# Phase I Environmental Site Assessment

North Sanderson Avenue
Assessor's Parcel Numbers 432-030-006, 432-030-010, and 432-030-011
San Jacinto, California

October 25, 2021

Prepared for:

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# Executive Summary

Shea Properties Management Company, Inc. (Shea, the User) retained Roux Associates, Inc. (Roux) to perform a Phase I Environmental Site Assessment (ESA) of the property located at west of North Sanderson Avenue, Assessor's Parcel Numbers (APNs) 432-030-006, 432-030-010, and 432-030-011 (the Site). Roux performed this Phase I ESA in general accordance with the American Society for Testing Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-13) in an effort to identify, to the extent feasible, the presence of recognized environmental conditions (RECs) with respect to the Site as defined in ASTM E1527-13. Exceptions to, or deletions from, this practice are described in Section 8.1 of this report.

The Site consists of approximately 470 acres bound by North Sanderson Avenue to the east and is located east of Odel Avenue and south of Ramona Boulevard in a rural and agricultural area of San Jacinto, California. No addresses are currently assigned to the Site; however, 870 and 1380 North Sanderson Avenue have previously been used. Based on a review of historical sources, the Site was developed with a residential structure by 1901 with a workshop and two barns added by 1953. By 1949, the northeastern portion of the Site was developed for agricultural use, possibly row crops. Agricultural production extended to the remainder of the Site and remained until approximately 2012. Agricultural features added to the Site include water wells for domestic and irrigation use and small ponds. By 1978, 20 acres on the southeastern portion of the Site were developed with a heifer raising farm including corrals, water cisterns, and covered structures. A large pond (or water reservoir) was added to the southwestern corner of the Site by 1985. The heifer farm remained operational through at least 2006 became inactive by 2009. All the former structures, including all residential and agricultural support structures were demolished by 2012. The Site has since remained inactive and currently consists of vacant graded land with earthen roads.

On August 3, 2021, Roux visually assessed the Site during the site reconnaissance for potential RECs, including, but not limited to, potential underground storage tanks (USTs), aboveground storage tanks (ASTs), polychlorinated biphenyl (PCB)-containing equipment, hazardous materials storage or handling areas, containerized or bulk wastes, and visual indications of impacted soil.

Roux also performed a records review in an effort to identify RECs in connection with the Site. This records review addressed the Site and surrounding properties. Roux reviewed commercially available records associated with the Site and nearby properties to assess potential concerns associated with the migration of hazardous substances. The records review also included reasonably ascertainable historical data, which can be helpful in identifying the past uses of the Site and surrounding areas, as it may relate to the environmental condition of the Site.

Roux performed interviews and/or file reviews with various government agencies and other parties with possible knowledge of the Site and surrounding properties in an effort to identify current and past uses of the Site and surrounding areas, as they may relate to the environmental condition of the Site.

ASTM E 1527-13 defines a Recognized Environmental Condition (REC) as:

> "The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."

A Controlled Recognized Environmental Condition (cREC) as:

> "A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

And a Historical Recognized Environmental Condition (hREC) as:

> "A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a *recognized* environmental condition at the time the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition."

The term recognized environmental condition is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

This Executive Summary provides a brief overview of the findings of this Phase I ESA. Although the Executive Summary is an integral part of a report, it does not substitute for reading the entire report or the appended or referenced documents in order to fully understand the findings and potential environmental concerns associated with the Site.

Based on the information obtained through the performance of this ESA, Roux identified the following RECs in connection with the current and historical operations at the Site or adjacent properties. To the extent possible, the locations of the RECs are shown in Figure 2. To avoid confusion, all RECs, cRECs, hRECs, and OEFs are numbered sequentially.

**REC 1 – Former Heifer Farm.** A southeastern portion of the Site, totaling approximately 20 acres in size, was formerly developed as a heifer raising farm from at least 1978 through 2002. The former heifer farm operations represented a REC due to the possible presence of methane from manure.

**REC 2 - Petroleum-Stained Soil.** During a reconnaissance of the Site conducted in 2002, petroleum-stained soil was observed beneath a diesel aboveground storage tank (AST) located northwest of the reservoir (pond), near the irrigation groundwater well located southwest of the reservoir, and on the floor of the equipment shed, beneath three oil-containing 55-gallon drums. Based on the storage of hazardous substances and petroleum products in uncovered ground areas and evidence of a release, the former chemical storage identified above represented a REC.

**REC 3 - Pond**. The Site is equipped with a pond located on the southwestern corner. According to aerial photographs, the pond was added between 1978 and 1985 and was likely used as part of the heifer ranch operations. According to a 2009 Environmental Impact Report (EIR), the reservoir contained reclaimed water from the neighboring San Jacinto Valley Regional Water Reclamation Facility related to irrigation for sod farming activities on-Site. It is unknown whether the pond also historically received wastewater from the on-Site ranch operations, was used for agricultural irrigation, or stored water treated with larvicide/repellant for mosquito control. The pond appeared unlined, allowing waters to infiltrate the ground and recharge the aquifer. Based on the historical agricultural use of the Site, the on-Site pond represents a REC.

**REC 4 - Former Agricultural Applied Pesticide Area**. Based on a review of historical sources, a portion of the Site was developed for agricultural use (row crops) as early as 1949 with increased agricultural development noted from at least 1978 to 2016. No indications of former row crops were observed on the Site. According to the EIR, a portion of the Site was developed as a sod farm from 1997 through at least 2002. Any residual pesticide, herbicide, or fertilizer residue in Site soils associated with sod farming was not identified as an environmental concern based on the removal of shallow soils during sod harvest. Agricultural production prior to 1997 at the Site is not currently known. However, it is likely that agricultural chemicals, such as pesticides, herbicides, and fertilizers, were used on-Site historically, and the potential for impacts from agricultural chemicals to on-Site soils is considered a REC.

Roux did not identify known or suspected cRECs in connection with the current and historical operations at the Site or adjacent properties.

Roux identified the following hRECs in connection with the current and historical operations at the Site or adjacent properties.

**hREC 5 – Historical Underground Storage Tanks.** Westra Dairy Farm, formerly located on-Site at 870 Sanderson Avenue, was identified as having a closed Leaking Underground Storage Tank (LUST) file. According to closure documents, the former on-Site dairy farm (or heifer ranch) had two 1,000-gallon gasoline USTs and one 10,000-gallon gasoline UST located south of a former workshop building in the southern portion of the Site. All three USTs were removed from the Site in December 1999 under direction of the County of Riverside. The tank area was over-excavated and approximately 120 tons of contaminated soil were removed and transported for off-Site disposal. In October 2000, a soil investigation identified total petroleum hydrocarbon (TPH) and volatile organic compounds (VOC) impacts below the former tanks to a depth of 35 feet bgs. In May 2001, a vapor extraction well was subsequently in the vicinity of the former tanks and a mobile soil vapor extraction system was used to extract and treat soil vapor. Soil samples do not appear to have been collected following the vapor extraction test. It is unknown if the SVE system operated outside of the 7-hour vapor extraction test as part of remediation for the impacted soils. A “No Further Action” letter was issued by the Santa Ana Regional Water Quality Control Board (SA-RWQCB) to the Westra Family Trust on December 26, 2001. The closure letter recommended that correction action should be reviewed if land use changes. According to the “No Further Action” letter, data from this investigation indicates that the residual petroleum hydrocarbons in soil are limited to an area with a 15-foot radius between 15 and 20 feet bgs and did not indicate a significant presence or source of petroleum hydrocarbons in the soil. Although a closure document was issued by the SA-RWQCB in 2001, the remaining petroleum hydrocarbon-impacted soil in the former LUST area is considered a hREC.

The term recognized environmental condition is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Other environmental features (OEFs) are environmental conditions that do not meet the definition of a REC, but which may warrant mention in a comprehensive Phase I ESA. Based on the subject Phase I ESA, Roux identified the following OEFs. To the extent possible, the locations of the OEFs are shown in Figure 2.

**OEF 6 - Septic Systems.** According to the EIR, the Site was equipped with two septic systems that historical sources suggest may have been in operation for many decades. The EIR stated the septic systems would be removed along with any residue material in accordance with Riverside County Department of Environmental Health (RCDEH) protocols. Based on the likely use of these systems for domestic waste only, the existing septic systems represent an OEF.

**OEF 7 - Debris.** Debris, including old equipment, water heaters, tires, and trash were observed in several piles throughout the site both in the 2002 Phase I ESA and during Site reconnaissance associated with the EIR. Several mounds of soil also were observed across the Site. According to the EIR, the soil piles were generated from on-Site activities and were piled for storage and eventual removal. The EIR recommended a qualified environmental professional be present on-Site during removal of debris piles to assess debris and stockpiled soils and direct disposal accordingly. Based on observations made during the Site reconnaissance, on-Site debris represent an OEF.

**OEF 8 - Abandoned Drums**. Two abandoned 55-gallon drums were observed during Roux' Site reconnaissance on August 3, 2021. The drums were observed on a concrete pad in the southeastern portion of the Site in the vicinity of the former heifer ranch area and appeared to contain unknown waste products. Minor to moderate staining was observed in the vicinity of these features. The staining was located on a paved area. It appears that the staining is surficial in nature and thus is not expected to represent a significant environmental concern.

# 1. Introduction

Roux Associates, Inc. (Roux) completed this Phase I Environmental Site Assessment (ESA) of the commercial property located at west of North Sanderson Avenue (the Site). The Site location is shown in Figure 1 and the Site and vicinity is shown in Figure 2. Roux performed this Phase I ESA in compliance with the scope and limitations of American Society for Testing Materials (ASTM) E1527-13 and the terms and conditions of Roux' proposal dated August 19, 2021. Roux conducted this Phase I ESA for the benefit of Shea Properties (Shea, the User).

The following sections of this report present our Phase I ESA findings and conclusions. A glossary containing terms and definitions presented in ASTM E1527-13 is included in Appendix A – Glossary of Terms. Other appendices presented at the end of the report include historical topographic maps, historical aerial photographs, regulatory records review documentation, applicable historical records, and personnel qualifications.

## 1.1 Purpose

The purpose of this Phase I ESA is to identify and report, to the extent feasible, recognized environmental conditions (RECs) with respect to the Site. Performing a Phase I ESA in general compliance with ASTM E 1527-13 may enable a User to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability. That is, the practice that constitutes one of the requirements for "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC Section 9601(35) (B).

## 1.2 Scope of Services

The scope of services for this Phase I ESA included, but was not limited to, the activities listed below.

- A review of reasonably ascertainable and practicably reviewable topographic maps, historical aerial photographs, and city directories, if available, to investigate past Site conditions;
- A review of specific government lists pursuant to ASTM Standard E 1527-13 regarding environmental activities for the Site and local area properties;
- A review of recorded land title records, building, assessors, and fire department records, for permits, citations, and reports connected to the Site that were reasonably ascertainable, practicably reviewable, and publicly available within reasonable time and cost;
- An inspection by an environmental professional to investigate the current use of the Site and to identify environmental concerns including but not limited to, the presence of hazardous substances or petroleum products, wastes, underground storage tanks (USTs), aboveground storage tanks (ASTs), or other environmental concerns;
- Interviews with available representatives of the owner of the Site, occupants, and local government officials by an environmental professional; and
- Preparation of this Phase I ESA report.

Roux initiated this Phase I ESA pursuant to receipt of written authorization to proceed on August 26, 2021.

## 1.3 Standard of Care

Roux conducted this Phase I ESA using a defined scope of services considered appropriate and agreed upon by all parties on the date the service was authorized, unless the scope of services or the methods used were later modified, in writing, and accepted by all parties prior to performance. Roux conducted this Phase I ESA in accordance with generally accepted practices in a manner consistent with that level of care exercised by other members of our profession in the same locality and under similar conditions of time and accessibility of improvements and information. No other representations, expressed or implied, and no warranty or guarantee is included or intended to be part of this Phase I ESA.

Please note that the scope of services performed in execution of this assessment may not be appropriate to satisfy the needs of other parties. We, therefore, are not responsible for independent conclusions, opinions, or recommendations of others based on our assessment. Furthermore, this Phase I ESA relates to the environmental conditions of the Site and does not address issues raised in transactions such as business risk, purchase of business entities, or interests therein, or of their assets, that may well involve environmental liabilities pertaining to properties previously owned or operated or other offsite liabilities.

Additionally, the findings of this Phase I ESA are based on Roux' observations, inquiries, and historical research using reasonably ascertainable and practically reviewable information obtained within reasonable time and cost constraints. Roux does not represent that this Phase I ESA is an exhaustive investigation that reflects the findings of all of the information available for the Site, nor is it representative of future Site conditions. If additional information is generated from the Site, it should be provided to Roux so that we may evaluate its impact on our conclusions. As such, activities or episodes that transpire subsequent to this Phase I ESA are not considered in this assessment. It is not intended that a Phase I ESA in accordance with ASTM E1527-13 be an exhaustive assessment of a property nor can it wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a property.

## 1.4 Assumptions

This Phase I ESA Report, including the exhibits attached hereto, describes the results of Roux' investigation to identify the presence of *recognized environmental conditions* connected with the Site in accordance with ASTM E1527-13, as allowed by and consistent with the regulatory requirements of the All Appropriate Inquiry Rule, 40 CFR Part 312, Amendment to Standards and Practices for All Appropriate Inquires Under CERCLA, Final Rule, published December 30, 2013 (AAI Rule). Specifically, the preamble to the amended AAI Rule states:

> *The Environmental Protection Agency (EPA) today is taking final action to amend the standards and practices for conducting all appropriate inquiries under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to reference a standard practice recently made available by ASTM International, a widely recognized standards development organization. Specifically, this final rule amends the "All Appropriate Inquiries Rule" at 40 CFR Part 312 to reference ASTM International's E1527–13 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" and make clear that persons conducting all appropriate inquiries may use the procedures included in this standard to comply with the All Appropriate Inquiries Rule*[1].

[1] Federal Register: December 30, 2013 (Volume 78, Number 250) Page 79319

One of the requirements that a person acquiring real property must meet in order to qualify for either the innocent landowner, contiguous owner, or bona fide prospective purchaser (collectively hereinafter "Prospective Purchaser") defense to liability under the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, and the Small Business Liability Relief and Brownfields' Revitalization Act of 2002, 42 U.S.C. 9601-9675 (collectively referred to hereafter as "CERCLA") is that person must conduct all appropriate inquiries into the previous ownership and uses of the property in conformance with the AAI Rule (or the ASTM E1527-13) prior to acquisition of the property. The User has acknowledged that, under the AAI Rule, Roux' performance of this Phase I ESA in accordance with ASTM E1527-13 will not alone result in the User satisfying all requirements of the AAI Rule and will not in itself provide a defense to CERCLA liability. The User has acknowledged that the AAI Rule also requires that the Prospective Purchaser undertake certain additional inquiries and post-acquisition activities to satisfy the CERCLA AAI requirements. Accordingly, Roux makes no guarantees or warranties, expressed or implied, regarding this Phase I ESA, including without limitation, that this Phase I ESA will qualify the User for a defense to CERCLA liability.

Roux has performed this Phase I ESA in a professional manner using that degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants. Professional judgments expressed herein are based on the facts currently available to Roux.

The AAI Rule requires, and the conclusions and recommendations stated herein represent, the application of a variety of engineering and technical disciplines to material facts and conditions associated with the Site. As such, these conclusions and recommendations are based on subjective interpretations and the exercise of discretion based on the facts available to Roux and conditions at the time of the performance of this Phase I ESA. Many of these facts and conditions are subject to change over time. Accordingly, the conclusions and recommendations must be considered within this context.

The User has agreed that Roux shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time this Phase I ESA was performed. To the extent practicable, Roux has identified data gaps, and has evaluated the potential significance of such data gaps. Recommendations to address those data gaps are presented herein and are based on the data available at the time of the performance of this Phase I ESA. Implementation of the recommendations may not fully address the data gaps, and the information obtained from execution of those recommendations may alter and/or modify the interpretation of the Site conditions and conclusions, herein. This Phase I ESA does not include consideration of matters specifically excluded by ASTM E1527-13, including but not limited to, asbestos-containing building materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, and mold unless specifically identified herein.

Roux has not collected any soil and/or groundwater samples on the Site for Phase I purposes, and is relying on information presented by others, often in preliminary, draft, or verbal form. By referencing this information, Roux does not accept responsibility for the accuracy of the underlying data, sampling methods, laboratory analysis, or documentation.

This Phase I ESA Report should not be considered a legal interpretation of existing environmental laws and regulations. This Phase I ESA was conducted with a reasonable degree of inquiry to identify *recognized environmental conditions*, but uncertainty is not eliminated. No Phase I ESA can wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a property.

The Phase I ESA process is intended to reduce, but not eliminate, the uncertainty involved with identifying *recognized environmental conditions*.

This Phase I ESA Report is not an appraisal or value judgment of the Site. The User has agreed that Roux shall not be liable for any use of this Phase I ESA Report as an appraisal or value judgment of the Site.

This Phase I ESA Report has been prepared for the exclusive use of the User for specific application to the Site covered by this Phase I ESA Report. The User has agreed that any third-party use of this Phase I ESA Report, upon disclosure by the User, is the sole responsibility and at the sole liability of the User.

## 1.5 User Reliance

No additional parties may use the information contained in this report without obtaining the written permission of Roux or the User. Roux' duties and obligations extend to the User and to no other party. Roux' duties and obligations to the User are not transferable to persons, corporations, or organizations without the express written consent of the User and Roux. The User may rely upon the information provided in this Phase I ESA report for a period of 180 days from the date of issue. After 180 days, this Phase I ESA should be updated in accordance with ASTM guidance. Roux will not be liable for any consequential damages arising from the use of this report for other than its intended purpose, for use of this report beyond 180 days of its issue date, or from unauthorized use by third parties.

This Phase I ESA report must be read and interpreted as a whole and can only be considered representative of the conditions of the Site as of the date of our site reconnaissance described herein. Roux makes no representation whatsoever concerning the condition of the Site beyond the date of our site reconnaissance described herein. Individual sections and appendices of this report are dependent on the balance of this report, and on the terms, conditions, and stipulations contained in the proposal and written amendments accepted by Roux.

# 2. Site Description

## 2.1 Site Location and Description

| Site Information | |
|---|---|
| Site Name | Shea San Jacinto |
| Street Address(es) | No current address; Historically used 870 and 1380 North Sanderson Avenue |
| City | City of San Jacinto |
| County | Riverside |
| State | California |
| Location | West of North Sanderson Avenue, east of Odel Avenue and south of Ramona Boulevard |
| Assessor's Parcel Number (APN) | 432-030-006, 432-030-010, and 432-030-011 |
| Site Acreage (per Riverside County Assessor Website) | Approximately 470 acres |
| Site Occupant(s) | None; currently unoccupied |
| Onsite Operations | None; formerly operated as sod farm and heifer raising farm |
| Description of Onsite Structures | None; Site consists of vacant land and is equipped with remnant cisterns, concrete building foundations, and a pond (water reservoir) |
| Site Paving | Unpaved vacant graded land with areas overgrown with weeds and native desert brush |
| Site Grading | Graded to drain at a gentle slope roughly oriented to the north |
| Site Vicinity | Rural and agricultural |

Refer to Section 5.0 for a detailed description of the current condition of the Site and operations.

## 2.2 Vicinity General Characteristics

The facilities and improvements which are located immediately adjacent to the Site are provided in the following table.

| Direction from Site | Improvements / Use (Addresses) |
|---|---|
| North | Records Road and vacant and/or agricultural land |
| East | North Sanderson Avenue, followed by vacant and/or agricultural land and California Equine Retirement Foundation (805 North Sanderson Avenue) |
| South | San Jacinto Valley Regional Water Reclamation Facility (770 North Sanderson Avenue) |
| Southwest | Residence and vacant and/or agricultural land |
| West | Demler Farms (1455 North Warren Road) |

## 2.3 Past Use of the Site

Based on a review of historical sources, the Site was developed with a residential structure by 1901 with a workshop and two barns added by 1953. By 1949, the northeastern portion of the Site was developed for agricultural use, possibly row crops. Agricultural production extended to the remainder of the Site and remained until approximately 2012. Agricultural features added to the Site include water wells for domestic and irrigation use and small ponds. By 1978, 20 acres on the southeastern portion of the Site were developed with a heifer raising farm including corrals, water cisterns, and covered structures. A large pond (or water reservoir) was added to the southwestern corner of the Site by 1985. The heifer farm remained operational through at least 2006 became inactive by 2009. All the former structures, including all residential and agricultural support structures were demolished by 2012. The Site has since remained inactive and currently consists of vacant graded land with earthen roads.

## 2.4 Physical Setting

Roux obtained and reviewed published, reasonably ascertainable information concerning the physical setting of the Site. The following is a summary of the information reviewed from those physical setting sources.

| Physical Setting Summary | |
|---|---|
| United States Geological Survey (USGS) Topographic Map | Lakeview, California Quadrangle |
| Approximate Site Elevation / Source | 1460 to 1490 feet above mean sea level (msl) / Lakeview, California (2012) 7.5-minute quadrangle topographic map published by the USGS |
| Nearest Surface Water Features / Approximate Distance | San Jacinto Reservoir, an unlined stormwater drainage pond / 0.3 mile east of the Site |
| Regional Geology / Source | Quaternary deposits: alluvium, lake, playa and terrace, consolidated and semi-consolidated / California Department of Conservation, 2010 Geologic Map of California |
| Site Topography / Source | Generally flat with a gradual slope to the east-northeast / Site observation and USGS topographic map |
| Hydrogeological Region / Source | Located along the eastern portion of the San Jacinto Groundwater Basin / *California Department of Water Resources Bulletin 118, Update 2003 and Interim Update 2016* |
| Depth to Groundwater / Source | Greater than 70 feet bgs / Previous Site investigation (ATC, 2000)<br>11 to 13 feet bgs (perched) / Monitoring well installation report for a facility approximately 0.6 mile northeast of the Site (Leighton, 2009) |
| Groundwater Gradient Direction / Source | Northeast / Groundwater monitoring data for a facility approximately 0.6 mile northeast of the Site (Leighton, 2009) |
| Onsite Soil | Unconsolidated sands and gravel from the surface to 70 feet bgs (ATC, 2000) |

# 3. Sources of Information

Sources of information utilized in preparing this Phase I ESA report included historical topographic maps; historical aerial photographs; a walkover survey of the Site and adjoining properties; in-person discussions with User and tenant personnel; a review of records available at selected local and state regulatory agencies; a review of databases maintained by local, state, and federal government agencies; and other records available from commercial and online sources.

## 3.1 Historical Sources

To help understand the history of the Site and past land uses, historical sources were obtained from Environmental Data Resources, Inc. (EDR), of Shelton, Connecticut. The sources and locations within the Appendices are provided in the table below.

| EDR Historical Sources | | |
|---|---|---|
| **Historical Range** | **Source** | **Appendix** |
| 1901 - 2012 | U.S. Geological Survey Topographic Maps | B |
| 1938 - 2016 | EDR Aerial Photographs “Decade Package” | C |
| No Available Coverage | EDR “Certified Sanborn® Map Report” | D |
| 1971 - 2017 | EDR “City Directory Image Report” | E |

## 3.2 Site Reconnaissance

On August 3, 2021, Roux personnel conducted a reconnaissance of the Site and surrounding areas. Roux visually and/or physically observed adjoining properties from reasonably accessible locations on the Site and public thoroughfares. Photographs documenting Roux’ Site Reconnaissance are provided in Appendix G.

## 3.3 Regulatory Agencies

Roux contacted governmental agencies for reasonably ascertainable information concerning environmental conditions at the Site. Roux contacted or reviewed information from the agencies provided in the following table. Refer to Appendix G – Pertinent Historical Documentation for copies of the records reviewed. A summary of the information gathered from the regulatory agencies is provided in the table and details regarding the records were incorporated into applicable sections as noted.

| Agency | Date Requested / Accessed | Response Date | Description of Records | Section Discussed |
|---|---|---|---|---|
| **Federal** | | | | |
| U.S. Environmental Protection Agency (EPA) – FOIAonline | 07/29/2021 | 08/02/2021 | No records were associated with the Site | N/A |
| U.S EPA MyProperty Database | 07/29/2021 | N/A | No records were associated with the Site. | N/A |
| National Pipeline Mapping System (NPMS) Online Database | 07/29/2021 | N/A | No records were associated with the Site. | N/A |
| **State** | | | | |
| State Water Resources Control Board (SWRCB): GeoTracker Online Database | 07/29/2021 | N/A | A LUST case at Westra Dairy Farm in 2001 was associated with 870 N Sanderson Avenue. | 6.0 |
| SWRCB: Storm Water Multiple Application and Report Tracking System (SMARTS) Online Database | 07/29/2021 | N/A | No records were associated with the Site. | N/A |
| Department of Toxic Substances Control (DTSC) | 07/29/2021 | 07/30/2021 | No additional records were identified through this request – the DTSC referred to available documents on EnviroStor and the HWTS database | N/A |
| DTSC: EnviroStor Online Database | 07/29/2021 | N/A | A listing for the proposed high school as associated with the Site. Representatives from the DTSC Cypress office informed Roux any records for the proposed high school not available online are no longer on file and have likely been purged. | 8.1 |
| DTSC: Hazardous Waste Tracking System (HWTS) Online Database | 07/29/2021 | N/A | One disposal record associated with the Western Family Trust is associated with 870 N Sanderson Avenue. This listing appears to be associated with removal of former underground tanks at the Site. | 6.0 |

| Agency | Date Requested / Accessed | Response Date | Description of Records | Section Discussed |
|---|---|---|---|---|
| California Air Resources Board (CARB) | 07/29/2021 | 08/02/2021 | No records were associated with the Site. | N/A |
| California Office of Environmental Health Hazard Assessment (OEHHA) | 07/29/2021 | N/A | No response has been received as of this report date. | N/A |
| California EPA (CalEPA) | 07/29/2021 | N/A | No response has been received as of this report date. | N/A |
| CalEPA CalRecycle | 07/29/2021 | 08/03/2021 | No records were associated with the Site. | N/A |
| CalEPA CalRecycle Solid Waste Information System (SWIS) Online Database | 07/29/2021 | N/A | No records were associated with the Site. | N/A |
| California Geological Energy Management (CalGEM) Online Database | 07/29/2021 | N/A | No records were associated with the Site or vicinity. | N/A |
| **County / Regional** | | | | |
| Santa Ana Regional Water Quality Control Board (SARWQCB) | 07/29/2021 | 08/23/2021 | Records provided by the SARWQCB for the Site are discussed below in Section 6.0. | 6.0 |
| South Coast Air Quality Management District (SCAQMD) | 07/29/2021 | 7/30/2021 | No records were associated with the Site. | N/A |
| SCAQMD Facility Information Detail (FIND) Online Database | 07/29/2021 | N/A | No records were associated with the Site. | N/A |
| County of Riverside Department of Environmental Health | 07/29/2021 | 7/30/2021 | No records were associated with the Site. | N/A |
| County of Riverside Department of Buildings and Safety | 07/29/2021 | 08/04/2021 | Records provided include permits for installation of electrical lines to barn, well, pumps dated between 1982 and 1991. | N/A |
| County of Riverside Fire Department | 07/29/2021 | N/A | No response has been received as of this report date. | N/A |
| **City / Local** | | | | |
| City of San Jacinto City Clerk | 07/29/2021 | 8/25/2021 | Records have not been received as of this report date. According to the City Clerk's office, the request for records is still being processed. | N/A |

### 3.3.1 California Department of Toxic Substances Control (DTSC)

A 61-acre portion of the Site is listed by the California DTSC as the "Proposed High School at the Villages of San Jacinto" (Global ID T60000906) at the intersection of Ramona Boulevard and Cawston Avenue. In 2008, the San Jacinto Unified School District filed for an Environmental Oversight Agreement with the DTSC for oversight of the preparation of a Preliminary Endangerment Assessment (PEA) at Site Assessor Parcel Numbers 432-030-006 and 432-030-010. Three pages of the PEA including the introduction and part of the executive summary are available on EnviroStor appended to a response to comments matrix; however, the full PEA document is not available online. According to the available PEA sections, soil samples were collected and analyzed for organochlorine pesticides and arsenic. The DTSC issued an Approval of PEA Report on September 17, 2008, and stated that neither a release of hazardous material nor the presence of a naturally occurring hazardous material posed a threat to public health or the environment. The case is currently marked as 'No Further Action' on EnviroStor as of September 24, 2008. According to EnviroStor records, the area assessed was limited to 61 acres that were planned for school redevelopment. Soil sampling for pesticides and metals does not appear to have been conducted on the remaining areas of the Site.

Roux contacted the DTSC Cypress office for copies of the PEA reports. Ms. Gloria Conti and Ms. Jone Barrio of the DTSC Cypress office informed Roux that no other pertinent records, including the PEA report, for the proposed high school are on file with the DTSC and have likely been purged. Ms. Jone Barrio informed Roux that a copy of an Environmental Impact Report (EIR) is available for review in the DTSC file room. Roux' inability to obtain a copy of the previous PEA report represents a data gap. Based the limited information available online for the PEA and NFA letter issued by the DTSC, this limitation is not expected to alter the findings of this assessment

## 3.4 Government Databases

To document potential sources of contamination at or near the Site, a government records search was conducted by EDR. The search included local, state, and federal records for the Site and for other properties within ASTM-standard distances of the Site. The records search is summarized in Section 7.0 and a copy of "The EDR Radius Map™ Report with GeoCheck®," dated July 30, 2021, is included in its entirety as Appendix F. As recommended by ASTM, all but a few of the databases searched were "current," i.e., had been updated within 90 days prior to the search date.

## 3.5 User Provided Information

ASTM E1527-13 provides that the User perform certain tasks. The purpose of this section is to present select User-provided information that can assist in identifying possible *recognized environmental conditions* in connection with the Site. According to ASTM E1527-13, these tasks do not require the technical expertise of an environmental professional and the environmental professional generally does not perform these tasks. Roux administered a questionnaire to the User at the beginning of this Phase I ESA to assist them with these tasks. The following sections outline the parts of the questionnaire that the User completed.

### 3.5.1 Environmental Liens or Activity and Use Limitations

The User indicated that they have no knowledge regarding environmental liens or activity and use limitations (engineering/institutional controls) with respect to the Site.

### 3.5.2 Specialized Knowledge

The User did not report any specialized knowledge related to the Site.

### 3.5.3 Valuation Reduction for Environmental Issues

The User indicated that they have no knowledge regarding valuation reduction for environmental issues.

### 3.5.4 Commonly Known or Reasonably Ascertainable Information

The User did not have any knowledge regarding commonly known or reasonable ascertainable information about the Site not otherwise addressed.

### 3.5.5 Obvious Indicators of the Presence or Likely Presence of Contamination of the Site

The User did not have any knowledge regarding obvious indicators of the presence or likely presence of contamination of the Site not otherwise addressed.

## 3.6 Interviews

On August 26, 2021, Roux attempted to reach an owner of the Site, Mr. Cal Westra, via telephone. Roux was informed that the phone number for Mr. Westra had been reassigned. Based on the information obtained from previous reports and historical sources available, this limitation is not expected to significant alter the findings of this assessment.

# 4. Site History

This section documents the history of the Site and describes current conditions and existing or former environmental features.

## 4.1 Site History

The history of the Site and, to a lesser extent, the surrounding area, including previous land use, has been compiled based on information from the exhaustive list of sources provided in Section 3.

| Summary of Historical Sources | | | | |
|---|---|---|---|---|
| **Decade** | **Year** | **Source** | **Site Description** | **Vicinity Description** |
| Early Residential Development | | | | |
| Pre-1900 | No Sources Available | | | |
| 1900s | 1901 | Historical Topographic Map: Elsinore / San Jacinto (15-minute) | Mostly vacant land located in a rural area of San Jacinto Viejo. Southern portion of the site is developed with a road and single structure likely used as a residence or homestead. | Adjacent sites appear as vacant land. Nearby arterial roads are to the west and north. Two unnamed streams are to the north. |
| 1910s | No Sources Available | | | |
| 1920s | No Sources Available | | | |
| 1930s | 1938 | EDR Aerial Photograph | No significant changes from prior Site history except for addition of ancillary structures to residence or homestead on the southern portion of the Site. | No significant changes from prior history. |
| Agricultural Development | | | | |
| 1940s | 1943 | Historical Topographic Map: Perris / Banning (15-minute) | No significant changes from prior Site history. | No significant changes from prior history. |
| | 1949 | EDR Aerial Photograph | The northeastern portion of the Site was developed for agricultural use, possibly row crops. Three additional structures were added west of the existing residence in the southern portion and one small structure of unknown use was added on the northwestern corner of the Site | Agricultural development is noted to the northeast and east of the Site. |

| Summary of Historical Sources | | | | |
|---|---|---|---|---|
| **Decade** | **Year** | **Source** | **Site Description** | **Vicinity Description** |
| 1950s | 1953 | EDR Aerial Photograph | Agricultural development has extended to the northern and central portions of the Site. | Increase agricultural development to the northeast and east of the Site. |
| | | Historical Topographic Map: La Jolla (15-minute) | Three water wells, likely used for irrigation, were added to the Site. | Addition of unnamed road (later Sanderson Avenue) to the east and San Jacinto Reservoir and canal further to the southeast. |
| 1960s | 1961 | EDR Aerial Photograph | Agricultural development throughout the Site increased. | No significant changes from prior history. |
| | 1967 | Historical Topographic Map: Lakeview / San Jacinto (7.5-minute) | A fourth water well and two intermittent ponds were added to the Site. | Addition of duck ponds to the northeast and east, sewage disposal ponds to the south, several wells throughout the surrounding areas, and canal and aqueduct part of the nearby San Jacinto Reservoir. |
| 1970s | 1975 | EDR Aerial Photograph | The two previous ponds were no longer present. Two windmills were depicted to the west of the Site in topographic maps, although no windmills were noted within the Site boundaries during review of historical aerial photographs | Addition of water reclamation plant adjacent to the south |
| | 1978 | EDR Aerial Photograph | A heifer farm, totaling approximately 20 acres, was operating on the southeastern portion of the Site. Discernable features include multiple enclosures (or corrals), and four covered structures. | Addition of ponds or other water features to the southwest and south. |
| | 1979 | Historical Topographic Map: Lakeview / San Jacinto (7.5-minute) | No significant changes from prior Site history. | No significant changes from prior history. |
| 1980s | 1985 | EDR Aerial Photograph | A presently existing water reservoir had been constructed in the southwestern corner of the Site. The remainder of the Site is developed for agricultural use including row crops or heifer farm. | Addition of dairy farms to the west. |
| | 1989 | EDR Aerial Photograph | No significant changes from prior Site history. | No significant changes from prior history. |
| 1990s | 1991 | Building Permits | Site equipped with a residence, workshop, two barns, several corrals, and shade structures. The southern and central portions of the site were used for grain storage (or growth), oats, and alfalfa. | N/A |

| Summary of Historical Sources | | | | |
|---|---|---|---|---|
| **Decade** | **Year** | **Source** | **Site Description** | **Vicinity Description** |
| | 1996 | EDR Aerial Photograph | No significant changes from prior Site history. | No significant changes from prior history. |
| 2000s | 2002 | EDR Aerial Photograph | No significant changes from prior Site history. | No significant changes from prior history. |
| | | Previous Reports | Site was reportedly occupied by one residential structure, two warehouses, a storage shed, two office trailers, and three groundwater wells (one domestic and two irrigation), covered areas for the cows (barn structures), and equipment storage areas | N/A |
| | 2006 | EDR Aerial Photograph | No significant changes from prior Site history. | Former ponds to the southwest have been redeveloped for agricultural use (row crops). |
| | 2009 | Previous Reports | A site visit was conducted in May 2009 as part of the EIR. The only reported structures observed on-Site were an abandoned residence and “shade structures”. The heifer farm operations were reportedly no longer active as of 2009. | N/A |
| | | EDR Aerial Photograph | Two of the previous “shade structures” remain onsite. The majority of the Site appears vacant and may have no longer been developed for agricultural use. | No significant changes from prior history. |
| 2010s | 2012 | Historical Topographic Map: Lakeview / San Jacinto (7.5-minute) | No significant changes from prior Site history. | No significant changes from prior history. |
| | | EDR Aerial Photograph | All the former structures have been demolished. Some agricultural features (light row crops) appear throughout the Site. | No significant changes from prior history. |
| 2020s | 2021 | Site Reconnaissance | No significant changes from prior Site history. | No significant changes from prior history. |

# 5. Current Site Conditions

A Roux representative, Mr. Connor Moore, conducted a reconnaissance of the Site and surrounding areas on August 3, 2021. Roux also visually and/or physically observed adjoining properties from reasonably accessible locations on the Site and public thoroughfares. During the Site reconnaissance, the weather was clear and the temperature was approximately 115° Fahrenheit. A photographic log summarizing the Site Reconnaissance is provided as Appendix G. The following sections summarize observations during the inspection.

## 5.1 Site Reconnaissance

The Site consists of approximately 470 acres of vacant land and is bound by North Sanderson Avenue to the east and is located east of Odel Avenue and south of Ramona Boulevard. No addresses are currently assigned to the Site; however, 870 and 1380 North Sanderson Avenue have previously been used for two of the parcels. The Site is undeveloped apart from unpaved farm roads and consists of vacant graded land. Graded areas across the Site are overgrown with weeds and native desert brush vegetation and do not appear to have been used for any purpose for many years.

Roux observed the Site from accessible road throughout the Site. Due to the size of the property and the vegetation present on site, isolated areas of the site may have not been accessible for direct observation during the Site reconnaissance.

## 5.2 Phase I ESA Observations

During Site reconnaissance, Roux personnel attempt to identify any environmental features that may be relevant in the context of the Phase I ESA. The features identified are summarized in the table below. Any such features are discussed in the following subsections.

| Feature | Observed on the Site | Observed on an Adjacent Property |
|---|---|---|
| Areas of stressed vegetation | | |
| Areas which receive flood or storm water from potentially contaminated areas | | |
| Air Compressor Vent Discharges | | |
| Chemical Storage and/or Use | | |
| Drainage Swales and Culverts | | |
| Discharge Areas | | |
| Discolored or Spill Areas | | |
| Drums (55 Gallons or Larger) | X | |
| Electrical Transformers | X | |
| Former Agricultural Applied Pesticide Area | X | |

| Feature | Observed on the Site | Observed on an Adjacent Property |
|---|---|---|
| Hydraulic Lifts | | |
| Incinerators | | |
| Landfills or Landfarms | | |
| Loading and Unloading Areas | | |
| Non-Contact Cooling Water Discharge | | |
| Oil-Water Separator(s) | | |
| Open Areas Away from Production Areas | | |
| Process Area Sinks and Piping | | |
| Rail Cars/Railroad Spurs | | |
| Septic Systems Leach Fields or Seepage Pits | | |
| Silos | | |
| Sprayfields | | |
| Storm Sewer and Spill Containment Collection System | | |
| Storm Water Detention Pond | X | |
| Surface Impoundments and Lagoons | | |
| Underground / Aboveground Storage Tanks and Associated Piping | | |
| Waste Piles | X | |
| Wells | X | |

### 5.2.1 Drums (55 Gallons or Larger)

Two abandoned 55-gallon drums were observed during Roux' Site reconnaissance on August 3, 2021. The drums were observed on a concrete pad in the southeastern portion of the Site in the vicinity of the former heifer ranch area and appeared to contain unknown waste products. Minor to moderate staining was observed in the vicinity of these features. The staining was located on a paved area. It appears that the staining is surficial in nature and thus is not expected to represent a significant environmental concern. As a best management practice, any abandoned drums should be removed from the Site and properly disposed.

### 5.2.2 Electrical Transformers

Roux personnel observed pole-mounted transformers at the Site. Staining was not observed at the base of the transformer poles. Based on the construction and appearance of the transformers, they did not appear to be wet-type, with the potential to contain PCBs. Roux does not consider the presence of these transformers to be an environmental concern.

### 5.2.3 Former Agricultural Applied Pesticide Area

Based on a review of historical sources, a portion of the Site was developed for agricultural use (row crops) as early as 1949 with increased agricultural development noted from at least 1978 to 2016. No indications of former row crops were observed on the Site. According to the EIR, a portion of the Site was developed as a sod farm from 1997 through at least 2002. Any residual pesticide, herbicide, or fertilizer residue in Site soils associated with sod farming was not identified as an environmental concern based on the removal of shallow soils during sod harvest. Agricultural production prior to 1997 at the Site is not currently known. However, it is likely that agricultural chemicals, such as pesticides, herbicides and fertilizers, were used on-Site historically, and the potential for impacts from agricultural chemicals to on-Site soils is considered a REC.

### 5.2.4 Storm Water Detention Pond

The Site is equipped with a drainage pond located on the southwestern corner. According to aerial photographs, the pond was added between 1978 and 1985 and was likely used as part of the heifer ranch operations. According to the EIR, the reservoir contained reclaimed water from the nearby San Jacinto Valley Regional Water Reclamation Facility related to irrigation for sod farming activities on-Site. It is unknown whether the pond also historically received wastewater from the on-Site ranch operations, was used for agricultural irrigation, or stored water treated with larvicide/repellant for mosquito control. The pond appeared unlined, allowing waters to infiltrate the ground and recharge the aquifer. Based on the historical agricultural use of the Site, the on-Site pond represents a REC.

### 5.2.5 Wells

According to topographic maps, the Site has been equipped with at least four groundwater wells located throughout the Site. During the 2002 Phase I ESA, a total of three wells, including one domestic production well and two irrigation wells, were observed on-site. Only one of the three wells noted during the 2002 Phase I ESA match a known well depicted in topographic maps. Two of the irrigation groundwater wells noted during the 2002 Phase I ESA were located during Roux' Site reconnaissance. According to the EIR, any known and discovered wells will be abandoned and decommissioned in accordance with SA-RWQCB and RCDEH protocols.

## 5.3 Vapor Intrusion

Roux performed a vapor migration/intrusion pathway assessment. Operation of the Site as a heifer raising farm constitutes a known source for potential vapor intrusion. No known sources for potential vapor intrusion were identified for any adjacent or nearby properties.

The former onsite operations have been identified elsewhere in this report as *recognized environmental conditions* or *other environmental features*.

# 6. Summary of Key Previous Investigations

The following sections provide a summary of previous environmental investigations at the Site, particularly in regard to the former gasoline and diesel USTs at the Site.

Westra Dairy Farm, located at 870 Sanderson Avenue, was identified in the GeoTracker database as having a closed Leaking Underground Storage Tank (LUST) file. According to records provided by the SA-RWQCB, the former on-Site dairy farm (or heifer ranch) had two 1,000-gallon gasoline USTs and one 10,000-gallon diesel UST. The locations of the former USTs as provided by these documents are included in Figure 2.

## 6.1 Site Investigation (ATC, 2000)

Under direction of the County of Riverside, two 1,000-gallon USTs and one 10,000-gallon USTs were removed from the Site in December 1999. The tank area was over-excavated and approximately 120 tons of hydrocarbon-impacted soil were removed and transported for off-Site disposal. ATC was retained to delineate the vertical and lateral extent of impacts to the soil.

In October 2000, three borings (S-1, S-2, and S-3) were drilled in the area of the former USTs to depths of 60 and 70 feet bgs. Groundwater was not encountered during this investigation. Soil samples were collected at 5-foot intervals starting at 15 feet bgs to the total depth of each boring. Soil samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline (TPH-g) and diesel (TPH-d) and aromatic hydrocarbons. Selected samples collected at 15 feet from S-1 and S-3 were also analyzed for fuel oxygenates, alcohols, and semi-volatiles at the request of the SA-RWQCB.

Based on the analytical results of the soil sampling, ATC determined that the extent of the contamination was “very limited”, and the vertical extent reached below the former tanks to a depth of 35 feet.

## 6.2 Well Installation and Vapor Extraction Testing (Stratus, 2001)

In accordance with a workplan approved by the SA-RWQCB, Stratus installed one vapor extraction well (VE-1) to assess if any residual petroleum hydrocarbon source remained in the soil that would pose a threat to groundwater resources. VE-1 was installed to a terminal depth of 20 feet bgs and located on the northeastern corner of the former tank excavation. Soil samples were collected at 5-foot intervals and screened using a photoionization detector (PID).

Following the installation of the vapor extraction well in May 2001, a mobile soil vapor extraction (SVE) system was used to extract and treat soil vapors. A vapor extraction test was conducted for 7 hours and reportedly removed an estimated 9.55 pounds of vapor-phase hydrocarbons. Influent soil vapor samples were collected at the startup, mid-point, and end-point of the vapor extraction test and analyzed for volatile fuel hydrocarbons (VFH), benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tert-butyl ether (MTBE). Laboratory results of the end-point vapor sample identified VFH at 2,300 parts per million volume (ppmv), benzene at 17 ppmv, toluene at 57 ppmv, total xylenes at 24 ppmv, and MTBE at 270 ppmv. Soil samples do not appear to have been collected following the vapor extraction test. It is unknown if the SVE system operated outside of the 7-hour vapor extraction test as part of remediation for the impacted soils.

A “No Further Action” letter was issued by the SA-RWQCB to the Westra Family Trust on December 26, 2001. The closure letter recommended that correction action should be reviewed if land use changes. According to the “No Further Action” letter, data from this investigation indicates that the residual petroleum hydrocarbons in soil are limited to an area with a 15-foot radius between 15 and 20 feet bgs and did not

indicate a significant presence or source of petroleum hydrocarbons in the soil. At the request of the SA-RWQCB, the vapor extraction well at the Site (identified as a "study well") was properly sealed and abandoned by April 15, 2002.

Although a closure document was issued by the SA-RWQCB in 2001, the remaining petroleum hydrocarbon-impacted soil in the former LUST area is considered a hREC.

## 6.3 Draft Environmental Impact Report (Dudek, 2009)

Dudek prepared an Environmental Impact Report (EIR) for the City of San Jacinto for the proposed Villages of San Jacinto redevelopment project (the Site). The Villages of San Jacinto project consisted of mixed-use redevelopment of the Site including parks, residences, and a high school. Included in the EIR is a reference to a previous Phase I ESA prepared by Gradient Engineers, dated October 10, 2002. A copy of this report was not included in the appendices provided to Roux. Roux has requested a copy of the 2002 Phase I ESA from the City of San Jacinto; however, records have not been provided as of this writing. The following on-Site environmental hazards were identified in the EIR, particularly regarding the former agricultural operations and petroleum storage.

- **Former Heifer Farm**. A southeastern portion of the Site, totaling approximately 20 acres in size, was formerly developed as a heifer raising farm from at least 1978 through 2002. The former heifer farm operations represented a REC due to the possible presence of methane from manure. According to the EIR, the Riverside County's Methane Investigation Protocol would be followed in order to ensure that methane hazards do not exist on the 20-acre portion of the Site formerly used for heifer raising. Methane gas sampling and associated mitigation activities were reportedly planned after grading, in accordance with RCDEH protocols.

- **Petroleum-Stained Soil.** During the 2002 Phase I ESA, petroleum-stained soil was observed beneath a diesel aboveground storage tank (AST) located northwest of the reservoir (pond), near the irrigation groundwater well located southwest of the reservoir, and on the floor of the equipment shed, beneath three oil-containing 55-gallon drums. Based on the storage of hazardous substances and petroleum products in uncovered ground areas and evidence of a release, the former chemical storage identified above represented a REC. In order to evaluate and possibly mitigate environmental hazards associated with petroleum releases, the EIR recommend sampling and proper disposal of stained soils.

- **Septic Systems.** According to the EIR, the Site was equipped with two septic systems that historical sources suggest may have been in operation for many decades. The EIR stated the septic systems would be removed along with any residue material in accordance with RCDEH protocols. Based on the likely use of these systems for domestic waste only, the existing septic systems represent an OEF.

- **Debris.** Debris, including old equipment, water heaters, tires, and trash were observed in several piles throughout the site both in the 2002 Phase I ESA and during Site reconnaissance associated with the EIR. Several mounds of soil also were observed across the Site. According to the EIR, the soil piles were generated from on-Site activities and were piled for storage and eventual removal. The EIR recommended a qualified environmental professional be present on-Site during removal of debris piles to assess debris and stockpiled soils and direct disposal accordingly. All debris would be disposed of in accordance with state and local laws. Based on observations made during the Site reconnaissance, on-Site debris represent an OEF.

# 7. Database Records Review

## 7.1 Standard Environmental Record Sources

According to ASTM Standard E1527-13, the purpose of reviewing regulatory records is to obtain and review records that will help identify *recognized environmental conditions* in connection with the Site. In addition, some records to be reviewed pertain not only to the Site, but also to properties within an additional "approximate minimum search distance" in order to help assess the likelihood of problems from migrating hazardous substances or petroleum products. The basis of the "approximate minimum search distance" is the Site boundary.

Roux retained EDR of Shelton, Connecticut to provide an ASTM Radius Map Report (EDR Report) for this Site. This report is a computerized search of select state and federal environmental databases that identify various properties with a record of environmental activity. Roux reviewed the report and summarized the relevant findings in the following sections. A copy of the compiled EDR Report has been included as Appendix F. The EDR report includes a detailed description of each of the databases searched, providing a summary of the type of information provided by each. A summary of Roux' review of the EDR Report listings is provided in Table 1.

The following section describes the findings of the database search. Roux used professional judgement in determining which EDR-listed sites to include in the narrative of this report. Facilities adjoining the Site were included due to their proximity to the Site and the potential for surface water discharges (e.g., storm water runoff, surface water effluent discharges) to enter the Site or through the migration of groundwater. Sites with listings indicative of a release (e.g., SHWS, LUST, RELEASE) are likewise discussed below. Nonadjacent facilities with database listings not necessarily indicative of a release (hazardous waste generator, FINDS, ECHO, NPDES, HAZNET, AST, or UST) will not be discussed unless considered potentially relevant in context of the Phase I ESA.

### 7.1.1 Site (Target Property)

| Address | Owner/Operator | Database(s) |
|---|---|---|
| 870 Sanderson Avenue | None identified | CHMIRS |
| | Western Family Trust | HAZNET, HWTS |
| | Westra Dairy Farm | RGA LUST, LUST, Cortese, CERS, FINDS |
| | Quality Turf | FINDS |
| | Proposed High School at the Villages of San Jacinto | ENVIROSTOR, SCH |

According to the CHMIRS listing, Riverside County Fire Department was called to a burning operation at a dairy on January 28, 1999. Ten 55-gallon drums of waste motor oil were identified to be leaking and overturned. There was reportedly evidence that some oil had been dumped into a refuse pit and burned. No additional pertinent information such as the location of the drums or cleanup activities were provided. Roux

requested records from Riverside County Fire Department on July 29, 2021. No response has been received as of this report date.

In 1999, Western Family Trust generated 4.17 tons of off-specification, aged or surplus inorganics at the Site. This listing may be associated with removal of hazardous waste drums such as the 10 drums identified in the CHMIRS. Environmental concerns associated with former aboveground chemical storage at the Site are discussed in Section 6.0.

Westra Dairy Farm was identified as a closed Leaking Underground Storage Tank (LUST) facility. According to the listings, a release of gasoline to soil was remediated under oversight of the Santa Ana Regional Water Quality Control Board. The closed LUST case is further discussed above in Section 6.0.

According to client-provided information, a portion of the Site was formerly proposed to be redeveloped with a school campus. The proposed school facility, located at Ramona Boulevard and Cawston Avenue, was identified as a school investigation EnviroStor listing. The closed EnviroStor case is further discussed above in Section 8.1.

### 7.1.2 Adjoining and Nearby Properties

Discussions of adjoining and nearby properties of potential environmental concern as noted in Table 1 are provided below.

- **EMWD San Jacinto Valley RWRF / Hemet San Jacinto Reg Water (770 North Sanderson Avenue).** The south adjacent site, identified as a sewage treatment facility, was identified in the AST, RCRA-LQG, CERS HAZ WASTE, CERS TANKS, CHMIRS, NPDES, CIWQS, and CERS database. According to the AST listing, this facility is equipped with ASTs totaling 3,720 gallons in capacity. The quantity and contents of the tanks were not provided. The RCRA-LQG listing indicates ignitable waste, corrosive waste, and lead have been generated by the facility. This adjacent site has reportedly been issued a construction stormwater permit by the Eastern Municipal Water District. Absent any additional information, this adjacent site is not expected to represent a significant environmental concern to the Site based on the lack of a documented release.

### 7.1.3 Orphan Sites

The EDR Report includes a section addressing “Orphan Sites.” Orphan sites are sites, which, due to incomplete geographic location data, incomplete address information or incorrect address information, cannot be plotted correctly. The database report identified one unmapped facility.

- **Hemet/San Jacinto WWRD (770 Sanderson).** The south adjacent site was identified in the CIWQS database. This listing pertains to an inactive industrial stormwater permit issued to the facility by the Eastern Municipal Water District. Based on the lack of a documented release associated with this facility, this listing is not expected to represent a significant environmental concern.

# 8. Findings

Roux has performed this Phase I ESA in general compliance with the scope and limitations of ASTM Standard Practice E1527-13. Roux separated the findings of this assessment into the following four categories: *recognized environmental conditions*, *controlled recognized environmental conditions*, *historical recognized environmental conditions* and *other environmental features*.

## 8.1 Data Gaps

During conduct of this ESA, the following data gaps, as defined in ASTM Standard E1527-13 were identified:

- The timing of the report did not allow for all contacted agencies to respond to the records requests issued, including a request pending with the City of San Jacinto City Clerk. This data gap is not considered significant due to sufficient information available from previous environmental reports, the EDR report, and city, county, and state websites.
- Previous Site owners/operators were not available for an interview. On August 26, 2021, Roux attempted to reach an owner of the Site, Mr. Cal Westra, via telephone. Roux was informed that the phone number for Mr. Westra had been reassigned. This data gap is not considered significant due to sufficient information regarding Site history available from EDR historical documents and FOIA requests.
- Roux observed the Site from accessible road throughout the Site. Due to the size of the property and the vegetation present on site, isolated areas of the site may have not been accessible for direct observation during the Site reconnaissance.
- A portion of the Site is listed by the California DTSC as the "Proposed High School at the Villages of San Jacinto" (Global ID T60000906) at the intersection of Ramona Boulevard and Cawston Avenue. Three pages of a PEA report including the introduction and part of the executive summary are available on EnviroStor appended to a response to comments matrix; however, the full PEA document is not available online. Roux contacted the DTSC Cypress office for copies of the PEA reports. Ms. Gloria Conti and Ms. Jone Barrio of the DTSC Cypress office informed Roux that no other pertinent records for the proposed high school are on file with the DTSC and have likely been purged. Roux' inability to obtain a copy of the previous PEA report represents a data gap. Based the limited information available online for the PEA and NFA letter issued by the DTSC, this limitation is not expected to alter the findings of this assessment.

## 8.2 Recognized Environmental Conditions

Based on the information obtained through the performance of this ESA, Roux identified the following RECs in connection with the current and historical operations at the Site or adjacent properties. To the extent possible, the locations of the RECs are shown in Figure 2. To avoid confusion, all RECs, cRECs, and hRECs, and OEFs are numbered sequentially.

**REC 1 – Former Heifer Farm.** A southeastern portion of the Site, totaling approximately 20 acres in size, was formerly developed as a heifer raising farm from at least 1978 through 2002. The former heifer farm operations represented a REC due to the possible presence of methane from manure.

**REC 2 - Petroleum-Stained Soil.** During a reconnaissance of the Site conducted in 2002, petroleum-stained soil was observed beneath a diesel AST located northwest of the reservoir (pond), near the irrigation groundwater well located southwest of the reservoir, and on the floor of the equipment shed, beneath three oil-containing 55-gallon drums. Based on the storage of hazardous substances and

petroleum products in uncovered ground areas and evidence of a release, the former chemical storage identified above represented a REC.

**REC 3 - Pond**. The Site is equipped with a pond located on the southwestern corner. According to aerial photographs, the pond was added between 1978 and 1985 and was likely used as part of the heifer ranch operations. According to a 2009 EIR, the reservoir contained reclaimed water from the neighboring San Jacinto Valley Regional Water Reclamation Facility related to irrigation for sod farming activities on-Site. It is unknown whether the pond also historically received wastewater from the on-Site ranch operations, was used for agricultural irrigation, or stored water treated with larvicide/repellant for mosquito control. The pond appeared unlined, allowing waters to infiltrate the ground and recharge the aquifer. Based on the historical agricultural use of the Site, the on-Site pond represents a REC.

**REC 4 - Former Agricultural Applied Pesticide Area**. Based on a review of historical sources, a portion of the Site was developed for agricultural use (row crops) as early as 1949 with increased agricultural development noted from at least 1978 to 2016. No indications of former row crops were observed on the Site. According to the EIR, a portion of the Site was developed as a sod farm from 1997 through at least 2002. Any residual pesticide, herbicide, or fertilizer residue in Site soils associated with sod farming was not identified as an environmental concern based on the removal of shallow soils during sod harvest. Agricultural production prior to 1997 at the Site is not currently known. However, it is likely that agricultural chemicals, such as pesticides, herbicides, and fertilizers, were used on-Site historically, and the potential for impacts from agricultural chemicals to on-Site soils is considered a REC.

## 8.3 Controlled Recognized Environmental Conditions

Roux did not identify known or suspected cRECs in connection with the current and historical operations at the Site

## 8.4 Historical Recognized Environmental Conditions

Roux identified the following hRECs in connection with the current and historical operations at the Site or adjacent properties. To the extent possible, the locations of the hRECs are shown in Figure 2.

**hREC 5 – Historical Underground Storage Tanks.** Westra Dairy Farm, formerly located on-Site at 870 Sanderson Avenue, was identified as having a closed LUST file. According to closure documents, the former on-Site dairy farm (or heifer ranch) had two 1,000-gallon gasoline USTs and one 10,000-gallon gasoline UST located south of a former workshop building in the southern portion of the Site. All three USTs were removed from the Site in December 1999 under direction of the County of Riverside. The tank area was over-excavated and approximately 120 tons of contaminated soil were removed and transported for off-Site disposal. In October 2000, a soil investigation identified TPH and VOC impacts below the former tanks to a depth of 35 feet bgs. In May 2001, a vapor extraction well was subsequently in the vicinity of the former tanks and a mobile soil vapor extraction system was used to extract and treat soil vapor. Soil samples do not appear to have been collected following the vapor extraction test. It is unknown if the SVE system operated outside of the 7-hour vapor extraction test as part of remediation for the impacted soils. A “No Further Action” letter was issued by the SA-RWQCB to the Westra Family Trust on December 26, 2001. The closure letter recommended that correction action should be reviewed if land use changes. According to the “No Further Action” letter, data from this investigation indicates that the residual petroleum hydrocarbons in soil are limited to an area with a 15-foot radius between 15

and 20 feet bgs and did not indicate a significant presence or source of petroleum hydrocarbons in the soil. Although a closure document was issued by the SA-RWQCB in 2001, the remaining petroleum hydrocarbon-impacted soil in the former LUST area is considered a hREC.

## 8.5 Other Environmental Features

OEFs are environmental conditions that do not meet the definition of a REC, cREC, or hREC, but which may warrant mention in a comprehensive Phase I ESA. Based on the subject Phase I ESA, Roux identified the following OEFs at or in the vicinity of the Site. To the extent possible, the locations of the OEFs are shown in Figure 2.

**OEF 6 - Septic Systems.** According to the EIR, the Site was equipped with two septic systems that historical sources suggest may have been in operation for many decades. The EIR stated the septic systems would be removed along with any residue material in accordance with Riverside County Department of Environmental Health (RCDEH) protocols. Based on the likely use of these systems for domestic waste only, the existing septic systems represent an OEF.

**OEF 7 - Debris.** Debris, including old equipment, water heaters, tires, and trash were observed in several piles throughout the site both in the 2002 Phase I ESA and during Site reconnaissance associated with the EIR. Several mounds of soil also were observed across the Site. According to the EIR, the soil piles were generated from on-Site activities and were piled for storage and eventual removal. The EIR recommended a qualified environmental professional be present on-Site during removal of debris piles to assess debris and stockpiled soils and direct disposal accordingly. Based on observations made during the Site reconnaissance, on-Site debris represent an OEF.

**OEF 8 - Abandoned Drums**. Two abandoned 55-gallon drums were observed during Roux' Site reconnaissance on August 3, 2021. The drums were observed on a concrete pad in the southeastern portion of the Site in the vicinity of the former heifer ranch area and appeared to contain unknown waste products. Minor to moderate staining was observed in the vicinity of these features. The staining was located on a paved area. It appears that the staining is surficial in nature and thus is not expected to represent a significant environmental concern.

# 9. References


American Society for Testing Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13)

EDR, *The EDR Radius Map™ Report with GeoCheck®*, July 30, 2021

EDR, *The EDR Aerial Photo Decade Package*, July 30, 2021

EDR, *EDR Historical Topo Map Report*, July 30, 2021

EDR, *Certified Sanborn Map Report*, July 30, 2021

EDR, *The EDR-City Directory Abstract*, August 3, 2021

ATC Associates Inc. (ATC), *Site Investigation, Westra Dairy, 870 Sanderson Avenue, San Jacinto, California*, October 30, 2000.

Stratus Environmental, Inc. (Stratus), *Well Investigation and Vapor Extraction Testing, Westra Diary Farm, 870 North Sanderson Avenue, San Jacinto, California*, June 6, 2001.

Dudek, *Recirculated Draft Environmental Impact Report No.2, Villages of San Jacinto,* August 2009.

Leighton Consulting, Inc. (Leighton), *Groundwater Monitoring Well Installation Report and Results of Groundwater Monitoring, Former San Jacinto Mobil, Site No. 200824216, 2070 North Sanderson Avenue, San Jacinto, California*, August 24, 2009.

# 10. Signature of Environmental Professional

Roux performed this assessment in accordance with the generally accepted practices for environmental assessments at the time of implementation. Roux made a reasonable effort to ensure that the information presented in this report is materially complete and accurate.

Roux completed a Phase I ESA in general compliance with the scope and limitations of ASTM Practice E1527-13 of the vacant property located at west of North Sanderson Avenue, San Jacinto, Riverside County, California.

"We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental professional as defined in §312.10 of 40 CFR 312" and,

"We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

Roux performed this Phase I ESA by, or under direct supervision of, the undersigned environmental professionals.

Respectfully Submitted,

**ROUX ASSOCIATES, INC**.

Rocio Quinones
Project Scientist

Mauricio H. Escobar, P.G.
Principal Geologist

# TABLES

1. Standard Environmental Record Sources (EDR Report) Summary

**Table 1: Standard Environmental Record Sources (EDR Report) Summary**

870 & 1380 N SANDERSON AVENUE SAN JACINTO, CA 92582

| Site Name | Address | Database Listings | Distance (Miles) | Direction | Discussed in Report Text |
|---|---|---|---|---|---|
| | 870 SANDERSON AVE | CHMIRS | TP | TP | Yes |
| WESTERN FAMILY TRUST | 870 N SANDERSON | HWTS,HAZNET | TP | TP | Yes |
| WESTRA DAIRY FARM | 870 SANDERSON | RGA LUST | TP | TP | Yes |
| WESTRA DAIRY FARM | 870 SANDERSON | LUST,CORTESE,CERS | TP | TP | Yes |
| WESTRA DAIRY FARM | 870 SANDERSON | FINDS | TP | TP | Yes |
| QUALITY TURF | 870 SANDERSON AVE | FINDS | TP | TP | Yes |
| PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINT | RAMONA BOULEVARD/CAWSTON AVENUE | ENVIROSTOR,SCH | 0 | 0 | Yes |
| PROPOSED HIGH SCHOOL | RAMONA BOULEVARD/CAWSTON AVENUE | CERS | 0 | 0 | Yes |
| SAN JACINTO VALLEY REGIONAL WATER RECLAMATION FACI | 700 N SANDERSON AVE | FINDS | 0 | 0 | Yes |
| SAN JACINTO VALLEY REGIONAL WATER RECLAMATION FACI | 700 N SANDERSON AVE | RCRA-VSQG | 0 | 0 | Yes |
| EMWD SAN JACINTO VALLEY RWRF | 770 N SANDERSON AVE | CERS HAZ WASTE,CERS TANKS,CHMIRS,NPDES,CIWQS,CERS | 0.146 | SSE | Yes |
| HEMET SAN JACINTO REG WATER | 770 N SANDERSON AVE | AST | 0.146 | SSE | Yes |
| SAN JACINTO VALLEY RWRF | 770 NORTH SANDERSON | RCRA-LQG | 0.146 | SSE | Yes |

Notes

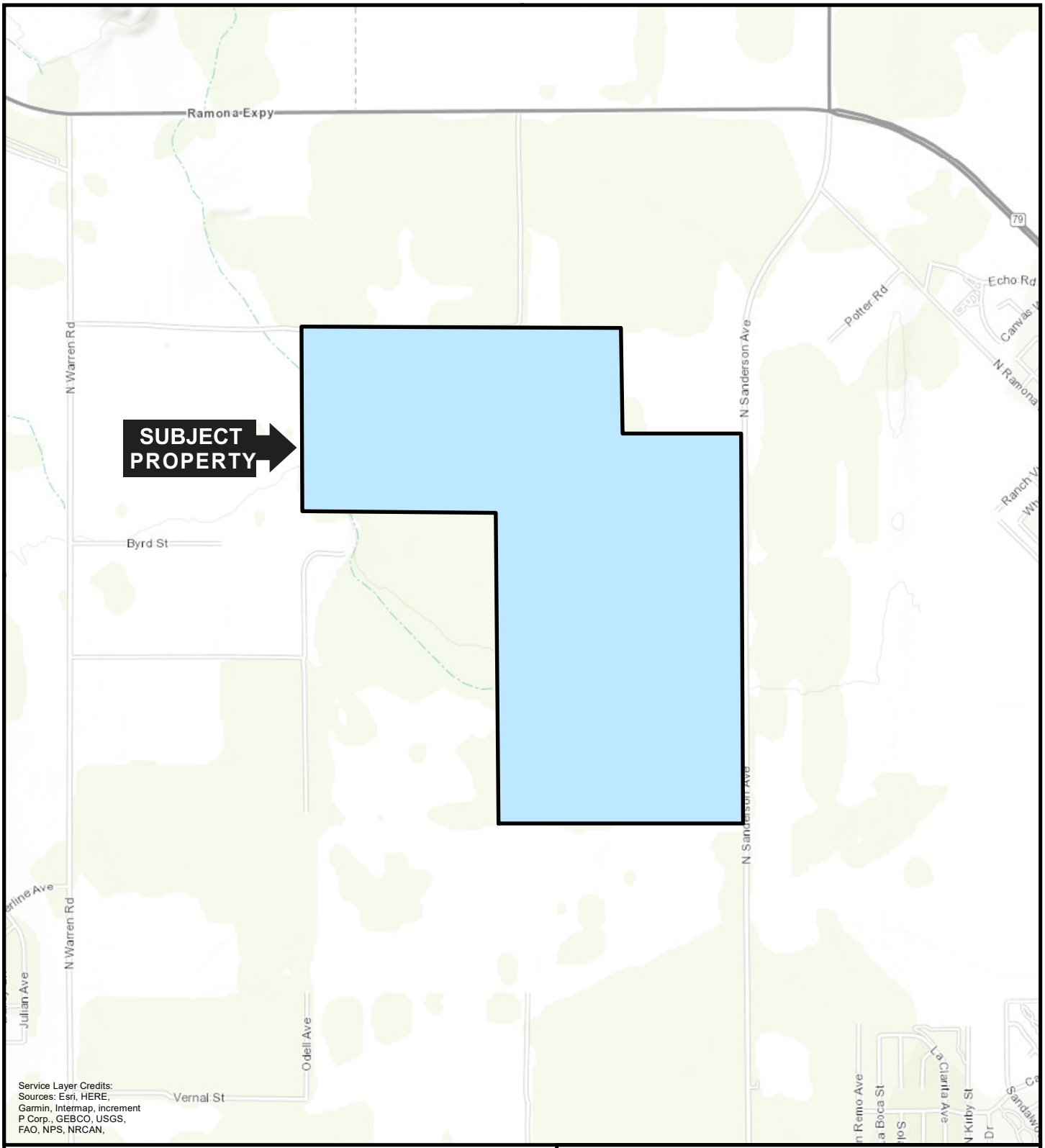
Blue: Facility does not have associated database listings indicative of a release or contamination

Green: Facility is hydraulically downgradient or crossgradient and/or is a closed release case

Orange: Facility has an associated release case impacting soil only and/or VOCs are not a potential contaminant of concern

# FIGURES

1. Site Location Map
2. Site Plan
3. Site Plan: Former Operations Area




QUADRANGLE LOCATION

N

1,000 0 1,000'

Title:

# SITE LOCATION MAP

Villages at San Jacinto
870 & 1380 N Sanderson Avenue
San Jacinto, Riverside County, California

Prepared for:

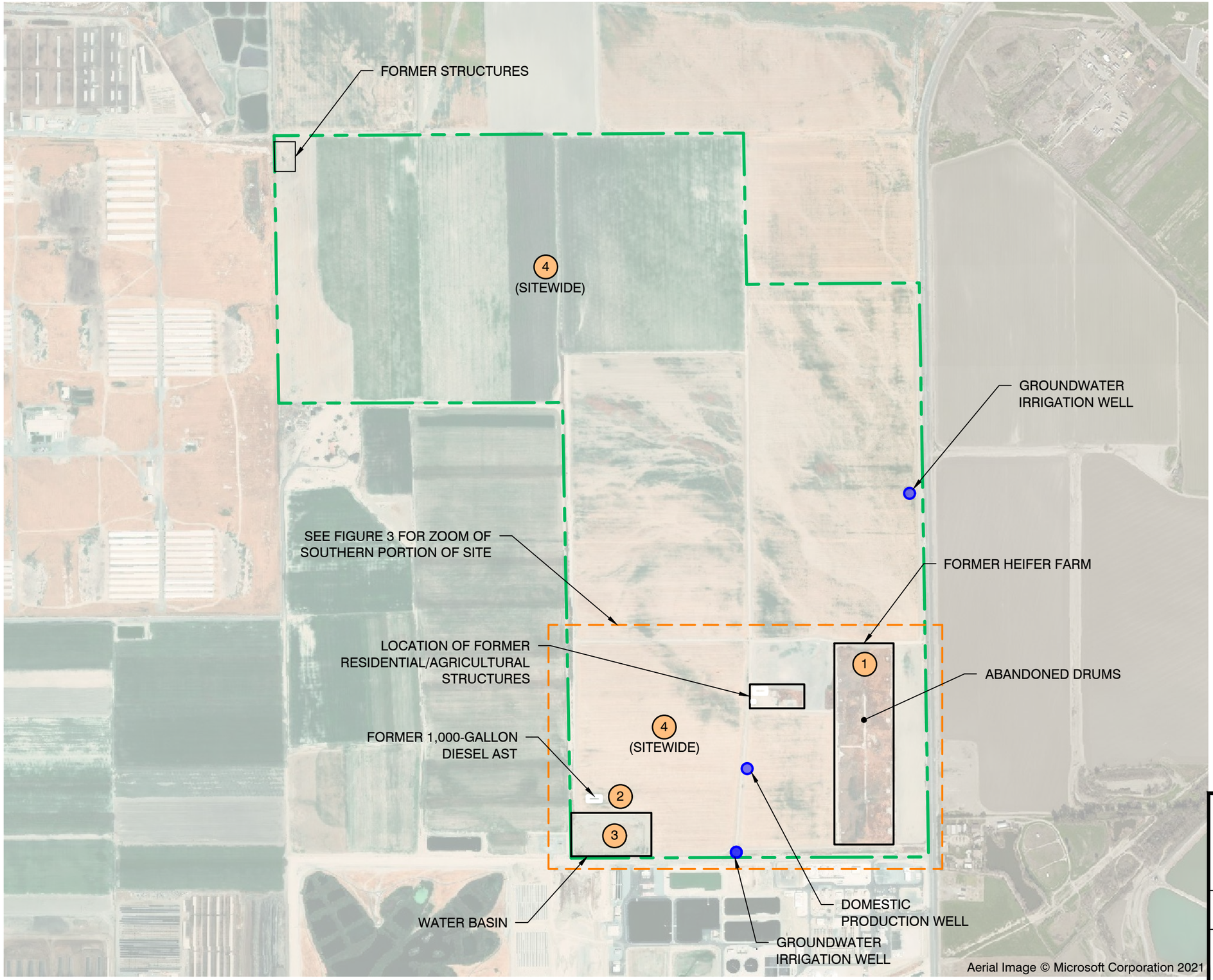
SHEA PROPERTIES LLC

ROUX

| | |
|---|---|
| Compiled by: C.M. | Date: 08/04/21 |
| Prepared by: C.M. | Scale: AS SHOWN |
| Project Mgr: R.Q. | Project: |

FIGURE 1

S:\OFFICE ADMIN\REFERENCE LIBRARY\CM\FIGURE 1 - SAN JACINTO.MXD




LEGEND

- APPROXIMATE SITE BOUNDARY
- APPROXIMATE WATER WELL LOCATION
- # RECOGNIZED ENVIRONMENTAL CONDITION (REC)

N

0' 800' 1600'

Title:

**SITE PLAN**

NORTH SANDERSON AVENUE
SAN JACINTO, CALIFORNIA

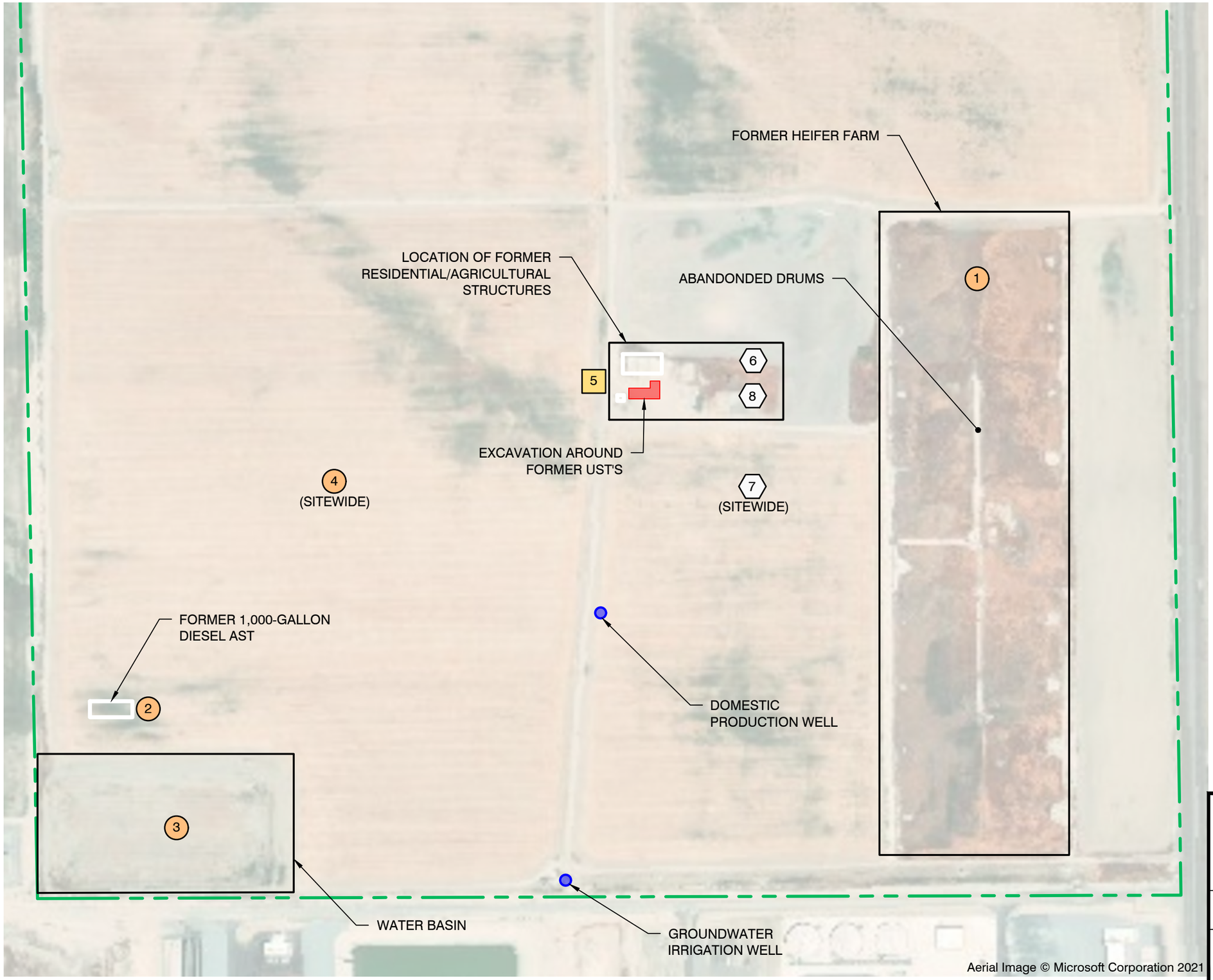
Prepared for:

SHEA PROPERTIES

ROUX

| | | | |
|---|---|---|---|
| Compiled by: C.J. | Date: 30 AUG 2021 | 2 |
| Prepared by: C.J. | Scale: AS SHOWN | |
| Project Mgr: R.Q. | Project: 2217.0025L | |
| File: 001_2217.XXXX_SITE PLAN.DWG | | |

S:\CLIENTS\2217.0025L SHEA SAN JACINTO MHE\10CAD\001_2217.XXXX_SITE PLAN.DWG




Aerial Image © Microsoft Corporation 2021

LEGEND

- APPROXIMATE SITE BOUNDARY
- APPROXIMATE WATER WELL LOCATION
- 1 REC 1 - FORMER HEIFER FARM
- 2 REC 2 - PETROLEUM-STAINED SOIL
- 3 REC 3 - POND
- 4 REC 4 - HISTORICAL AGRICULTURAL USE
- 5 hREC 5 - HISTORICAL UNDERGROUND STORAGE TANKS
- 6 OEF 6 - SEPTIC TANKS
- 7 OEF 7 - DEBRIS
- 8 OEF 8 - ABANDONED DRUMS

N

0' 250' 500'

Title:

# SITE PLAN
# FORMER OPERATIONS AREA

NORTH SANDERSON AVENUE
SAN JACINTO, CALIFORNIA

Prepared for:

SHEA PROPERTIES

ROUX

| | |
|---|---|
| Compiled by: C.J. | Date: 30 AUG 2021 |
| Prepared by: C.J. | Scale: AS SHOWN |
| Project Mgr: R.Q. | Project: 2217.0025L |
| File: 001_2217.XXXX_SITE PLAN.DWG | |

3

S:\CLIENTS\2217.0025L SHEA SAN JACINTO MHE\10CAD\001_2217.XXXX_SITE PLAN.DWG

# APPENDICES

A. Glossary of Terms

B. Historical Topographic Maps

C. Historical Aerial Photographs

D. Certified Sanborn Report

E. EDR City Directory Image Report

F. EDR Radius Map Report with Geocheck®

G. Photographic Log

H. Pertinent Historical Documentation

# APPENDIX A

## Glossary of Terms

# GLOSSARY OF KEY TERMS

This appendix provides definitions, description of terms, and a list of acronyms for many of the words used in ASTM E 1527-13. These terms are an integral part of ASTM E 1527-13 and are critical to understanding ASTM E 1527-13 and its use.

***DEFINITIONS:***

***Abandoned Property*** – *property* that can be presumed to be deserted, or an intent to relinquish possession or control can be inferred from the general disrepair or lack of activity thereon such that a reasonable person could believe that there was an intent on the part of the current *owner* to surrender rights to the *property*.

***Activity and Use Limitations*** – Legal or physical restrictions or limitations on the use of, or access to, a site or facility: *(1)* to reduce or eliminate potential exposure to *hazardous substances* or *petroleum products* in the soil, soil vapor, groundwater, and/or surface water on the *property*, or *(2)* to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or *engineering controls*, are intended to prevent adverse impacts to individuals or populations that may be exposed to *hazardous substances* and *petroleum products* in the soil, soil vapor, groundwater, and/or surface water on the *property*.

***Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)*** – The list of sites compiled by EPA that EPA has investigated, or is currently investigating, for potential hazardous substance contamination for possible inclusion on the National Priorities List.

***Construction debris*** – Concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvement to property.

***Contaminated public wells*** – Public wells used for drinking water that have been designated by a government entity as contaminated by toxic substances (for example, chlorinated solvents), or as having water unsafe to drink without treatment.

***Contiguous Property Owner Liability Protection*** – a person may qualify for the *contiguous property owner liability protection* if, among other requirements, such person owns real *property* that is contiguous to, and that is or may be contaminated by *hazardous substances* from other real *property* that is not owned by that person. Furthermore, such person conducted *all appropriate inquiries* at the time of acquisition of the *property* and did not know or have reason to know that the *property* was or could be contaminated by a *release* or threatened *release* from the contiguous *property*. The *all appropriate inquiries* must not result in knowledge of contamination. If it does, then such person did “know” or “had reason to know” of contamination and would not be eligible for the *contiguous property owner liability protection*.

***Controlled Recognized Environmental Condition*** – a *recognized environmental condition* resulting from a past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls (for example, *property* use restrictions, *activity and use limitations*, *institutional controls*, or *engineering controls*).

***CORRACTS list*** – a list maintained by EPA of *hazardous waste* treatment, storage, or disposal facilities and other RCRA-regulated facilities (due to past interim status or storage of *hazardous waste* beyond 90 days)

that have been notified by the U.S. Environmental Protection Agency to undertake corrective action under RCRA. The *CORRACTS list* is a subset of the EPA database that manages RCRA data.

***Demolition debris*** – Concrete, brick, asphalt, and other such building materials discarded in the demolition of a building or other improvement to property.

***Drum*** – A container (typically, but not necessarily, holding 55 gal (208 L) of liquid) that may be used to store *hazardous substances* or *petroleum products.*

***Dry wells*** – Underground areas where soil have been removed and replaced with pea gravel, coarse sand, or large rocks. Dry wells are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional), and wastewater disposal (often illegal).

***Dwelling*** – Structure of portion thereof used for residential habitation.

***Engineering controls*** – Physical modifications to a site or facility (for example, capping, slurry walls, or point of use water treatment) to reduce or eliminate the potential for exposure to contaminants in the soil or groundwater on the property.

***Environmental lien*** – A charge, security, or encumbrance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*, including (but not limited to) liens imposed pursuant to CERCLA 42 USC § 9607(1) and similar state or local laws.

***ERNS list*** – EPA's emergency response notification system list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such releases or spills are codified in 40 CFR parts 302 and 355.

***Federal Register (FR)*** – Publication of the Untied States government published daily (except for federal holidays and weekends) containing all proposed and final regulations and some other activities of the federal government. When regulations become final, they are included in the Code of Federal Regulations (CFR), as well as published in the Federal Register.

***Fire insurance maps*** – Maps produced for private fire insurance map companies that indicate uses of properties at specified dates and that encompass the property. These maps are often available in local libraries, historical societies, private resellers, or from the map companies who produced them. See Question 23 of the transaction screen process in Practice E 1528 and 7.3.4.2 of this practice.

***Hazardous substance*** – A substance defined as hazardous pursuant to CERCLA 42 USC § 9601(14), as interpreted by EPA regulations and the courts: "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Soil Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 USC § 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A)

through (F) of this paragraph; the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

***Hazardous waste*** – Any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Cat (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress). The Solid Waste Disposal Act of 1980 amended RCRA. RCRA defines hazardous waste, in 42 USC § 6903, as: "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may – (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

***Institutional control*** – A legal or administrative restriction (e.g., deed restriction, restrictive zoning) on the use of, or access to, a site or facility to reduce or eliminate potential exposure to contaminants in the soil or groundwater on the property.

***Landfill*** – A place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *solid waste disposal site* and is also known as a garbage dump, trash dump, or similar term.

***Local street directories*** – Directories published by private (or sometimes government) sources that show ownership, occupancy, and/or use of sites by reference to street addresses. Often, local street directories are available at libraries of local governments, colleges or universities, or historical societies.

***Material safety data sheet (MSDS)*** – Written or printed material concerning a hazardous substance which is prepared by chemical manufacturers, importers, and employers for hazardous chemicals pursuant to OSHA's Hazard Communication Standard, 29, CFR 1910.1200.

***National Contingency Plan (NCP)*** – The National Oil and Hazardous Substances Pollution Contingency Plan, found at 40 CFR § 300, that is the EPA's blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA.

***National Priorities List (NPL)*** – List compiled by the EPA, pursuant to CERCLA 42 USC § 9605(a)(8)(B), of properties with the highest priority for cleanup pursuant to EPA's Hazard Ranking System. See 40 CFR Part 300.

***Occupants*** – Those tenants, subtenants, or other persons or entities using the *property* or a portion of the *property.*

***Owner*** – Generally the fee owner of record for the *property*.

***Petroleum exclusion*** – The exclusion from CERCLA liability provided in 42 USC § 9601(14), as interpreted by the courts and EPA: "The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

***Petroleum products*** – Those substances included within the meaning of the *petroleum exclusion* to CERCLA, 42 USC § 9601(14), as interpreted by the courts and EPA, that is: petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of 42 USC § 9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). (The word fraction refers to certain distillates of crude oil, including gasoline, kerosene, diesel oil, jet fuels, and fuel oil, pursuant to *Standard Definitions of Petroleum Statistics*[1]*.)*

***Phase I Environmental Site Assessment*** – The process described in this practice.

***Pits, ponds, or lagoons*** – Man-made or natural depressions in the ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

***Property*** – The real property that is the subject of the *environmental site assessment* described in this practice. Real property includes buildings and other fixtures and improvement located on the property and affixed to the land.

***Property tax files*** – The files kept for property tax purposes by the local jurisdiction where the property is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is reasonable ascertainable and pertaining to the property.

***RCRA generators*** – Those persons or entities that generate hazardous waste, as defined and regulated by RCRA.

***RCRA generators list*** – List kept by the EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

***RCRA TSD facilities*** – Those facilities at which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

***RCRA TSD facilities list*** – List kept by the EPA of those facilities at which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

***Recorded land title records*** – Records of fee ownership, leases, land contracts, easements, liens, and other encumbrances on or of the property recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located. (Often such records are kept by a municipal or county recorder or clerk.) Such records may be obtained from title companies or directly from the local government agency. Information about the title to the property that is recorded in a U.S. district court or any place other than where land title records are, by law or custom, recorded for the local jurisdiction in which the property is located, are not considered part of recorded land title records.

***Records of emergency release notifications (SARA § 304)*** – Section 304 of EPCRA or Title III of SARA requires operators of facilities to notify their local emergency planning committee (as defined in EPCRA) and the state emergency response commission (as defined in EPCRA) of any release beyond the facility's boundary of any reportable quantity of any extremely hazardous substance. Often the local fire department is the local emergency planning committee. Records of such notifications are "Records of Emergency Release Notifications" (SARA§ 304).

***Report*** – The written record of a transaction screen process as required by Practice E 1528 or the written report prepared by the environmental professional and constituting part of a "Phase I Environmental Site Assessment," as required by this practice.

***Solid waste disposal site*** – A place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *landfill* and is also known as a garbage dump, trash dump, or similar term.

***Solvent*** – A chemical compound that is capable of dissolving another substance and may itself be a *hazardous substance,* used in a number of manufacturing/industrial processes including, but not limited to, the manufacture of paints and coatings for industrial and household purposes, equipment clean-up, and surface degreasing in metal fabricating industries.

***State registered USTs*** – State lists of underground storage tanks required to be registered under Subtitle I, Section 9002 of RCRA.

***Sump*** – A pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

***TSD facility*** – Treatment, storage, or disposal facility (*see RCRA TSD facilities*).

***Underground storage tank (UST)*** - Any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10% or more beneath the surface of the ground.

***USGS 7.5 Minute Topographic Map*** – The map (if any) available from or produced by the United States Geological Survey, entitled "USGS 7.5 Minute Topographic Map," and showing the property.

***Wastewater*** – Water that (1) is or has been used in an industrial or manufacturing process, (2) conveys or has conveyed sewage, or (3) is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. Wastewater does not include water originating on or passing through or adjacent to a site, such as storm water flows, that has not been used in industrial or manufacturing processes, has not been combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

***Zoning/land use records*** – Those records of the local government in which the *property* is located, indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located in the planning department of a municipality or county.

***DEFINITIONS SPECIFIC TO ASTM E 1527-13:***

***Actual knowledge*** – The knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge that is knowledge imputed to an individual or entity.

***Adjoining properties*** – Any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them.

***Aerial photographs*** – Photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the property. Aerial photographs are often available from government agencies or private collections unique to a local area.

***Appropriate inquiry*** – That inquiry constituting "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in CERCLA, 42 USC § 9601(35)(B), that will give a party to a *commercial real estate* transaction the *innocent landowner defense* to the CERCLA liability (42 USC § 9601(A) and (B) and § 9607(b)(3)), assuming compliance with other elements of the defense. See Appendix X1.

***Approximate minimum search distance*** – The area for which records must be obtained and reviewed pursuant to Section 7 subject to the limitations provided in that section. This may include areas outside the *property* and shall be measured from the nearest *property* boundary. This term is used in lieu of radius to include irregularly-shaped properties.

***Building department records*** – Those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property. Often, building department records are located in the building department of a municipality or county.

***Business environmental risk*** – A risk which can have a material environmental or environmentally-driven financial impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of *business environmental risk* issues may necessitate that an *environmental professional* address one or more non-scope considerations, some of which are identified in Section 12.

***Commercial real estate –*** Any real property except a dwelling or property with no more than four dwelling units exclusively for residential use (except that a dwelling or property with no more than four dwelling units exclusively for residential use is included in this term when it has a commercial function, as in the building of such dwellings for profit). This term includes, but is not limited to, undeveloped real property and real property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes; property used for residential purposes that has more than four residential dwelling units; and any property with no more than four dwelling units for residential use when it has a commercial function, as in the building of such dwellings for profit.

***Commercial real estate transaction*** – A transfer of title to or possession of real property or receipt of a security interest in real property, except that it does not include transfer of title to or possession of real property or the receipt of a security interest in real property with respect to an individual dwelling or building containing fewer than five dwelling units, nor does it include the purchase of a lot or lots to construct a dwelling for occupancy by a purchaser, but a commercial real estate transaction does include real property purchased or leased by persons or entities in the business of building or developing dwelling units.

***Controlled Recognized Environmental Condition*** – a *recognized environmental condition* resulting from a past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls (for example, *property* use restrictions, *activity and use limitations*, *institutional controls*, or *engineering controls*).

***Due diligence*** – The process of inquiring into the environmental characteristics of a parcel of *commercial real estate* or other conditions, usually in connection with a commercial real estate transaction. The degree and kind of due diligence vary for different properties and differing purposes.

***Environmental audit*** – The investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe Practice E 1528 or this practice, although an environmental audit may include an *environmental site assessment* or, if prior audits are available, may be part of an environmental site assessment.

***Environmental professional*** – A person processing sufficient training and experience necessary to conduct a *site reconnaissance, interviews,* and other activities in accordance with this practice, and from the information generated by such activities, having the ability to develop opinions and conclusions regarding *recognized environmental conditions* in connection with the *property* in question. An individual's status as an environmental professional may be limited to the type of assessment to be performed or to specific segments of the assessment for which the professional is responsible. The person may be an independent contractor or an employee of the *user.*

***Environmental site assessment (ESA)*** – The process by which a person or entity seeks to determine if a particular parcel of real *property* (including improvements) is subject to *recognized environmental conditions.* At the option of the *user*, an environmental site assessment may include more inquiry than that constituting *appropriate inquiry* or, if the user is not concerned about qualifying for the *innocent landowner defense,* less inquiry than that constituting *appropriate inquiry.* An environmental site assessment is both different from and less rigorous than an *environmental audit.*

***Fill dirt*** – Dirt, soil, sand, or other earth, obtained off-site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real property. It does not include material that is used in limited quantities for normal landscaping activities.

***Hazardous waste/contaminated sites*** – Sites on which a release has occurred, or is suspected to have occurred, of any *hazardous substance, hazardous waste,* or *petroleum products,* and that release or suspected release has been reported to a government entity.

***Historical Recognized Environmental Condition*** – a past *release* of any *hazardous substances* or *petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the *property* to any required controls (for example, *property* use restrictions, *activity and use limitations*, *institutional controls*, or *engineering controls*). Before calling the past *release* a *historical recognized environmental condition*, the *environmental professional* must determine whether the past *release* is a *recognized environmental condition* at the time the *Phase I Environmental Site Assessment* is conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past *release* to be a *recognized environmental condition* at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a *recognized environmental condition*.

***Innocent landowner defense*** – That defense to CERCLA liability provided in 42 USC § 9601(35) and § 9607(b)(3). One of the requirements to qualify for this defense is that the party make "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice." There are additional requirements to qualify for this defense.

***Interviews*** – Those portions of this practice that are contained in Section 9 and 10 thereof and address questions to be asked of *owners* and *occupants* of the *property* and questions to be asked of local government officials.

***Key site manager*** – The person identified by the *owner* of a *property* as having good knowledge of the uses and physical characteristics of the property.

***Local government agencies*** – Those agencies of municipal or county government having jurisdiction over the *property.* Municipal and county government agencies include, but are not limited to, cities, parishes, townships, and similar entities.

***LUST sites*** – State lists of leaking underground storage tank sites. Section 9003 (h) of Subtitle I of RCRA gives EPA and states, under cooperative agreements with EPA, authority to clean up releases from UST systems or require owners and operators to do so.

***Major occupants*** – Those tenants, subtenants, or other persons or entities each of which uses at least 40% of the leasable area of the *property* or any anchor tenant when the *property* is a shopping center.

***Material threat*** – A physically observable or obvious threat which is reasonable likely to lead to a release that, in the opinion of the *environmental professional,* is threatening and might result in impact to human health and the environment. An example might include an aboveground storage tank that contains a hazardous substance and which shows evidence of damage. The damage would represent a material threat if it is deemed serious enough that it may cause or contribute to tank integrity failure with a release of contents to the environment.

***Obvious*** – That which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while *visually* or *physically observing the property.*

***Other historical sources*** – Any source or sources other than those designated in 7.3.4.1-7.3.4.8 that are credible to a reasonable person and that identify past uses of the property. The term includes, but is not limited to, miscellaneous maps, newspaper archives, and records in the files and/or personal knowledge of the *property owner* and/or *occupants.*

***Physical setting sources*** – sources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a *property.*

***Practically reviewable*** – Information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the *property* without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the user can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the *property* or a geographic area in which the *property* is located are not generally *practically reviewable.* Most databases of public records are *practically reviewable* if they can be obtained from the source agency by the county, city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally practically reviewable. Listings in publicly available records which do not have adequate address information to be located geographically are not generally considered practically reviewable. For large databases with numerous facility records (such as RCRA hazardous waste generators and registered underground storage tanks), the records are not *practically reviewable* unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be

identified within a given zip code. In these cases, it is not necessary to review the impact of all of the sites that are likely to be listed in any given zip code because that information would not be *practically reviewable*. In other words, then so much data is generated that it cannot be feasibly reviewed for its impact on the *property,* it is not *practically reviewable.*

***Preparer*** – The person preparing the *transaction screen questionnaire* pursuant to Practice E 1528, who may be either the user or the person to whom the user has delegated the preparation of the *transaction screen questionnaire.*

***Publicly available*** – Information that is publicly available means that the source of the information allows access to the information by anyone upon request.

***Reasonably ascertainable*** – For purposes of both this practice and Practice E 1528, information that is (1) *publicly available,* (2) obtainable from its source within reasonable time and cost constraints, and (3) *practically reviewable.*

***Recognized Environmental Conditions*** – the presence or likely presence of any *hazardous substances* or *petroleum products* in, on, or at a *property*: (*1*) due to release to the environment; (*2*) under conditions indicative of a *release* to the *environment*; or (*3*) under conditions that pose a *material threat* of a future *release* to the *environment*. *De minimis conditions* are not *recognized environmental conditions*.

***Records review*** – That part that is contained in Section 7 of this practice addresses which records shall or may be reviewed.

***Site reconnaissance*** – That part that is contained in Section 8 of this practice and addresses what should be done in connection with the *site visit.* The site reconnaissance includes, but is not limited to, the *site visit* done in connection with such a Phase I Environmental Site Assessment.

***Site visit*** – The visit to the property during which observations are made constituting the *site reconnaissance* section of this practice and the *site visit* requirement of Practice E 1528.

***Standard environmental record sources*** – Those records specified in 7.2.1.1.

***Standard historical sources*** – Those sources of information about the history of uses of the property specified in 7.3.4.

***Standard physical setting source*** – A current USGS 7.5-minute topographic map (if any) showing the area on which the property is located.

***Standard practice(s)*** – The activities set forth in either and both this practice and Practice E 1528.

***Standard sources*** – Sources of environmental, physical setting, or historical records specified in Section 7 of this practice.

***Transaction screen process*** – The process described in Practice E 1528.

***Transaction screen questionnaire*** – The questionnaire provided in Section 6 of Practice E 1528.

***User*** – The party seeking to use Practice E 1528 to perform an *environmental site assessment* of the *property*. A user may include, without limitation, a purchaser of *property,* a potential tenant of *property,* an *owner* of *property,* a lender, or a property manager.

***Visually and/or physically observed*** – During a *site visit* pursuant to Practice E 1528, or pursuant to this practice, this term means observations made by vision while walking through a *property* and the structures located on it and observations made by the sense of smell, particularly observations of noxious or foul odors. The term "walking through" is not meant to imply that disabled persons who cannot physically walk may not conduct a *site visit;* they may do so by the means at their disposal for moving through the *property* and the structures located on it.

***ACRONYMS:***

***CERCLA*** – Comprehensive Environmental Response, Compensation and Liability Act of 1980 (as amended, 42 USC § 9601 *et seq.*)

***CERCLIS*** – Comprehensive Environmental Response, Compensation and Liability Information System (maintained by EPA)

***CFR*** – Code of Federal Regulations

***CORRACTS*** – Facilities subject to corrective action under RCRA

***EPA*** – United States Environmental Protection Agency

***EPCRA*** – Emergency Planning and Community Right to Know Act (also known as SARA Title III), 42 USC § 11001 *et seq.*)

***ERNS*** – Emergency response notification system

***ESA*** – Environmental site assessment (different than an *environmental audit*)

***FOIA*** – U.S. Freedom of Information Act (5 USC 552 *et seq.*)

***FR*** – Federal Register

***LUST*** – Leaking underground storage tank

***MSDS*** – Material safety data sheet

***NCP*** – National Contingency Plan

# APPENDIX B

Historical Topographic Maps

Villages of San Jacinto
870 & 1380 N Sanderson Avenue
San Jacinto, CA 92582

Inquiry Number: 6599939.4
July 30, 2021

# EDR Historical Topo Map Report

## with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Historical Topo Map Report

07/30/21

**Site Name:**

Villages of San Jacinto
870 & 1380 N Sanderson Aven
San Jacinto, CA 92582
EDR Inquiry # 6599939.4

**Client Name:**

Roux Associates
402 Heron Drive
Logan Township, NJ 08085-0000
Contact: Connor Moore

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Roux Associates were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

***Search Results:***

**P.O.#** NA

**Project:** Shea Villages of San Jacinto

***Coordinates:***

| | |
|---|---|
| **Latitude:** | 33.813328 33° 48' 48" North |
| **Longitude:** | -117.020638 -117° 1' 14" West |
| **UTM Zone:** | Zone 11 North |
| **UTM X Meters:** | 498089.97 |
| **UTM Y Meters:** | 3741458.66 |
| **Elevation:** | 1460.10' above sea level |

**Maps Provided:**

2012
1979
1967, 1972
1953
1943
1901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## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

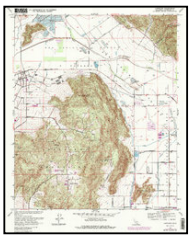
### 2012 Source Sheets

Lakeview
2012
7.5-minute, 24000

San Jacinto
2012
7.5-minute, 24000

### 1979 Source Sheets

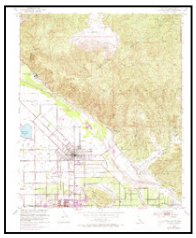
San Jacinto
1979
7.5-minute, 24000
Aerial Photo Revised 1978



Lakeview
1979
7.5-minute, 24000
Aerial Photo Revised 1976

### 1967, 1972 Source Sheets

Lakeview
1967
7.5-minute, 24000
Aerial Photo Revised 1966



San Jacinto
1972
7.5-minute, 24000
Aerial Photo Revised 1972

### 1953 Source Sheets

San Jacinto
1953
7.5-minute, 24000
Aerial Photo Revised 1949

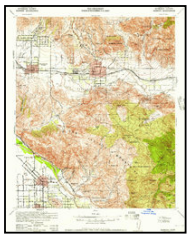
Lakeview
1953
7.5-minute, 24000
Aerial Photo Revised 1951

## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1943 Source Sheets

PERRIS
1943
15-minute, 62500



Banning
1943
15-minute, 62500
Aerial Photo Revised 1941

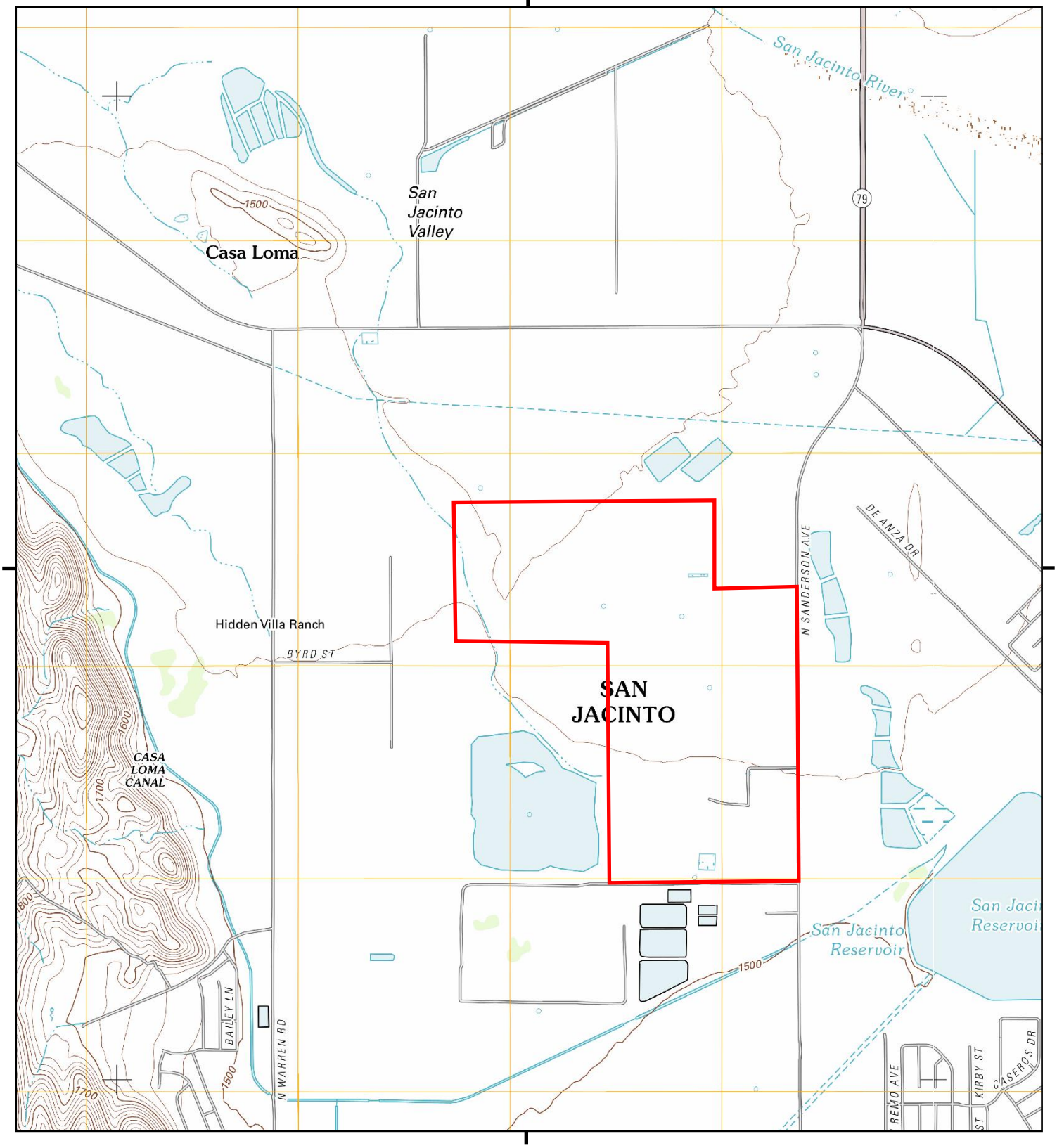
### 1901 Source Sheets

Elsinore
1901
30-minute, 125000

San Jacinto
1901
30-minute, 125000

# Historical Topo Map

2012




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

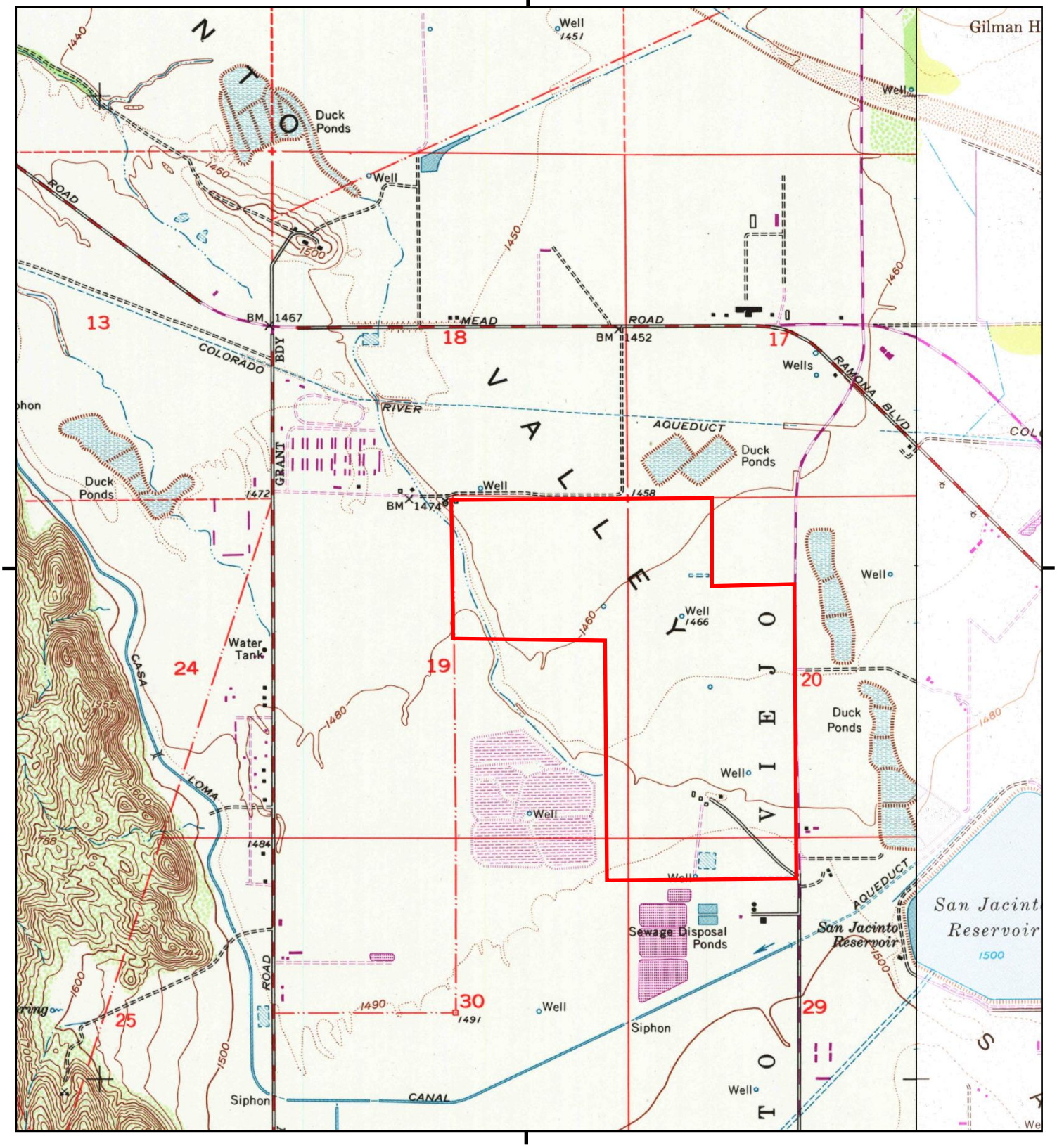
TP, Lakeview, 2012, 7.5-minute
E, San Jacinto, 2012, 7.5-minute

SITE NAME: Villages of San Jacinto
ADDRESS: 870 & 1380 N Sanderson Avenue
San Jacinto, CA 92582
CLIENT: Roux Associates

N

# Historical Topo Map

1979




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

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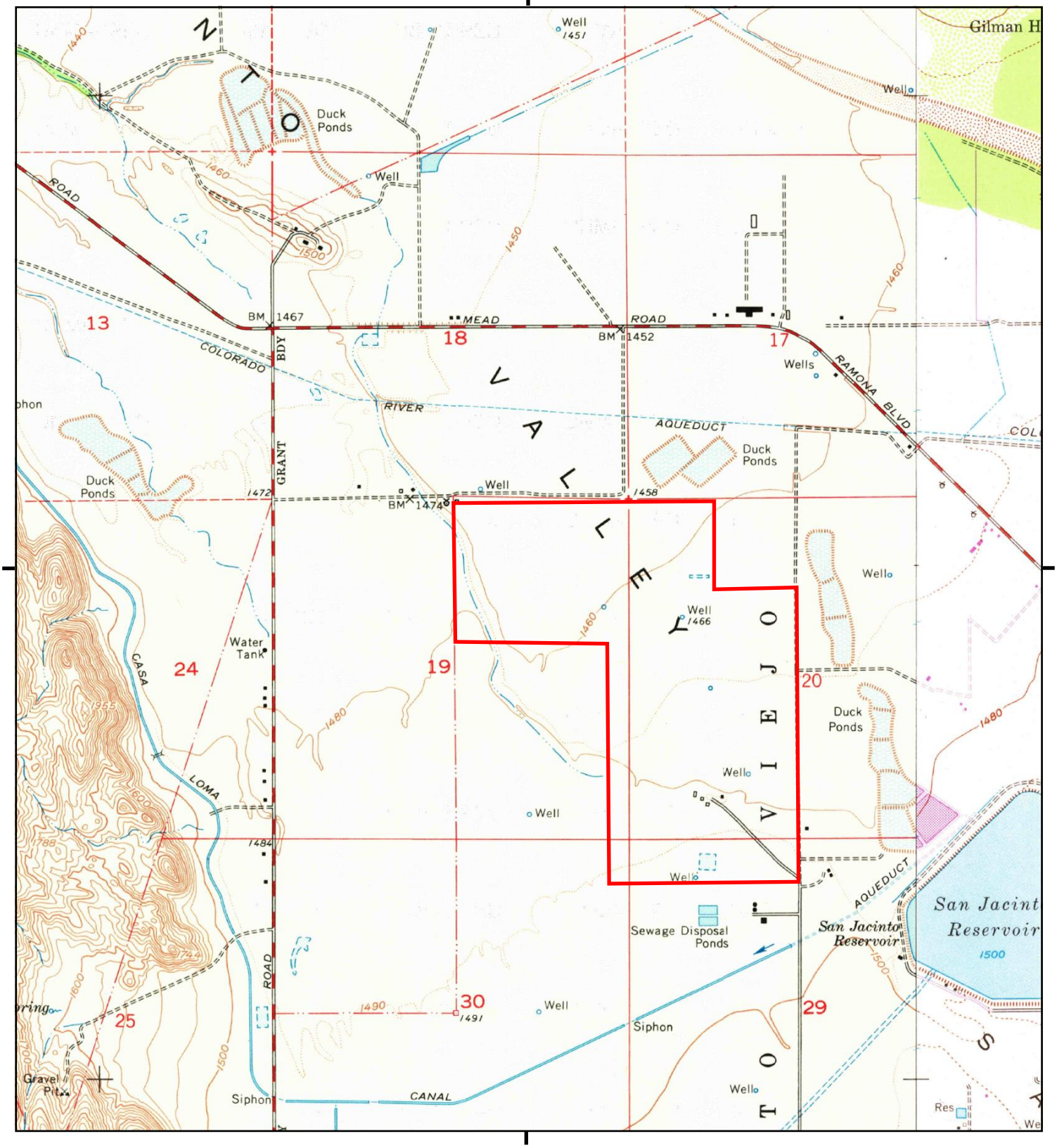
E, San Jacinto, 1979, 7.5-minute

SITE NAME: Villages of San Jacinto
ADDRESS: 870 & 1380 N Sanderson Avenue
San Jacinto, CA 92582
CLIENT: Roux Associates

N

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W E
SW S SE

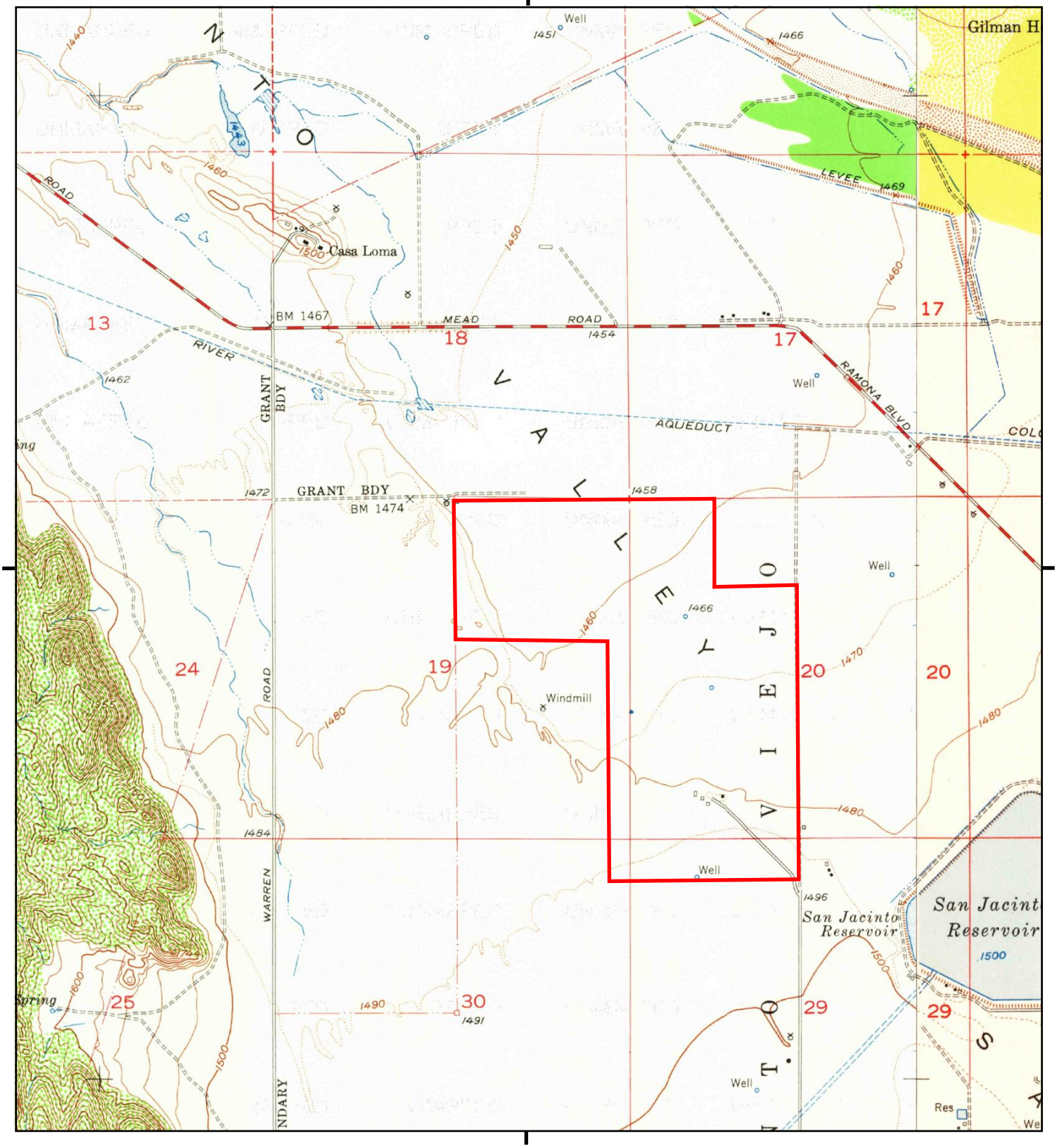
TP, Lakeview, 1967, 7.5-minute
E, San Jacinto, 1972, 7.5-minute

SITE NAME: Villages of San Jacinto
ADDRESS: 870 & 1380 N Sanderson Avenue
San Jacinto, CA 92582
CLIENT: Roux Associates

N

# Historical Topo Map

1953

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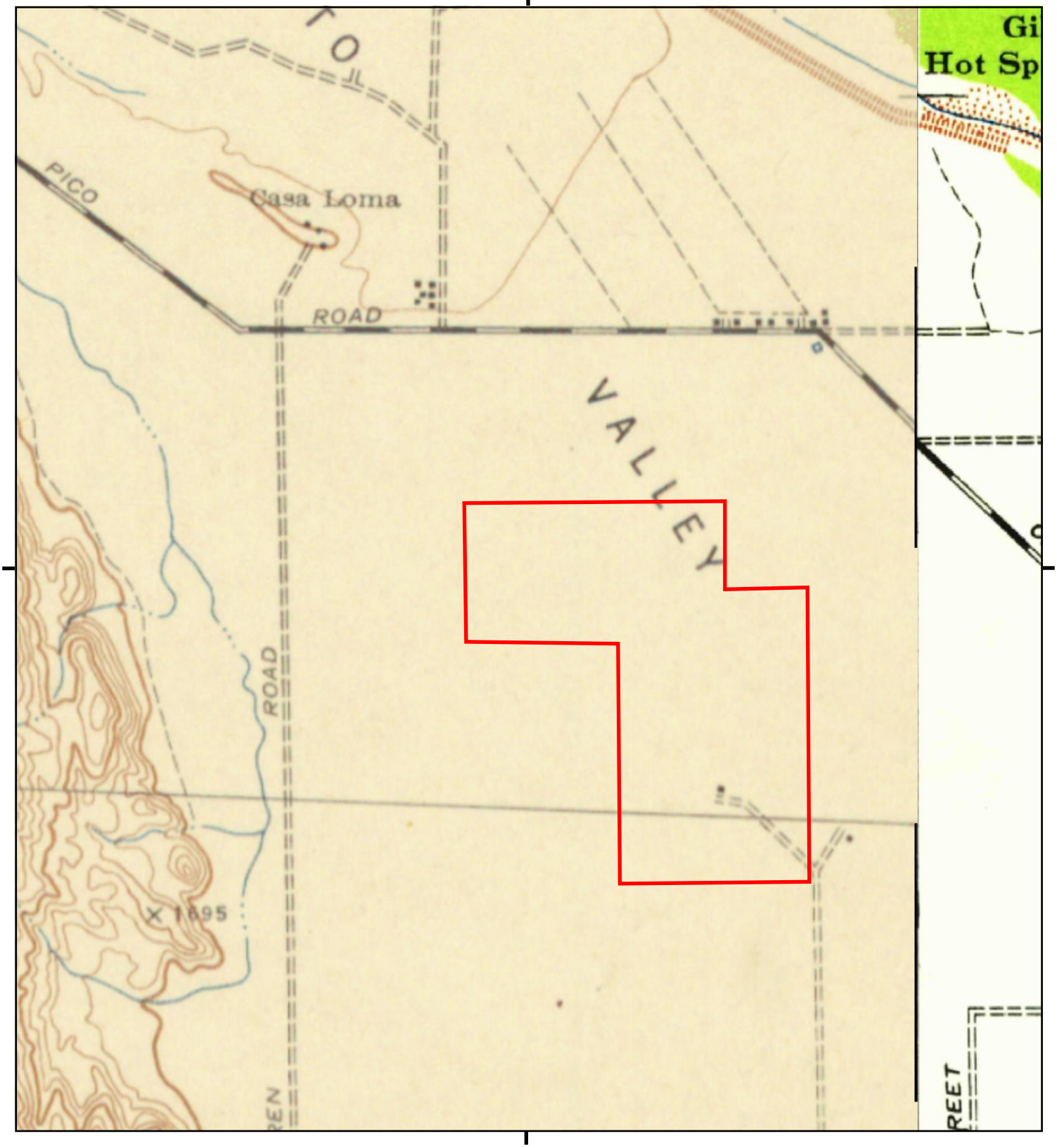
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lakeview, 1953, 7.5-minute
E, San Jacinto, 1953, 7.5-minute

SITE NAME: Villages of San Jacinto
ADDRESS: 870 & 1380 N Sanderson Avenue
San Jacinto, CA 92582
CLIENT: Roux Associates

N




This report includes information from the following map sheet(s).

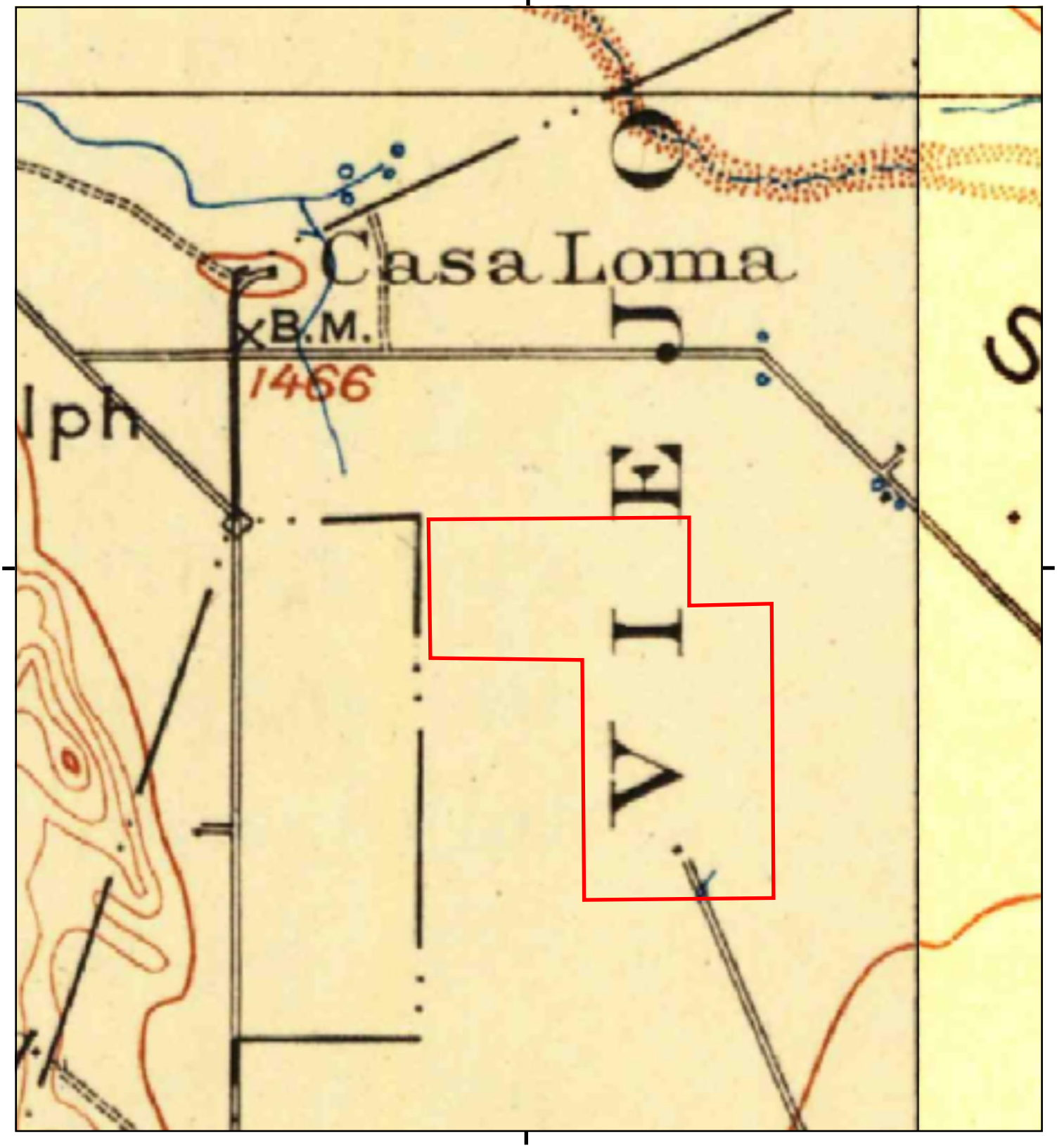
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, PERRIS, 1943, 15-minute
NE, Banning, 1943, 15-minute

SITE NAME: Villages of San Jacinto
ADDRESS: 870 & 1380 N Sanderson Avenue
San Jacinto, CA 92582
CLIENT: Roux Associates

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Elsinore, 1901, 30-minute
E, San Jacinto, 1901, 30-minute

SITE NAME: Villages of San Jacinto
ADDRESS: 870 & 1380 N Sanderson Avenue
San Jacinto, CA 92582
CLIENT: Roux Associates

N

# APPENDIX C

Historical Aerial Photographs

**Villages of San Jacinto**

870 & 1380 N Sanderson Avenue

San Jacinto, CA 92582

Inquiry Number: 6599939.8

July 30, 2021

# The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Aerial Photo Decade Package

07/30/21

**Site Name:**

Villages of San Jacinto
870 & 1380 N Sanderson Aven
San Jacinto, CA 92582
EDR Inquiry # 6599939.8

**Client Name:**

Roux Associates
402 Heron Drive
Logan Township, NJ 08085-0000
Contact: Connor Moore

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

## *Search Results:*

| *Year* | *Scale* | *Details* | *Source* |
|---|---|---|---|
| 2016 | 1"=875' | Flight Year: 2016 | USDA/NAIP |
| 2012 | 1"=875' | Flight Year: 2012 | USDA/NAIP |
| 2009 | 1"=875' | Flight Year: 2009 | USDA/NAIP |
| 2006 | 1"=875' | Flight Year: 2006 | USDA/NAIP |
| 2002 | 1"=875' | Acquisition Date: January 01, 2002 | USGS/DOQQ |
| 1996 | 1"=875' | Acquisition Date: September 30, 1996 | USGS/DOQQ |
| 1989 | 1"=875' | Flight Date: August 14, 1989 | USDA |
| 1985 | 1"=875' | Flight Date: February 24, 1985 | USDA |
| 1978 | 1"=875' | Flight Date: September 21, 1978 | USDA |
| 1975 | 1"=875' | Flight Date: September 18, 1975 | USGS |
| 1967 | 1"=875' | Flight Date: May 09, 1967 | USDA |
| 1961 | 1"=875' | Flight Date: June 16, 1961 | USDA |
| 1953 | 1"=875' | Flight Date: August 22, 1953 | USDA |
| 1949 | 1"=875' | Flight Date: May 25, 1949 | USDA |
| 1938 | 1"=875' | Flight Date: June 14, 1938 | USDA |

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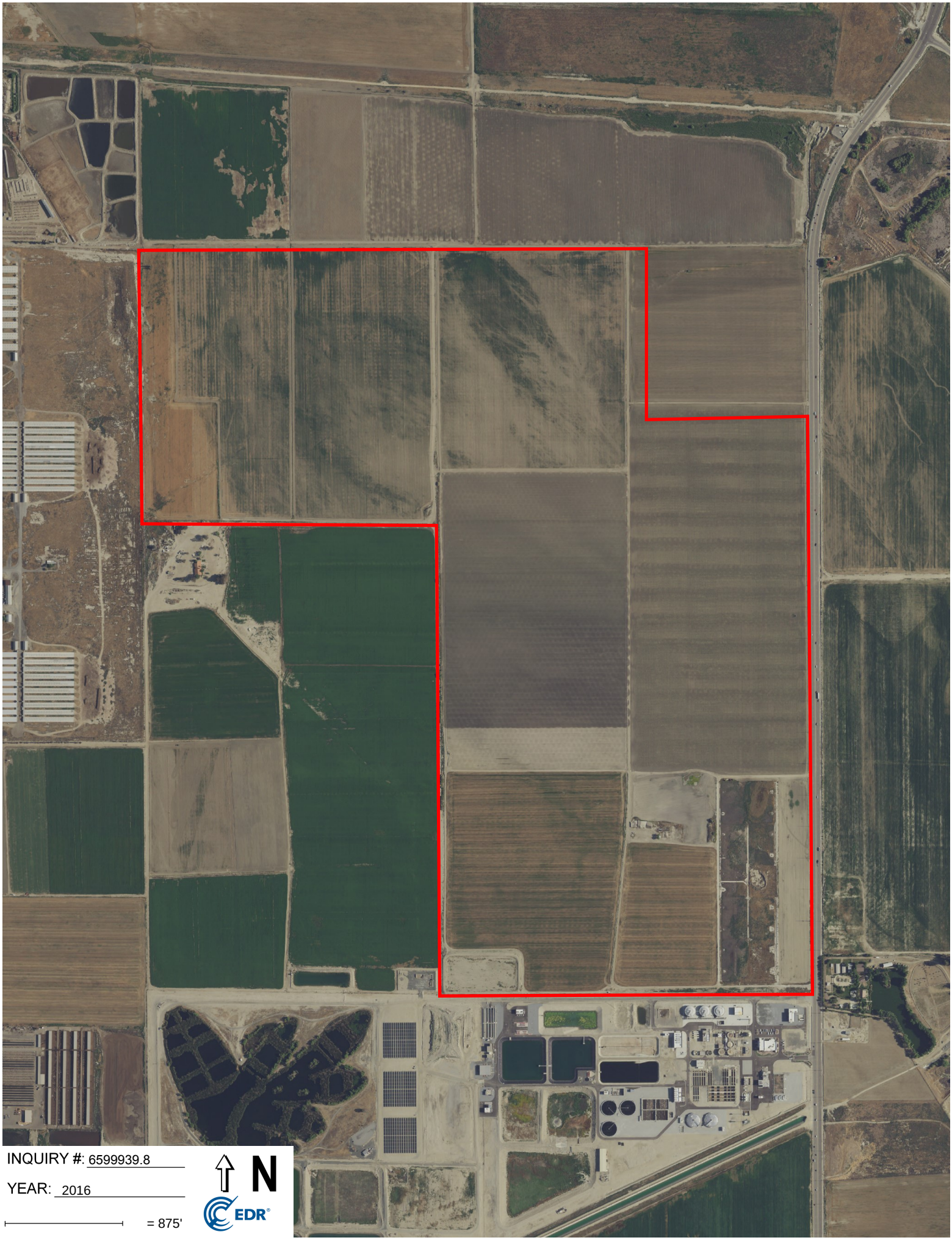
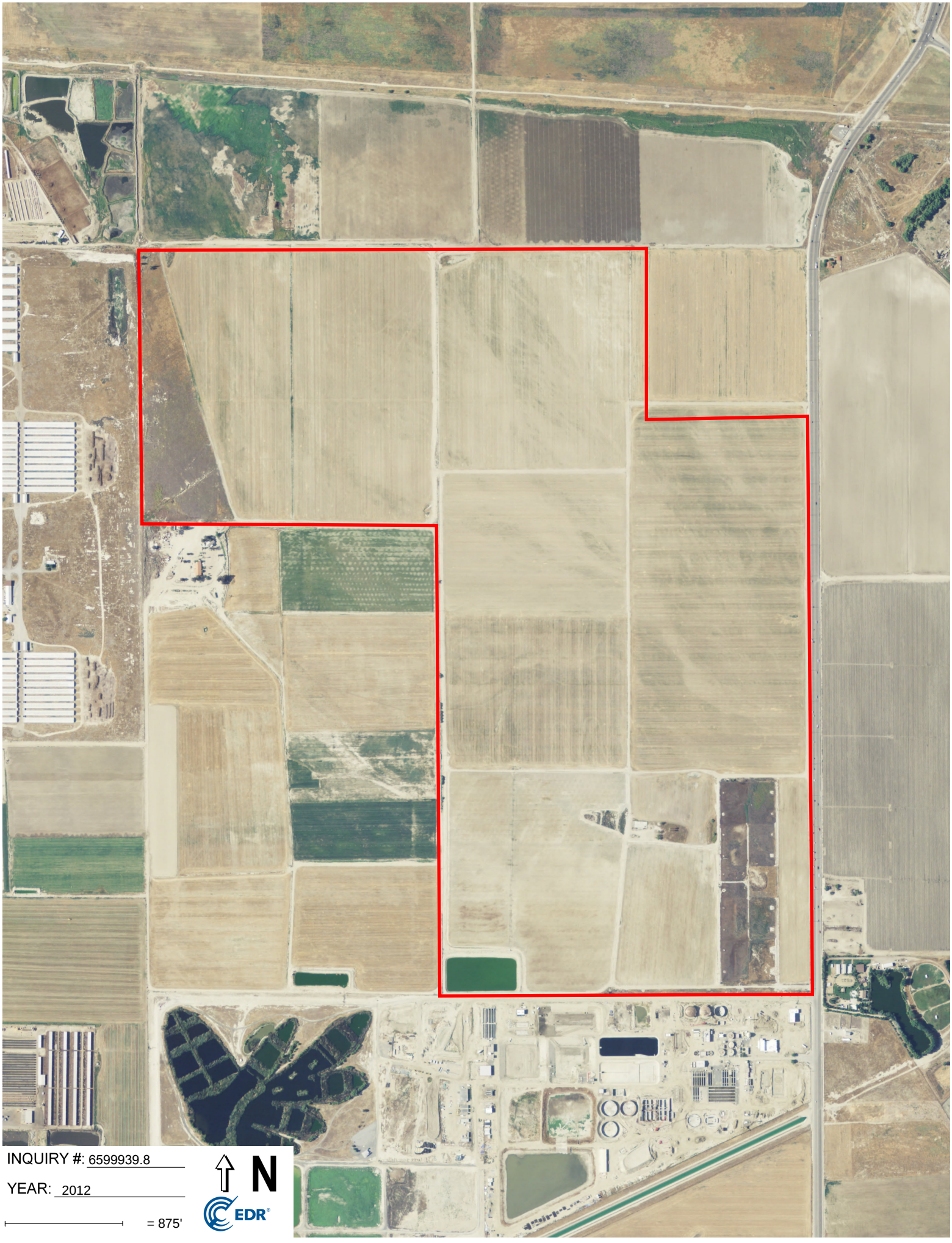
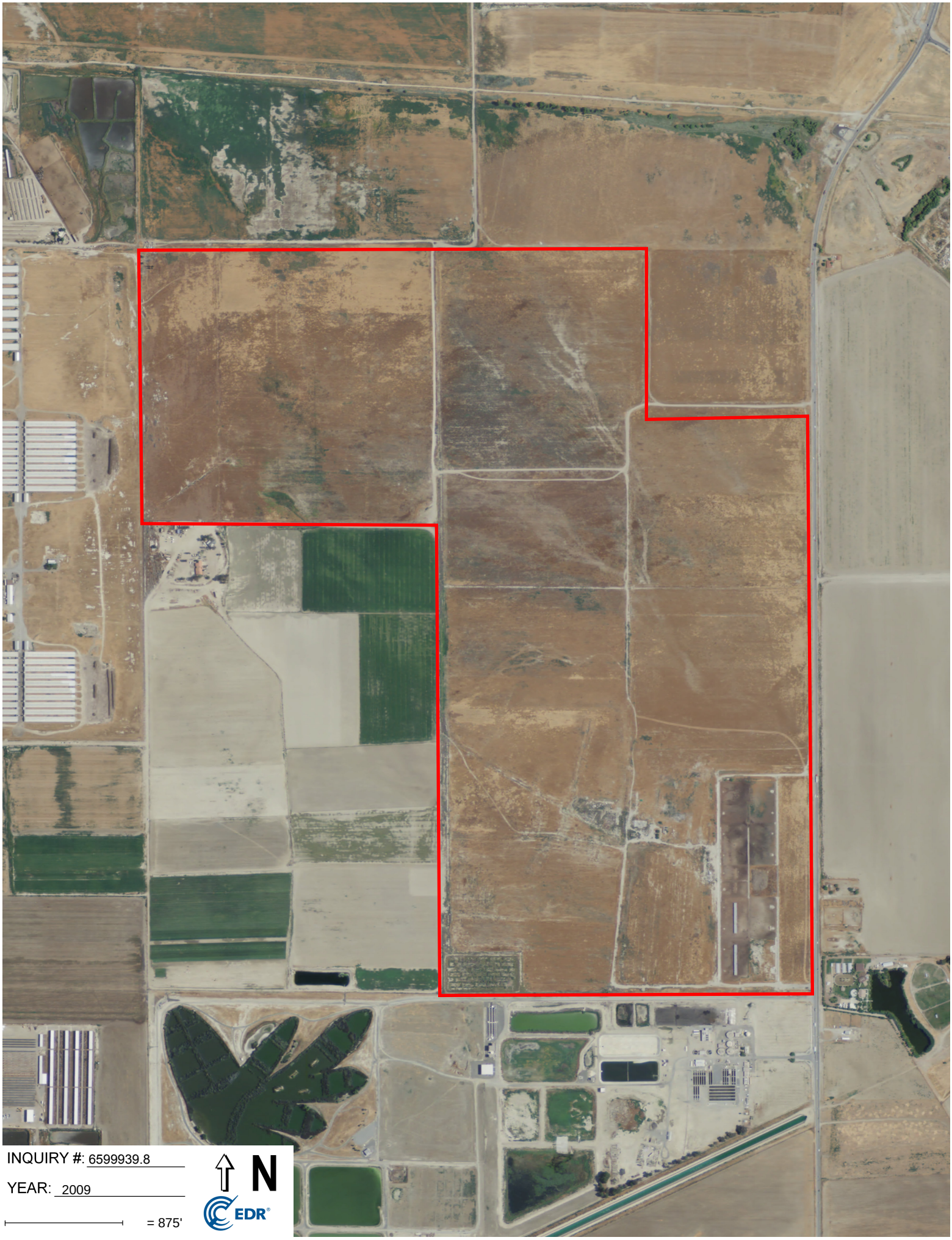
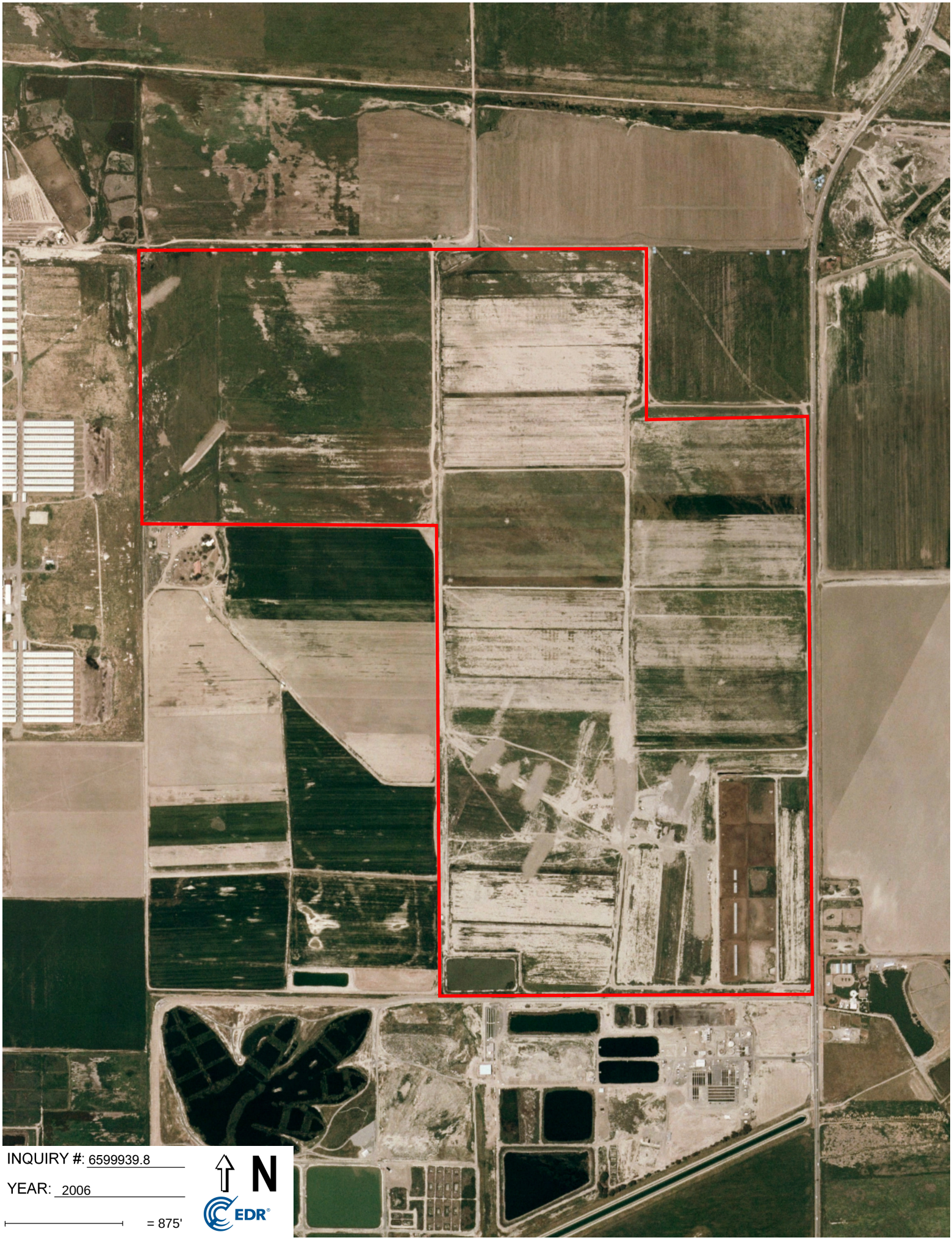

INQUIRY #: 6599939.8
YEAR: 2016
= 875'
N
EDR

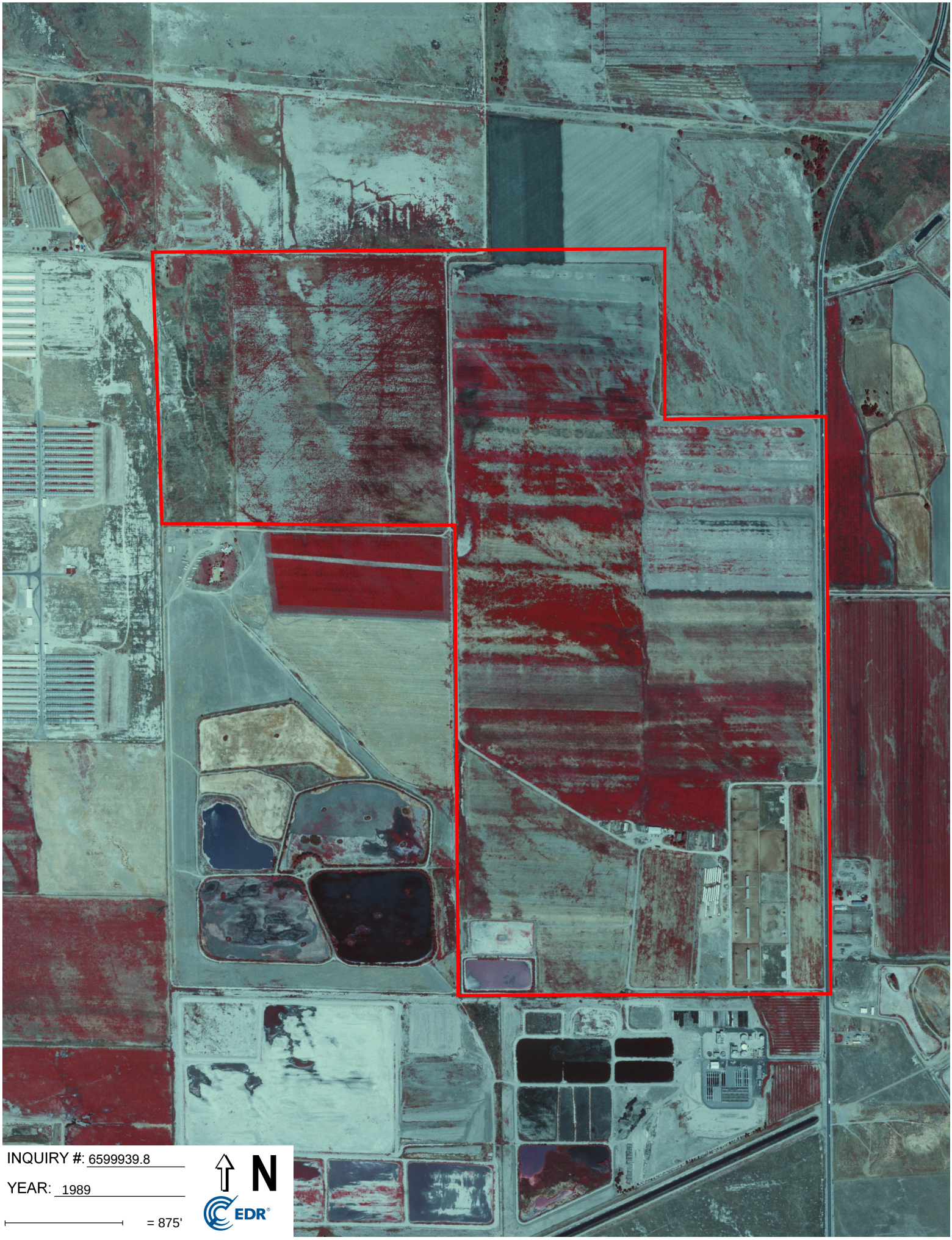

INQUIRY #: 6599939.8
YEAR: 2012
= 875'
N
EDR


INQUIRY #: 6599939.8
YEAR: 2009
= 875'
N
EDR


INQUIRY #: 6599939.8
YEAR: 2006
= 875'
N
EDR

INQUIRY #: 6599939.8
YEAR: 2002
= 875'
N
EDR

INQUIRY #: 6599939.8
YEAR: 1996
= 875'
N
EDR



INQUIRY #: 6599939.8

YEAR: 1989

= 875'

N

EDR

INQUIRY #: 6599939.8

YEAR: 1985

= 875'

N

EDR

INQUIRY #: 6599939.8

YEAR: 1978

= 875'

N

EDR

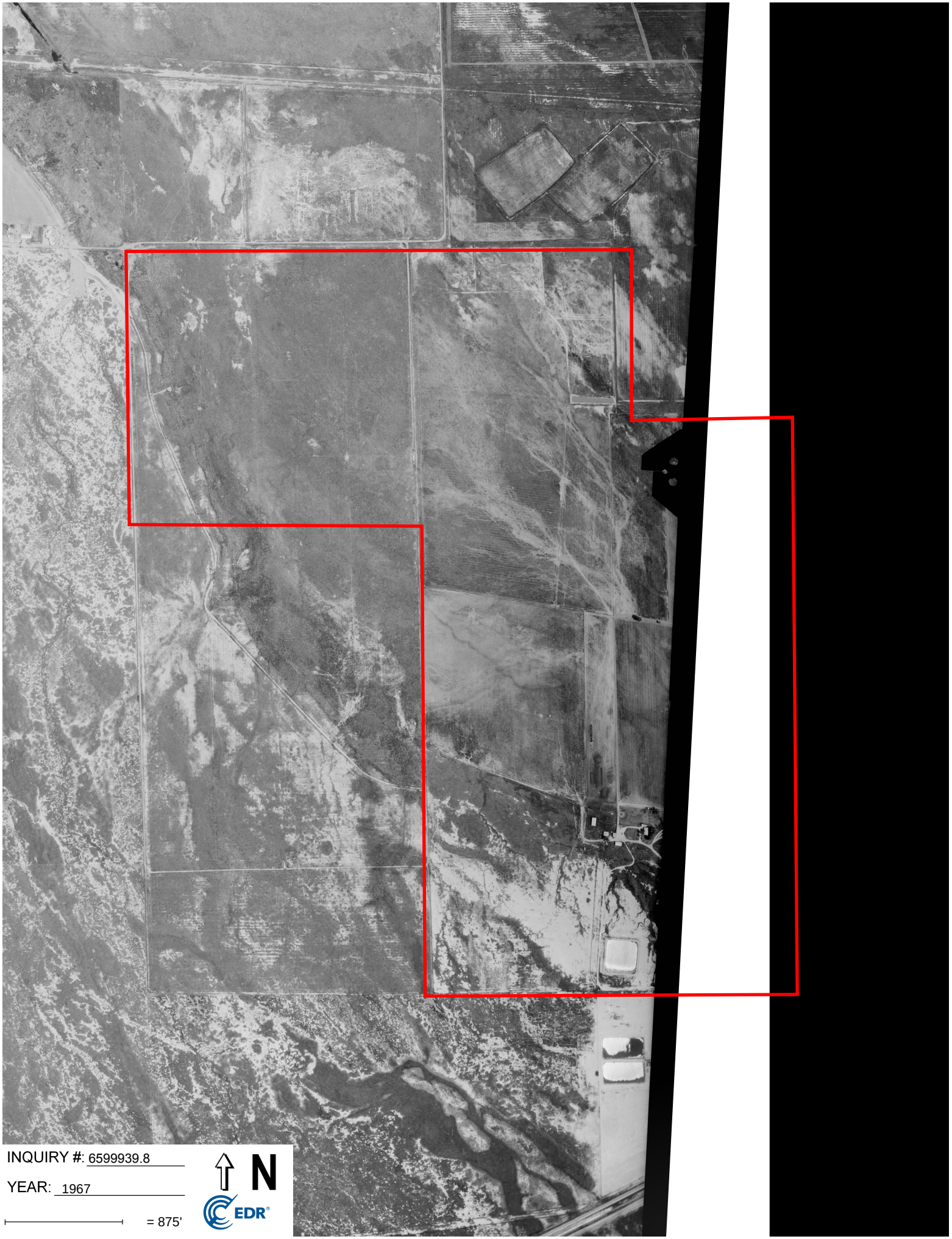
INQUIRY #: 6599939.8

YEAR: 1975

= 875'

N

EDR



INQUIRY #: 6599939.8

YEAR: 1967

= 875'

N

EDR

INQUIRY #: 6599939.8

YEAR: 1961

= 875'

N

EDR

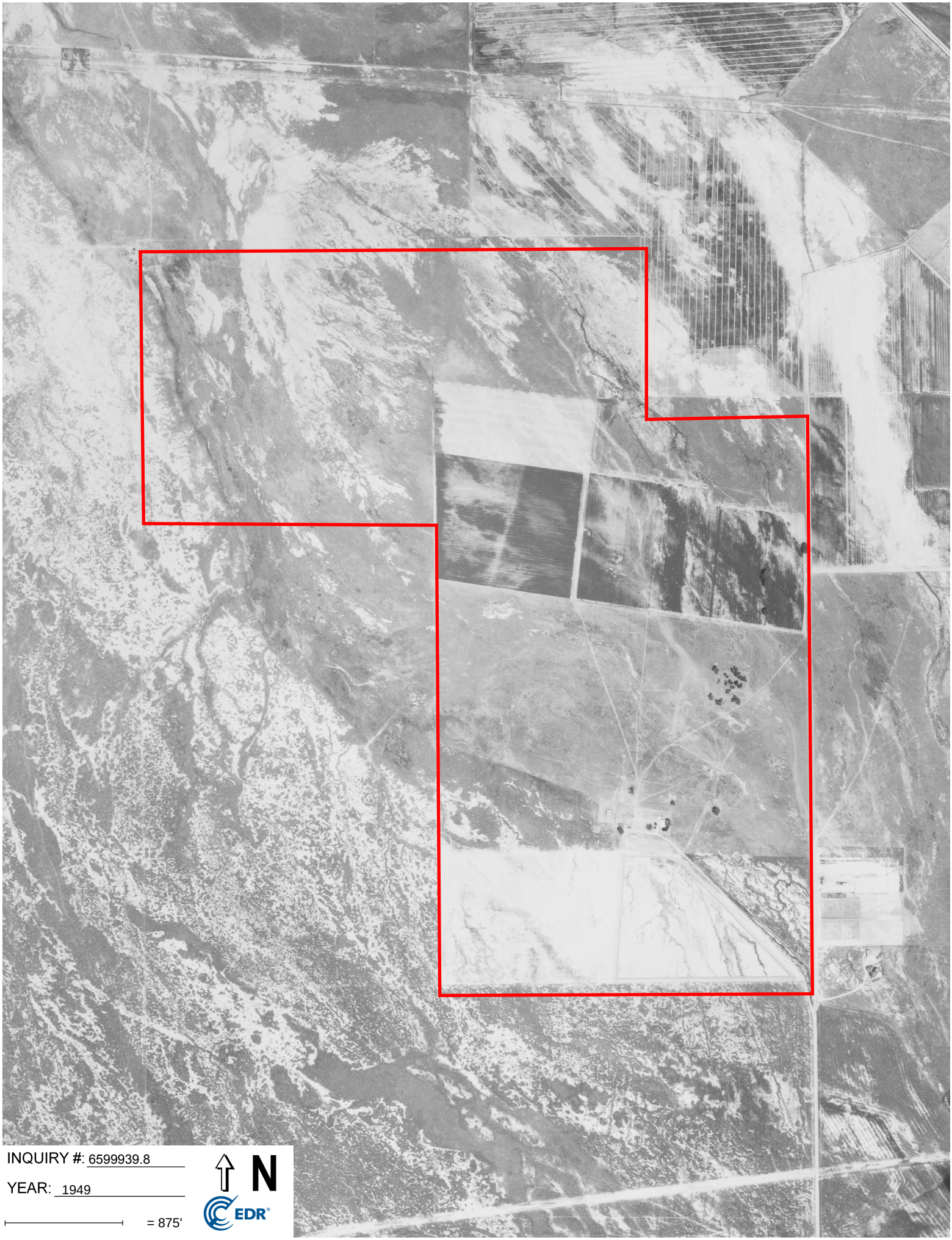
INQUIRY #: 6599939.8

YEAR: 1953

= 875'

N

EDR



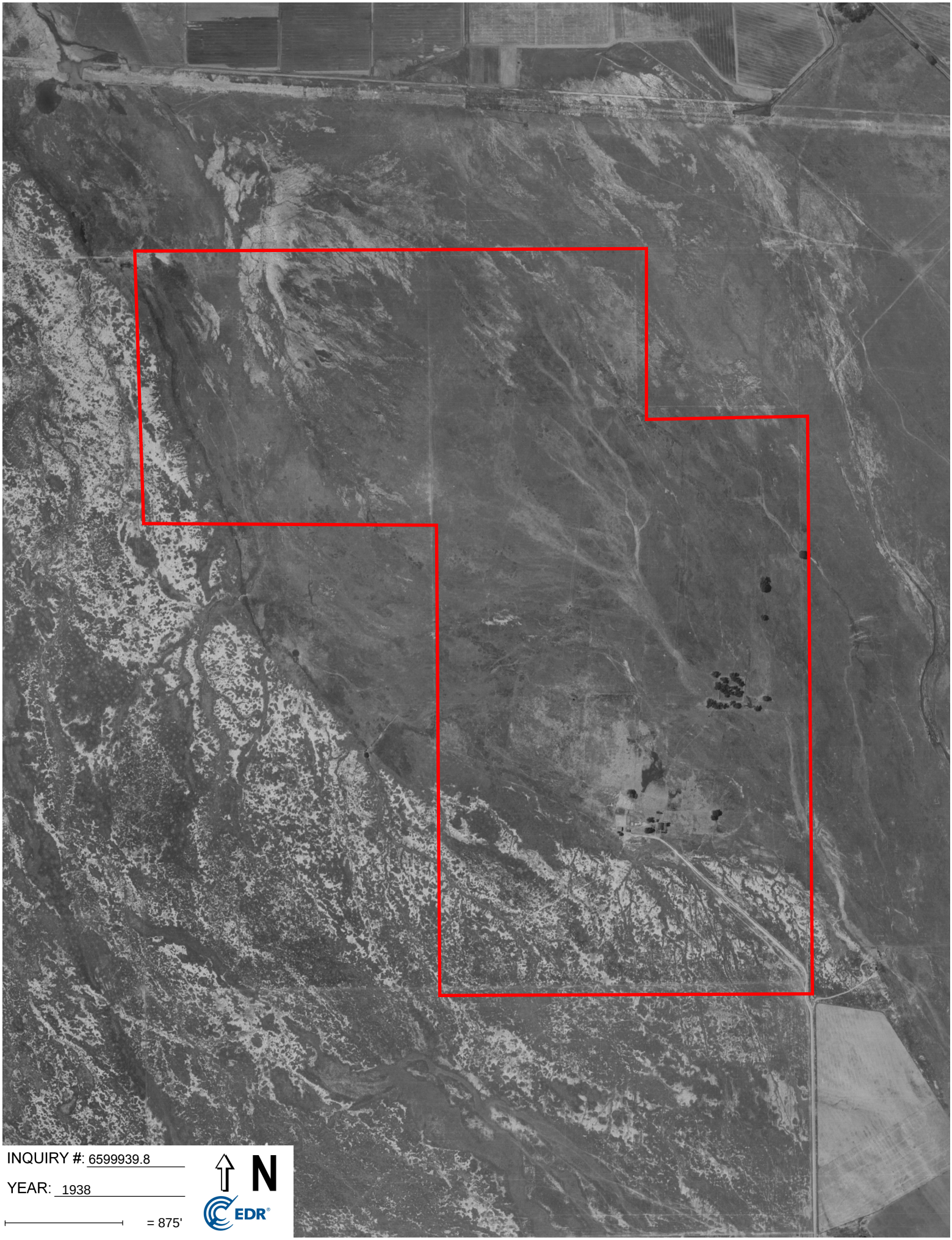
INQUIRY #: 6599939.8

YEAR: 1949

= 875'

N

EDR


INQUIRY #: 6599939.8
YEAR: 1938
= 875'
N
EDR

# APPENDIX D

Certified Sanborn Report

Villages of San Jacinto

870 & 1380 N Sanderson Avenue

San Jacinto, CA 92582

Inquiry Number: 6599939.3

July 30, 2021

# Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# Certified Sanborn® Map Report

07/30/21

**Site Name:**

Villages of San Jacinto
870 & 1380 N Sanderson Aven
San Jacinto, CA 92582
EDR Inquiry # 6599939.3

**Client Name:**

Roux Associates
402 Heron Drive
Logan Township, NJ 08085-0000
Contact: Connor Moore

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Roux Associates were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## *Certified Sanborn Results:*

**Certification #** BBE2-46F7-9125

**PO #** NA

**Project** Shea Villages of San Jacinto

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: BBE2-46F7-9125

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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# APPENDIX E

EDR City Directory Image Report

**Villages of San Jacinto**
870 & 1380 N Sanderson Avenue
San Jacinto, CA 92582

Inquiry Number: 6599939.5
August 03, 2021

# The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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**Executive Summary**

**Findings**

**City Directory Images**

***Thank you for your business.***
Please contact EDR at 1-800-352-0050
with any questions or comments.

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# EXECUTIVE SUMMARY

## DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

## RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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## RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

| Year | Target Street | Cross Street | Source |
|---|---|---|---|
| 2017 | ☑ | ☐ | EDR Digital Archive |
| 2014 | ☑ | ☐ | EDR Digital Archive |
| 2010 | ☑ | ☐ | EDR Digital Archive |
| 2005 | ☑ | ☐ | EDR Digital Archive |
| 2000 | ☑ | ☐ | EDR Digital Archive |
| 1995 | ☑ | ☐ | EDR Digital Archive |
| 1990 | ☐ | ☐ | Haines Criss-Cross Directory |
| 1985 | ☐ | ☐ | Haines Criss-Cross Directory |
| 1980 | ☐ | ☐ | Haines Criss-Cross Directory |
| 1976 | ☐ | ☐ | Haines Criss-Cross Directory |
| 1971 | ☐ | ☐ | Haines Criss-Cross Directory |

# FINDINGS

## TARGET PROPERTY STREET

870 & 1380 N Sanderson Avenue
San Jacinto, CA 92582

| *Year* | *CD Image* | *Source* | |
|---|---|---|---|
| **N SANDERSON AVE** | | | |
| 2017 | pg A1 | EDR Digital Archive | |
| 2014 | pg A2 | EDR Digital Archive | |
| 2010 | pg A3 | EDR Digital Archive | |
| 2005 | pg A4 | EDR Digital Archive | |
| 2000 | pg A5 | EDR Digital Archive | |
| 1995 | pg A6 | EDR Digital Archive | |
| 1990 | - | Haines Criss-Cross Directory | Target and Adjoining not listed in Source |
| 1985 | - | Haines Criss-Cross Directory | Target and Adjoining not listed in Source |
| 1980 | - | Haines Criss-Cross Directory | Target and Adjoining not listed in Source |
| 1976 | - | Haines Criss-Cross Directory | Target and Adjoining not listed in Source |
| 1971 | - | Haines Criss-Cross Directory | Street not listed in Source |

# FINDINGS

## CROSS STREETS

No Cross Streets Identified

# City Directory Images

| Target Street | Cross Street | Source |
| --- | --- | --- |
| ✓ | - | EDR Digital Archive |

# N SANDERSON AVE 2017

| | |
| --- | --- |
| 327 | AVALOS, TARIACURI T |
| 805 | ARD, CAROLINE L |
| | THE CALIFORNIA EQUINE RETIREMENT FOU |
| 1727 | BROWNE, KENNETH A |

| Target Street | Cross Street | Source |
| --- | --- | --- |
| ✓ | - | EDR Digital Archive |

## N SANDERSON AVE 2014

| | |
| --- | --- |
| 327 | SANDOVAL, HORTENCIA |
| 805 | MATOS, GERARDO |
| 1225 | OCCUPANT UNKNOWN, |
| 1315 | PEREZ, S |
| 1727 | BROWNE, KENNETH A |

| Target Street | Cross Street | Source |
| --- | --- | --- |
| ✓ | - | EDR Digital Archive |

## N SANDERSON AVE 2010

| | |
| --- | --- |
| 327 | WILLIAMS, LINDA S |
| 775 | IPARAGUIRRE, BOB |
| | JO LAND & CATTLE CO |
| 805 | OCCUPANT UNKNOWN, |
| 981 | CARRERA, SJAC |
| | DUNCAN, KATHARINE R |
| 1225 | HENRY, RONDA S |
| 1315 | PEREZ, HILARIO |

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | EDR Digital Archive |

## N SANDERSON AVE 2005

| | |
|---|---|
| 775 | OCCUPANT UNKNOWN, |
| 870 | WESTRA, JOHN J |
| 981 | CARRERA, MARIA M |
| | DUNCAN, KATHARINE R |
| 1225 | HENRY, RONDA S |
| 1315 | PEREZ, HILARIO |
| 1380 | WESTRA, JOHN J |
| 2070 | MIA VIA PIZZA |
| | MOBIL SUBWAY |
| | SANDERSON MOBIL |

| Target Street | Cross Street | Source |
| --- | --- | --- |
| ✓ | - | EDR Digital Archive |

## N SANDERSON AVE 2000

327 HURST, GORDON D
2070 MIA VIA PIZZA
SANDERSON MOBIL
SANDERSONS SUBWAY

| Target Street | Cross Street | Source |
| --- | --- | --- |
| ✓ | - | EDR Digital Archive |

## N SANDERSON AVE 1995

327 HURST, CATHY
805 WIND MACHINE SALES & SVC

# APPENDIX F

EDR Radius Map Report with Geocheck®

**Villages of San Jacinto**
870 & 1380 N Sanderson Avenue
San Jacinto, CA 92582

Inquiry Number: 6599939.2s
July 30, 2021

# The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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| Detail Map | 3 |
| Map Findings Summary | 4 |
| Map Findings | 9 |
| Orphan Summary | 36 |
| Government Records Searched/Data Currency Tracking | GR-1 |

**GEOCHECK ADDENDUM**

| | |
|---|---|
| Physical Setting Source Addendum | A-1 |
| Physical Setting Source Summary | A-2 |
| Physical Setting SSURGO Soil Map | A-5 |
| Physical Setting Source Map | A-16 |
| Physical Setting Source Map Findings | A-18 |
| Physical Setting Source Records Searched | PSGR-1 |


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# EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

## TARGET PROPERTY INFORMATION

### ADDRESS

870 & 1380 N SANDERSON AVENUE
SAN JACINTO, CA 92582

### COORDINATES

| | |
|---|---|
| Latitude (North): | 33.8133280 - 33° 48' 47.98'' |
| Longitude (West): | 117.0206380 - 117° 1' 14.29'' |
| Universal Tranverse Mercator: | Zone 11 |
| UTM X (Meters): | 498089.9 |
| UTM Y (Meters): | 3741264.8 |
| Elevation: | 1460 ft. above sea level |

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

| | |
|---|---|
| Target Property Map: | 5640936 LAKEVIEW, CA |
| Version Date: | 2012 |
| East Map: | 5641216 SAN JACINTO, CA |
| Version Date: | 2012 |

### AERIAL PHOTOGRAPHY IN THIS REPORT

| | |
|---|---|
| Portions of Photo from: | 20140530 |
| Source: | USDA |

## MAPPED SITES SUMMARY

Target Property Address:
870 & 1380 N SANDERSON AVENUE
SAN JACINTO, CA 92582

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| A1 | | 870 SANDERSON AVE | CHMIRS | | TP |
| A2 | WESTERN FAMILY TRUST | 870 N SANDERSON | HAZNET, HWTS | | TP |
| A3 | WESTRA DAIRY FARM | 870 SANDERSON | RGA LUST | | TP |
| A4 | WESTRA DAIRY FARM | 870 SANDERSON | LUST, Cortese, CERS | | TP |
| A5 | WESTRA DAIRY FARM | 870 SANDERSON | FINDS | | TP |
| A6 | QUALITY TURF | 870 SANDERSON AVE | FINDS | | TP |
| B7 | PROPOSED HIGH SCHOOL | RAMONA BOULEVARD/CAW | ENVIROSTOR, SCH | Higher | 1 ft. |
| B8 | PROPOSED HIGH SCHOOL | RAMONA BOULEVARD/CAW | CERS | Higher | 1 ft. |
| C9 | SAN JACINTO VALLEY R | 700 N SANDERSON AVE | FINDS | Higher | 1 ft. |
| C10 | SAN JACINTO VALLEY R | 700 N SANDERSON AVE | RCRA-VSQG | Higher | 1 ft. |
| D11 | EMWD SAN JACINTO VAL | 770 N SANDERSON AVE | CERS HAZ WASTE, CERS TANKS, CHMIRS, NPDES, CIWQS, | Higher | 769, 0.146, SSE |
| D12 | HEMET SAN JACINTO RE | 770 N SANDERSON AVE | AST | Higher | 769, 0.146, SSE |
| D13 | SAN JACINTO VALLEY R | 770 NORTH SANDERSON | RCRA-LQG | Higher | 769, 0.146, SSE |

# EXECUTIVE SUMMARY

**TARGET PROPERTY SEARCH RESULTS**

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

| Site | Database(s) | EPA ID |
|---|---|---|
| 870 SANDERSON AVE<br>870 SANDERSON AVE<br>SAN JACINTO, CA 91761 | CHMIRS<br>OES Incident Number: 9-0444 | N/A |
| WESTERN FAMILY TRUST<br>870 N SANDERSON<br>SAN JACINTO, CA 92582 | HAZNET<br>GEPAID: CAC001322952<br>HWTS | N/A |
| WESTRA DAIRY FARM<br>870 SANDERSON<br>SAN JACINTO, CA | RGA LUST | N/A |
| WESTRA DAIRY FARM<br>870 SANDERSON<br>SAN JACINTO, CA 92582 | LUST<br>Database: LUST REG 8, Date of Government Version: 02/14/2005<br>Database: LUST, Date of Government Version: 03/08/2021<br>Status: Completed - Case Closed<br>Facility Status: Case Closed<br>Global Id: T0606599136<br>Global ID: T0606599136<br>Cortese<br>Cleanup Status: COMPLETED - CASE CLOSED<br>CERS | N/A |
| WESTRA DAIRY FARM<br>870 SANDERSON<br>SAN JACINTO, CA 92582 | FINDS<br>Registry ID:: 110065084571 | N/A |
| QUALITY TURF<br>870 SANDERSON AVE<br>SAN JACINTO, CA 92582 | FINDS<br>Registry ID:: 110066404055 | N/A |

# EXECUTIVE SUMMARY

**DATABASES WITH NO MAPPED SITES**

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

**STANDARD ENVIRONMENTAL RECORDS**

***Federal NPL site list***

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

***Federal Delisted NPL site list***

Delisted NPL ---------- National Priority List Deletions

***Federal CERCLIS list***

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

***Federal RCRA CORRACTS facilities list***

CORRACTS ---------- Corrective Action Report

***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

***Federal RCRA generators list***

RCRA-SQG ---------- RCRA - Small Quantity Generators

***Federal institutional controls / engineering controls registries***

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

***Federal ERNS list***

ERNS ---------- Emergency Response Notification System

***State- and tribal - equivalent NPL***

RESPONSE ---------- State Response Sites

***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF ---------- Solid Waste Information System

***State and tribal leaking storage tank lists***

INDIAN LUST - Leaking Underground Storage Tanks on Indian Land
CPS-SLIC - Statewide SLIC Cases

***State and tribal registered storage tank lists***

FEMA UST - Underground Storage Tank Listing
UST - Active UST Facilities
INDIAN UST - Underground Storage Tanks on Indian Land

***State and tribal voluntary cleanup sites***

VCP - Voluntary Cleanup Program Properties
INDIAN VCP - Voluntary Cleanup Priority Listing

***State and tribal Brownfields sites***

BROWNFIELDS - Considered Brownfieds Sites Listing

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS - A Listing of Brownfields Sites

***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT - Waste Management Unit Database
SWRCY - Recycler Database
HAULERS - Registered Waste Tire Haulers Listing
INDIAN ODI - Report on the Status of Open Dumps on Indian Lands
ODI - Open Dump Inventory
DEBRIS REGION 9 - Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS - Open Dumps on Indian Land

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL - Delisted National Clandestine Laboratory Register
HIST Cal-Sites - Historical Calsites Database
CDL - Clandestine Drug Labs
Toxic Pits - Toxic Pits Cleanup Act Sites
US CDL - National Clandestine Laboratory Register
PFAS - PFAS Contamination Site Location Listing

***Local Lists of Registered Storage Tanks***

SWEEPS UST - SWEEPS UST Listing
HIST UST - Hazardous Substance Storage Container Database
CA FID UST - Facility Inventory Database

***Local Land Records***

LIENS - Environmental Liens Listing

| | |
|---|---|
| LIENS 2 | CERCLA Lien Information |
| DEED | Deed Restriction Listing |

***Records of Emergency Release Reports***

| | |
|---|---|
| HMIRS | Hazardous Materials Information Reporting System |
| LDS | Land Disposal Sites Listing |
| MCS | Military Cleanup Sites Listing |
| SPILLS 90 | SPILLS 90 data from FirstSearch |

***Other Ascertainable Records***

| | |
|---|---|
| RCRA NonGen / NLR | RCRA - Non Generators / No Longer Regulated |
| FUDS | Formerly Used Defense Sites |
| DOD | Department of Defense Sites |
| SCRD DRYCLEANERS | State Coalition for Remediation of Drycleaners Listing |
| US FIN ASSUR | Financial Assurance Information |
| EPA WATCH LIST | EPA WATCH LIST |
| 2020 COR ACTION | 2020 Corrective Action Program List |
| TSCA | Toxic Substances Control Act |
| TRIS | Toxic Chemical Release Inventory System |
| SSTS | Section 7 Tracking Systems |
| ROD | Records Of Decision |
| RMP | Risk Management Plans |
| RAATS | RCRA Administrative Action Tracking System |
| PRP | Potentially Responsible Parties |
| PADS | PCB Activity Database System |
| ICIS | Integrated Compliance Information System |
| FTTS | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) |
| MLTS | Material Licensing Tracking System |
| COAL ASH DOE | Steam-Electric Plant Operation Data |
| COAL ASH EPA | Coal Combustion Residues Surface Impoundments List |
| PCB TRANSFORMER | PCB Transformer Registration Database |
| RADINFO | Radiation Information Database |
| HIST FTTS | FIFRA/TSCA Tracking System Administrative Case Listing |
| DOT OPS | Incident and Accident Data |
| CONSENT | Superfund (CERCLA) Consent Decrees |
| INDIAN RESERV | Indian Reservations |
| FUSRAP | Formerly Utilized Sites Remedial Action Program |
| UMTRA | Uranium Mill Tailings Sites |
| LEAD SMELTERS | Lead Smelter Sites |
| US AIRS | Aerometric Information Retrieval System Facility Subsystem |
| US MINES | Mines Master Index File |
| ABANDONED MINES | Abandoned Mines |
| UXO | Unexploded Ordnance Sites |
| ECHO | Enforcement & Compliance History Information |
| DOCKET HWC | Hazardous Waste Compliance Docket Listing |
| FUELS PROGRAM | EPA Fuels Program Registered Listing |
| CA BOND EXP. PLAN | Bond Expenditure Plan |
| CUPA Listings | CUPA Resources List |
| DRYCLEANERS | Cleaner Facilities |
| EMI | Emissions Inventory Data |
| ENF | Enforcement Action Listing |
| Financial Assurance | Financial Assurance Information Listing |

# EXECUTIVE SUMMARY

| | |
|---|---|
| ICE | ICE |
| HIST CORTESE | Hazardous Waste & Substance Site List |
| HWP | EnviroStor Permitted Facilities Listing |
| HWT | Registered Hazardous Waste Transporter Database |
| MINES | Mines Site Location Listing |
| MWMP | Medical Waste Management Program Listing |
| NPDES | NPDES Permits Listing |
| PEST LIC | Pesticide Regulation Licenses Listing |
| PROC | Certified Processors Database |
| Notify 65 | Proposition 65 Records |
| UIC | UIC Listing |
| UIC GEO | UIC GEO (GEOTRACKER) |
| WASTEWATER PITS | Oil Wastewater Pits Listing |
| WDS | Waste Discharge System |
| WIP | Well Investigation Program Case List |
| MILITARY PRIV SITES | MILITARY PRIV SITES (GEOTRACKER) |
| PROJECT | PROJECT (GEOTRACKER) |
| WDR | Waste Discharge Requirements Listing |
| CIWQS | California Integrated Water Quality System |
| NON-CASE INFO | NON-CASE INFO (GEOTRACKER) |
| OTHER OIL GAS | OTHER OIL & GAS (GEOTRACKER) |
| PROD WATER PONDS | PROD WATER PONDS (GEOTRACKER) |
| SAMPLING POINT | SAMPLING POINT (GEOTRACKER) |
| WELL STIM PROJ | Well Stimulation Project (GEOTRACKER) |
| MINES MRDS | Mineral Resources Data System |

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

| | |
|---|---|
| EDR MGP | EDR Proprietary Manufactured Gas Plants |
| EDR Hist Auto | EDR Exclusive Historical Auto Stations |
| EDR Hist Cleaner | EDR Exclusive Historical Cleaners |

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

| | |
|---|---|
| RGA LF | Recovered Government Archive Solid Waste Facilities List |

**SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

# EXECUTIVE SUMMARY

**STANDARD ENVIRONMENTAL RECORDS**

***Federal RCRA generators list***

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| SAN JACINTO VALLEY R<br>EPA ID:: CAL000089262 | 770 NORTH SANDERSON | SSE 1/8 - 1/4 (0.146 mi.) | D13 | 31 |

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| SAN JACINTO VALLEY R<br>EPA ID:: CAL000344571 | 700 N SANDERSON AVE | 0 - 1/8 (0.000 mi.) | C10 | 21 |

***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 04/23/2021 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***PROPOSED HIGH SCHOOL*** | ***RAMONA BOULEVARD/CAW*** | ***0 - 1/8 (0.000 mi.)*** | ***B7*** | ***17*** |

Facility Id: 60000906
Status: No Further Action

***State and tribal registered storage tank lists***

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| HEMET SAN JACINTO RE | 770 N SANDERSON AVE | SSE 1/8 - 1/4 (0.146 mi.) | D12 | 30 |
| Database: AST, Date of Government Version: 07/06/2016 | | | | |

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Lists of Hazardous waste / Contaminated Sites***

SCH: This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category. depending on the level of threat to public health and safety or the. environment they pose.

A review of the SCH list, as provided by EDR, and dated 04/23/2021 has revealed that there is 1 SCH site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***PROPOSED HIGH SCHOOL*** | ***RAMONA BOULEVARD/CAW*** | ***0 - 1/8 (0.000 mi.)*** | ***B7*** | ***17*** |
| Facility Id: 60000906 | | | | |
| Status: No Further Action | | | | |

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 04/19/2021 has revealed that there is 1 CERS HAZ WASTE site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***EMWD SAN JACINTO VAL*** | ***770 N SANDERSON AVE*** | ***SSE 1/8 - 1/4 (0.146 mi.)*** | ***D11*** | ***23*** |

# EXECUTIVE SUMMARY

***Local Lists of Registered Storage Tanks***

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 04/19/2021 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***EMWD SAN JACINTO VAL*** | ***770 N SANDERSON AVE*** | ***SSE 1/8 - 1/4 (0.146 mi.)*** | ***D11*** | ***23*** |

***Other Ascertainable Records***

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 02/03/2021 has revealed that there is 1 FINDS site within approximately 0.001 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| SAN JACINTO VALLEY R | 700 N SANDERSON AVE | 0 - 1/8 (0.000 mi.) | C9 | 20 |

CERS: The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

A review of the CERS list, as provided by EDR, and dated 04/19/2021 has revealed that there is 1 CERS site within approximately 0.001 miles of the target property.

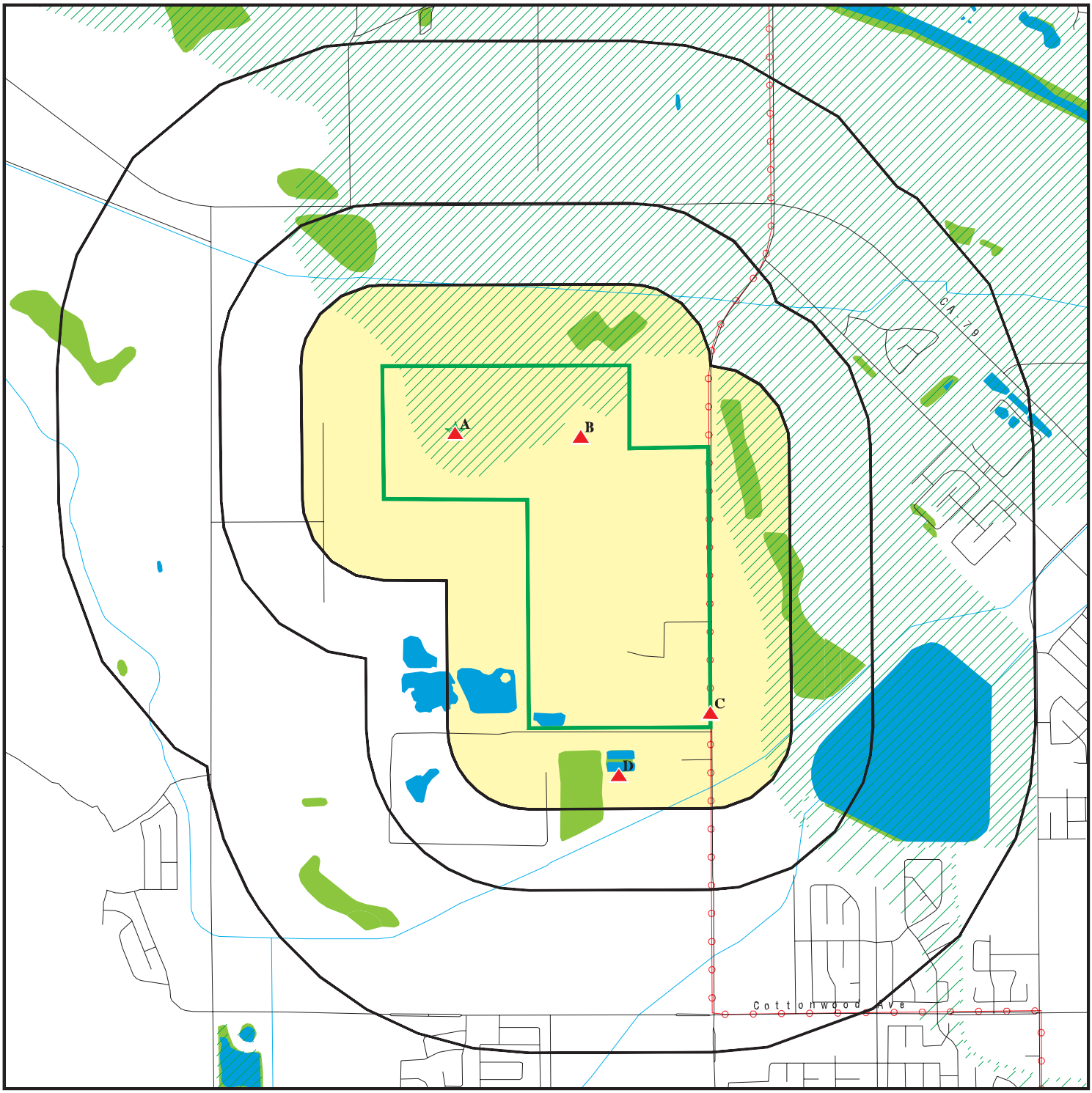
| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| PROPOSED HIGH SCHOOL | RAMONA BOULEVARD/CAW | 0 - 1/8 (0.000 mi.) | B8 | 20 |

# EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

| Site Name | Database(s) |
|---|---|
| HEMET/SAN JACINTO WWRF | CIWQS |

# OVERVIEW MAP - 6599939.2S




- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | | | |
|---|---|---|---|
| SITE NAME: | Villages of San Jacinto | CLIENT: | Roux Associates |
| ADDRESS: | 870 & 1380 N Sanderson Avenue<br>San Jacinto CA 92582 | CONTACT: | Connor Moore |
| LAT/LONG: | 33.813328 / 117.020638 | INQUIRY #: | 6599939.2s |
| | | DATE: | July 30, 2021 2:02 pm |

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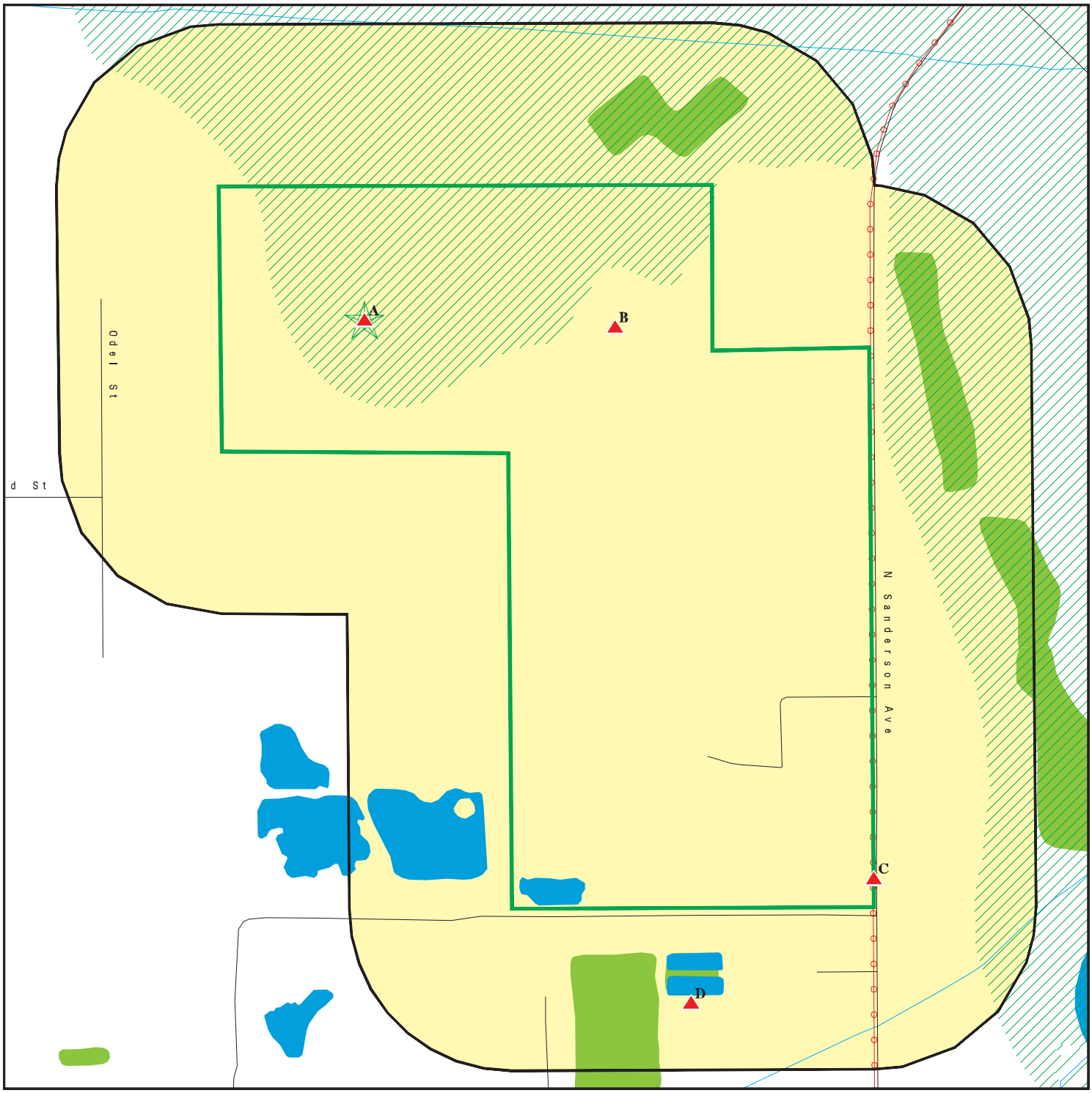
# DETAIL MAP - 6599939.2S




- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | | | |
|---|---|---|---|
| SITE NAME: | Villages of San Jacinto | CLIENT: | Roux Associates |
| ADDRESS: | 870 & 1380 N Sanderson Avenue<br>San Jacinto CA 92582 | CONTACT: | Connor Moore |
| LAT/LONG: | 33.813328 / 117.020638 | INQUIRY #: | 6599939.2s |
| | | DATE: | July 30, 2021 2:03 pm |

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# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| **STANDARD ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Federal NPL site list*** | | | | | | | | |
| NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Proposed NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| NPL LIENS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal Delisted NPL site list*** | | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal CERCLIS list*** | | | | | | | | |
| FEDERAL FACILITY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SEMS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal CERCLIS NFRAP site list*** | | | | | | | | |
| SEMS-ARCHIVE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal RCRA CORRACTS facilities list*** | | | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal RCRA non-CORRACTS TSD facilities list*** | | | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal RCRA generators list*** | | | | | | | | |
| RCRA-LQG | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| RCRA-SQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-VSQG | 0.250 | | 1 | 0 | NR | NR | NR | 1 |
| ***Federal institutional controls / engineering controls registries*** | | | | | | | | |
| LUCIS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US INST CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal ERNS list*** | | | | | | | | |
| ERNS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***State- and tribal - equivalent NPL*** | | | | | | | | |
| RESPONSE | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***State- and tribal - equivalent CERCLIS*** | | | | | | | | |
| ENVIROSTOR | 1.000 | | 1 | 0 | 0 | 0 | NR | 1 |
| ***State and tribal landfill and/or solid waste disposal site lists*** | | | | | | | | |
| SWF/LF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***State and tribal leaking storage tank lists*** | | | | | | | | |
| LUST | 0.500 | 1 | 0 | 0 | 0 | NR | NR | 1 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| INDIAN LUST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| CPS-SLIC | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***State and tribal registered storage tank lists*** | | | | | | | | |
| FEMA UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| AST | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| INDIAN UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***State and tribal voluntary cleanup sites*** | | | | | | | | |
| VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***State and tribal Brownfields sites*** | | | | | | | | |
| BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| **ADDITIONAL ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Local Brownfield lists*** | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Landfill / Solid Waste Disposal Sites*** | | | | | | | | |
| WMUDS/SWAT | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SWRCY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| HAULERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| INDIAN ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| DEBRIS REGION 9 | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| IHS OPEN DUMPS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Hazardous waste / Contaminated Sites*** | | | | | | | | |
| US HIST CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST Cal-Sites | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCH | 0.250 | | 1 | 0 | NR | NR | NR | 1 |
| CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| Toxic Pits | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| CERS HAZ WASTE | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| US CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PFAS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Registered Storage Tanks*** | | | | | | | | |
| SWEEPS UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| HIST UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| CA FID UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| CERS TANKS | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| ***Local Land Records*** | | | | | | | | |
| LIENS | 0.001 | | 0 | NR | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| LIENS 2 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DEED | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Records of Emergency Release Reports*** | | | | | | | | |
| HMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CHMIRS | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |
| LDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MCS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SPILLS 90 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Other Ascertainable Records*** | | | | | | | | |
| RCRA NonGen / NLR | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| FUDS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCRD DRYCLEANERS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US FIN ASSUR | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| EPA WATCH LIST | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| 2020 COR ACTION | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| TSCA | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| TRIS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SSTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ROD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| RMP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RAATS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PRP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PADS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ICIS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MLTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| COAL ASH DOE | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| COAL ASH EPA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| PCB TRANSFORMER | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RADINFO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DOT OPS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CONSENT | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| INDIAN RESERV | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| FUSRAP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| UMTRA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| LEAD SMELTERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US AIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ABANDONED MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| FINDS | 0.001 | 2 | 1 | NR | NR | NR | NR | 3 |
| UXO | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ECHO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DOCKET HWC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FUELS PROGRAM | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| CA BOND EXP. PLAN | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Cortese | 0.500 | 1 | 0 | 0 | 0 | NR | NR | 1 |
| CUPA Listings | 0.250 | | 0 | 0 | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| DRYCLEANERS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| EMI | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ENF | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| Financial Assurance | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HAZNET | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |
| ICE | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST CORTESE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| HWP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| HWT | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MWMP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NPDES | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PEST LIC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PROC | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| Notify 65 | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| UIC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| UIC GEO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WASTEWATER PITS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| WDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WIP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MILITARY PRIV SITES | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PROJECT | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WDR | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CIWQS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CERS | 0.001 | 1 | 1 | NR | NR | NR | NR | 2 |
| NON-CASE INFO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| OTHER OIL GAS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PROD WATER PONDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SAMPLING POINT | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WELL STIM PROJ | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MINES MRDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HWTS | TP | 1 | NR | NR | NR | NR | NR | 1 |
| **EDR HIGH RISK HISTORICAL RECORDS** | | | | | | | | |
| ***EDR Exclusive Records*** | | | | | | | | |
| EDR MGP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| EDR Hist Auto | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| EDR Hist Cleaner | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| **EDR RECOVERED GOVERNMENT ARCHIVES** | | | | | | | | |
| ***Exclusive Recovered Govt. Archives*** | | | | | | | | |
| RGA LF | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RGA LUST | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |
| - Totals -- | | 9 | 5 | 4 | 0 | 0 | 0 | 18 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

**A1** **CHMIRS** **S105663211**
**Target Property** **870 SANDERSON AVE**
**SAN JACINTO, CA 91761** **N/A**

**Site 1 of 6 in cluster A**

**Actual: 1460 ft.**

CHMIRS:

| | |
|---|---|
| Name: | Not reported |
| Address: | 870 SANDERSON AVE |
| City,State,Zip: | SAN JACINTO, CA 91761 |
| OES Incident Number: | 9-0444 |
| OES notification: | 01/29/1999 |
| OES Date: | Not reported |
| OES Time: | Not reported |
| **Date Completed:** | **Not reported** |
| Property Use: | Not reported |
| Agency Id Number: | Not reported |
| Agency Incident Number: | Not reported |
| Time Notified: | Not reported |
| Time Completed: | Not reported |
| Surrounding Area: | Not reported |
| Estimated Temperature: | Not reported |
| Property Management: | Not reported |
| More Than Two Substances Involved?: | Not reported |
| Resp Agncy Personel # Of Decontaminated: | Not reported |
| Responding Agency Personel # Of Injuries: | Not reported |
| Responding Agency Personel # Of Fatalities: | Not reported |
| Others Number Of Decontaminated: | Not reported |
| Others Number Of Injuries: | Not reported |
| Others Number Of Fatalities: | Not reported |
| Vehicle Make/year: | Not reported |
| Vehicle License Number: | Not reported |
| Vehicle State: | Not reported |
| Vehicle Id Number: | Not reported |
| CA DOT PUC/ICC Number: | Not reported |
| Company Name: | Not reported |
| Reporting Officer Name/ID: | Not reported |
| Report Date: | Not reported |
| Facility Telephone: | Not reported |
| Waterway Involved: | No |
| Waterway: | Not reported |
| Spill Site: | Not reported |
| Cleanup By: | Responsible Party |
| Containment: | Not reported |
| What Happened: | Not reported |
| Type: | Not reported |
| Measure: | Not reported |
| Other: | Not reported |
| Date/Time: | Not reported |
| Year: | 1999 |
| Agency: | Riverside Co Fire |
| Incident Date: | 1/28/199912:00:00 AM |
| Admin Agency: | Riverside County Environmental Health |
| Amount: | Not reported |
| Contained: | Yes |
| Site Type: | Other |
| E Date: | Not reported |
| Substance: | Waste motor oil |
| Unknown: | 0 |

**(Continued)** **S105663211**

| | |
|---|---|
| Substance #2: | Not reported |
| Substance #3: | Not reported |
| Evacuations: | 0 |
| Number of Injuries: | 0 |
| Number of Fatalities: | 0 |
| #1 Pipeline: | Not reported |
| #2 Pipeline: | Not reported |
| #3 Pipeline: | Not reported |
| #1 Vessel >= 300 Tons: | Not reported |
| #2 Vessel >= 300 Tons: | Not reported |
| #3 Vessel >= 300 Tons: | Not reported |
| Evacs: | Not reported |
| Injuries: | Not reported |
| Fatals: | Not reported |
| Comments: | Not reported |
| Description: | Fire was called to a burning operation at a dairy. They located ten 55 gallon drums of waste motor oil that were leaking and overturned. There was also evidence that some oil had been dumped into a refuse pit and burned. |

---

**A2** **WESTERN FAMILY TRUST** **HAZNET** **S112882392**
**Target** **870 N SANDERSON** **HWTS** **N/A**
**Property** **SAN JACINTO, CA 92582**

**Site 2 of 6 in cluster A**

**Actual:**
**1460 ft.**

HAZNET:

| | |
|---|---|
| Name: | WESTERN FAMILY TRUST |
| Address: | 870 N SANDERSON |
| Address 2: | Not reported |
| City,State,Zip: | SAN JACINTO, CA 925820000 |
| Contact: | ED MCGLOTHLIN - CHEMIST |
| Telephone: | 9096256645 |
| Mailing Name: | Not reported |
| Mailing Address: | 11023 EUCALYPTUS |
| Year: | 1999 |
| Gepaid: | CAC001322952 |
| TSD EPA ID: | CAD028409019 |
| CA Waste Code: | 141 - Off-specification, aged or surplus inorganics |
| Disposal Method: | T01 - Treatment, Tank |
| Tons: | 4.17 |

Additional Info:

| | |
|---|---|
| Year: | 1999 |
| Gen EPA ID: | CAC001322952 |
| Shipment Date: | 19991214 |
| Creation Date: | 2/15/2000 0:00:00 |
| Receipt Date: | 19991215 |
| Manifest ID: | 99781720 |
| Trans EPA ID: | CAD983668583 |
| Trans Name: | Not reported |
| Trans 2 EPA ID: | Not reported |
| Trans 2 Name: | Not reported |

**WESTERN FAMILY TRUST (Continued)** **S112882392**

| | |
|---|---|
| TSDF EPA ID: | CAD028409019 |
| Trans Name: | Not reported |
| TSDF Alt EPA ID: | Not reported |
| TSDF Alt Name: | Not reported |
| Waste Code Description: | 141 - Off-specification, aged, or surplus inorganics |
| RCRA Code: | Not reported |
| Meth Code: | T01 - Treatment, Tank |
| Quantity Tons: | 4.17 |
| Waste Quantity: | 1000 |
| Quantity Unit: | G |
| Additional Code 1: | Not reported |
| Additional Code 2: | Not reported |
| Additional Code 3: | Not reported |
| Additional Code 4: | Not reported |
| Additional Code 5: | Not reported |

HWTS:

| | |
|---|---|
| Name: | WESTERN FAMILY TRUST |
| Address: | 870 N SANDERSON |
| Address 2: | Not reported |
| City,State,Zip: | SAN JACINTO, CA 925820000 |
| EPA ID: | CAC001322952 |
| Inactive Date: | 10/25/2000 |
| Create Date: | 12/10/1999 |
| Last Act Date: | 10/25/2000 |
| Mailing Name: | Not reported |
| Mailing Address: | 11023 EUCALYPTUS |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | ONTARIO, CA 917630000 |
| Owner Name: | WESTERN FAMILY TRUST |
| Owner Address: | 11023 EUCALYPTUS |
| Owner Address 2: | Not reported |
| Owner City,State,Zip: | ONTARIO, CA 917630000 |
| Contact Name: | ED MCGLOTHLIN - CHEMIST |
| Contact Address: | 10680 SILICON AVE |
| Contact Address 2: | Not reported |
| City,State,Zip: | MONTCLAIR, CA 917630000 |

---

**A3** **WESTRA DAIRY FARM** **RGA LUST** **S114721669**
**Target** **870 SANDERSON** **N/A**
**Property** **SAN JACINTO, CA**

**Site 3 of 6 in cluster A**

**Actual:**
**1460 ft.**

RGA LUST:

| | |
|---|---|
| Name: | WESTRA DAIRY FARM |
| Address: | 870 SANDERSON |
| City: | SAN JACINTO |
| State: | SAN JACINTO |

2012 WESTRA DAIRY FARM 870 SANDERSON

| | |
|---|---|
| Name: | WESTRA DAIRY FARM |
| Address: | 870 SANDERSON |
| City: | SAN JACINTO |
| State: | SAN JACINTO |

2011 WESTRA DAIRY FARM 870 SANDERSON

| | |
|---|---|
| Name: | WESTRA DAIRY FARM |
| Address: | 870 SANDERSON |

**WESTRA DAIRY FARM (Continued)** **S114721669**

City: SAN JACINTO
State: SAN JACINTO
2010 WESTRA DAIRY FARM 870 SANDERSON
Name: WESTRA DAIRY FARM
Address: 870 SANDERSON
City: SAN JACINTO
State: SAN JACINTO
2009 WESTRA DAIRY FARM 870 SANDERSON
Name: WESTRA DAIRY FARM
Address: 870 SANDERSON
City: SAN JACINTO
State: SAN JACINTO
2008 WESTRA DAIRY FARM 870 SANDERSON
Name: WESTRA DAIRY FARM
Address: 870 SANDERSON
City: SAN JACINTO
State: SAN JACINTO
2007 WESTRA DAIRY FARM 870 SANDERSON
Name: WESTRA DAIRY FARM
Address: 870 SANDERSON
City: SAN JACINTO
State: SAN JACINTO
2006 WESTRA DAIRY FARM 870 SANDERSON
Name: WESTRA DAIRY FARM
Address: 870 SANDERSON
City: SAN JACINTO
State: SAN JACINTO
2005 WESTRA DAIRY FARM 870 SANDERSON
Name: WESTRA DAIRY FARM
Address: 870 SANDERSON
City: SAN JACINTO
State: SAN JACINTO
2003 WESTRA DAIRY FARM 870 SANDERSON
Name: WESTRA DAIRY FARM
Address: 870 SANDERSON
City: SAN JACINTO
State: SAN JACINTO
2002 WESTRA DAIRY FARM 870 SANDERSON
Name: WESTRA DAIRY FARM
Address: 870 SANDERSON
City: SAN JACINTO
State: SAN JACINTO
2001 WESTRA DAIRY FARM 870 SANDERSON

---

**A4** **WESTRA DAIRY FARM** **LUST** **S104539431**
**Target** **870 SANDERSON** **Cortese** **N/A**
**Property** **SAN JACINTO, CA 92582** **CERS**

**Site 4 of 6 in cluster A**

**Actual:** **1460 ft.**

LUST:
Name: WESTRA DAIRY FARM
Address: 870 SANDERSON
City,State,Zip: SAN JACINTO, CA 92582
Lead Agency: SANTA ANA RWQCB (REGION 8)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606599136
Global Id: T0606599136

**WESTRA DAIRY FARM (Continued)** **S104539431**

| | |
|---|---|
| Latitude: | 33.7985312 |
| Longitude: | -117.0068849 |
| Status: | Completed - Case Closed |
| Status Date: | 12/26/2001 |
| Case Worker: | RS |
| RB Case Number: | 083303601T |
| Local Agency: | RIVERSIDE COUNTY LOP |
| File Location: | Not reported |
| Local Case Number: | Not reported |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Gasoline |
| Site History: | Not reported |

LUST:

| | |
|---|---|
| Global Id: | T0606599136 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | ROSE SCOTT |
| Organization Name: | SANTA ANA RWQCB (REGION 8) |
| Address: | 3737 MAIN STREET, SUITE 500 |
| City: | RIVERSIDE |
| Email: | rose.scott@waterboards.ca.gov |
| Phone Number: | 9513206375 |

| | |
|---|---|
| Global Id: | T0606599136 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | Riverside County LOP |
| Organization Name: | RIVERSIDE COUNTY LOP |
| Address: | 3880 LEMON ST SUITE 200 |
| City: | RIVERSIDE |
| Email: | Not reported |
| Phone Number: | 9519558980 |

LUST:

| | |
|---|---|
| Global Id: | T0606599136 |
| Action Type: | ENFORCEMENT |
| Date: | 12/26/2001 |
| Action: | Closure/No Further Action Letter |

| | |
|---|---|
| Global Id: | T0606599136 |
| Action Type: | Other |
| Date: | 12/14/1999 |
| Action: | Leak Discovery |

| | |
|---|---|
| Global Id: | T0606599136 |
| Action Type: | Other |
| Date: | 12/14/1999 |
| Action: | Leak Stopped |

| | |
|---|---|
| Global Id: | T0606599136 |
| Action Type: | Other |
| Date: | 02/21/2000 |
| Action: | Leak Reported |

LUST:

| | |
|---|---|
| Global Id: | T0606599136 |
| Status: | Open - Case Begin Date |
| Status Date: | 12/14/1999 |

**WESTRA DAIRY FARM (Continued)** **S104539431**

Global Id: T0606599136
Status: Open - Site Assessment
Status Date: 12/14/1999

Global Id: T0606599136
Status: Open - Site Assessment
Status Date: 06/02/2000

Global Id: T0606599136
Status: Open - Site Assessment
Status Date: 10/30/2000

Global Id: T0606599136
Status: Open - Verification Monitoring
Status Date: 05/07/2001

Global Id: T0606599136
Status: Completed - Case Closed
Status Date: 12/26/2001

LUST REG 8:

| | |
|---|---|
| Name: | WESTRA DAIRY FARM |
| Address: | 870 SANDERSON |
| City: | SAN JACINTO |
| Region: | 8 |
| County: | Riverside |
| Regional Board: | Santa Ana Region |
| Facility Status: | Case Closed |
| Case Number: | 083303601T |
| Local Case Num: | Not reported |
| Case Type: | Soil only |
| Substance: | Gasoline |
| Qty Leaked: | Not reported |
| Abate Method: | Not reported |
| Cross Street: | Not reported |
| Enf Type: | Not reported |
| Funding: | Not reported |
| How Discovered: | Tank Closure |
| How Stopped: | Not reported |
| Leak Cause: | UNK |
| Leak Source: | Tank |
| Global ID: | T0606599136 |
| How Stopped Date: | 12/14/1999 |
| Enter Date: | 5/1/2000 |
| Date Confirmation of Leak Began: | 12/14/1999 |
| Date Preliminary Assessment Began: | 10/30/2000 |
| Discover Date: | 12/14/1999 |
| Enforcement Date: | Not reported |
| Close Date: | 12/26/2001 |
| Date Prelim Assessment Workplan Submitted: | 6/2/2000 |
| Date Pollution Characterization Began: | Not reported |
| Date Remediation Plan Submitted: | Not reported |
| Date Remedial Action Underway: | Not reported |
| Date Post Remedial Action Monitoring: | 5/7/2001 |
| Enter Date: | 5/1/2000 |
| GW Qualifies: | Not reported |

**WESTRA DAIRY FARM (Continued)** **S104539431**

| | |
|---|---|
| Soil Qualifies: | = |
| Operator: | Not reported |
| Facility Contact: | Not reported |
| Interim: | Not reported |
| Oversite Program: | LUST |
| Latitude: | 33.806672 |
| Longitude: | -117.007106 |
| MTBE Date: | Not reported |
| Max MTBE GW: | Not reported |
| MTBE Concentration: | 1 |
| Max MTBE Soil: | 377 |
| MTBE Fuel: | 1 |
| MTBE Tested: | MTBE Detected. Site tested for MTBE & MTBE detected |
| MTBE Class: | * |
| Staff: | RS |
| Staff Initials: | Not reported |
| Lead Agency: | Regional Board |
| Local Agency: | 33000L |
| Hydr Basin #: | SAN JACINTO (8-5) |
| Beneficial: | Not reported |
| Priority: | Not reported |
| Cleanup Fund Id: | Not reported |
| Work Suspended: | No |

Summary: Not reported

CORTESE:

| | |
|---|---|
| Name: | WESTRA DAIRY FARM |
| Address: | 870 SANDERSON |
| City,State,Zip: | SAN JACINTO, CA 92582 |
| Region: | CORTESE |
| Envirostor Id: | Not reported |
| Global ID: | T0606599136 |
| Site/Facility Type: | LUST CLEANUP SITE |
| Cleanup Status: | COMPLETED - CASE CLOSED |
| Status Date: | Not reported |
| Site Code: | Not reported |
| Latitude: | Not reported |
| Longitude: | Not reported |
| Owner: | Not reported |
| Enf Type: | Not reported |
| Swat R: | Not reported |
| Flag: | active |
| Order No: | Not reported |
| Waste Discharge System No: | Not reported |
| Effective Date: | Not reported |
| Region 2: | Not reported |
| WID Id: | Not reported |
| Solid Waste Id No: | Not reported |
| Waste Management Uit Name: | Not reported |
| File Name: | Active Open |

CERS:

| | |
|---|---|
| Name: | WESTRA DAIRY FARM |
| Address: | 870 SANDERSON |
| City,State,Zip: | SAN JACINTO, CA 92582 |
| Site ID: | 222944 |

**WESTRA DAIRY FARM (Continued)** **S104539431**

CERS ID: T0606599136
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: Riverside County LOP - RIVERSIDE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 3880 LEMON ST SUITE 200
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9519558980

Affiliation Type Desc: Regional Board Caseworker
Entity Name: ROSE SCOTT - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9513206375

---

**A5** **WESTRA DAIRY FARM** **FINDS** **1023222040**
**Target** **870 SANDERSON** **N/A**
**Property** **SAN JACINTO, CA 92582**

**Site 5 of 6 in cluster A**

**Actual:** FINDS:
**1460 ft.** Registry ID: 110065084571

Click Here:

Environmental Interest/Information System:
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

---

**A6** **QUALITY TURF** **FINDS** **1023344581**
**Target** **870 SANDERSON AVE** **N/A**
**Property** **SAN JACINTO, CA 92582**

**Site 6 of 6 in cluster A**

**Actual:** FINDS:
**1460 ft.** Registry ID: 110066404055

Click Here:

Environmental Interest/Information System:
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**B7** **PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINT** **ENVIROSTOR** **S109149563**
**RAMONA BOULEVARD/CAWSTON AVENUE** **SCH** **N/A**
**< 1/8** **SAN JACINTO, CA 92582**
**1 ft.**

**Site 1 of 2 in cluster B**

**Relative:** **Higher**

**Actual:** **1463 ft.**

ENVIROSTOR:

| | |
|---|---|
| Name: | PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINTO |
| Address: | RAMONA BOULEVARD/CAWSTON AVENUE |
| City,State,Zip: | SAN JACINTO, CA 92582 |
| Facility ID: | 60000906 |
| Status: | No Further Action |
| Status Date: | 09/24/2008 |
| Site Code: | 404801 |
| Site Type: | School Investigation |
| Site Type Detailed: | School |
| Acres: | 61 |
| NPL: | NO |
| Regulatory Agencies: | SMBRP |
| Lead Agency: | SMBRP |
| Program Manager: | Not reported |
| Supervisor: | Shahir Haddad |
| Division Branch: | Southern California Schools & Brownfields Outreach |
| Assembly: | 42 |
| Senate: | 23 |
| Special Program: | Not reported |
| Restricted Use: | NO |
| Site Mgmt Req: | NONE SPECIFIED |
| Funding: | School District |
| Latitude: | 33.81317 |
| Longitude: | -117.0139 |
| APN: | 432-030-006, 432-030-010, 432030006, 432030010 |
| Past Use: | AGRICULTURAL - ROW CROPS |
| Potential COC: | Under Investigation |
| Confirmed COC: | NONE SPECIFIED |
| Potential Description: | UE |
| Alias Name: | 432-030-006 |
| Alias Type: | APN |
| Alias Name: | 432-030-010 |
| Alias Type: | APN |
| Alias Name: | 432030006 |
| Alias Type: | APN |
| Alias Name: | 432030010 |
| Alias Type: | APN |
| Alias Name: | 404801 |
| Alias Type: | Project Code (Site Code) |
| Alias Name: | 60000906 |
| Alias Type: | Envirostor ID Number |

Completed Info:

| | |
|---|---|
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Cost Recovery Closeout Memo |
| Completed Date: | 09/18/2008 |
| Comments: | Not reported |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Environmental Oversight Agreement |
| Completed Date: | 06/09/2008 |

**PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINTO (Continued)** **S109149563**

| | |
|---|---|
| Comments: | Signed agreement sent (FedEx) to District. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Preliminary Endangerment Assessment Workplan |
| Completed Date: | 07/02/2008 |
| Comments: | DTSC approved the Workplan for implementation provided DTSC comments are incorporated in future work/reports. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Preliminary Endangerment Assessment Report |
| Completed Date: | 09/17/2008 |
| Comments: | DTSC approved the PEA with a No Further Action determination |
| Future Area Name: | Not reported |
| Future Sub Area Name: | Not reported |
| Future Document Type: | Not reported |
| Future Due Date: | Not reported |
| Schedule Area Name: | Not reported |
| Schedule Sub Area Name: | Not reported |
| Schedule Document Type: | Not reported |
| Schedule Due Date: | Not reported |
| Schedule Revised Date: | Not reported |

SCH:

| | |
|---|---|
| Name: | PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINTO |
| Address: | RAMONA BOULEVARD/CAWSTON AVENUE |
| City,State,Zip: | SAN JACINTO, CA 92582 |
| Facility ID: | 60000906 |
| Site Type: | School Investigation |
| Site Type Detail: | School |
| Site Mgmt. Req.: | NONE SPECIFIED |
| Acres: | 61 |
| National Priorities List: | NO |
| Cleanup Oversight Agencies: | SMBRP |
| Lead Agency: | SMBRP |
| Lead Agency Description: | DTSC - Site Cleanup Program |
| Project Manager: | Not reported |
| Supervisor: | Shahir Haddad |
| Division Branch: | Southern California Schools & Brownfields Outreach |
| Site Code: | 404801 |
| Assembly: | 42 |
| Senate: | 23 |
| Special Program Status: | Not reported |
| Status: | No Further Action |
| Status Date: | 09/24/2008 |
| Restricted Use: | NO |
| Funding: | School District |
| Latitude: | 33.81317 |
| Longitude: | -117.0139 |
| APN: | 432-030-006, 432-030-010, 432030006, 432030010 |
| Past Use: | AGRICULTURAL - ROW CROPS |
| Potential COC: | Under Investigation |
| Confirmed COC: | NONE SPECIFIED |
| Potential Description: | UE |

**PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINTO (Continued)** **S109149563**

Alias Name: 432-030-006
Alias Type: APN
Alias Name: 432-030-010
Alias Type: APN
Alias Name: 432030006
Alias Type: APN
Alias Name: 432030010
Alias Type: APN
Alias Name: 404801
Alias Type: Project Code (Site Code)
Alias Name: 60000906
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 09/18/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 06/09/2008
Comments: Signed agreement sent (FedEx) to District.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 07/02/2008
Comments: DTSC approved the Workplan for implementation provided DTSC comments are incorporated in future work/reports.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 09/17/2008
Comments: DTSC approved the PEA with a No Further Action determination

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

**B8** **PROPOSED HIGH SCHOOL** **CERS** **S123510253**
**RAMONA BOULEVARD/CAWSTON AVENUE** **N/A**
**< 1/8** **SAN JACINTO, CA 92582**
**1 ft.**

**Site 2 of 2 in cluster B**

**Relative:** CERS:
**Higher**
Name: PROPOSED HIGH SCHOOL
**Actual:** Address: RAMONA BOULEVARD/CAWSTON AVENUE
**1463 ft.** City,State,Zip: SAN JACINTO, CA 92582
Site ID: 341804
CERS ID: 60000906
CERS Description: School Investigation

Affiliation:
Affiliation Type Desc: Lead Project Manager
Entity Name: IVY OSORNIO
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Supervisor
Entity Name: SHAHIR HADDAD
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

---

**C9** **SAN JACINTO VALLEY REGIONAL WATER RECLAMATION FACI** **FINDS** **1026422765**
**700 N SANDERSON AVE** **N/A**
**< 1/8** **SAN JACINTO, CA 92582**
**1 ft.**

**Site 1 of 2 in cluster C**

**Relative:** FINDS:
**Higher**
Registry ID: 110070745901
**Actual:**
**1494 ft.** Click Here:

Environmental Interest/Information System:
HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**C10** **SAN JACINTO VALLEY REGIONAL WATER RECLAMATION FACI** **RCRA-VSQG** **1016954557**
**700 N SANDERSON AVE** **CAL000344571**
**< 1/8** **SAN JACINTO, CA 92582**
**1 ft.**

**Site 2 of 2 in cluster C**

**Relative:** RCRA-VSQG:
**Higher**

**Actual:** Date Form Received by Agency: 2014-03-01 00:00:00.0
**1494 ft.** Handler Name: SAN JACINTO VALLEY REGIONAL WATER RECLAMATION FACILITY
Handler Address: 700 N SANDERSON AVE
Handler City,State,Zip: SAN JACINTO, CA 92582
EPA ID: CAL000344571
Contact Name: ALFRED JAVIER
Contact Address: TRUMBLE RD
Contact City,State,Zip: PERRIS, CA 92572
Contact Telephone: 951-928-3777
Contact Fax: 951-928-6177
Contact Email: JAVIERA@EMWD.ORG
Contact Title: ENVIRON. SERVICES MGR
EPA Region: 09
Land Type: Municipal
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
Non-Notifier: Not reported
Biennial Report Cycle: 2013
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported
State District: Not reported
Mailing Address: PO BOX 8300
Mailing City,State,Zip: PERRIS, CA 92572-8300
Owner Name: EASTERN MUNICPAL WATER DISTRICT
Owner Type: Municipal
Operator Name: EASTERN MUNICIPAL WATER DISTRICT
Operator Type: Municipal
Short-Term Generator Activity: Yes
Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility Activity: No
Recycler Activity with Storage: No
Small Quantity On-Site Burner Exemption: No
Smelting Melting and Refining Furnace Exemption: No
Underground Injection Control: No
Off-Site Waste Receipt: No
Universal Waste Indicator: No
Universal Waste Destination Facility: No
Federal Universal Waste: No
Active Site Fed-Reg Treatment Storage and Disposal Facility: Not reported
Active Site Converter Treatment storage and Disposal Facility: Not reported
Active Site State-Reg Treatment Storage and Disposal Facility: Not reported
Active Site State-Reg Handler: ---
Federal Facility Indicator: Not reported
Hazardous Secondary Material Indicator: N
Sub-Part K Indicator: Not reported
Commercial TSD Indicator: No
Treatment Storage and Disposal Type: Not reported
2018 GPRA Permit Baseline: Not on the Baseline
2018 GPRA Renewals Baseline: Not on the Baseline
Permit Renewals Workload Universe: Not reported

**SAN JACINTO VALLEY REGIONAL WATER RECLAMATION FACILITY (Continued)** **1016954557**

| | |
|---|---|
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 2014-11-20 17:13:31.0 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Biennial: List of Years
Year: 2013

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D002
Waste Description: CORROSIVE WASTE

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: | EASTERN MUNICPAL WATER DISTRICT |
| Legal Status: | Municipal |
| Date Became Current: | 1964-01-01 00:00:00. |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 2270 TRUMBLE RD |
| Owner/Operator City,State,Zip: | PERRIS, CA 92572 |
| Owner/Operator Telephone: | 951-928-3777 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: | EASTERN MUNICIPAL WATER DISTRICT |
| Legal Status: | Municipal |

**SAN JACINTO VALLEY REGIONAL WATER RECLAMATION FACILITY (Continued)** **1016954557**

| | |
|---|---|
| Date Became Current: | 1964-01-01 00:00:00. |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | Not reported |
| Owner/Operator City,State,Zip: | Not reported |
| Owner/Operator Telephone: | Not reported |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 2014-03-01 00:00:00.0 |
| Handler Name: | SAN JACINTO VALLEY REGIONAL WATER RECLAMATION FACILITY |
| Federal Waste Generator Description: | Conditionally Exempt Small Quantity Generator |
| State District Owner: | Not reported |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Code: | 22132 |
| NAICS Description: | SEWAGE TREATMENT FACILITIES |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

---

**D11** **EMWD SAN JACINTO VALLEY RWRF** **CERS HAZ WASTE** **S105672014**
**SSE** **770 N SANDERSON AVE** **CERS TANKS** **N/A**
**1/8-1/4** **SAN JACINTO, CA 92582** **CHMIRS**
**0.146 mi.** **NPDES**
**769 ft.** **Site 1 of 3 in cluster D** **CIWQS**
**CERS**

**Relative:**
**Higher**

**Actual:**
**1497 ft.**

CERS HAZ WASTE:

| | |
|---|---|
| Name: | EMWD SAN JACINTO VALLEY RWRF |
| Address: | 770 N SANDERSON AVE |
| City,State,Zip: | SAN JACINTO, CA 92582 |
| Site ID: | 114512 |
| CERS ID: | 10322812 |
| CERS Description: | Hazardous Waste Generator |

CERS TANKS:

| | |
|---|---|
| Name: | EMWD SAN JACINTO VALLEY RWRF |
| Address: | 770 N SANDERSON AVE |
| City,State,Zip: | SAN JACINTO, CA 92582 |
| Site ID: | 114512 |
| CERS ID: | 10322812 |

**EMWD SAN JACINTO VALLEY RWRF (Continued)** **S105672014**

CERS Description: Aboveground Petroleum Storage

CHMIRS:

| | |
|---|---|
| Name: | Not reported |
| Address: | 770 N SANDERSON AV |
| City,State,Zip: | SAN JACINTO, CA 92582 |
| OES Incident Number: | 1-5245 |
| OES notification: | 09/14/2001 |
| OES Date: | Not reported |
| OES Time: | Not reported |
| **Date Completed:** | **Not reported** |
| Property Use: | Not reported |
| Agency Id Number: | Not reported |
| Agency Incident Number: | Not reported |
| Time Notified: | Not reported |
| Time Completed: | Not reported |
| Surrounding Area: | Not reported |
| Estimated Temperature: | Not reported |
| Property Management: | Not reported |
| More Than Two Substances Involved?: | Not reported |
| Resp Agncy Personel # Of Decontaminated: | Not reported |
| Responding Agency Personel # Of Injuries: | Not reported |
| Responding Agency Personel # Of Fatalities: | Not reported |
| Others Number Of Decontaminated: | Not reported |
| Others Number Of Injuries: | Not reported |
| Others Number Of Fatalities: | Not reported |
| Vehicle Make/year: | Not reported |
| Vehicle License Number: | Not reported |
| Vehicle State: | Not reported |
| Vehicle Id Number: | Not reported |
| CA DOT PUC/ICC Number: | Not reported |
| Company Name: | Not reported |
| Reporting Officer Name/ID: | Not reported |
| Report Date: | Not reported |
| Facility Telephone: | Not reported |
| Waterway Involved: | No |
| Waterway: | Not reported |
| Spill Site: | Not reported |
| Cleanup By: | Reporting Party |
| Containment: | Not reported |
| What Happened: | Not reported |
| Type: | Not reported |
| Measure: | Not reported |
| Other: | Not reported |
| Date/Time: | Not reported |
| Year: | 2001 |
| Agency: | Eastern Municipal Water Dist. |
| Incident Date: | 8/16/200112:00:00 AM |
| Admin Agency: | Not reported |
| Amount: | Not reported |
| Contained: | Yes |
| Site Type: | Treatment/Sewage Facility |
| E Date: | Not reported |
| Substance: | Ferric Chloride |
| Gallons: | 980 |
| Unknown: | 0.000000 |
| Substance #2: | Not reported |

**EMWD SAN JACINTO VALLEY RWRF (Continued)** **S105672014**

| | |
|---|---|
| Substance #3: | Not reported |
| Evacuations: | 0 |
| Number of Injuries: | 0 |
| Number of Fatalities: | 0 |
| #1 Pipeline: | Not reported |
| #2 Pipeline: | Not reported |
| #3 Pipeline: | Not reported |
| #1 Vessel >= 300 Tons: | Not reported |
| #2 Vessel >= 300 Tons: | Not reported |
| #3 Vessel >= 300 Tons: | Not reported |
| Evacs: | Not reported |
| Injuries: | Not reported |
| Fatals: | Not reported |
| Comments: | Not reported |
| Description: | The material is corrosive and it ate through a brass fitting in a pipe causing the release. |

NPDES:

| | |
|---|---|
| Name: | SAN JACINTO VALLEY RWRF SOLAR PROJECT |
| Address: | 770 N SANDERSON AVE |
| City,State,Zip: | SAN JACINTO, CA 92583 |
| Facility Status: | Not reported |
| NPDES Number: | Not reported |
| Region: | Not reported |
| Agency Number: | Not reported |
| Regulatory Measure ID: | Not reported |
| Place ID: | Not reported |
| Order Number: | Not reported |
| WDID: | 8 33C386898 |
| Regulatory Measure Type: | Construction |
| Program Type: | Not reported |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | Not reported |
| Expiration Date Of Regulatory Measure: | Not reported |
| Discharge Address: | Not reported |
| Discharge Name: | Not reported |
| Discharge City: | Not reported |
| Discharge State: | Not reported |
| Discharge Zip: | Not reported |
| Status: | Active |
| Status Date: | 05/05/2021 |
| Operator Name: | Eastern Municipal Water District |
| Operator Address: | 2270 Trumble Road |
| Operator City: | Perris |
| Operator State: | California |
| Operator Zip: | 92572 |

| | |
|---|---|
| Name: | SAN JACINTO VALLEY RWRF SOLAR PROJECT |
| Address: | 770 N SANDERSON AVE |
| City,State,Zip: | SAN JACINTO, CA 92583 |
| Facility Status: | Active |
| NPDES Number: | CAS000002 |
| Region: | 8 |
| Agency Number: | 0 |
| Regulatory Measure ID: | 508595 |
| Place ID: | Not reported |

**EMWD SAN JACINTO VALLEY RWRF (Continued)** **S105672014**

| | |
|---|---|
| Order Number: | 2009-0009-DWQ |
| WDID: | 8 33C386898 |
| Regulatory Measure Type: | Enrollee |
| Program Type: | Construction |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | 05/14/2019 |
| Termination Date Of Regulatory Measure: | Not reported |
| Expiration Date Of Regulatory Measure: | Not reported |
| Discharge Address: | 2270 Trumble Road |
| Discharge Name: | Eastern Municipal Water District |
| Discharge City: | Perris |
| Discharge State: | California |
| Discharge Zip: | 92572 |
| Status: | Not reported |
| Status Date: | Not reported |
| Operator Name: | Not reported |
| Operator Address: | Not reported |
| Operator City: | Not reported |
| Operator State: | Not reported |
| Operator Zip: | Not reported |

CIWQS:

| | |
|---|---|
| Name: | SAN JACINTO VALLEY RWRF SOLAR PROJECT |
| Address: | 770 N SANDERSON AVE |
| City,State,Zip: | SAN JACINTO, CA 92583 |
| Agency: | Eastern Municipal Water District |
| Agency Address: | 2270 Trumble Road PO Box 8300, Perris, CA 92572 |
| Place/Project Type: | Construction - Utility: Solar Pad |
| SIC/NAICS: | Not reported |
| Region: | 8 |
| Program: | CONSTW |
| Regulatory Measure Status: | Active |
| Regulatory Measure Type: | Storm water construction |
| Order Number: | 2009-0009-DWQ |
| WDID: | 8 33C386898 |
| NPDES Number: | CAS000002 |
| Adoption Date: | 01/01/1900 |
| Effective Date: | 05/14/2019 |
| Termination Date: | 01/01/1900 |
| Expiration/Review Date: | 01/01/1900 |
| Design Flow: | Not reported |
| Major/Minor: | Not reported |
| Complexity: | Not reported |
| TTWQ: | Not reported |
| Enforcement Actions within 5 years: | 1 |
| Violations within 5 years: | 1 |
| Latitude: | 33.80051 |
| Longitude: | -117.02382 |

CERS:

| | |
|---|---|
| Name: | EMWD SAN JACINTO VALLEY RWRF |
| Address: | 770 N SANDERSON AVE |
| City,State,Zip: | SAN JACINTO, CA 92582 |
| Site ID: | 114512 |
| CERS ID: | 10322812 |
| CERS Description: | Chemical Storage Facilities |

**EMWD SAN JACINTO VALLEY RWRF (Continued)** **S105672014**

Violations:

| | |
|---|---|
| Site ID: | 114512 |
| Site Name: | EMWD San Jacinto Valley RWRF |
| Violation Date: | 11-06-2018 |
| Citation: | 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a) |
| Violation Description: | Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste. |
| Violation Notes: | Returned to compliance on 11/06/2018. OBSERVATION: No manifests available during inspection. CORRECTIVE ACTION: Owner/operator shall obtain all manifests for hazardous waste shipments which occurred in the past 3 years. Manifests shall be made available for inspection. |
| Violation Division: | Riverside County Department of Env Health |
| Violation Program: | HW |
| Violation Source: | CERS |

Evaluation:

| | |
|---|---|
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 02-14-2018 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Riverside County Department of Env Health |
| Eval Program: | APSA |
| Eval Source: | CERS |

| | |
|---|---|
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 02-19-2014 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Riverside County Department of Env Health |
| Eval Program: | CalARP |
| Eval Source: | CERS |

| | |
|---|---|
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 05-23-2017 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Riverside County Department of Env Health |
| Eval Program: | CalARP |
| Eval Source: | CERS |

| | |
|---|---|
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 09-02-2015 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Riverside County Department of Env Health |
| Eval Program: | HMRRP |
| Eval Source: | CERS |

**EMWD SAN JACINTO VALLEY RWRF (Continued)** **S105672014**

| | |
|---|---|
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 09-02-2015 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Riverside County Department of Env Health |
| Eval Program: | HW |
| Eval Source: | CERS |

| | |
|---|---|
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 11-06-2018 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | NOTE: Old Blower Building contains spent absorbent and empty battery cases; owner/operator shall remove spend absorbent and either reuse batter cases, label as empty, or remove |
| Eval Division: | Riverside County Department of Env Health |
| Eval Program: | HMRRP |
| Eval Source: | CERS |

| | |
|---|---|
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 11-06-2018 |
| Violations Found: | Yes |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Riverside County Department of Env Health |
| Eval Program: | HW |
| Eval Source: | CERS |

| | |
|---|---|
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 11-24-2020 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Riverside County Department of Env Health |
| Eval Program: | APSA |
| Eval Source: | CERS |

| | |
|---|---|
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 11-24-2020 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Riverside County Department of Env Health |
| Eval Program: | HMRRP |
| Eval Source: | CERS |

| | |
|---|---|
| Eval General Type: | Compliance Evaluation Inspection |
| Eval Date: | 11-24-2020 |
| Violations Found: | No |
| Eval Type: | Routine done by local agency |
| Eval Notes: | Not reported |
| Eval Division: | Riverside County Department of Env Health |
| Eval Program: | HW |
| Eval Source: | CERS |

**EMWD SAN JACINTO VALLEY RWRF (Continued)** **S105672014**

Affiliation:

| | |
|---|---|
| Affiliation Type Desc: | CUPA District |
| Entity Name: | Riverside Cnty Env Health |
| Entity Title: | Not reported |
| Affiliation Address: | 4065 County Circle Drive, Room 104 |
| Affiliation City: | Riverside |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | 92503 |
| Affiliation Phone: | (951) 358-5055 |

| | |
|---|---|
| Affiliation Type Desc: | Document Preparer |
| Entity Name: | Dotty Torres |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | Not reported |

| | |
|---|---|
| Affiliation Type Desc: | Identification Signer |
| Entity Name: | Doug Edwards |
| Entity Title: | Environmental Services Manager |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | Not reported |

| | |
|---|---|
| Affiliation Type Desc: | Parent Corporation |
| Entity Name: | Eastern Municipal Water District |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | Not reported |

| | |
|---|---|
| Affiliation Type Desc: | Legal Owner |
| Entity Name: | Eastern Municipal Water District |
| Entity Title: | Not reported |
| Affiliation Address: | PO Box 8300 |
| Affiliation City: | Perris |
| Affiliation State: | CA |
| Affiliation Country: | United States |
| Affiliation Zip: | 92572 |
| Affiliation Phone: | (951) 928-3777 |

| | |
|---|---|
| Affiliation Type Desc: | Operator |
| Entity Name: | DOUG EDWARDS |
| Entity Title: | Not reported |
| Affiliation Address: | Not reported |
| Affiliation City: | Not reported |
| Affiliation State: | Not reported |

**EMWD SAN JACINTO VALLEY RWRF (Continued)** **S105672014**

| | |
|---|---|
| Affiliation Country: | Not reported |
| Affiliation Zip: | Not reported |
| Affiliation Phone: | (951) 928-3777 |
| | |
| Affiliation Type Desc: | Environmental Contact |
| Entity Name: | DOUG EDWARDS |
| Entity Title: | Not reported |
| Affiliation Address: | P.O. Box 8300 |
| Affiliation City: | Perris |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | 92572-8300 |
| Affiliation Phone: | Not reported |
| | |
| Affiliation Type Desc: | Facility Mailing Address |
| Entity Name: | Mailing Address |
| Entity Title: | Not reported |
| Affiliation Address: | PO Box 8300 |
| Affiliation City: | Perris |
| Affiliation State: | CA |
| Affiliation Country: | Not reported |
| Affiliation Zip: | 92572 |
| Affiliation Phone: | Not reported |
| | |
| Affiliation Type Desc: | Property Owner |
| Entity Name: | EMWD |
| Entity Title: | Not reported |
| Affiliation Address: | PO Box 8300 |
| Affiliation City: | Perris |
| Affiliation State: | CA |
| Affiliation Country: | United States |
| Affiliation Zip: | 92572 |
| Affiliation Phone: | (951) 928-3777 |

---

**D12** **HEMET SAN JACINTO REG WATER** **AST** **A100226065**
**SSE** **770 N SANDERSON AVE** **N/A**
**1/8-1/4** **SAN JACINTO, CA**
**0.146 mi.**
**769 ft.** **Site 2 of 3 in cluster D**

**Relative:** AST:
**Higher**

| | |
|---|---|
| Name: | HEMET SAN JACINTO REG WATER |
| Address: | 770 N SANDERSON AVE |
| City/Zip: | SAN JACINTO, |
| Certified Unified Program Agencies: | Riverside |
| Owner: | EASTERN MUNICIPAL WATER DIST |
| Total Gallons: | 3,720 |
| CERSID: | Not reported |
| Facility ID: | Not reported |
| Business Name: | Not reported |
| Phone: | Not reported |
| Fax: | Not reported |
| Mailing Address: | Not reported |
| Mailing Address City: | Not reported |
| Mailing Address State: | Not reported |
| Mailing Address Zip Code: | Not reported |
| Operator Name: | Not reported |

**Actual:**
**1497 ft.**

**HEMET SAN JACINTO REG WATER (Continued)** **A100226065**

| | |
|---|---|
| Operator Phone: | Not reported |
| Owner Phone: | Not reported |
| Owner Mail Address: | Not reported |
| Owner State: | Not reported |
| Owner Zip Code: | Not reported |
| Owner Country: | Not reported |
| Property Owner Name: | Not reported |
| Property Owner Phone: | Not reported |
| Property Owner Mailing Address: | Not reported |
| Property Owner City: | Not reported |
| Property Owner Stat : | Not reported |
| Property Owner Zip Code: | Not reported |
| Property Owner Country: | Not reported |
| EPAID: | Not reported |

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**D13** **SAN JACINTO VALLEY RWRF** **RCRA-LQG** **1007200253**
**SSE** **770 NORTH SANDERSON** **CAL000089262**
**1/8-1/4** **SAN JACINTO, CA 92583**
**0.146 mi.**
**769 ft.** **Site 3 of 3 in cluster D**

**Relative:** **Higher**

**Actual:** **1497 ft.**

RCRA-LQG:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 2012-03-19 00:00:00.0 |
| Handler Name: | SAN JACINTO VALLEY RWRF | |
| Handler Address: | | 770 NORTH SANDERSON |
| Handler City,State,Zip: | | SAN JACINTO, CA 92583 |
| EPA ID: | | CAL000089262 |
| Contact Name: | | ALFRED JAVIER |
| Contact Address: | | TRUMBLE ROAD |
| Contact City,State,Zip: | | PERRIS, CA 92572 |
| Contact Telephone: | | 951-928-3777 6327 |
| Contact Fax: | | 951-928-6177 |
| Contact Email: | | JAVIERA@EMWD.ORG |
| Contact Title: | | MGR, ENVIRONMENTAL SRVCS |
| EPA Region: | | 09 |
| Land Type: | | Municipal |
| Federal Waste Generator Description: | | Large Quantity Generator |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | 2011 |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Handler Activities |
| State District Owner: | | Not reported |
| State District: | | Not reported |
| Mailing Address: | | TRUMBLE ROAD |
| Mailing City,State,Zip: | | PERRIS, CA 92572 |
| Owner Name: | | EASTERN MUNICIPAL WATER DISTRICT |
| Owner Type: | | Municipal |
| Operator Name: | | EASTERN MUNICIPAL WATER DISTRICT |
| Operator Type: | | Municipal |
| Short-Term Generator Activity: | | Yes |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |

**SAN JACINTO VALLEY RWRF (Continued)** **1007200253**

| | |
|---|---|
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site Fed-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site Converter Treatment storage and Disposal Facility: | Not reported |
| Active Site State-Reg Treatment Storage and Disposal Facility: | Not reported |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | NN |
| Sub-Part K Indicator: | Not reported |
| Commercial TSD Indicator: | No |
| Treatment Storage and Disposal Type: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| Permit Renewals Workload Universe: | Not reported |
| Permit Workload Universe: | Not reported |
| Permit Progress Universe: | Not reported |
| Post-Closure Workload Universe: | Not reported |
| Closure Workload Universe: | Not reported |
| 202 GPRA Corrective Action Baseline: | No |
| Corrective Action Workload Universe: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: | No |
| TSDFs Only Subject to CA under Discretionary Auth Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Operating TSDF Universe: | Not reported |
| Full Enforcement Universe: | Not reported |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 2012-11-06 13:57:46.0 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | Not reported |
| Manifest Broker: | Not reported |
| Sub-Part P Indicator: | No |

Biennial: List of Years
Year: 2011

Click Here for Biennial Reporting System Data:
Year: 2007

Click Here for Biennial Reporting System Data:
Year: 2001

**SAN JACINTO VALLEY RWRF (Continued)** **1007200253**

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D001
Waste Description: IGNITABLE WASTE

Waste Code: D002
Waste Description: CORROSIVE WASTE

Waste Code: D008
Waste Description: LEAD

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: EASTERN MUNICIPAL WATER DISTRICT
Legal Status: Municipal
Date Became Current: 1964-01-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 2270 TRUMBLE ROAD
Owner/Operator City,State,Zip: PERRIS, CA 92572
Owner/Operator Telephone: 951-928-3777
Owner/Operator Telephone Ext: 6327
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: EASTERN MUNICIPAL WATER DISTRICT
Legal Status: Municipal
Date Became Current: 1964-01-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: PO BOX 8300
Owner/Operator City,State,Zip: PERRIS, CA 92572
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: EASTERN MUNICIPAL WATER DISTRICT
Legal Status: Municipal
Date Became Current: 1964-01-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: EASTERN MUNICIPAL WATER DISTRICT
Legal Status: Municipal
Date Became Current: 1964-01-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 2270 TRUMBLE ROAD

**SAN JACINTO VALLEY RWRF (Continued)** **1007200253**

Owner/Operator City,State,Zip: PERRIS, CA 92572
Owner/Operator Telephone: 951-928-3777
Owner/Operator Telephone Ext: 6327
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 2012-03-19 00:00:00.0
Handler Name: SAN JACINTO VALLEY RWRF
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2002-02-20 00:00:00.0
Handler Name: HEMET SAN JACINTO REGIONAL WATER RECLAMA
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2002-02-20 00:00:00.0
Handler Name: HEMET SAN JACINTO REGIONAL WATER RECLAMA
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2008-02-27 00:00:00.0
Handler Name: EMWD - SAN JACINTO VALLEY RWRF
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported

**SAN JACINTO VALLEY RWRF (Continued)** **1007200253**

Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 22132
NAICS Description: SEWAGE TREATMENT FACILITIES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

Count: 1 records. ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---|---|---|---|---|---|
| SAN JACINTO | S121643623 | HEMET/SAN JACINTO WWRF | 770 SANDERSON | 92583 | CIWQS |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

**STANDARD ENVIRONMENTAL RECORDS**

***Federal NPL site list***

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/30/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 06/23/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Quarterly

***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Quarterly

***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

***Federal institutional controls / engineering controls registries***

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 39

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/24/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 85

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

***State- and tribal - equivalent NPL***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 04/23/2021
Date Data Arrived at EDR: 04/23/2021
Date Made Active in Reports: 07/12/2021
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Quarterly

***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 04/23/2021
Date Data Arrived at EDR: 04/23/2021
Date Made Active in Reports: 07/12/2021
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Quarterly

***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/10/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 77

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Quarterly

***State and tribal leaking storage tank lists***

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/30/2020
Date Data Arrived at EDR: 12/22/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 80
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/02/2020
Date Data Arrived at EDR: 12/18/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 84
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

***State and tribal registered storage tank lists***

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/05/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 04/01/2021
Number of Days to Update: 23
Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/02/2020
Date Data Arrived at EDR: 12/18/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 84

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/30/2020
Date Data Arrived at EDR: 12/22/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

***State and tribal voluntary cleanup sites***

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/15/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: No Update Planned

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 04/23/2021
Date Data Arrived at EDR: 04/23/2021
Date Made Active in Reports: 07/12/2021
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: No Update Planned

***State and tribal Brownfields sites***

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/15/2021
Date Data Arrived at EDR: 03/16/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/10/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Semi-Annually

***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 06/15/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Varies

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/22/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 04/23/2021
Date Data Arrived at EDR: 04/23/2021
Date Made Active in Reports: 07/12/2021
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 04/20/2021
Date Made Active in Reports: 07/07/2021
Number of Days to Update: 78

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 07/15/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

***Local Lists of Registered Storage Tanks***

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/07/2021
Date Made Active in Reports: 07/23/2021
Number of Days to Update: 77

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 04/20/2021
Date Made Active in Reports: 07/07/2021
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/15/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Quarterly

***Local Land Records***

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 77

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

***Records of Emergency Release Reports***

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/24/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 85
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 04/04/2021
Date Data Arrived at EDR: 04/20/2021
Date Made Active in Reports: 07/07/2021
Number of Days to Update: 78
Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/15/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 47

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/09/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/07/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/17/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 04/20/2021
Date Made Active in Reports: 07/16/2021
Number of Days to Update: 87

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/19/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 01/22/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/14/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/05/2021
Number of Days to Update: 50

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/19/2020
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/09/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: No Update Planned

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/11/2021
Date Made Active in Reports: 05/11/2021
Number of Days to Update: 61

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/14/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 70

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/07/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: No Update Planned

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/23/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 07/14/2021
Date Made Active in Reports: 07/16/2021
Number of Days to Update: 2

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/02/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/02/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/23/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: No Update Planned

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: No Update Planned

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 05/27/2021
Date Data Arrived at EDR: 05/27/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 14

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/23/2021
Date Data Arrived at EDR: 03/25/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 84

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/14/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 33

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/17/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/04/2021
Date Data Arrived at EDR: 04/06/2021
Date Made Active in Reports: 06/25/2021
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/07/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/17/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 79

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/25/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 83

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/26/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/04/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 77

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/10/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/16/2021
Date Data Arrived at EDR: 04/20/2021
Date Made Active in Reports: 07/07/2021
Number of Days to Update: 78

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 07/15/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/13/2021
Date Data Arrived at EDR: 05/13/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 74

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/09/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Annually

ICE: ICE
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/14/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 74
Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/14/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 74
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/05/2021
Date Data Arrived at EDR: 04/06/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 05/10/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/12/2021
Date Data Arrived at EDR: 03/16/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/15/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 06/07/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/12/2021
Number of Days to Update: 73
Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 05/19/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 04/20/2021
Date Made Active in Reports: 07/07/2021
Number of Days to Update: 78
Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/15/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/08/2021
Date Data Arrived at EDR: 04/09/2021
Date Made Active in Reports: 04/20/2021
Number of Days to Update: 11

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/30/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: No Update Planned

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/30/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 06/30/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: No Update Planned

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**COUNTY RECORDS**

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 03/17/2021
Date Data Arrived at EDR: 03/18/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 7

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/15/2021
Date Data Arrived at EDR: 06/16/2021
Date Made Active in Reports: 07/02/2021
Number of Days to Update: 16

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/15/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 04/21/2021
Date Data Arrived at EDR: 04/22/2021
Date Made Active in Reports: 07/12/2021
Number of Days to Update: 81

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/10/2021
Date Data Arrived at EDR: 05/12/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 75

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/14/2021
Date Data Arrived at EDR: 01/15/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 80

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/23/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/17/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 2

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/10/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 04/22/2021
Date Data Arrived at EDR: 04/30/2021
Date Made Active in Reports: 07/19/2021
Number of Days to Update: 80

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 01/28/2021
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 05/10/2021
Date Data Arrived at EDR: 05/12/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 75

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/06/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/08/2021
Date Data Arrived at EDR: 04/13/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 76

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/12/2021
Date Data Arrived at EDR: 04/13/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 76

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/09/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 81

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/06/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 02/04/2021
Date Data Arrived at EDR: 04/16/2021
Date Made Active in Reports: 04/21/2021
Number of Days to Update: 5

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 07/12/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 11

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 04/16/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 81
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/09/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/06/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72
Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: No Update Planned

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/24/2021
Date Data Arrived at EDR: 04/07/2021
Date Made Active in Reports: 06/24/2021
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/13/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 73

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/06/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/23/2021
Date Data Arrived at EDR: 06/23/2021
Date Made Active in Reports: 06/24/2021
Number of Days to Update: 1

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 04/29/2021
Date Made Active in Reports: 07/15/2021
Number of Days to Update: 77
Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 04/30/2021
Date Made Active in Reports: 07/19/2021
Number of Days to Update: 80
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/29/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 9
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/29/2021
Date Data Arrived at EDR: 04/30/2021
Date Made Active in Reports: 07/19/2021
Number of Days to Update: 80
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/29/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 05/26/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 6
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64
Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 06/29/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 14
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 06/29/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 14
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/07/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 03/30/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 83
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 03/30/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/25/2021
Number of Days to Update: 85
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 06/23/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 04/29/2021
Date Made Active in Reports: 05/03/2021
Number of Days to Update: 4

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/19/2021
Date Data Arrived at EDR: 05/19/2021
Date Made Active in Reports: 06/07/2021
Number of Days to Update: 19

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/21/2021
Number of Days to Update: 79

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing
A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/07/2021
Date Made Active in Reports: 07/23/2021
Number of Days to Update: 77
Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/07/2021
Date Made Active in Reports: 07/23/2021
Number of Days to Update: 77
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: No Update Planned

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/07/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 3
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/06/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/10/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: No Update Planned

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/26/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 82
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: No Update Planned

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/23/2021
Date Data Arrived at EDR: 03/25/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 77

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 09/12/2021
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/28/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/01/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 83

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/15/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/06/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/29/2021
Date Data Arrived at EDR: 04/22/2021
Date Made Active in Reports: 07/12/2021
Number of Days to Update: 81

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/15/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/29/2021
Date Data Arrived at EDR: 04/21/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 2

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/15/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 03/26/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 83

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 04/21/2021
Date Data Arrived at EDR: 04/22/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 20

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Varies

**OTHER DATABASE(S)**

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 03/24/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 07/28/2021
Number of Days to Update: 78

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/09/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/29/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/07/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 02/24/2021
Number of Days to Update: 13

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/13/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

**STREET AND ADDRESS INFORMATION**

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# GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

**TARGET PROPERTY ADDRESS**

VILLAGES OF SAN JACINTO
870 & 1380 N SANDERSON AVENUE
SAN JACINTO, CA 92582

**TARGET PROPERTY COORDINATES**

| | |
|---|---|
| Latitude (North): | 33.813328 - 33° 48' 47.98'' |
| Longitude (West): | 117.020638 - 117° 1' 14.30'' |
| Universal Tranverse Mercator: | Zone 11 |
| UTM X (Meters): | 498089.9 |
| UTM Y (Meters): | 3741264.8 |
| Elevation: | 1460 ft. above sea level |

**USGS TOPOGRAPHIC MAP**

| | |
|---|---|
| Target Property Map: | 5640936 LAKEVIEW, CA |
| Version Date: | 2012 |
| East Map: | 5641216 SAN JACINTO, CA |
| Version Date: | 2012 |

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

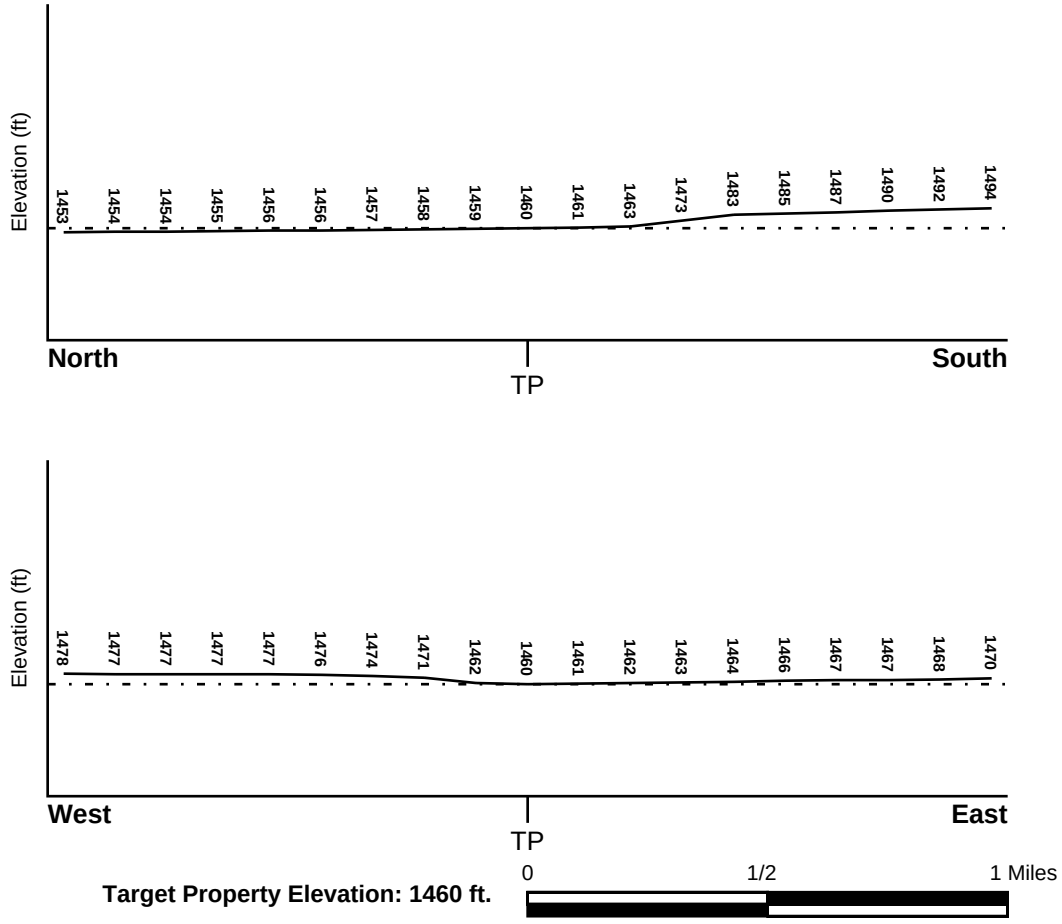
**TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

**TARGET PROPERTY TOPOGRAPHY**

General Topographic Gradient: General ENE

**SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**




Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE**

| Flood Plain Panel at Target Property | FEMA Source Type |
|---|---|
| 06065C1460H | FEMA FIRM Flood data |

| Additional Panels in search area: | FEMA Source Type |
|---|---|
| 06065C1470G | FEMA FIRM Flood data |

**NATIONAL WETLAND INVENTORY**

| NWI Quad at Target Property | NWI Electronic Data Coverage |
|---|---|
| LAKEVIEW | YES - refer to the Overview Map and Detail Map |

**HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

***Site-Specific Hydrogeological Data*:***

| | |
|---|---|
| Search Radius: | 1.25 miles |
| Status: | Not found |

**AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| MAP ID | LOCATION FROM TP | GENERAL DIRECTION GROUNDWATER FLOW |
|---|---|---|
| Not Reported | | |

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

**GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

**ROCK STRATIGRAPHIC UNIT**

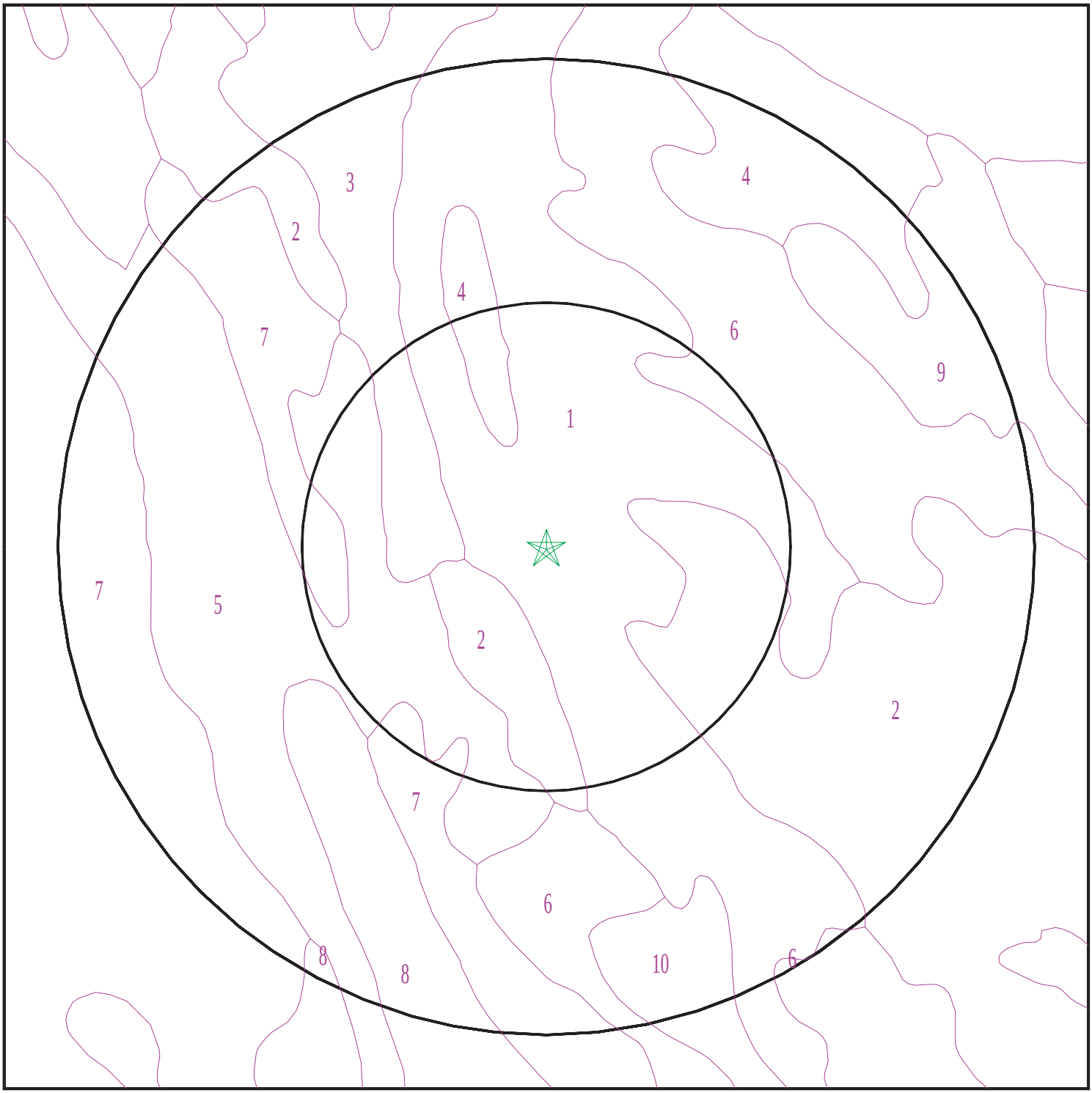
| | |
|---|---|
| Era: | Cenozoic |
| System: | Tertiary |
| Series: | Pliocene |
| Code: | Tpc *(decoded above as Era, System & Series)* |

**GEOLOGIC AGE IDENTIFICATION**

Category: Continental Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 6599939.2s




Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

| | | | |
|---|---|---|---|
| SITE NAME: | Villages of San Jacinto | CLIENT: | Roux Associates |
| ADDRESS: | 870 & 1380 N Sanderson Avenue<br>San Jacinto CA 92582 | CONTACT: | Connor Moore |
| LAT/LONG: | 33.813328 / 117.020638 | INQUIRY #: | 6599939.2s |
| | | DATE: | July 30, 2021 2:03 pm |

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# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

---

**Soil Map ID: 1**

Soil Component Name: CHINO

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 14 inches | silt loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 4<br>Min: 1.4 | Max: 8.4<br>Min: 7.9 |
| 2 | 14 inches | 27 inches | silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 4<br>Min: 1.4 | Max: 8.4<br>Min: 7.9 |
| 3 | 27 inches | 59 inches | silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 4<br>Min: 1.4 | Max: 8.4<br>Min: 7.9 |

**Soil Map ID: 2**

Soil Component Name: DELLO

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 7 inches | loamy fine sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 8.4<br>Min: 7.4 |
| 2 | 7 inches | 61 inches | sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 8.4<br>Min: 7.4 |

**Soil Map ID: 3**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 16 inches | fine sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14 Min: 4 | Max: 9 Min: 7.4 |
| 2 | 16 inches | 59 inches | sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14 Min: 4 | Max: 9 Min: 7.4 |

---

**Soil Map ID: 4**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 16 inches | fine sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14 Min: 4 | Max: 9 Min: 7.4 |
| 2 | 16 inches | 59 inches | sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14 Min: 4 | Max: 9 Min: 7.4 |

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**Soil Map ID: 5**

Soil Component Name: TRAVER

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 12 inches | loamy fine sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14 Min: 4 | Max: 9.6 Min: 8.4 |

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 2 | 12 inches | 38 inches | fine sandy loam | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14<br>Min: 4 | Max: 9.6<br>Min: 8.4 |
| 3 | 38 inches | 59 inches | stratified fine sandy loam to silty clay loam | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14<br>Min: 4 | Max: 9.6<br>Min: 8.4 |

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**Soil Map ID: 6**

Soil Component Name: DELLO

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 14 inches | loamy fine sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 8.4<br>Min: 7.4 |

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 2 | 14 inches | 61 inches | sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 8.4<br>Min: 7.4 |

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**Soil Map ID: 7**

Soil Component Name: TRAVER

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 20 inches | fine sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14<br>Min: 4 | Max: 9.6<br>Min: 8.4 |
| 2 | 20 inches | 59 inches | stratified fine sandy loam to silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14<br>Min: 4 | Max: 9.6<br>Min: 8.4 |

**Soil Map ID: 8**

Soil Component Name: TRAVER

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 20 inches | fine sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14<br>Min: 4 | Max: 9.6<br>Min: 8.4 |
| 2 | 20 inches | 59 inches | stratified fine sandy loam to silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14<br>Min: 4 | Max: 9.6<br>Min: 8.4 |

**Soil Map ID: 9**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 16 inches | loamy fine sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42<br>Min: 14 | Max: 8.4<br>Min: 6.6 |
| 2 | 16 inches | 59 inches | sandy loam | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42<br>Min: 14 | Max: 8.4<br>Min: 6.6 |

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**Soil Map ID: 10**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 35 inches | sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42 Min: 14 | Max: 9 Min: 7.4 |
| 2 | 35 inches | 59 inches | sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42 Min: 14 | Max: 9 Min: 7.4 |

**LOCAL / REGIONAL WATER AGENCY RECORDS**

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

**WELL SEARCH DISTANCE INFORMATION**

| DATABASE | SEARCH DISTANCE (miles) |
|---|---|
| Federal USGS | 1.000 |
| Federal FRDS PWS | Nearest PWS within 1 mile |
| State Database | 1.000 |

**FEDERAL USGS WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| A6 | USGS40000138346 | 1/2 - 1 Mile SW |
| A7 | USGS40000138347 | 1/2 - 1 Mile SW |
| A8 | USGS40000138348 | 1/2 - 1 Mile SW |
| A9 | USGS40000138339 | 1/2 - 1 Mile SW |
| A10 | USGS40000138340 | 1/2 - 1 Mile SW |
| A11 | USGS40000138338 | 1/2 - 1 Mile SW |
| A12 | USGS40000138336 | 1/2 - 1 Mile SW |
| A13 | USGS40000138337 | 1/2 - 1 Mile SW |
| A14 | USGS40000138344 | 1/2 - 1 Mile SW |
| A15 | USGS40000138345 | 1/2 - 1 Mile SW |
| A16 | USGS40000138343 | 1/2 - 1 Mile SW |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**FEDERAL USGS WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| A17 | USGS40000138341 | 1/2 - 1 Mile SW |
| A18 | USGS40000138342 | 1/2 - 1 Mile SW |
| C36 | USGS40000138390 | 1/2 - 1 Mile West |
| D41 | USGS40000138379 | 1/2 - 1 Mile WSW |
| E42 | USGS40000138353 | 1/2 - 1 Mile WSW |
| F47 | USGS40000138457 | 1/2 - 1 Mile NNE |

**FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| No PWS System Found | | |

Note: PWS System location is not always the same as well location.

**STATE DATABASE WELL INFORMATION**

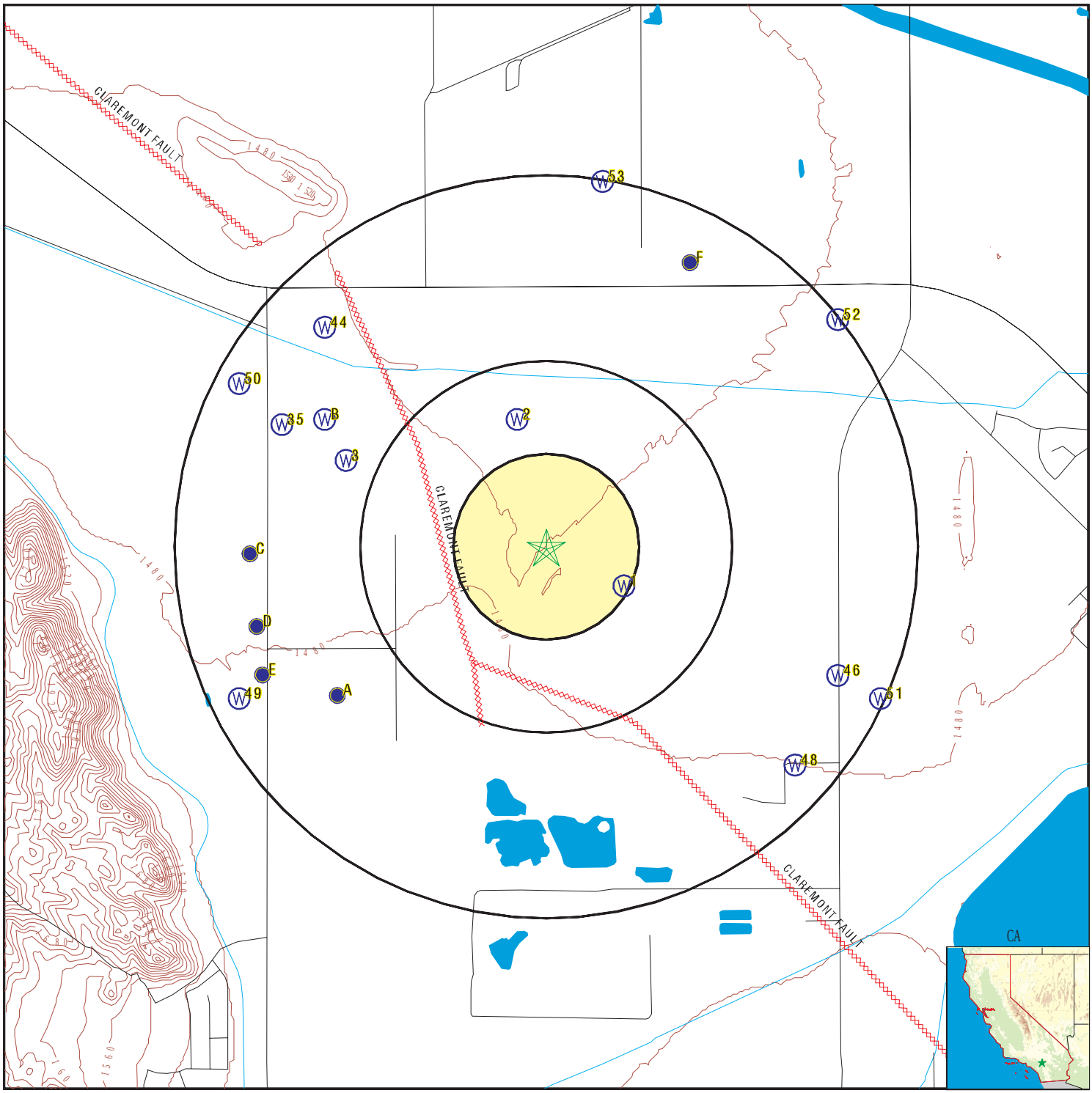
| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 1 | CADWR9000005661 | 1/8 - 1/4 Mile ESE |
| 2 | CADWR0000027004 | 1/4 - 1/2 Mile NNW |
| 3 | CADWR9000005684 | 1/2 - 1 Mile WNW |
| A4 | CADWR9000005638 | 1/2 - 1 Mile SW |
| A5 | CADWR9000005639 | 1/2 - 1 Mile SW |
| A19 | CAUSGSN00005970 | 1/2 - 1 Mile SW |
| A20 | CAUSGSN00000340 | 1/2 - 1 Mile SW |
| A21 | CAUSGSN00007245 | 1/2 - 1 Mile SW |
| A22 | CAUSGSN00013418 | 1/2 - 1 Mile SW |
| A23 | CAUSGSN00014244 | 1/2 - 1 Mile SW |
| A24 | CAUSGSN00005327 | 1/2 - 1 Mile SW |
| A25 | CAUSGSN00006048 | 1/2 - 1 Mile SW |
| A26 | CAUSGSN00004745 | 1/2 - 1 Mile SW |
| B27 | CADWR0000034615 | 1/2 - 1 Mile WNW |
| B28 | CADWR0000025003 | 1/2 - 1 Mile WNW |
| A29 | CADWR9000005636 | 1/2 - 1 Mile SW |
| A30 | CADWR9000005637 | 1/2 - 1 Mile SW |
| A31 | CADWR9000005635 | 1/2 - 1 Mile SW |
| A32 | CADWR9000005633 | 1/2 - 1 Mile SW |
| A33 | CADWR9000005634 | 1/2 - 1 Mile SW |
| C34 | CADWR9000005665 | 1/2 - 1 Mile West |
| 35 | CADWR9000005690 | 1/2 - 1 Mile WNW |
| D37 | 4806 | 1/2 - 1 Mile WSW |
| D38 | CADWR9000005647 | 1/2 - 1 Mile WSW |
| D39 | CADWR9000005648 | 1/2 - 1 Mile WSW |
| C40 | CADWR9000005666 | 1/2 - 1 Mile West |
| E43 | CAUSGSN00013354 | 1/2 - 1 Mile WSW |
| 44 | CADWR0000010733 | 1/2 - 1 Mile NW |
| F45 | CAUSGSN00013137 | 1/2 - 1 Mile NNE |
| 46 | CADWR9000005642 | 1/2 - 1 Mile ESE |
| 48 | CADWR9000005624 | 1/2 - 1 Mile SE |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**STATE DATABASE WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 49 | CADWR0000022349 | 1/2 - 1 Mile WSW |
| 50 | CADWR9000005698 | 1/2 - 1 Mile WNW |
| 51 | CADWR0000025057 | 1/2 - 1 Mile ESE |
| 52 | CADWR9000005711 | 1/2 - 1 Mile NE |
| 53 | CADWR9000005744 | 1/2 - 1 Mile North |

# PHYSICAL SETTING SOURCE MAP - 6599939.2s




0 1/4 1/2 1 Miles

- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

N

| | | | |
|---|---|---|---|
| SITE NAME: | Villages of San Jacinto | CLIENT: | Roux Associates |
| ADDRESS: | 870 & 1380 N Sanderson Avenue<br>San Jacinto CA 92582 | CONTACT: | Connor Moore |
| LAT/LONG: | 33.813328 / 117.020638 | INQUIRY #: | 6599939.2s |
| | | DATE: | July 30, 2021 2:03 pm |

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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**1**
**ESE**
**1/8 - 1/4 Mile**
**Higher**

**CA WELLS** **CADWR9000005661**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48160 |
| Well Name: | EMWD10194 | Basin Name: | San Jacinto |
| Well Use: | Observation | Well Type: | Single Well |
| Well Depth: | 824 | Well Completion Rpt #: | Not Reported |

---

**2**
**NNW**
**1/4 - 1/2 Mile**
**Lower**

**CA WELLS** **CADWR0000027004**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W18Q001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W18Q001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W18Q001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**3**
**WNW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005684**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48155 |
| Well Name: | EMWD10234 | Basin Name: | San Jacinto |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 574 | Well Completion Rpt #: | Not Reported |

---

**A4**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005638**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48156 |
| Well Name: | EMWD10236 | Basin Name: | San Jacinto |
| Well Use: | Observation | | |
| Well Type: | Part of a nested/multi-completion well | | |
| Well Depth: | 179 | Well Completion Rpt #: | Not Reported |

---

**A5**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005639**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48157 |
| Well Name: | EMWD12921 | Basin Name: | San Jacinto |
| Well Use: | Observation | | |
| Well Type: | Part of a nested/multi-completion well | | |

| | | | |
|---|---|---|---|
| Well Depth: | 261 | Well Completion Rpt #: | Not Reported |

---

**A6**
**SW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138346**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M011SLYS | | |
| Type: | Well: Test hole not completed as a well | | |
| Description: | SHALLOW YELLOW LYSIMETER AT 15 FEET | | |
| HUC: | 18070202 | Drainage Area: | Not Reported |
| Drainage Area Units: | Not Reported | Contrib Drainage Area: | Not Reported |
| Contrib Drainage Area Unts: | Not Reported | Aquifer: | California Coastal Basin aquifers |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 15 |
| Well Depth Units: | ft | Well Hole Depth: | 27 |
| Well Hole Depth Units: | ft | | |

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**A7**
**SW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138347**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M012SLYS | | |
| Type: | Well: Test hole not completed as a well | | |
| Description: | SHALLOW GREEN LYSIMETER AT 10 FEET | | |
| HUC: | 18070202 | Drainage Area: | Not Reported |
| Drainage Area Units: | Not Reported | Contrib Drainage Area: | Not Reported |
| Contrib Drainage Area Unts: | Not Reported | Aquifer: | California Coastal Basin aquifers |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 10 |
| Well Depth Units: | ft | Well Hole Depth: | 27 |
| Well Hole Depth Units: | ft | | |

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**A8**
**SW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138348**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M013SLYS | | |
| Type: | Well: Test hole not completed as a well | | |
| Description: | SHALLOW BLUE LYSIMETER AT 5 FEET | | |
| HUC: | 18070202 | Drainage Area: | Not Reported |
| Drainage Area Units: | Not Reported | Contrib Drainage Area: | Not Reported |
| Contrib Drainage Area Unts: | Not Reported | Aquifer: | California Coastal Basin aquifers |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 5 |
| Well Depth Units: | ft | Well Hole Depth: | 27 |
| Well Hole Depth Units: | ft | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**A9**
**SW**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS40000138339**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M003S | Type: | Well |
| Description: | INTER. WELL - GREEN | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | 19900814 | Well Depth: | 265 |
| Well Depth Units: | ft | Well Hole Depth: | 365 |
| Well Hole Depth Units: | ft | | |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 13 | Level reading date: | 1994-01-04 |
| Feet below surface: | 212.44 | Feet to sea level: | Not Reported |
| Note: | Not Reported | | |
| Level reading date: | 1992-08-13 | Feet below surface: | 209.80 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-08-12 | Feet below surface: | 211.66 |
| Feet to sea level: | Not Reported | | |
| Note: | A nearby site that taps the same aquifer was being pumped. | | |
| Level reading date: | 1992-07-09 | Feet below surface: | 212.61 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-06-12 | Feet below surface: | 206.51 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-02-26 | Feet below surface: | 199.54 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-01-29 | Feet below surface: | 200.13 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-01-28 | Feet below surface: | 200.16 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-12-24 | Feet below surface: | 203.47 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-08-15 | Feet below surface: | 203.44 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-05-15 | Feet below surface: | 200.64 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-04-17 | Feet below surface: | 195.54 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-03-29 | Feet below surface: | 196.21 |
| Feet to sea level: | Not Reported | Note: | Not Reported |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**A10**
**SW**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS40000138340**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M004S | Type: | Well |
| Description: | INTER. WELL - BLUE | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | 19900814 | Well Depth: | 210 |
| Well Depth Units: | ft | Well Hole Depth: | 365 |
| Well Hole Depth Units: | ft | | |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 15 | Level reading date: | 1994-01-04 |
| Feet below surface: | 192.35 | Feet to sea level: | Not Reported |
| Note: | Not Reported | | |
| Level reading date: | 1992-08-19 | Feet below surface: | 190.14 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-08-12 | Feet below surface: | 190.38 |
| Feet to sea level: | Not Reported | | |
| Note: | A nearby site that taps the same aquifer was being pumped. | | |
| Level reading date: | 1992-07-09 | Feet below surface: | 190.58 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-06-12 | Feet below surface: | 189.06 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-02-26 | Feet below surface: | 187.69 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-01-29 | Feet below surface: | 187.88 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-01-28 | Feet below surface: | 187.84 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-12-24 | Feet below surface: | 188.47 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-08-15 | Feet below surface: | 187.47 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-06-14 | Feet below surface: | 186.72 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-05-14 | Feet below surface: | 185.54 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-05-03 | Feet below surface: | 189.60 |
| Feet to sea level: | Not Reported | Note: | The site had been pumped recently. |
| Level reading date: | 1991-04-17 | Feet below surface: | 185.45 |

| | | | |
|---|---|---|---|
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-03-29 | Feet below surface: | 185.82 |
| Feet to sea level: | Not Reported | Note: | Not Reported |

---

**A11**
**SW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138338**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M002S | Type: | Well |
| Description: | INTER. WELL - YELLOW | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | 19900814 | Well Depth: | 310 |
| Well Depth Units: | ft | Well Hole Depth: | 365 |
| Well Hole Depth Units: | ft | | |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 14 | Level reading date: | 1994-01-04 |
| Feet below surface: | 212.79 | Feet to sea level: | Not Reported |
| Note: | Not Reported | | |
| Level reading date: | 1992-08-13 | Feet below surface: | 212.15 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-08-12 | Feet below surface: | 214.11 |
| Feet to sea level: | Not Reported | | |
| Note: | A nearby site that taps the same aquifer was being pumped. | | |
| Level reading date: | 1992-07-09 | Feet below surface: | 215.60 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-06-12 | Feet below surface: | 208.43 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-02-26 | Feet below surface: | 200.61 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-01-29 | Feet below surface: | 201.23 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-01-28 | Feet below surface: | 201.32 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-12-24 | Feet below surface: | 205.84 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-08-15 | Feet below surface: | 206.69 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-05-15 | Feet below surface: | 201.84 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-03-29 | Feet below surface: | 196.33 |
| Feet to sea level: | Not Reported | Note: | Not Reported |

| | | | |
|---|---|---|---|
| Level reading date: | 1991-01-30 | Feet below surface: | 196.82 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-01-09 | Feet below surface: | 149.19 |
| Feet to sea level: | Not Reported | Note: | Not Reported |

---

**A12**
**SW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138336**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M005S | Type: | Well |
| Description: | SHALLOW WELL - WHITE | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | 19900814 | Well Depth: | 185 |
| Well Depth Units: | ft | Well Hole Depth: | 365 |
| Well Hole Depth Units: | ft | | |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 8 | Level reading date: | 1992-08-12 |
| Feet below surface: | Not Reported | Feet to sea level: | Not Reported |
| Note: | The site was dry (no water level recorded). | | |
| Level reading date: | 1992-07-09 | Feet below surface: | Not Reported |
| Feet to sea level: | Not Reported | | |
| Note: | The site was dry (no water level recorded). | | |
| Level reading date: | 1992-02-26 | Feet below surface: | Not Reported |
| Feet to sea level: | Not Reported | | |
| Note: | The site was dry (no water level recorded). | | |
| Level reading date: | 1992-01-29 | Feet below surface: | Not Reported |
| Feet to sea level: | Not Reported | | |
| Note: | The site was dry (no water level recorded). | | |
| Level reading date: | 1991-12-24 | Feet below surface: | Not Reported |
| Feet to sea level: | Not Reported | | |
| Note: | The site was dry (no water level recorded). | | |
| Level reading date: | 1991-08-15 | Feet below surface: | Not Reported |
| Feet to sea level: | Not Reported | | |
| Note: | The site was dry (no water level recorded). | | |
| Level reading date: | 1991-05-15 | Feet below surface: | Not Reported |
| Feet to sea level: | Not Reported | | |
| Note: | The site was dry (no water level recorded). | | |
| Level reading date: | 1991-03-29 | Feet below surface: | Not Reported |
| Feet to sea level: | Not Reported | | |
| Note: | The site was dry (no water level recorded). | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**A13**
**SW**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS40000138337**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M001S | Type: | Well |
| Description: | DEEP WELL - RED | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | 19900814 | Well Depth: | 344 |
| Well Depth Units: | ft | Well Hole Depth: | 365 |
| Well Hole Depth Units: | ft | | |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 14 | Level reading date: | 1994-01-04 |
| Feet below surface: | 215.81 | Feet to sea level: | Not Reported |
| Note: | Not Reported | | |
| Level reading date: | 1992-08-13 | Feet below surface: | 213.56 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-08-12 | Feet below surface: | 216.05 |
| Feet to sea level: | Not Reported | | |
| Note: | A nearby site that taps the same aquifer was being pumped. | | |
| Level reading date: | 1992-07-09 | Feet below surface: | 213.52 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-06-12 | Feet below surface: | 209.45 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-02-26 | Feet below surface: | 201.00 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-01-29 | Feet below surface: | 201.09 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1992-01-28 | Feet below surface: | 201.41 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-12-24 | Feet below surface: | 206.67 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-08-15 | Feet below surface: | 208.66 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-06-15 | Feet below surface: | 201.03 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-03-29 | Feet below surface: | 195.44 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-01-30 | Feet below surface: | 196.40 |
| Feet to sea level: | Not Reported | Note: | Not Reported |
| Level reading date: | 1991-01-09 | Feet below surface: | 199.96 |

| | | | |
|---|---|---|---|
| Feet to sea level: | Not Reported | Note: | Not Reported |

---

**A14**
**SW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138344**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M009SLYS | | |
| Type: | Well: Test hole not completed as a well | | |
| Description: | DEEP BLUE LYSIMETER AT 50 FEET | | |
| HUC: | 18070202 | Drainage Area: | Not Reported |
| Drainage Area Units: | Not Reported | Contrib Drainage Area: | Not Reported |
| Contrib Drainage Area Unts: | Not Reported | Aquifer: | California Coastal Basin aquifers |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 50 |
| Well Depth Units: | ft | Well Hole Depth: | 155 |
| Well Hole Depth Units: | ft | | |

---

**A15**
**SW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138345**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M010SLYS | | |
| Type: | Well: Test hole not completed as a well | | |
| Description: | SHALLOW RED LYSIMETER AT 25 FEET | | |
| HUC: | 18070202 | Drainage Area: | Not Reported |
| Drainage Area Units: | Not Reported | Contrib Drainage Area: | Not Reported |
| Contrib Drainage Area Unts: | Not Reported | Aquifer: | California Coastal Basin aquifers |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 25 |
| Well Depth Units: | ft | Well Hole Depth: | 27 |
| Well Hole Depth Units: | ft | | |

---

**A16**
**SW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138343**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M008SLYS | | |
| Type: | Well: Test hole not completed as a well | | |
| Description: | DEEP GREEN LYSIMETER AT 75 FEET | | |
| HUC: | 18070202 | Drainage Area: | Not Reported |
| Drainage Area Units: | Not Reported | Contrib Drainage Area: | Not Reported |
| Contrib Drainage Area Unts: | Not Reported | Aquifer: | California Coastal Basin aquifers |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 75 |
| Well Depth Units: | ft | Well Hole Depth: | 155 |
| Well Hole Depth Units: | ft | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**A17**
**SW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138341**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M006SLYS | | |
| Type: | Well: Test hole not completed as a well | | |
| Description: | DEEP RED LYSIMETER AT 150 FEET | | |
| HUC: | 18070202 | Drainage Area: | Not Reported |
| Drainage Area Units: | Not Reported | Contrib Drainage Area: | Not Reported |
| Contrib Drainage Area Unts: | Not Reported | Aquifer: | California Coastal Basin aquifers |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 150 |
| Well Depth Units: | ft | Well Hole Depth: | 155 |
| Well Hole Depth Units: | ft | | |

---

**A18**
**SW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138342**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W19M007SLYS | | |
| Type: | Well: Test hole not completed as a well | | |
| Description: | DEEP YELLOW LYSIMETER AT 100 FEET | | |
| HUC: | 18070202 | Drainage Area: | Not Reported |
| Drainage Area Units: | Not Reported | Contrib Drainage Area: | Not Reported |
| Contrib Drainage Area Unts: | Not Reported | Aquifer: | California Coastal Basin aquifers |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 100 |
| Well Depth Units: | ft | Well Hole Depth: | 155 |
| Well Hole Depth Units: | ft | | |

---

**A19**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAUSGSN00005970**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334827117014603 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334827117014603 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334827117014603&store_num= | | |
| GeoTracker Data: | Not Reported | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**A20**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAUSGSN00000340**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334827117014604 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334827117014604 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334827117014604&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**A21**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAUSGSN00007245**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334827117014601 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334827117014601 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334827117014601&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**A22**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAUSGSN00013418**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334827117014608 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334827117014608 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334827117014608&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**A23**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAUSGSN00014244**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334827117014602 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334827117014602 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334827117014602&store_num= | | |
| GeoTracker Data: | Not Reported | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**A24**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAUSGSN00005327**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334827117014609 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334827117014609 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334827117014609&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**A25**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAUSGSN00006048**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334827117014606 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334827117014606 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334827117014606&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**A26**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAUSGSN00004745**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334827117014607 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334827117014607 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334827117014607&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**B27**
**WNW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000034615**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W18N002S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W18N002S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W18N002S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**B28**
**WNW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000025003**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W18N001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W18N001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W18N001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**A29**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005636**

| | | | |
|---|---|---|---|
| State Well #: | 04S01W19M004S | Station ID: | 6389 |
| Well Name: | Not Reported | Basin Name: | San Jacinto |
| Well Use: | Unknown | Well Type: | Unknown |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

---

**A30**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005637**

| | | | |
|---|---|---|---|
| State Well #: | 04S01W19M005S | Station ID: | 6390 |
| Well Name: | Not Reported | Basin Name: | San Jacinto |
| Well Use: | Unknown | Well Type: | Unknown |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

---

**A31**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005635**

| | | | |
|---|---|---|---|
| State Well #: | 04S01W19M003S | Station ID: | 28906 |
| Well Name: | Not Reported | Basin Name: | San Jacinto |
| Well Use: | Unknown | Well Type: | Unknown |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

---

**A32**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005633**

| | | | |
|---|---|---|---|
| State Well #: | 04S01W19M001S | Station ID: | 6387 |
| Well Name: | Not Reported | Basin Name: | San Jacinto |
| Well Use: | Unknown | Well Type: | Unknown |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**A33**
**SW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005634**

| | | | |
|---|---|---|---|
| State Well #: | 04S01W19M002S | Station ID: | 6388 |
| Well Name: | Not Reported | Basin Name: | San Jacinto |
| Well Use: | Unknown | Well Type: | Unknown |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

---

**C34**
**West**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005665**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48222 |
| Well Name: | EMWD10387 | Basin Name: | San Jacinto |
| Well Use: | Observation | Well Type: | Single Well |
| Well Depth: | 544 | Well Completion Rpt #: | Not Reported |

---

**35**
**WNW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005690**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48154 |
| Well Name: | EMWD10233 | Basin Name: | San Jacinto |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 603 | Well Completion Rpt #: | Not Reported |

---

**C36**
**West**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138390**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S002W24A001S | Type: | Well |
| Description: | Not Reported | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | Not Reported |
| Well Depth Units: | Not Reported | Well Hole Depth: | Not Reported |
| Well Hole Depth Units: | Not Reported | | |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 4 | Level reading date: | 1992-07-07 |
| Feet below surface: | Not Reported | Feet to sea level: | Not Reported |
| Note: | The site was being pumped. | | |

| | | | |
|---|---|---|---|
| Level reading date: | 1992-05-15 | Feet below surface: | 209.29 |
| Feet to sea level: | Not Reported | Note: | Not Reported |

| | | | |
|---|---|---|---|
| Level reading date: | 1991-12-24 | Feet below surface: | 211.04 |
| Feet to sea level: | Not Reported | Note: | The site had been pumped recently. |
| Level reading date: | 1990-06-12 | Feet below surface: | 209.00 |
| Feet to sea level: | Not Reported | Note: | Not Reported |

---

**D37**
**WSW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **4806**

| | | | |
|---|---|---|---|
| Seq: | 4806 | Prim sta c: | 04S/02W-24H01 S |
| Frds no: | 3310009027 | County: | 33 |
| District: | 14 | User id: | WAT |
| System no: | 3310009 | Water type: | G |
| Source nam: | WELL 2421 DAIRY - ABANDONED | Station ty: | WELL/AMBNT |
| Latitude: | 334836.0 | Longitude: | 1170159.0 |
| Precision: | 2 | Status: | AB |
| Comment 1: | Not Reported | Comment 2: | Not Reported |
| Comment 3: | Not Reported | Comment 4: | Not Reported |
| Comment 5: | Not Reported | Comment 6: | Not Reported |
| Comment 7: | Not Reported | | |
| System no: | 3310009 | System nam: | Eastern Municipal Wd |
| Hqname: | EASTERN MUNICIPAL WATER DIST | Address: | P.O. Box 8300 |
| City: | San Jacinto | State: | CA |
| Zip: | 92381 | Zip ext: | 1300 |
| Pop serv: | 253705 | Connection: | 84839 |
| Area serve: | HEMET-SAN JACINTO-SUN CITY | | |

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**D38**
**WSW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005647**

| | | | |
|---|---|---|---|
| State Well #: | 04S02W24H001S | Station ID: | 48223 |
| Well Name: | EMWD10388 | Basin Name: | San Jacinto |
| Well Use: | Observation | Well Type: | Single Well |
| Well Depth: | 600 | Well Completion Rpt #: | Not Reported |

---

**D39**
**WSW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005648**

| | | | |
|---|---|---|---|
| State Well #: | 04S02W24H003S | Station ID: | 48224 |
| Well Name: | EMWD10389 | Basin Name: | San Jacinto |
| Well Use: | Observation | Well Type: | Single Well |
| Well Depth: | 800 | Well Completion Rpt #: | 395314 |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**C40**
**West**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005666**

| | | | |
|---|---|---|---|
| State Well #: | 04S02W24A001S | Station ID: | 6406 |
| Well Name: | Not Reported | Basin Name: | San Jacinto |
| Well Use: | Unknown | Well Type: | Unknown |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

---

**D41**
**WSW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138379**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S002W24H001S | Type: | Well |
| Description: | Not Reported | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 629 |
| Well Depth Units: | ft | Well Hole Depth: | 629 |
| Well Hole Depth Units: | ft | | |

---

**E42**
**WSW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000138353**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S002W24J002S | Type: | Well |
| Description: | Not Reported | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 500 |
| Well Depth Units: | ft | Well Hole Depth: | Not Reported |
| Well Hole Depth Units: | Not Reported | | |

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**E43**
**WSW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CAUSGSN00013354**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334831117020101 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334831117020101 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334831117020101&store_num= | | |

GeoTracker Data: Not Reported

---

**44**
**NW** **CA WELLS** **CADWR0000010733**
**1/2 - 1 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W18M002S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W18M002S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W18M002S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**F45**
**NNE** **CA WELLS** **CAUSGSN00013137**
**1/2 - 1 Mile**
**Lower**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334928117004701 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334928117004701 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334928117004701&store_num= | | |
| GeoTracker Data: | Not Reported | | |

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**46**
**ESE** **CA WELLS** **CADWR9000005642**
**1/2 - 1 Mile**
**Higher**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48161 |
| Well Name: | EMWD10243 | Basin Name: | San Jacinto |
| Well Use: | Observation | Well Type: | Single Well |
| Well Depth: | 824 | Well Completion Rpt #: | Not Reported |

---

**F47**
**NNE** **FED USGS** **USGS40000138457**
**1/2 - 1 Mile**
**Lower**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W17E001S | Type: | Well |
| Description: | Not Reported | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | Not Reported |
| Well Depth Units: | Not Reported | Well Hole Depth: | Not Reported |
| Well Hole Depth Units: | Not Reported | | |

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**48**
**SE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005624**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48162 |
| Well Name: | EMWD12161 | Basin Name: | San Jacinto |
| Well Use: | Observation | Well Type: | Single Well |
| Well Depth: | 442 | Well Completion Rpt #: | Not Reported |

---

**49**
**WSW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000022349**

| | | | |
|---|---|---|---|
| Well ID: | 04S02W24J001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S02W24J001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S02W24J001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**50**
**WNW**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005698**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48217 |
| Well Name: | EMWD10383 | Basin Name: | San Jacinto |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 570 | Well Completion Rpt #: | Not Reported |

---

**51**
**ESE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000025057**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W20K001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W20K001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W20K001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**52**
**NE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005711**

| | | | |
|---|---|---|---|
| State Well #: | 04S01W17K003S | Station ID: | 28905 |
| Well Name: | Not Reported | Basin Name: | San Jacinto |
| Well Use: | Unknown | Well Type: | Unknown |

| | | | |
|---|---|---|---|
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

---

**53**
**North**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000005744**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48151 |
| Well Name: | EMWD14440 | Basin Name: | San Jacinto |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
# RADON

**AREA RADON INFORMATION**

State Database: CA Radon

Radon Test Results

| Zipcode | Num Tests | > 4 pCi/L |
|---|---|---|
| 92582 | 9 | 2 |

Federal EPA Radon Zone for RIVERSIDE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

---

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|---|---|---|---|---|
| Living Area - 1st Floor | 0.117 pCi/L | 100% | 0% | 0% |
| Living Area - 2nd Floor | 0.450 pCi/L | 100% | 0% | 0% |
| Basement | 1.700 pCi/L | 100% | 0% | 0% |

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

AQUIFLOW$^{R}$ Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

## OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

**STREET AND ADDRESS INFORMATION**

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# APPENDIX G

Photographic Log

G-1. View of the Site from the western parcel boundary, denoted as 'Field B' in field notes (08/03/2021).

G-2. Abandoned concrete improvements in the southeastern corner of the Site related to former heifer ranch operations (08/03/2021).

G-3. Miscellaneous concrete debris in southeastern corner of the Site (08/03/2021).

G-4. Abandoned 55-gallon drums located in the southeastern corner of the Site (33.802430622641666, -117.00940455424796; 08/03/2021)

G-5. Exterior of abandoned, un-labeled drum. The surface on the top lid was punctured. It appeared the drum contents were partially intact (08/03/2021)

G-6. Exterior of abandoned, un-labeled drum. The surface was damaged and the top lid (bottom) was missing (08/03/2021).

G-7. Caking and potential staining underneath abandoned drum (08/03/2021).

G-8. Interior of yellow abandoned drum. Observed from open bottom of drum. (08/03/2021).

G-9. Abandoned blue plastic 55-gallon tote, located in southeastern corner of Site.

G-10. Interior of abandoned blue plastic 55-gallon tote (08/19/2020).

G-11. View from east of pond in southwest corner of the Site, beyond which is irrigated fields on an adjacent parcel (08/03/2021).

G-12. Pond in southwest corner of the Site (08/19/2020).

G-13. View from north as Field A, as denoted in field notes (08/19/2020).

G-14. View of Field B, as denoted in field notes (08/04/2021).

G-15. View of the east of Field C, as denoted in field notes (08/03/2021).

G-16. Northwest corner of Field C, as denoted in field notes (08/03/2021)

G-17. Field D, as denoted in field notes (08/03/2021).

G-18. Field E, as denoted in field notes (08/03/2021)

G-19. Former residence area from west (08/03/2021).

G-20. Debris in former residence area (08/03/2021)

G-21. 100-foot by 50-foot concrete foundation in former residence area (08/03/2021).

G-22. View from the north of debris pile adjacent to former residence area (08/03/2021).

G-23. Box of debris on concrete foundation in former residence area (08/03/2021).

G-24. Interior of box of debris on concrete foundation in former residence area (08/19/2020).

G-25. Encampment in former residence area (08/03/2021)

G-26. 15-foot by 10-foot concrete foundation and debris southwest of residence area (08/03/2021).

G-27. Groundwater irrigation well at eastern boundary of Site (08/03/2021)

G-28. Groundwater irrigation well at southern boundary of Site

G-29. Southern adjacent water reclamation facility (08/03/2021).

G-30. Western adjacent property from Field C, as denoted in field notes (08/03/2021).

# APPENDIX H

Pertinent Historical Documentation

ASSOCIATES INC.

50 East Foothill Boulevard
Arcadia, California 91006
www.atc-enviro.com
626.447.5216
Fax 626.447.7593

October 30, 2000

Mr. Ed McGlothlin
**CONSOLIDATED WASTE INDUSTRIES, INC.**
10680 Silicon Avenue
Montclair, California 91763-4621

NOV 2000
Received
RWQCB
Santa Ana Region 8

**RE: SITE INVESTIGATION**
**WESTRA DAIRY**
**870 SANDERSON AVENUE**
**SAN JACINTO, CALIFORNIA**
**ATC PROJECT NUMBER 12077.5203**

Dear McGlothlin:

This report presents the results of a Phase II Subsurface Investigation performed at 870 Sanderson Avenue in San Jacinto, California, by ATC Associates Inc. (ATC). This investigation was performed in accordance with the *Workplan of Environmental Sampling* dated August 4, 2000 prepared by ATC and approved within a California Regional Water Quality Control Board-Santa Ana Region letter dated September 26, 2000. ATC previously prepared a report of tank removal operations "Underground Storage Tank Closure Summary Report" dated February 21, 2000 (ATC Job No. 12077.5202).

## BACKGROUND

The project location is the Westra Dairy (the Site) located at 870 Sanderson Avenue in the City of San Jacinto. The Site is situated in Riverside County (See Drawing 1).

ATC was retained by Consolidated Waste Industries, Inc. (CWI) to assist in the closure of three underground storage tanks at the Westra Dairy. ATC's initial scope of work included the collection of soil samples from the floor and walls of a former UST System tank pit (see Drawing 2). CWI over-excavated obvious petroleum hydrocarbon stained soil, prior to ATC's collection of soil samples. Ms. Brenda MacGregor, a representative for the County of Riverside Environmental Health Department, monitored ATC sample collection activities. ATC submitted the collected soil samples for analysis by EPA Methods 8015M for gasoline and diesel, 8020 for BTEX/MTBE and 8260 for MTBE confirmation to a state-certified laboratory.

ATC's evaluation of the analytical results indicated that a release had occurred at the site. ATC recommended a subsurface characterization beneath the former tanks. ATC prepared a Workplan for a Phase II Subsurface Investigation in which was submitted to the State Regional Water Resources Control Board – Santa Ana Regional for approval.

## PURPOSE AND SCOPE

The purpose of the work was to define the approximate vertical and lateral extent of contamination in the subsurface soil. The scope of work included:

- Drilling three borings to a maximum depth of 60 feet below ground surface.
- Monitor and log the soil;
- Collect soil samples for analysis by EPA Methods 8015, 8021B, 8260B, and 8270C.
- Evaluate the analytical results
- Provide a report of exploration activity.

ATC's *Workplan of Environmental Sampling* dated August 4, 2000 was approved by the California Regional Water Quality Control Board-Santa Ana Region (RWQCB) dated September 26, 2000 (see attached letter).

## HYDROGEOLOGICAL CONDITIONS

The Site and surrounding area are included within the U.S. Geological Survey, San Jacinto, California, 7.5-minute quadrangle map. The elevation of the Subject Property is shown as approximately 1,530 feet above mean sea level (MSL).

Quaternary age alluvial fan deposits consisting of unconsolidated sand and gravel underlie the Site. Ground water in this area is reportedly at 120 feet below the ground surface. The regional ground water gradient is southward in the vicinity.

## FIELD WORK

ATC advanced 3 soil borings with the use of a CME-85 drilling rig on October 10, 2000 at RWQCB pre-approved locations in association with the former UST field. Soil sample collection was performed at 5 foot intervals beginning at 15 feet to a depth of 70 feet within boring S-1 and S-2, and to a maximum depth of 60 feet within boring S-3. Soil lithology within the borings were characteristic of alluvial deposits consisting of unconsolidated sands and gravel from the surface to the total depth of each boring.

Soil samples were collected using a Modified California Split Spoon Sampler. Upon reaching designated sampling depths, the sampler was driven 18 inches ahead into undisturbed soil. The collected soil samples were retained in stainless steel sleeves, capped with Teflon sheeting and plastic end caps. The samples designated for analysis were labeled, placed on Chain of Custody forms, placed in an iced cooler and delivered to a certified laboratory for analysis.

## LABORATORY ANALYSES

All collected soil samples were tested for total (gas and diesel) fuel and aromatic hydrocarbons by Environmental Protection Agency (EPA) methods 8015 and 8021B. Selected samples from boring S-1 at 15 feet and S-3 at 15 feet were analyzed for oxygenates, alcohol's and semi-volatiles as requested by Ms. Rose Scott of the RWQCB by EPA Methods 8260B and 8270C. Analyses were performed by Enviro Chem Laboratories of Pomona, California.

## FINDINGS

Soil encountered during this investigation consisted of alluvium, which was brown to a mottled blue/gray color, moist and firm to very dense. Groundwater was not encountered in the borings drilled. Groundwater is estimated to be at a depth of approximately 120 feet beneath the site. Petroleum odors and obvious staining was encountered in all the borings to a depth of 15 feet.

The laboratory analyses indicated that gasoline compounds were present at 15 feet in boring S-1, but concentrations diminished quickly with depth. The highest concentration (2,710-ppm) was at 15 feet, diminishing to 0.497 ppm at 35 feet, and non-detect below 35 feet. Only one sample contained gasoline hydrocarbons in either of borings S-2 or S-3. The sample from boring S-3 at 15 feet contained 0.147 ppm gasoline hydrocarbons Diesel concentrations were not detected in any soil samples.

Two soil samples from 15 feet which contained gasoline compounds were further analyzed for oxygenates and semi volatile compounds by EPA Methods 8260B and 8270C. As expected, several gasoline related compounds were present in sample S-1 at 15 feet which had the highest concentration of gasoline. MTBE was present at 200 mg/kg. Aromatic hydrocarbons including benzene, toluene, ethylbenzene, xylene and trimethylbenzene were present ranging from 22.4 to 578 mg/kg. The laboratory results are summarized on Tables 1, 2, and 3. The laboratory results and chain-of-custody are attached to this report.

## CONCLUSIONS

Based on ATC's field observations and the analytical results of the collected soil samples, it is ATC's opinion that the contamination at the site is very limited in vertical and lateral extent. The vertical extent of contamination extends below the former tanks to a depth of 35 feet.

ATC suggests that recent cleanup criteria allow fuel hydrocarbons to be left in soil if the risk of impacting groundwater resources is low. As reported to ATC, the depth to groundwater in this local vicinity is below 120 feet bgs. It appears therefore, that the site conditions are low-risk. The type of hydrocarbons (gasoline) and the relatively low concentrations of hydrocarbon constituents (benzene) and the lack of MTBE, TAME, DIPE and TBA coupled with the great depth to groundwater suggest that no cleanup action would be required. Additionally, a "clean" zone has been established beneath the deepest zone of contamination and the potential for migration to any groundwater resources is low. ATC recommends that the regulatory agency close the site.

## LIMITATIONS

This project was performed employing the same degree and skill expected of other similar firms practicing in similar situations or localities. The statements and conclusions provided herein are based on field observations and the analytical results described herein and considered professional opinions.

If there are any questions regarding this report or any of its attachments, please contact the undersigned at (626) 447-5216.

Sincerely,

Timothy J. Lane
Project Geologist

Keith G. Farrell, CEG #1314
Director of Geological Services

Attachments

Drawing 1 - Site Location Map
Drawing 2 - Soil Boring Map

Table 1 - Laboratory Summary – 8015/8021B
Table 2 - Laboratory Summary – 8260B
Table 3 Laboratory Summary – 8270C

Appendix A - Certified Laboratory Results
Appendix B – CRWQCB letter dated September 26, 2000

TABLE 1
LABORATORY SUMMARY
EPA METHODS 8015/8021b
WESTRA DAIRY
SAN JACINTO, CALIFORNIA
ATC PROJECT NUMBER 12077.5203
RESULTS ARE EXPRESSED AS MG/KG

| Boring | Depth | 8015g | 8015d | B | T | E | X | MTBE* |
|---|---|---|---|---|---|---|---|---|
| S-1 | 15 | **2710** | ND | ND | **131** | ND | 486 | **169** |
| | 20 | **3.50** | ND | ND | **0.179** | ND | 0.375 | **3.13** |
| | 25 | ND | ND | ND | **0.008** | ND | 0.015 | **0.028** |
| | 30 | ND | ND | ND | ND | ND | ND | ND |
| | 35 | **0.497** | ND | ND | **0.021** | **0.012** | **0.158** | **0.027** |
| | 40 | ND | ND | ND | ND | ND | ND | ND |
| | 45 | ND | ND | ND | ND | ND | ND | ND |
| | 50 | ND | ND | ND | ND | ND | ND | ND |
| | 55 | ND | ND | ND | ND | ND | ND | ND |
| | 60 | ND | ND | ND | ND | ND | ND | **0.089** |
| | 65 | ND | ND | ND | ND | ND | ND | ND |
| | 70 | ND | ND | ND | ND | ND | ND | ND |
| S-2 | 15 | ND | ND | ND | ND | ND | ND | ND |
| | 20 | ND | ND | ND | ND | ND | ND | ND |
| | 25 | ND | ND | ND | ND | ND | ND | ND |
| | 30 | ND | ND | ND | ND | ND | ND | ND |
| | 35 | ND | ND | ND | ND | ND | ND | ND |
| | 40 | ND | ND | ND | ND | ND | ND | ND |
| | 45 | ND | ND | ND | ND | ND | ND | ND |
| | 50 | ND | ND | ND | ND | ND | ND | ND |
| | 55 | ND | ND | ND | ND | ND | ND | ND |
| | 60 | ND | ND | ND | ND | ND | ND | ND |
| | 65 | ND | ND | ND | ND | ND | ND | ND |
| | 70 | ND | ND | ND | ND | ND | ND | ND |
| S-3 | 15 | **0.147** | ND | **0.009** | **0.031** | ND | **0.012** | **0.186** |
| | 20 | ND | ND | **0.006** | **0.005** | ND | ND | **0.047** |
| | 25 | ND | ND | ND | ND | ND | ND | ND |
| | 30 | ND | ND | ND | ND | ND | ND | ND |
| | 35 | ND | ND | ND | ND | ND | ND | ND |
| | 40 | ND | ND | ND | ND | ND | ND | ND |
| | 45 | ND | ND | ND | ND | ND | ND | ND |
| | 50 | ND | ND | ND | ND | ND | ND | ND |
| | 55 | ND | ND | ND | ND | ND | ND | ND |
| | 60 | ND | ND | ND | ND | ND | ND | ND |

ND= Not detected at laboratory detection levels
B = Benzene T = toluene E = Ethylbenzne X = Total Xylene Isomers
ND = Not detected at the laboratories detection level *MTBE =analyzed by EPA Method 8021B

**TABLE 2**
**LABORATORY SUMMARY**
**EPA METHOD 8260B**
**WESTRA DAIRY**
**SAN JACINTO, CALIFORNIA**
**ATC PROJECT NUMBER 12077.5203**
**RESULTS ARE EXPRESSED AS mg/Kg**

| Sample | Depth | B | T | E | MTBE | NAPTH | N-Prop | 1,2,4 TriMet | 1,3,5 TriMet | X |
|---|---|---|---|---|---|---|---|---|---|---|
| S-1 | 15 | 22.4 | 308 | 98.6 | 200 | 31.4 | 34.6 | 248 | 82.8 | 578 |
| S-3 | 15 | ND | 0.020 | ND | 0.197 | ND | ND | ND | ND | ND |

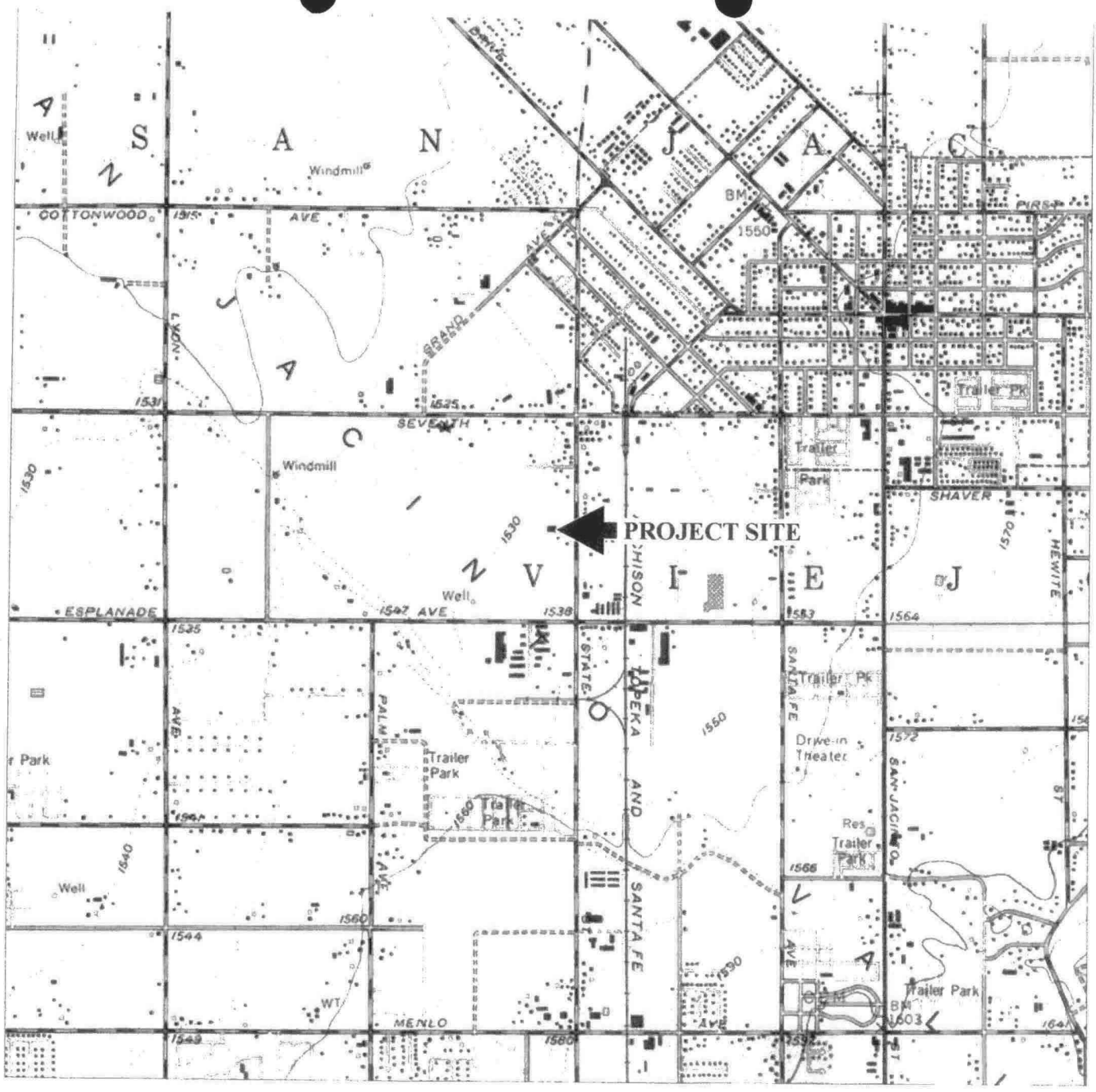
B = Benzene T = toluene E = Ethylbenzne X = Total Xylene Isomers
MTBE = Meth-tert Butyl Ether
NAPTH = Napthalene
N-Prop = N-Propylbenzene
1,2,4 TriMet = 1,2,4 TriMethylbenzene
1,3,5 TriMet = 1,3,5, TriMethlybenzene

ND = Not detected at the laboratories detection level.

TABLE 3
LABORATORY SUMMARY
EPA METHOD 8270C
WESTRA DAIRY
SAN JACINTO, CALIFORNIA
ATC PROJECT NUMBER 12077.5203
RESULTS ARE EXPRESSED AS mg/Kg

| SAMPLE | DEPTH | 2-Methylnapthalene | Napthalene |
|---|---|---|---|
| S-1 | 15 | 33.6 | 32.6 |
| S-3 | 15 | ND | ND |

ND = Not detected at the laboratories detection level.




N

0 2000 4000

SCALE IN FEET 1" = 2000'

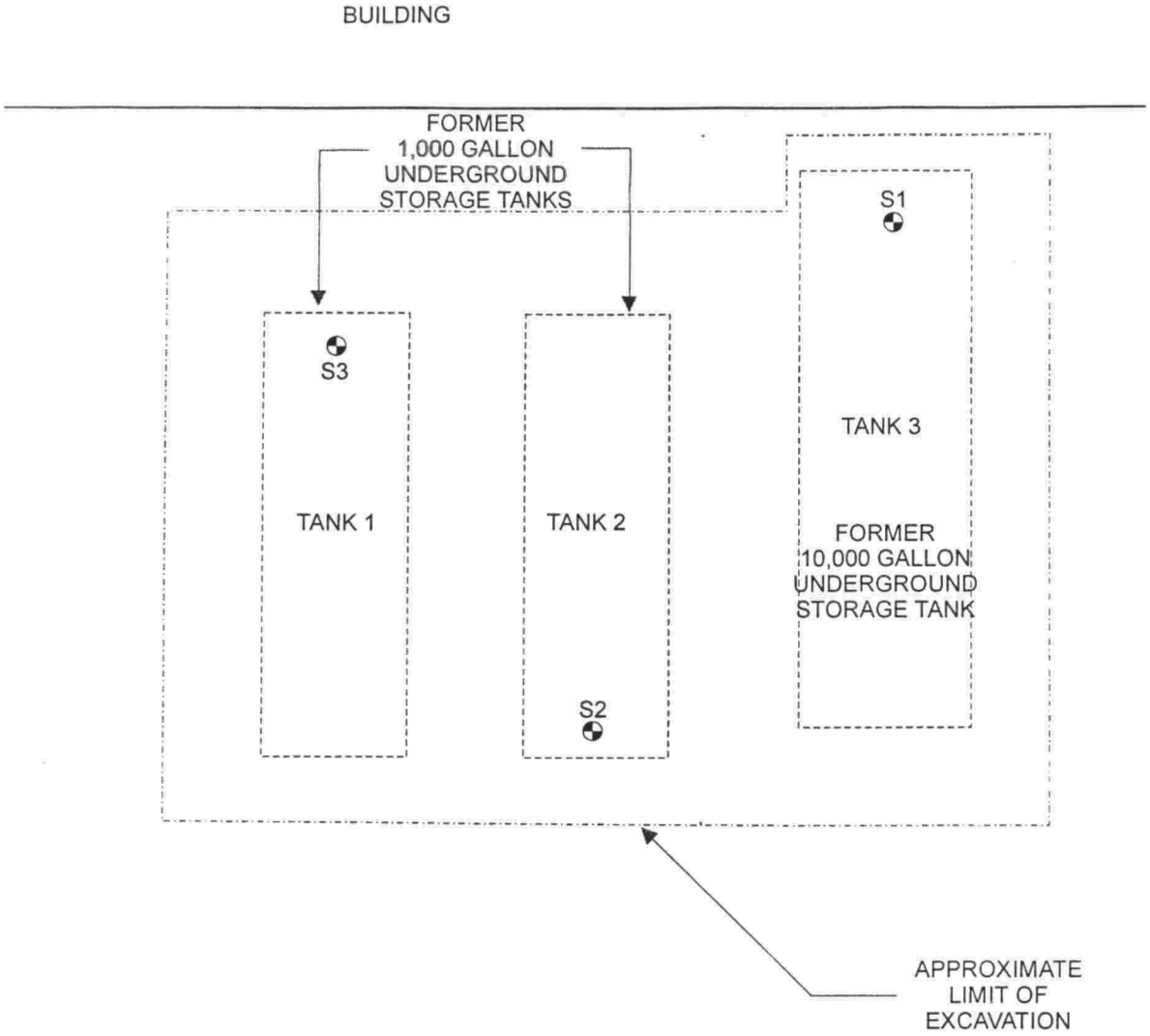
CORONA SOUTH, CALIFORNIA QUADRANGLE, DATE 1967, PHOTOREVISED 1988, SCALE 1:24,000

VATC ASSOCIATES
50 East Foothill Boulevard
Arcadia, California 91006
(626) 447-5216

PROJECT NO. 52.12077.5203

DATE 10/20/2000

FIGURE 1
**SITE LOCATION MAP**
CONSOLIDATED WASTE INDUSTRIES, INC.
WESTRA DAIRY
870 SANDERSON
SAN JACINTO, CALIFORNIA




ATC ASSOCIATES
50 East Foothill Boulevard
Arcadia, California 91006
(626) 447-5216

PROJECT NO. 52.12077.5203

DATE 10/20/2000

SCALE: NOT TO SCALE

**FIGURE 2**

**SITE PLOT PLAN**

**DRILLING LOCATIONS**

CONSOLIDATED WASTE INDUSTRIES, INC.
WESTRA DAIRY
870 SANDERSON
SAN JACINTO, CALIFORNIA

# APPENDIX A

# CERTIFIED LABORATORY RESULTS

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: October 16, 2000

Mr. Tim Lane
ATC Environmental, Inc.
50 East Foothill Blvd
Arcadia, CA 91006

Project: **Westra Dairy-5203**

Dear Mr. Lane:

The analytical results for the soil samples, received by our Lab on October 10, 2000, are attached.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call Mr. John Ackerman, our Customer Service Specialist, or myself, if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Chen-Chou Su
Lab Manager

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

# LABORATORY REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/10-12/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

**EPA 5030/8015M FOR TPH-GASOLINE RANGE (C4-C10)**
**EPA 5030/8021B FOR BTEX/MTBE**
**UNITS = MG/KG (PPM) PAGE 1 OF 2**

| SAMPLE ID | LAB ID | TPH-GASOLINE | BENZENE | TOLUENE | ETHYL-BENZENE | TOTAL XYLENES | MTBE | DF |
|---|---|---|---|---|---|---|---|---|
| S-1-15 | 001010-9 | 2710 | ND | 131 | ND | 486 | 169*10000 | |
| S-1-20 | 001010-10 | 3.50 | ND | 0.179 | ND | 0.375 | 3.13 | 10 |
| S-1-25 | 001010-11 | ND | ND | 0.008 | ND | 0.015 | 0.028 | 1 |
| S-1-30 | 001010-12 | ND | ND | ND | ND | ND | ND | 1 |
| S-1-35 | 001010-13 | 0.497 | ND | 0.021 | 0.012 | 0.158 | 0.027 | 1 |
| S-1-40 | 001010-14 | ND | ND | ND | ND | ND | ND | 1 |
| S-1-45 | 001010-15 | ND | ND | ND | ND | ND | ND | 1 |
| S-1-50 | 001010-16 | ND | ND | ND | ND | ND | ND | 1 |
| S-1-60 | 001010-17 | ND | ND | ND | ND | ND | 0.089 | 1 |
| S-1-65 | 001010-18 | ND | ND | ND | ND | ND | ND | 1 |
| S-1-70 | 001010-19 | ND | ND | ND | ND | ND | ND | 1 |
| S-3-15 | 001010-20 | 0.147 | 0.009 | 0.031 | ND | 0.012 | 0.186 | 1 |
| S-3-20 | 001010-21 | ND | 0.006 | 0.005 | ND | ND | 0.047 | 1 |
| S-3-25 | 001010-22 | ND | ND | ND | ND | ND | ND | 1 |
| S-3-30 | 001010-23 | ND | ND | ND | ND | ND | ND | 1 |
| S-3-35 | 001010-24 | ND | ND | ND | ND | ND | ND | 1 |
| S-3-40 | 001010-25 | ND | ND | ND | ND | ND | ND | 1 |
| S-3-45 | 001010-26 | ND | ND | ND | ND | ND | ND | 1 |
| S-3-50 | 001010-27 | ND | ND | ND | ND | ND | ND | 1 |
| S-3-55 | 001010-28 | ND | ND | ND | ND | ND | ND | 1 |
| S-3-60 | 001010-29 | ND | ND | ND | ND | ND | ND | 1 |
| **PQL** | | **0.1** | **0.005** | **0.005** | **0.005** | **0.01** | **0.025** | |

**COMMENTS:**
DF = DILUTION FACTOR / *:DF=500
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
TPH = TOTAL PETROLEUM HYDROCARBONS
MTBE = METHYL tert-BUTYL ETHER
MTBE IS NOT UTILIZED IN THE CALCULATION FOR TPH-GASOLINE
Data Reviewed and Approved by:
CAL-DHS ELAP CERT No.: 1555

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

# LABORATORY REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00
MATRIX: SOIL
REPORT TO: MR. TIM LANE
DATE SAMPLE REC'D: 10/10/00
DATE ANALYZED: 10/10-12/00
DATE REPORTED: 10/16/00

**EPA 5030/8015M FOR TPH-GASOLINE RANGE (C4-C10)**
**EPA 5030/8021B FOR BTEX/MTBE**
**UNITS = MG/KG (PPM) PAGE 2 OF 2**

| SAMPLE ID | LAB ID | TPH-GASOLINE | BENZENE | TOLUENE | ETHYL-BENZENE | TOTAL XYLENES | MTBE | DF |
|---|---|---|---|---|---|---|---|---|
| S-2-15 | 001010-30 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-20 | 001010-31 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-25 | 001010-32 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-30 | 001010-33 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-35 | 001010-34 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-40 | 001010-35 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-45 | 001010-36 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-50 | 001010-37 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-55 | 001010-38 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-60 | 001010-39 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-65 | 001010-40 | ND | ND | ND | ND | ND | ND | 1 |
| S-2-70 | 001010-41 | ND | ND | ND | ND | ND | ND | 1 |
| Method Blank | | ND | ND | ND | ND | ND | ND | 1 |
| **PQL** | | **0.1** | **0.005** | **0.005** | **0.005** | **0.01** | **0.025** | |

**COMMENTS:**
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
TPH = TOTAL PETROLEUM HYDROCARBONS
MTBE = METHYL tert-BUTYL ETHER
MTBE IS NOT UTILIZED IN THE CALCULATION FOR TPH-GASOLINE
Data Reviewed and Approved by:
CAL-DHS ELAP CERT No.: 1555

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

# LABORATORY REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/10-11/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

**LUFT / EPA 8015M FOR TPH-DIESEL RANGE (C10-C22)**
**UNITS = MG/KG (PPM)**
**PAGE 1 OF 2**

| SAMPLE ID | LAB ID | TPH-DIESEL | DF |
|---|---|---|---|
| S-1-15 | 001010-9 | ND | 1 |
| S-1-20 | 001010-10 | ND | 1 |
| S-1-25 | 001010-11 | ND | 1 |
| S-1-30 | 001010-12 | ND | 1 |
| S-1-35 | 001010-13 | ND | 1 |
| S-1-40 | 001010-14 | ND | 1 |
| S-1-45 | 001010-15 | ND | 1 |
| S-1-50 | 001010-16 | ND | 1 |
| S-1-60 | 001010-17 | ND | 1 |
| S-1-65 | 001010-18 | ND | 1 |
| S-1-70 | 001010-19 | ND | 1 |
| S-3-15 | 001010-20 | ND | 1 |
| S-3-20 | 001010-21 | ND | 1 |
| S-3-25 | 001010-22 | ND | 1 |
| S-3-30 | 001010-23 | ND | 1 |
| S-3-35 | 001010-24 | ND | 1 |
| S-3-40 | 001010-25 | ND | 1 |
| S-3-45 | 001010-26 | ND | 1 |
| S-3-50 | 001010-27 | ND | 1 |
| S-3-55 | 001010-28 | ND | 1 |
| S-3-60 | 001010-29 | ND | 1 |
| **PQL** | | **10** | |

**COMMENTS:**
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
TPH = TOTAL PETROLEUM HYDROCARBONS

Data Reviewed and Approved by:
CAL-DHS ELAP CERT No.: 1555

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# LABORATORY REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/10-11/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

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**LUFT / EPA 8015M FOR TPH-DIESEL RANGE (C10-C22)**
**UNITS = MG/KG (PPM)**
**PAGE 2 OF 2**

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| SAMPLE ID | LAB ID | TPH-DIESEL | DF |
|---|---|---|---|
| S-2-15 | 001010-30 | ND | 1 |
| S-2-20 | 001010-31 | ND | 1 |
| S-2-25 | 001010-32 | ND | 1 |
| S-2-30 | 001010-33 | ND | 1 |
| S-2-35 | 001010-34 | ND | 1 |
| S-2-40 | 001010-35 | ND | 1 |
| S-2-45 | 001010-36 | ND | 1 |
| S-2-50 | 001010-37 | ND | 1 |
| S-2-55 | 001010-38 | ND | 1 |
| S-2-60 | 001010-39 | ND | 1 |
| S-2-65 | 001010-40 | ND | 1 |
| S-2-70 | 001010-41 | ND | 1 |
| Method Blank | | ND | 1 |
| **PQL** | | **10** | |

**COMMENTS:**
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
TPH = TOTAL PETROLEUM HYDROCARBONS

Data Reviewed and Approved by:
CAL-DHS ELAP CERT No.: 1555

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# LABORATORY REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/13/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

---

SAMPLE I.D.: **S-1-15** LAB I.D.: 001010-9

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ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 1 OF 2
UNIT: MG/KG (PPM)

| PARAMETER | SAMPLE RESULT | REPORTING LIMIT X2000 |
|---|---|---|
| ACETONE | ND | 0.05 |
| BENZENE | 22.4 | 0.01 |
| BROMOBENZENE | ND | 0.01 |
| BROMOCHLOROMETHANE | ND | 0.01 |
| BROMODICHLOROMETHANE | ND | 0.01 |
| BROMOFORM | ND | 0.01 |
| BROMOMETHANE | ND | 0.01 |
| 2-BUTANONE (MEK) | ND | 0.05 |
| N-BUTYLBENZENE | ND | 0.01 |
| SEC-BUTYLBENZENE | ND | 0.01 |
| TERT-BUTYLBENZENE | ND | 0.01 |
| CARBON DISULFIDE | ND | 0.01 |
| CARBON TETRACHLORIDE | ND | 0.01 |
| CHLOROBENZENE | ND | 0.01 |
| CHLOROETHANE | ND | 0.01 |
| CHLOROFORM | ND | 0.01 |
| CHLOROMETHANE | ND | 0.01 |
| 2-CHLOROTOLUENE | ND | 0.01 |
| 4-CHLOROTOLUENE | ND | 0.01 |
| DIBROMOCHLOROMETHANE | ND | 0.01 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 0.01 |
| 1,2-DIBROMOETHANE | ND | 0.01 |
| DIBROMOMETHANE | ND | 0.01 |
| 1,2-DICHLOROBENZENE | ND | 0.01 |
| 1,3-DICHLOROBENZENE | ND | 0.01 |
| 1,4-DICHLOROBENZENE | ND | 0.01 |
| DICHLORODIFLUOROMETHANE | ND | 0.01 |
| 1,1-DICHLOROETHANE | ND | 0.01 |
| 1,2-DICHLOROETHANE | ND | 0.01 |
| 1,1-DICHLOROETHENE | ND | 0.01 |
| CIS-1,2-DICHLOROETHENE | ND | 0.01 |
| TRANS-1,2-DICHLOROETHENE | ND | 0.01 |
| 1,2-DICHLOROPROPANE | ND | 0.01 |

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY:

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

# LABORATORY REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD, ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/13/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

SAMPLE I.D.: **S-1-15** LAB I.D.: 001010-9

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 2 OF 2
UNIT: MG/KG (PPM)

| PARAMETER | SAMPLE RESULT | REPORTING LIMIT X2000 |
|---|---|---|
| 1,3-DICHLOROPROPANE | ND | 0.01 |
| 2,2-DICHLOROPROPANE | ND | 0.01 |
| 1,1-DICHLOROPROPENE | ND | 0.01 |
| CIS-1,3-DICHLOROPROPENE | ND | 0.01 |
| TRANS-1,3-DICHLOROPROPENE | ND | 0.01 |
| ETHYLBENZENE | 98.6 | 0.01 |
| 2-HEXANONE | ND | 0.05 |
| HEXACHLOROBUTADIENE | ND | 0.01 |
| IODOMETHANE | ND | 0.01 |
| ISOPROPYLBENZENE | ND | 0.01 |
| 4-ISOPROPYLTOLUENE | ND | 0.01 |
| 4-METHYL-2-PENTANONE (MIBK) | ND | 0.05 |
| METHYL tert-BUTYL ETHER | 200 | 0.01 |
| METHYLENE CHLORIDE | ND | 0.01 |
| NAPHTHALENE | 31.4 | 0.01 |
| N-PROPYLBENZENE | 34.6 | 0.01 |
| STYRENE | ND | 0.01 |
| 1,1,1,2-TETRACHLOROETHANE | ND | 0.01 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 0.01 |
| TETRACHLOROETHENE (PCE) | ND | 0.01 |
| TOLUENE | 308 | 0.01 |
| 1,2,3-TRICHLOROBENZENE | ND | 0.01 |
| 1,2,4-TRICHLOROBENZENE | ND | 0.01 |
| 1,1,1-TRICHLOROETHANE | ND | 0.01 |
| 1,1,2-TRICHLOROETHANE | ND | 0.01 |
| TRICHLOROETHENE (TCE) | ND | 0.01 |
| TRICHLOROFLUOROMETHANE | ND | 0.01 |
| 1,2,3-TRICHLOROPROPANE | ND | 0.01 |
| 1,2,4-TRIMETHYLBENZENE | 248 | 0.01 |
| 1,3,5-TRIMETHYLBENZENE | 82.8 | 0.01 |
| VINYL CHLORIDE | ND | 0.01 |
| TOTAL XYLENES | 578 | 0.02 |

**COMMENTS** ND: NON-DETECTED OR BELOW THE REPORTING LIMIT

DATA REVIEWED AND APPROVED BY: _____
CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

# LABORATORY REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/13/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

---

SAMPLE I.D.: **S-3-15** LAB I.D.: 001010-20

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ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 1 OF 2
UNIT: MG/KG (PPM)

| PARAMETER | SAMPLE RESULT | REPORTING LIMIT X1 |
|---|---|---|
| ACETONE | ND | 0.05 |
| BENZENE | ND | 0.01 |
| BROMOBENZENE | ND | 0.01 |
| BROMOCHLOROMETHANE | ND | 0.01 |
| BROMODICHLOROMETHANE | ND | 0.01 |
| BROMOFORM | ND | 0.01 |
| BROMOMETHANE | ND | 0.01 |
| 2-BUTANONE (MEK) | ND | 0.05 |
| N-BUTYLBENZENE | ND | 0.01 |
| SEC-BUTYLBENZENE | ND | 0.01 |
| TERT-BUTYLBENZENE | ND | 0.01 |
| CARBON DISULFIDE | ND | 0.01 |
| CARBON TETRACHLORIDE | ND | 0.01 |
| CHLOROBENZENE | ND | 0.01 |
| CHLOROETHANE | ND | 0.01 |
| CHLOROFORM | ND | 0.01 |
| CHLOROMETHANE | ND | 0.01 |
| 2-CHLOROTOLUENE | ND | 0.01 |
| 4-CHLOROTOLUENE | ND | 0.01 |
| DIBROMOCHLOROMETHANE | ND | 0.01 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 0.01 |
| 1,2-DIBROMOETHANE | ND | 0.01 |
| DIBROMOMETHANE | ND | 0.01 |
| 1,2-DICHLOROBENZENE | ND | 0.01 |
| 1,3-DICHLOROBENZENE | ND | 0.01 |
| 1,4-DICHLOROBENZENE | ND | 0.01 |
| DICHLORODIFLUOROMETHANE | ND | 0.01 |
| 1,1-DICHLOROETHANE | ND | 0.01 |
| 1,2-DICHLOROETHANE | ND | 0.01 |
| 1,1-DICHLOROETHENE | ND | 0.01 |
| CIS-1,2-DICHLOROETHENE | ND | 0.01 |
| TRANS-1,2-DICHLOROETHENE | ND | 0.01 |
| 1,2-DICHLOROPROPANE | ND | 0.01 |

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

# LABORATORY REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/13/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

SAMPLE I.D.: **S-3-15** LAB I.D.: 001010-20

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 2 OF 2
UNIT: MG/KG (PPM)

| PARAMETER | SAMPLE RESULT | REPORTING LIMIT X1 |
|---|---|---|
| 1,3-DICHLOROPROPANE | ND | 0.01 |
| 2,2-DICHLOROPROPANE | ND | 0.01 |
| 1,1-DICHLOROPROPENE | ND | 0.01 |
| CIS-1,3-DICHLOROPROPENE | ND | 0.01 |
| TRANS-1,3-DICHLOROPROPENE | ND | 0.01 |
| ETHYLBENZENE | ND | 0.01 |
| 2-HEXANONE | ND | 0.05 |
| HEXACHLOROBUTADIENE | ND | 0.01 |
| IODOMETHANE | ND | 0.01 |
| ISOPROPYLBENZENE | ND | 0.01 |
| 4-ISOPROPYLTOLUENE | ND | 0.01 |
| 4-METHYL-2-PENTANONE (MIBK) | ND | 0.05 |
| METHYL tert-BUTYL ETHER | 0.197 | 0.01 |
| METHYLENE CHLORIDE | ND | 0.01 |
| NAPHTHALENE | ND | 0.01 |
| N-PROPYLBENZENE | ND | 0.01 |
| STYRENE | ND | 0.01 |
| 1,1,1,2-TETRACHLOROETHANE | ND | 0.01 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 0.01 |
| TETRACHLOROETHENE (PCE) | ND | 0.01 |
| TOLUENE | 0.020 | 0.01 |
| 1,2,3-TRICHLOROBENZENE | ND | 0.01 |
| 1,2,4-TRICHLOROBENZENE | ND | 0.01 |
| 1,1,1-TRICHLOROETHANE | ND | 0.01 |
| 1,1,2-TRICHLOROETHANE | ND | 0.01 |
| TRICHLOROETHENE (TCE) | ND | 0.01 |
| TRICHLOROFLUOROMETHANE | ND | 0.01 |
| 1,2,3-TRICHLOROPROPANE | ND | 0.01 |
| 1,2,4-TRIMETHYLBENZENE | ND | 0.01 |
| 1,3,5-TRIMETHYLBENZENE | ND | 0.01 |
| VINYL CHLORIDE | ND | 0.01 |
| TOTAL XYLENES | ND | 0.02 |

**COMMENTS** ND: NON-DETECTED OR BELOW THE REPORTING LIMIT

DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

# METHOD BLANK REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/13/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

METHOD BLANK FOR LAB I.D.: 001010-9, -20

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 1 OF 2
UNIT: MG/KG (PPM)

| PARAMETER | SAMPLE RESULT | REPORTING LIMIT X1 |
|---|---|---|
| ACETONE | ND | 0.05 |
| BENZENE | ND | 0.01 |
| BROMOBENZENE | ND | 0.01 |
| BROMOCHLOROMETHANE | ND | 0.01 |
| BROMODICHLOROMETHANE | ND | 0.01 |
| BROMOFORM | ND | 0.01 |
| BROMOMETHANE | ND | 0.01 |
| 2-BUTANONE (MEK) | ND | 0.05 |
| N-BUTYLBENZENE | ND | 0.01 |
| SEC-BUTYLBENZENE | ND | 0.01 |
| TERT-BUTYLBENZENE | ND | 0.01 |
| CARBON DISULFIDE | ND | 0.01 |
| CARBON TETRACHLORIDE | ND | 0.01 |
| CHLOROBENZENE | ND | 0.01 |
| CHLOROETHANE | ND | 0.01 |
| CHLOROFORM | ND | 0.01 |
| CHLOROMETHANE | ND | 0.01 |
| 2-CHLOROTOLUENE | ND | 0.01 |
| 4-CHLOROTOLUENE | ND | 0.01 |
| DIBROMOCHLOROMETHANE | ND | 0.01 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 0.01 |
| 1,2-DIBROMOETHANE | ND | 0.01 |
| DIBROMOMETHANE | ND | 0.01 |
| 1,2-DICHLOROBENZENE | ND | 0.01 |
| 1,3-DICHLOROBENZENE | ND | 0.01 |
| 1,4-DICHLOROBENZENE | ND | 0.01 |
| DICHLORODIFLUOROMETHANE | ND | 0.01 |
| 1,1-DICHLOROETHANE | ND | 0.01 |
| 1,2-DICHLOROETHANE | ND | 0.01 |
| 1,1-DICHLOROETHENE | ND | 0.01 |
| CIS-1,2-DICHLOROETHENE | ND | 0.01 |
| TRANS-1,2-DICHLOROETHENE | ND | 0.01 |
| 1,2-DICHLOROPROPANE | ND | 0.01 |

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY:

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# METHOD BLANK REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/13/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

METHOD BLANK FOR LAB I.D.: 001010-9, -20

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 2 OF 2
UNIT: MG/KG (PPM)

| PARAMETER | SAMPLE RESULT | REPORTING LIMIT X1 |
|---|---|---|
| 1,3-DICHLOROPROPANE | ND | 0.01 |
| 2,2-DICHLOROPROPANE | ND | 0.01 |
| 1,1-DICHLOROPROPENE | ND | 0.01 |
| CIS-1,3-DICHLOROPROPENE | ND | 0.01 |
| TRANS-1,3-DICHLOROPROPENE | ND | 0.01 |
| ETHYLBENZENE | ND | 0.01 |
| 2-HEXANONE | ND | 0.05 |
| HEXACHLOROBUTADIENE | ND | 0.01 |
| IODOMETHANE | ND | 0.01 |
| ISOPROPYLBENZENE | ND | 0.01 |
| 4-ISOPROPYLTOLUENE | ND | 0.01 |
| 4-METHYL-2-PENTANONE (MIBK) | ND | 0.05 |
| METHYL tert-BUTYL ETHER | ND | 0.01 |
| METHYLENE CHLORIDE | ND | 0.01 |
| NAPHTHALENE | ND | 0.01 |
| N-PROPYLBENZENE | ND | 0.01 |
| STYRENE | ND | 0.01 |
| 1,1,1,2-TETRACHLOROETHANE | ND | 0.01 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 0.01 |
| TETRACHLOROETHENE (PCE) | ND | 0.01 |
| TOLUENE | ND | 0.01 |
| 1,2,3-TRICHLOROBENZENE | ND | 0.01 |
| 1,2,4-TRICHLOROBENZENE | ND | 0.01 |
| 1,1,1-TRICHLOROETHANE | ND | 0.01 |
| 1,1,2-TRICHLOROETHANE | ND | 0.01 |
| TRICHLOROETHENE (TCE) | ND | 0.01 |
| TRICHLOROFLUOROMETHANE | ND | 0.01 |
| 1,2,3-TRICHLOROPROPANE | ND | 0.01 |
| 1,2,4-TRIMETHYLBENZENE | ND | 0.01 |
| 1,3,5-TRIMETHYLBENZENE | ND | 0.01 |
| VINYL CHLORIDE | ND | 0.01 |
| TOTAL XYLENES | ND | 0.02 |

**COMMENTS** ND: NON-DETECTED OR BELOW THE REPORTING LIMIT

DATA REVIEWED AND APPROVED BY: _____
CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

# LABORATORY REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/13/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

SAMPLE I.D.: **S-1-15** LAB I.D.: 001010-9

ANALYSIS: POLYNUCLEAR AROMATIC HYDROCARBONS, EPA METHOD 8270C
UNIT: MG/KG (PPM)

| PARAMETER | SAMPLE RESULT | REPORTING LIMIT X1 |
|---|---|---|
| ACENAPHTHENE | ND | 0.5 |
| ACENAPHTHYLENE | ND | 0.5 |
| ANTHRACENE | ND | 0.5 |
| BENZO(a)ANTHRACENE | ND | 0.5 |
| BENZO(a)PYRENE | ND | 0.5 |
| BENZO(b)FLUORANTHENE | ND | 0.5 |
| BENZO(k)FLUORANTHENE | ND | 0.5 |
| BENZO(g,h,i)PERYLENE | ND | 0.5 |
| CHRYSENE | ND | 0.5 |
| DIBENZO(a,h)ANTHRACENE | ND | 0.5 |
| DIBENZO(a,e)PYRENE | ND | 0.5 |
| DIBENZO(a,h)PYRENE | ND | 0.5 |
| DIBENZO(a,i)PYRENE | ND | 0.5 |
| FLUORANTHENE | ND | 0.5 |
| FLUORENE | ND | 0.5 |
| INDENO(1,2,3-cd)PYRENE | ND | 0.5 |
| 2-METHYLNAPHTHALENE | 33.6 | 0.5(X10) |
| NAPHTHALENE | 32.3 | 0.5(X10) |
| PHENANTHRENE | ND | 0.5 |
| PYRENE | ND | 0.5 |

**COMMENTS:**
ND = NON-DETECTED OR BELOW THE REPORTING LIMIT

Data Reviewed and Approved by: _____
CAL-DHS ELAP#1555

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

# LABORATORY REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/13/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

SAMPLE I.D.: **S-3-15** LAB I.D.: 001010-20

ANALYSIS: POLYNUCLEAR AROMATIC HYDROCARBONS, EPA METHOD 8270C
UNIT: MG/KG (PPM)

| PARAMETER | SAMPLE RESULT | REPORTING LIMIT | X1 |
|---|---|---|---|
| ACENAPHTHENE | ND | 0.5 | |
| ACENAPHTHYLENE | ND | 0.5 | |
| ANTHRACENE | ND | 0.5 | |
| BENZO(a)ANTHRACENE | ND | 0.5 | |
| BENZO(a)PYRENE | ND | 0.5 | |
| BENZO(b)FLUORANTHENE | ND | 0.5 | |
| BENZO(k)FLUORANTHENE | ND | 0.5 | |
| BENZO(g,h,i)PERYLENE | ND | 0.5 | |
| CHRYSENE | ND | 0.5 | |
| DIBENZO(a,h)ANTHRACENE | ND | 0.5 | |
| DIBENZO(a,e)PYRENE | ND | 0.5 | |
| DIBENZO(a,h)PYRENE | ND | 0.5 | |
| DIBENZO(a,i)PYRENE | ND | 0.5 | |
| FLUORANTHENE | ND | 0.5 | |
| FLUORENE | ND | 0.5 | |
| INDENO(1,2,3-cd)PYRENE | ND | 0.5 | |
| 2-METHYLNAPHTHALENE | ND | 0.5 | |
| NAPHTHALENE | ND | 0.5 | |
| PHENANTHRENE | ND | 0.5 | |
| PYRENE | ND | 0.5 | |

**COMMENTS:**
ND = NON-DETECTED OR BELOW THE REPORTING LIMIT

Data Reviewed and Approved by:
CAL-DHS ELAP#1555

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

# METHOD BLANK REPORT

CUSTOMER: ATC ENVIRONMENTAL, INC., 50 EAST FOOTHILL BLVD,
ARCADIA, CA 91006 TEL(626)447-5216 FAX(626)447-7593

PROJECT: **Westra Dairy-5203**
SAMPLING DATE: 10/10/00 DATE SAMPLE REC'D: 10/10/00
MATRIX: SOIL DATE ANALYZED: 10/13/00
REPORT TO: MR. TIM LANE DATE REPORTED: 10/16/00

METHOD BLANK FOR LAB I.D.: 001010-9, -20

ANALYSIS: POLYNUCLEAR AROMATIC HYDROCARBONS, EPA METHOD 8270C
UNIT: MG/KG (PPM)

| PARAMETER | SAMPLE RESULT | REPORTING LIMIT | X1 |
|---|---|---|---|
| ACENAPHTHENE | ND | 0.5 | |
| ACENAPHTHYLENE | ND | 0.5 | |
| ANTHRACENE | ND | 0.5 | |
| BENZO(a)ANTHRACENE | ND | 0.5 | |
| BENZO(a)PYRENE | ND | 0.5 | |
| BENZO(b)FLUORANTHENE | ND | 0.5 | |
| BENZO(k)FLUORANTHENE | ND | 0.5 | |
| BENZO(g,h,i)PERYLENE | ND | 0.5 | |
| CHRYSENE | ND | 0.5 | |
| DIBENZO(a,h)ANTHRACENE | ND | 0.5 | |
| DIBENZO(a,e)PYRENE | ND | 0.5 | |
| DIBENZO(a,h)PYRENE | ND | 0.5 | |
| DIBENZO(a,i)PYRENE | ND | 0.5 | |
| FLUORANTHENE | ND | 0.5 | |
| FLUORENE | ND | 0.5 | |
| INDENO(1,2,3-cd)PYRENE | ND | 0.5 | |
| 2-METHYLNAPHTHALENE | ND | 0.5 | |
| NAPHTHALENE | ND | 0.5 | |
| PHENANTHRENE | ND | 0.5 | |
| PYRENE | ND | 0.5 | |

**COMMENTS:**
ND = NON-DETECTED OR BELOW THE REPORTING LIMIT

Data Reviewed and Approved by:
CAL-DHS ELAP#1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

# GAS/BTEX (S) QC

Date Analyzed: 10/11-12/2000

**MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD)**

**SPIKED SAMPLE LAB. I.D.:** **1010-16** MATRIX: Soil (mg/Kg, ppm)

| ANALYTE | SR | SPK CONC | MS | % REC | MSD | % REC | %RPD | ACP % REC | ACP RPD |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0 | 0.500 | 0.508 | 102 | 0.483 | 97 | 5 | 75-125 | 0 - 20 |
| Toluene | 0 | 0.050 | 0.053 | 106 | 0.053 | 106 | 0 | 75-125 | 0 - 20 |

**LCS STD RECOVERY:**

| ANALYTE | SPK CONC | LCS | % REC | ACP %REC |
|---|---|---|---|---|
| Gasoline | 0.500 | 0.510 | 102 | 75-125 |
| Toluene | 0.050 | 0.054 | 108 | 75-125 |

**Analyzed By:** James Yeap

**Analyst Signature:** [signature]

**First Reviewer:** MF / Ja

**Final Reviewer:** CBD

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

# GAS/BTEX (S) QC

Date Analyzed: 10/10/00

**MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD)**

**SPIKED SAMPLE LAB. I.D.:** 01010-44 MATRIX: Soil (mg/Kg, ppm)

| ANALYTE | SR | SPK CONC | MS | % REC | MSD | % REC | %RPD | ACP % REC | ACP RPD |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0 | 0.500 | 0.508 | 102 | 0.507 | 101 | 0 | 75-125 | 0 - 20 |
| Toluene | 0 | 0.050 | 0.054 | 107 | 0.054 | 107 | 0 | 75-125 | 0 - 20 |

**LCS STD RECOVERY:**

| ANALYTE | SPK CONC | LCS | % REC | ACP %REC |
|---|---|---|---|---|
| Gasoline | 0.500 | 0.563 | 113 | 75-125 |
| Toluene | 0.050 | 0.048 | 97 | 75-125 |

**Analyzed By:** James Yeap **Analyst Signature:** JY

**First Reviewer:** MF **Final Reviewer:** CBO

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

# DIESEL (S) QC

Date Analyzed: 10/10/00

**Matrix Spike (MS)/Matrix Spike Duplicate (MSD)**
**Spiked Sample Lab I.D.: 1010-18**

**Unit** mG/Kg (PPM)
**Matrix:** soil

| Analyte | SR | spk conc | MS | %MS | MSD | %MSD | %RPD | ACP %MS | ACP RPD |
|---|---|---|---|---|---|---|---|---|---|
| Diesel | 0 | 3400 | 3270 | 96 | 3209 | 94 | 2 | 75-125 | <20% |

**LCS STD RECOVERY:**

| ANALYTE | spk conc | LCS | % REC | ACP %REC |
|---|---|---|---|---|
| Diesel | 2000 | 2065 | 103 | 75-125 |

**Analyzed By:** James Yeap

**Analyst Signature:** JY

**First Reviewer:** MF / Jae

**Final Reviewer:** BD

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

# DIESEL (S) QC

Date Analyzed: 10/11/00

**Matrix Spike (MS)/Matrix Spike Duplicate (MSD)** **Unit** **mG/Kg (PPM)**
**Spiked Sample Lab I.D.:** **1010-31** **Matrix:** **soil**

| Analyte | SR | spk conc | MS | %MS | MSD | %MSD | %RPD | ACP %MS | ACP RPD |
|---|---|---|---|---|---|---|---|---|---|
| Diesel | 0 | 3400 | 3921 | 115 | 3514 | 103 | 11 | 75-125 | <20% |

**LCS STD RECOVERY:**

| ANALYTE | spk conc | LCS | % REC | ACP %REC |
|---|---|---|---|---|
| Diesel | 2000 | 2125 | 106 | 75-125 |

**Analyzed By:** **James Yeap** **Analyst Signature:** _____

**First Reviewer:** _____ **Final Reviewer:** _____

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8260 QA/QC Report

Unit: uG/L (PPB)

Date Analyzed: 10/13/2000

**Matrix Spike (MS)/Matrix Spike Duplicate (MSD)**

**Spiked Sample Lab I.D.: 1013-05** **Matrix: Soil**

| Analyte | SR | spk conc | MS | %MS | MSD | %MSD | %RPD | ACP %MS | ACP RPD |
|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene (TCE) | 0 | 48.4 | 51.12 | 106 | 48.70 | 101 | 5 | 75-125 | 0-20 |
| Toluene | 0 | 47.5 | 51.20 | 108 | 47.59 | 100 | 7 | 75-125 | 0-20 |

**Lab Control Spike (LCS):**

| Analyte | spk conc | LCS | %LCS | ACP % |
|---|---|---|---|---|
| Trichloroethene (TCE) | 50.0 | 49.15 | 98 | 75-125 |
| Toluene | 50.0 | 48.32 | 97 | 75-125 |

| Surrogate Recovery | spk conc | ACP% | MB %RC | %RC | %RC | %RC | %RC | %RC | %RC |
|---|---|---|---|---|---|---|---|---|---|
| Sample I.D. | | | | 1013-05 | 1013-06 | 1013-07 | 1013-08 | 1013-10 | 1010-20 |
| Dibromofluoromethane | 50.0 | 75-125 | 100 | 102 | 103 | 102 | 104 | 102 | 103 |
| Toluene-d8 | 50.0 | 75-125 | 100 | 99 | 100 | 100 | 100 | 100 | 101 |
| 4-Bromofluorobenzene | 50.0 | 75-125 | 105 | 104 | 104 | 103 | 103 | 103 | 104 |

| Surrogate Recovery | spk conc | ACP% | %RC | %RC | %RC | %RC | %RC | %RC | %RC |
|---|---|---|---|---|---|---|---|---|---|
| Sample I.D. | | | 1010-09 | 1012-84 | 1012-85 | | | | |
| Dibromofluoromethane | 50.0 | 75-125 | 103 | 98 | 99 | | | | |
| Toluene-d8 | 50.0 | 75-125 | 99 | 96 | 97 | | | | |
| 4-Bromofluorobenzene | 50.0 | 75-125 | 104 | 105 | 107 | | | | |

| Surrogate Recovery | spk conc | ACP% | %RC | %RC | %RC | %RC | %RC | %RC | %RC |
|---|---|---|---|---|---|---|---|---|---|
| Sample I.D. | | | | | | | | | |
| Dibromofluoromethane | 50.0 | 75-125 | | | | | | | |
| Toluene-d8 | 50.0 | 75-125 | | | | | | | |
| 4-Bromofluorobenzene | 50.0 | 75-125 | | | | | | | |

**Analyzed By** Mina Farag **Analyst Signature:** MF

**First Reviewer:** Jv **Final Reviewer:** CBD

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

# 8270 QA/QC Report for 0001010-9, 20

Matrix: **solid**
Date Analyzed: **10/13/00**
Unit: **(PPM)**

**Matrix Spike (MS)/Matrix Spike Duplicate (MSD)**

**Spiked Sample Lab I.D.:** **01010-9**

| Analyte | SR | spk conc | MS | %MS | MSD | %MSD | %RPD | ACP %MS | ACP RPD |
|---|---|---|---|---|---|---|---|---|---|
| **Phenol** | 0 | 80 | 77.1 | 96 | 82.2 | 103 | 6 | 75-125 | 0-20 |
| **Pyrene** | 0 | 40 | 48.1 | 120 | 44.6 | 112 | 8 | 75-125 | 0-20 |

**LCS STD RECOVERY:**

| Analyte | spk conc | LCS | % REC | ACP %MS |
|---|---|---|---|---|
| **Phenol** | 80 | 77.0 | 96 | 75-125 |
| **Pyrene** | 80 | 78.7 | 98 | 75-125 |

**SURROGATE RECOVERY:**

| PARAMETERS | spk conc | ACP% | %RC | %RC | %RC | %RC | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sample I.D. | | | **MB** | **01010-9** | **01010-20** | | | | |
| 2-Fluorophenol | 80 | 25-121 | 104 | 102 | 96 | | | | |
| Phenol-d5 | 80 | 24-113 | 105 | 94 | 100 | | | | |
| Nitrobenzene-d5 | 40 | 23-120 | 111 | 114 | 110 | | | | |
| 2-Fluorobiphenyl | 40 | 30-115 | 110 | 112 | 119 | | | | |
| 2,4,6-Tribromophenol | 80 | 19-122 | 54 | 68 | 46 | | | | |
| Terphenyl-d14 | 40 | 18-137 | 107 | 101 | 121 | | | | |

**Analyzed By:** JOE SU **Analyst Signature:** Joe

**First Reviewer:** HF **Final Reviewer:** CBJ

**ENVIRO-CHEM, INC.**
**LABORATORIES**
1214 E. Lexington Ave.
Pomona, CA 91766
(909) 590-5905 • Fax: (909) 590-5907

# CHAIN of CUSTODY RECORD

DATE: 10-10-00
PAGE: 1 of 4

Lab Project # _____

CA-DHS ELAP CERTIFICATE # 1555

| | | |
|---|---|---|
| REPORT TO: AR Associates INC | PROJECT NAME: Weska Dairy - 5203 | TURN AROUND TIME DESIRED |
| STREET: 50 E. Foothill Blvd | PROJECT CONTACT: Tim Cane | ☐ Same Day ☐ 24 Hour ☐ 48 Hour |
| CITY: Arcadia, STATE: Ca ZIP: 91006 | SAMPLER(S) SIGNATURE: [signature] | ☐ 72 Hour ☐ 1 Week ☒ Standard (2 Weeks) |
| TEL: (626) 447-5216 FAX: (626) 447-7593 | | ☐ Others: _____ Confirmed By: _____ |
| SHIPPING INFORMATION: | AFTER ANALYSES, SAMPLES ARE TO BE: ☑ DISPOSED OF ☐ STORED (30 days) ☒ RETURNED TO CLIENT ☐ OTHER: | |

| | | | |
|---|---|---|---|
| RELINQUISHED BY: (Signature) [signature] | RECEIVED BY: (Signature) Jessica Lin | DATE: 10/10/00 | TIME: 1250pm |
| RELINQUISHED BY: (Signature) | RECEIVED BY: (Signature) | DATE: | TIME: |
| RELINQUISHED BY: (Signature) | RECEIVED BY: (Signature) | DATE: | TIME: |

| SAMPLE I.D. | LAB I.D. | SAMPLING DATE/TIME | MATRIX | Nº of Containers | ANALYSIS REQUESTED | COMMENTS | Sample Stored Location |
|---|---|---|---|---|---|---|---|
| -1-15 | 0001010 – 9 | 10/10/00 | Soil | 1 | 8015(g)(d) / BTEX / MTBE | Based on highest sample | |
| S-1-20 | – 10 | | | 1 | | Run full scan 8260 | |
| S-1-25 | – 11 | | | 1 | | and 8270 (PNA's). | |
| S-1-30 | – 12 | | | 1 | | FR Bring S-1 | |
| S-1-35 | – 13 | | | 1 | | | |
| S-1-40 | – 14 | | | 1 | | | |
| S-1-45 | – 15 | | | 1 | | | |
| S-1-50 | – 16 | | | 1 | | | |
| S-1-60 | – 17 | | | 1 | | | |
| S-1-65 | – 18 | | | 1 | | | |
| S-1-70 | – 19 | | | 1 | | | |

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**LABORATORIES**
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# CHAIN of CUSTODY RECORD

DATE: 10-10-00
PAGE: 2 of 4

Lab Project # _____

CA-DHS ELAP CERTIFICATE # 1555

| | | | |
|---|---|---|---|
| REPORT TO: AEC Associates Inc | | PROJECT NAME: Ultra Dairy | TURN AROUND TIME DESIRED: ☐ Same Day ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 1 Week ☒ Standard (2 Weeks) ☐ Others: |
| STREET: 50 E. Foothill Blvd | | PROJECT CONTACT: Tim Cox | Confirmed By: |
| CITY: Arcadia | STATE: Ca ZIP: 91006 | SAMPLER(S) SIGNATURE: | |
| TEL: (626) 447-5216 | FAX: (626) 447-7593 | | |
| SHIPPING INFORMATION: | | AFTER ANALYSES, SAMPLES ARE TO BE: ☐ DISPOSED OF ☐ STORED (30 days) ☒ RETURNED TO CLIENT ☐ OTHER: | |
| RELINQUISHED BY: (Signature) | RECEIVED BY: (Signature) | DATE: 10/10/00 | TIME: 1250p |
| RELINQUISHED BY: (Signature) | RECEIVED BY: (Signature) | DATE: | TIME: |
| RELINQUISHED BY: (Signature) | RECEIVED BY: (Signature) | DATE: | TIME: |

| SAMPLE I.D. | LAB I.D. | SAMPLING DATE/TIME | MATRIX | Nº of Containers | ANALYSIS REQUESTED | COMMENTS | Sample Stored Location |
|---|---|---|---|---|---|---|---|
| S-3-15 | 001010-20 | 10-10-00 | Soil | 1 | 8015(g),(d), BTEX/MTBE | Based on highest sample Run full Scan 8260, 8270 | |
| S-3-20 | -21 | | | 1 | | | |
| S-3-25 | -22 | | | 1 | | PR BRCM S-3 | |
| S-3-30 | -23 | | | 1 | | | |
| S-3-35 | -24 | | | 1 | | | |
| S-3-40 | -25 | | | 1 | | | |
| S-3-45 | -26 | | | 1 | | | |
| S-3-50 | -27 | | | 1 | | | |
| S-3-55 | -28 | | | 1 | | | |
| S-3-60 | -29 | X | | 1 | | | |
| | | | | | | | |

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**LABORATORIES**
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Pomona, CA 91766
(909) 590-5905 • Fax: (909) 590-5907

# CHAIN of CUSTODY RECORD

DATE: 10-10-00
PAGE: 3 of 4

Lab Project # _____

CA-DHS ELAP CERTIFICATE # 1555

| | | | |
|---|---|---|---|
| REPORT TO: AR Associates Inc | | PROJECT NAME: Wessa Dairy | TURN AROUND TIME DESIRED ☐ Same Day ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 1 Week ☒ Standard (2 Weeks) ☐ Others: Confirmed By: |
| STREET: 50 E. Foothill Blvd | | PROJECT CONTACT: Tom Lam | |
| CITY: Arcadia | STATE: Ca ZIP: 9100 | SAMPLER(S) SIGNATURE: [signature] | |
| TEL: (626) 447-5216 | FAX: (626) 447-7593 | | |
| SHIPPING INFORMATION: | | AFTER ANALYSES, SAMPLES ARE TO BE: ☐ DISPOSED OF ☐ STORED (30 days) ☒ RETURNED TO CLIENT ☐ OTHER: | |
| RELINQUISHED BY: (Signature) [signature] | RECEIVED BY: (Signature) Jessica [signature] | DATE: 10/10/00 | TIME: 1250pm |
| RELINQUISHED BY: (Signature) | RECEIVED BY: (Signature) | DATE: | TIME: |
| RELINQUISHED BY: (Signature) | RECEIVED BY: (Signature) | DATE: | TIME: |

| SAMPLE I.D. | LAB I.D. | SAMPLING DATE/TIME | MATRIX | Nº of Containers | ANALYSIS REQUESTED | COMMENTS | Sample Stored Location |
|---|---|---|---|---|---|---|---|
| S-2-15 | 0001010-30 | 10-10-00 | Soil | 1 | 8015(g),(d)/BTEX/MTBE | Based on highest | |
| S-2-20 | -31 | | | 1 | | Sample run full | |
| S-2-25 | -32 | | | 1 | | Scan 8260, 8270 PNAD | |
| S-2-30 | -33 | | | 1 | | FR Boring S-2 | |
| S-2-35 | -34 | | | 1 | | | |
| S-2-40 | -35 | | | 1 | | | |
| S-2-45 | -36 | | | 1 | | | |
| S-2-50 | -37 | | | 1 | | | |
| S-2-55 | -38 | | | 1 | | | |
| S-2-60 | -39 | | | 1 | | | |
| S-2-65 | -40 | | | 1 | | | |

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# CHAIN of CUSTODY RECORD

DATE: 10-10-00
PAGE: 4 of 4

Lab Project # _____

CA-DHS ELAP CERTIFICATE # 1555

| | | | |
|---|---|---|---|
| REPORT TO: AR Associates Inc | | PROJECT NAME: Westra Dairy | TURN AROUND TIME DESIRED |
| STREET: 50 E. Foothill Blvd | | PROJECT CONTACT: Tom Lu | ☐ Same Day ☐ 24 Hour ☐ 48 Hour |
| CITY: Arcadia | STATE: Ca ZIP: 91006 | SAMPLER(S) SIGNATURE: [signature] | ☐ 72 Hour ☐ 1 Week ☒ Standard (2 Weeks) |
| TEL: (626) 447-5216 | FAX: (447) 7593 | | ☐ Others: _____ Confirmed By: _____ |
| SHIPPING INFORMATION: | | AFTER ANALYSES, SAMPLES ARE TO BE: ☐ DISPOSED OF ☐ STORED (30 days) | ☒ RETURNED TO CLIENT ☐ OTHER: |

| | | | |
|---|---|---|---|
| RELINQUISHED BY: (Signature) [signature] | RECEIVED BY: (Signature) Jessica [signature] | DATE: 10/10/00 | TIME: 1250p |
| RELINQUISHED BY: (Signature) | RECEIVED BY: (Signature) | DATE: | TIME: |
| RELINQUISHED BY: (Signature) | RECEIVED BY: (Signature) | DATE: | TIME: |

| SAMPLE I.D. | LAB I.D. | SAMPLING DATE/TIME | MATRIX | Nº of Containers | ANALYSIS REQUESTED | COMMENTS | Sample Stored Location |
|---|---|---|---|---|---|---|---|
| S-2-70 | 001010-41 | 10/10/00 | Soil | 1 | 8015(g)(d)/BTEX/MTBE | Based on highest | |
| | | | | | | sample, run full scan | |
| | | | | | | 8260, 8270(PNA) | |
| | | | | | | FR Bring S-2 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

DISTRIBUTION: WHITE WITH REPORT • YELLOW TO COURIER

# APPENDIX B

# CRWQCB LETTER DATED SEPTEMBER 26,2000

# California Regional Water Quality Control Board
## Santa Ana Region

Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: http://www.swrcb.ca.gov
3737 Main Street, Suite 500, Riverside, California 92501-3339
Phone (909) 782-4130 • FAX (909) 781-6288

Gray Davis
Governor

626
447-8593

September 26, 2000

Mr. Cal Westra
Westra Family Trust
870 North Sanderson Avenue
San Jacinto, California 92582

**SUBJECT: WESTRA DAIRY FARM TANKS**
**870 NORTH SANDERSON AVENUE**
**SAN JACINTO, CALIFORNIA 92582**
**UST CASE NO. 083303601T**

Dear Mr. Westra:

We have reviewed the *Site Investigation Workplan* dated August 4, 2000. Your consultant, ATC Associates Inc. (ATC), prepared this plan. The objectives of the proposed investigation are to delineate the lateral and vertical extent of soil contamination.

In the workplan, ATC proposes to drill three borings to a minimum depth of 60 feet and collect soil samples for analysis. Based on our review, we approve the workplan for site investigation with the following conditions:

- The worst-case soil sample based on the EPA Method 8015 sample results must be analyzed using EPA Method 8260, full scan including all fuel oxygenates and alcohols, in addition to the semi-volatile analysis proposed.
- To consider the site fully assessed, a minimum of 30 feet of clean soil must be delineated beneath the deepest contamination.

Please submit the results of the assessment to this office by November 15, 2000. Please submit copies of all correspondence to Ms. Sharon Boltinghouse at the County of Riverside. If you have any questions, please call me at (909) 320-6375.

Sincerely,

Rose Scott
Associate Engineering Geologist
Pollutant Investigation Section

cc: Sharon Boltinghouse, County of Riverside
Ed McGlothlin, Consolidated Waste Industries, Inc.

ATC ASSOCIATES INC.

50 East Foothill Boulevard
Arcadia, California 91006
www.atc-enviro.com
626.447.5216
Fax 626.447.7593

CWI-RIV
KRW
RS 8/16/00
00 AUG -9 AM 1:03

August 4, 2000

Mr. Kenneth Williams
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

**RE: SITE INVESTIGATION WORKPLAN**
**WESTRA DAIRY FARMS**
**870 NORTH SANDERSON**
**SAN JACINTO, CALIFORNIA**
**ATC PROJECT NUMBER 12077.5203**

Dear Mr. Williams:

ATC Associates Inc (ATC) has been requested to submit this Workplan on behalf of our client, Consolidated Waste Industries (CWI) to comply with a fax memo dated July 6, 2000 by Rose Scott of the California Regional Water Quality Control Board, Santa Ana Region.

This Site Investigation Workplan describes the work to be performed to determine the approximate extent of soil contamination at the above referenced Site (Drawing 1). On December 14, 1999 ATC Associates Inc. (ATC) observed the removal of three underground storage tanks (1-10,000 gallon diesel, 2-1,000 gallon gasoline). Eight soil samples taken directly below the tanks indicated elevated analytical concentration of gasoline as high as 5,290 milligrams per kilogram (mg/Kg) and diesel as high as 2,360 mg/Kg. Laboratory results also indicated Methyl-tertiary butyl ether (MTBE) in six of the eight soil samples from the tank field in concentrations ranging from non-detect (ND) to 519 mg/Kg.

ATC recommends that three soil borings be advanced to a maximum depth of 60 feet to determine the approximate vertical and lateral extent of contamination at the site (Drawing 2).

## SCOPE OF WORK

### Soil Borings and Analysis

ATC proposes to drill and sample three soil borings on the subject property to a maximum depth of sixty feet. A hollow stem auger-drilling rig (CME 75 or equivalent) will perform the drilling. Soil samples will be collected at five-foot intervals beginning at 15 feet. All soil samples will be collected in brass tubes and as required by state and local agencies. Chain of custody protocol will be followed. Monitoring for volatile organic compounds (VOCs) will be conducted throughout field drilling and sampling operations.

### Laboratory Analysis

All soil samples will be analyzed for Carbon Chain Analysis by EPA Method 8015 (Mod) and for aromatic hydrocarbons (BTEX) by EPA Method 8021B. Methyl tertiary butyl ether (MTBE) and additional oxygenates will be analyzed by EPA Method 8260B. Semi-volatiles including polynuclear aromatics (PNA), will be analyzed by EPA Method 8270 will be run only on the sample with the highest laboratory result from each borehole.

## SCHEDULE

Upon written notification of the Workplan approval, ATC intends to initiate field operations within five working days. ATC anticipates a 15-day completion time for this project.

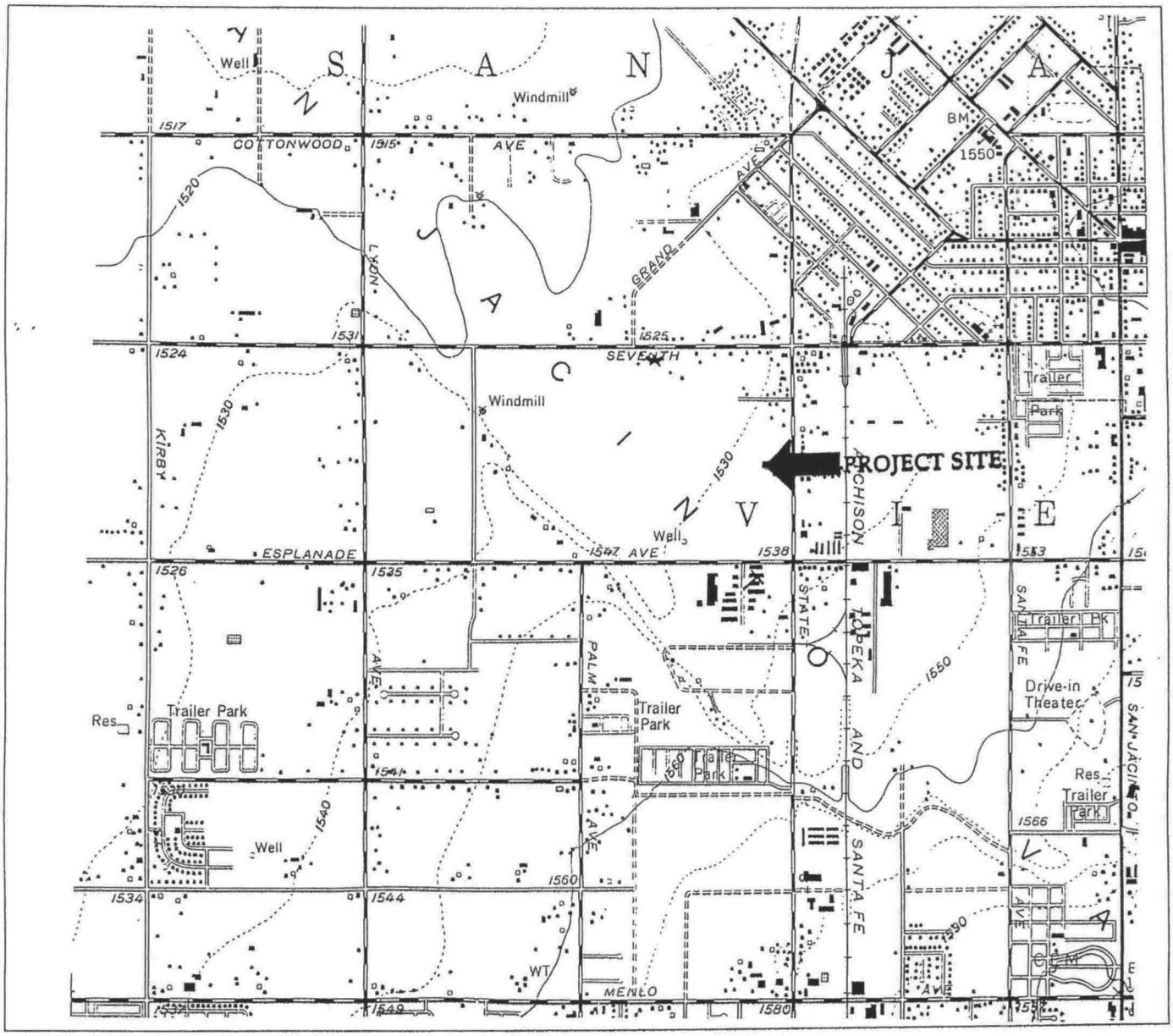
Should you have any questions regarding this Workplan, please contact the undersigned at (626) 447-5216.

Sincerely,

Ed McGlothlin
Project Manager

Timothy J. Lane
Project Geologist

Keith G. Farrell, CEG #1314
Branch Manager




FROM USGS 7.5 MINUTE QUADRANGLE, SAN JACINTO, CALIFORNIA (1953, PHOTOREVISED 1979)

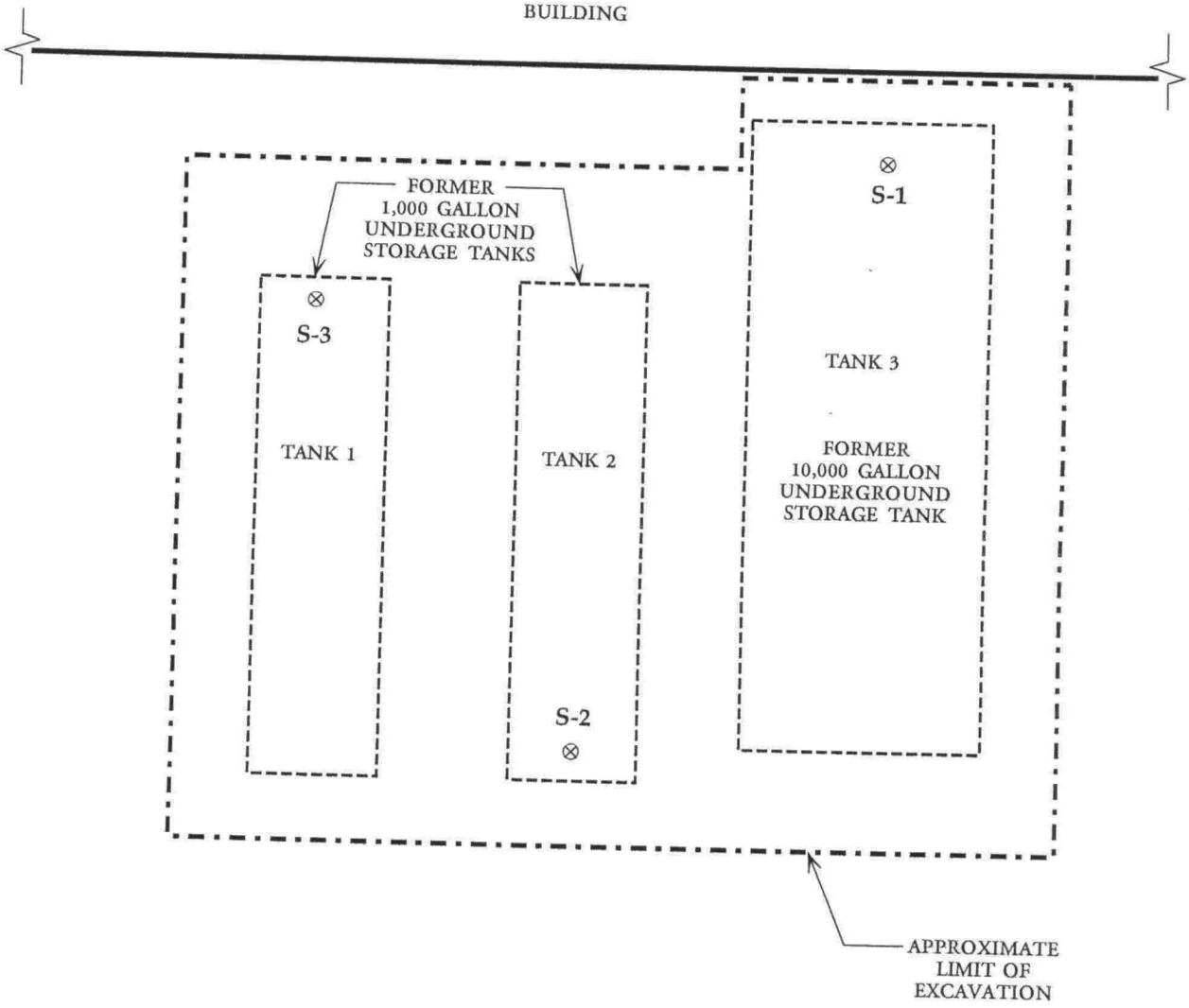
0 2000 4000

SCALE IN FEET 1" = 2000'

N

## SITE LOCATION MAP

| | | |
|---|---|---|
| PROJECT NAME:<br>WESTRA DAIRY<br>870 SANDERSON<br>SAN JACINTO, CALIFORNIA<br>PROJECT NO : 52.12077.5203 | VATC ASSOCIATES INC. | DRAWING<br>1<br>OF 2 |




## PROPOSED DRILLING LOCATIONS

APPROXIMATE SCALE: 1" = 10'

N

LEGEND:

S-3 ⊗ = PROPOSED SAMPLE LOCATIONS

PROJECT NAME: WESTRA DAIRY
870 SANDERSON
SAN JACINTO, CALIFORNIA

PROJECT NO. 52.12077.5203

ATC ASSOCIATES INC.

DRAWING 2 OF 2

# APPENDIX A
# SAMPLING PROCEDURES

STRATUS
ENVIRONMENTAL, INC.

4909 Fir Avenue, Seal Beach, California 90740 ~ Phone: (562) 799-7799 ~ Fax: (562) 799-6199

CONTROL-REGION 8
KRW
RTS

June 6, 2001
Project 1016-870-1.001

Ms. Rose Scott
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, California 92501-3348

Re: Well Installation and Vapor Extraction Testing
Westra Dairy Farm
870 North Sanderson Avenue
San Jacinto, California
UST Case No. 083303601T

Dear Ms. Scott:

Stratus Environmental, Inc. (Stratus) is pleased to submit this report presenting the results of the installation of one vapor extraction well (VE-1) and completion of a vapor extraction test (VET) at Westra Dairy Farm located at 870 North Sanderson Avenue, San Jacinto, California. The work was completed in accordance with Stratus' Workplan for Vapor Extraction Testing dated March 26, 2001. The Santa Ana Regional Water Quality Control Board (RWQCB) subsequently approved the Workplan in a letter dated April 9, 2001.

**Brief Site Background**

On February 21, 2000, ATC Associates, Inc. (ATC) submitted an Underground Storage Tank (UST) Closure Summary Report that presented analytical results of soil samples collected from beneath the former USTs. ATC's evaluation of the analytical results indicated that the soil beneath the former USTs was impacted with petroleum hydrocarbons. ATC recommended that a site assessment be completed to characterize the extent of petroleum hydrocarbon-impacted soil detected beneath the former USTs.

On October 10, 2000, ATC advanced three soil borings (S-1, S-2, and S-3) in the vicinity of the former USTs (Figure 2). Soil borings S-1 and S-2 were advanced to 70 feet below ground surface (bgs). Soil boring S-3 was advanced to 60 feet bgs. Soil samples were collected for laboratory analysis at 5-foot intervals beginning at 15 feet bgs to the total depth of the boring. Soil lithology within the borings was reported as alluvial deposits consisting of unconsolidated sands and gravel from the surface to the total depth of each

boring. Groundwater was not encountered and is reported to exist regionally at a depth of approximately 120 feet bgs (ATC, 2000).

Soil samples collected from boring S-2, located near the southern end of the former middle UST did not contain detectable petroleum hydrocarbons. Samples collected from 15 and 20 feet bgs in boring S-3, located on the northern end of the former western UST, contained low concentrations of total petroleum hydrocarbons as gasoline (TPHg; 0.147 milligrams per kilogram [mg/kg]), benzene (maximum 0.009 mg/kg), toluene (maximum 0.031 mg/kg), xylenes (0.012 mg/kg), and methyl tert-butyl ether (MTBE; maximum 0.186). Petroleum hydrocarbons were not detected in soil samples collected from 25 to 60 feet bgs in boring S-3 (ATC, 2000). Table 1 summarizes the analytical results for soil samples collected from borings S-1, S-2, and S-3.

The highest concentrations of adsorbed-phase petroleum hydrocarbons were detected between 5 and 35 feet bgs in boring S-1 located on the north side of the former eastern UST. Maximum concentrations of TPHg (2,710 mg/kg), toluene (131 mg/kg), xylenes (486 mg/kg), and MTBE (169 mg/kg by EPA Method 8021b) were detected in the sample collected immediately beneath the former UST at 15 feet bgs (ATC, 2000).

## Well Installation and Vapor Extraction Testing

Based on the findings presented in ATC's Site Investigation Report dated October 30, 2000, the RWQCB recommended that a vapor extraction test be conducted in order to evaluate the mass of petroleum hydrocarbons in the soil available for vapor recovery (RWQCB letter dated December 5, 2000). Based on this recommendation, Stratus installed on vapor extraction well and performed a vapor extraction test. The field activities and findings are presented below.

### *Vapor Extraction Well Installation*

On May 7, 2001, a Stratus Staff Geologist was on site to supervise and direct the installation of one vapor extraction well (VE-1) located in the northern portion of the former eastern UST (Figure 2). The boring was advanced using a hollow stem auger-equipped drill rig. Soil samples were collected during the advancement of the boring by driving a modified California-type, split-spoon sampler into undisturbed soil using a 140-pound slide hammer falling 30 inches (blow count). Soil samples were collected at 5-foot intervals for field screening using a photoionization detector (PID) and for classification using the Unified Soil Classification System.

The vapor extraction well was constructed using 2-inch diameter PVC casing with a 0.02-inch slotted well screen installed from approximately 10 to 20 feet bgs. Number 3 Monterey Sand was used as a filter pack around the slotted interval. Bentonite chips were used to seal the annular space of the blank well casing from approximately 2 to 9 feet bgs. A concrete seal and traffic rated well box was installed at the surface. The boring log and well construction details are included in Attachment A.

Soil generated during drilling was placed in a DOT-approved 55-gallon drum and temporarily stored onsite until arrangements for disposal are made.

### *Vapor Extraction Test*

Immediately following well installation on May 7, 2001, a mobile soil vapor extraction (SVE) system was used to extract soil vapors from vapor extraction well VE-1. The SVE system, provided by Envirosupply and Service of Fountain Valley, California, used vapor phase carbon to treat the extracted soil vapors prior to discharge to the atmosphere. A technician monitored the system, collected critical system parameters (flow rate, vapor concentrations, applied vacuum, etc), and maintained system operation for 7 hours. Vapor samples were collected for laboratory analysis at system startup, at mid-point, and at the end of the vapor extraction test. Field data collected during the VET is summarized in Table 2.

Vapor samples collected during the VET were analyzed by a state certified laboratory for volatile fuel hydrocarbons (VFH) using EPA Method 8015B, and for benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tert-butyl ether (MTBE) using EPA Method 8260B. The certified analytical report is included in Attachment B.

## Findings and Conclusions

Soil encountered at well VW-1 consisted of UST fill material (silty sand) from grade surface to approximately 10 feet bgs. Fine to medium grained sand and sand with silt was encountered between approximately 10 and 20 feet bgs. The boring log is included in Attachment A.

At an average applied vacuum of 11.4 inches of mercury, the average vapor extraction flow rate during the seven hour test was approximately 30 standard cubic feet per minute.

Based on the flow rate, laboratory results, and time of operation, an estimated 9.55 pounds of vapor-phase hydrocarbons were removed during the test (Table 2).

As indicated in Tables 2 and 3, varying concentrations of VFH, BTEX, and MTBE were detected in influent vapor samples collected during SVE operation. The highest concentrations of VFH, BTEX, and MTBE were reported in the vapor sample collected at the mid-point of the test. The hydrocarbon concentrations reduced by the end of 7 hours of extraction. Based on the cumulative mass destroyed during the VET, it is estimated that 32.7 pounds of VFH would be removed by the SVE system in a 24-hour period. This assumes that the influent hydrocarbon concentrations remain constant over that period. It is anticipated that the influent hydrocarbon concentrations and resulting hydrocarbon removal rate would significantly decrease within a short period of time.

Based on the results of the vapor extraction test, the previous site assessments, the estimated vertical column of clean soil between known hydrocarbon-impacted soil and the reported depth to groundwater (below 120 feet bgs), and the current land use (agricultural/farming), this site should be closed to further assessment and remediation.

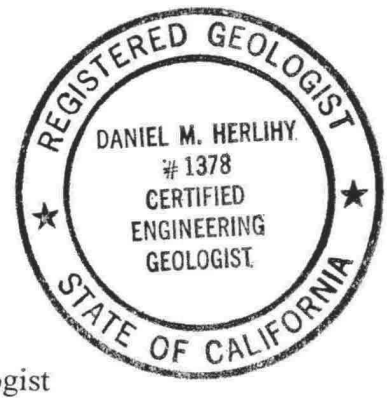
If you have any questions, please call Ronald Bailey at **(714) 670-2092**.

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Ronald J. Bailey
Project Manager

Dan Herlihy
California Registered Geologist




Attachments: Table 1 – Summary of Soil Analytical Results
Table 2 – Summary of Vapor Extraction Test Results
Table 3 – Summary of Vapor Sample Analytical Results
Figure 1 - Site Location Map
Figure 2 – Site Plan
Attachment A – Boring Log and Well Details
Attachment B – Certified Analytical Report

**References**

ATC, 2000. *Site Investigation*, Westra Dairy, 870 Sanderson Avenue, San Jacinto, CA. ATC Associates, Inc., Arcadia, CA. October 30.

# TABLE 1
## Summary of Soil Analytical Results

Westra Dairy Farm
San Jacinto, CA

| Boring ID | Depth (feet) | 8015g (mg/kg) | 8015d (mg/kg) | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Total Xylenes (mg/kg) | MTBE* (mg/kg) |
|---|---|---|---|---|---|---|---|---|
| S-1 | 15 | 2710 | ND | ND | 131 | ND | 486 | 169 |
| | 20 | 3.5 | ND | ND | 0.179 | ND | 0.375 | 3.13 |
| | 25 | ND | ND | ND | 0.008 | ND | 0.015 | 0.028 |
| | 30 | ND | ND | ND | ND | ND | ND | ND |
| | 35 | 0.497 | ND | ND | 0.0021 | 0.012 | 0.158 | 0.027 |
| | 40 | ND | ND | ND | ND | ND | ND | ND |
| | 45 | ND | ND | ND | ND | ND | ND | ND |
| | 50 | ND | ND | ND | ND | ND | ND | ND |
| | 55 | ND | ND | ND | ND | ND | ND | ND |
| | 60 | ND | ND | ND | ND | ND | ND | 0.089 |
| | 65 | ND | ND | ND | ND | ND | ND | ND |
| | 70 | ND | ND | ND | ND | ND | ND | ND |
| S-2 | 15 | ND | ND | ND | ND | ND | ND | ND |
| | 20 | ND | ND | ND | ND | ND | ND | ND |
| | 25 | ND | ND | ND | ND | ND | ND | ND |
| | 30 | ND | ND | ND | ND | ND | ND | ND |
| | 35 | ND | ND | ND | ND | ND | ND | ND |
| | 40 | ND | ND | ND | ND | ND | ND | ND |
| | 45 | ND | ND | ND | ND | ND | ND | ND |
| | 50 | ND | ND | ND | ND | ND | ND | ND |
| | 55 | ND | ND | ND | ND | ND | ND | ND |
| | 60 | ND | ND | ND | ND | ND | ND | ND |
| | 65 | ND | ND | ND | ND | ND | ND | ND |
| | 70 | ND | ND | ND | ND | ND | ND | ND |
| S-3 | 15 | 0.147 | ND | 0.009 | 0.031 | ND | 0.012 | 0.186 |
| | 20 | ND | ND | 0.006 | 0.005 | ND | ND | 0.047 |
| | 25 | ND | ND | ND | ND | ND | ND | ND |
| | 30 | ND | ND | ND | ND | ND | ND | ND |
| | 35 | ND | ND | ND | ND | ND | ND | ND |
| | 40 | ND | ND | ND | ND | ND | ND | ND |
| | 45 | ND | ND | ND | ND | ND | ND | ND |
| | 50 | ND | ND | ND | ND | ND | ND | ND |
| | 55 | ND | ND | ND | ND | ND | ND | ND |
| | 60 | ND | ND | ND | ND | ND | ND | ND |

**Notes:**
Data incorporated from ATC Associates, Inc. Site Investigation Report dated Oct. 30, 2000
ND = Not detected
mg/kg = milligrams/ kilogram
MTBE* = methyl tert-butyl ether (analyzed by EPA Method 8021B)
Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8021B.

# TABLE 2
## Summary of Vapor Extraction Test Results

Westra Dairy Farm
San Jacinto, CA

| Cumulative Operational Time (Hours) | Total Vacuum (in Hg) | Flow Rate (scfm) | TVH Concentration (Before Dilution) (ppmv)* | Benzene Concentration (Before Dilution) (ppmv)* | MTBE Concentration (Before Dilution) (ppmv)* | TVH Mass Destroyed (lbs)** | Cumulative TVH Mass Destroyed (lbs)** |
|---|---|---|---|---|---|---|---|
| 0.25 | 11.5 | 30.8 | (3,000) | (14) | (400) | 0.37 | 0.37 |
| 0.5 | 11.5 | 29.8 | 1,320 | NA | NA | -- | -- |
| 0.75 | 11.5 | 30.0 | 1,364 | NA | NA | -- | -- |
| 1.0 | 12.0 | 32.7 | 1,278 | NA | NA | -- | -- |
| 1.5 | 11.5 | 30.7 | 1,357 | NA | NA | -- | -- |
| 2.0 | 11.5 | 30.7 | 1,354 | NA | NA | -- | -- |
| 2.5 | 11.0 | 31.0 | 1,366 | NA | NA | -- | -- |
| 3.0 | 11.0 | 31.3 | 1,573 | NA | NA | -- | -- |
| 3.5 | 11.0 | 8.4 | 1,059 | NA | NA | -- | -- |
| 4.0 | 11.0 | 32.4 | (3,000) | (27) | (410) | 5.13 | 5.49 |
| 4.5 | 11.0 | 31.6 | 1,854 | NA | NA | -- | -- |
| 5.0 | 11.5 | 31.8 | 1,726 | NA | NA | -- | -- |
| 5.5 | 11.5 | 32.5 | 1,708 | NA | NA | -- | -- |
| 6.0 | 11.5 | 32.4 | 1,693 | NA | NA | -- | -- |
| 6.5 | 11.5 | 32.5 | 1,604 | NA | NA | -- | -- |
| 7.0 | 11.5 | 32.4 | (2,300) | (17) | (270) | 4.06 | 9.55 |

Notes:
PID calibrated to 100 ppmv Hexane
TVH Mass Recovery Calculation:

$$\text{lbs. TVH} = \frac{(\text{ppmV})(60\text{min/hr})(\text{hrs})(\text{SCFM})(100\ \text{lb/lb-mole})}{(1 \times 10^6)(379\ \text{ft}^3\text{/lb-mole})}$$

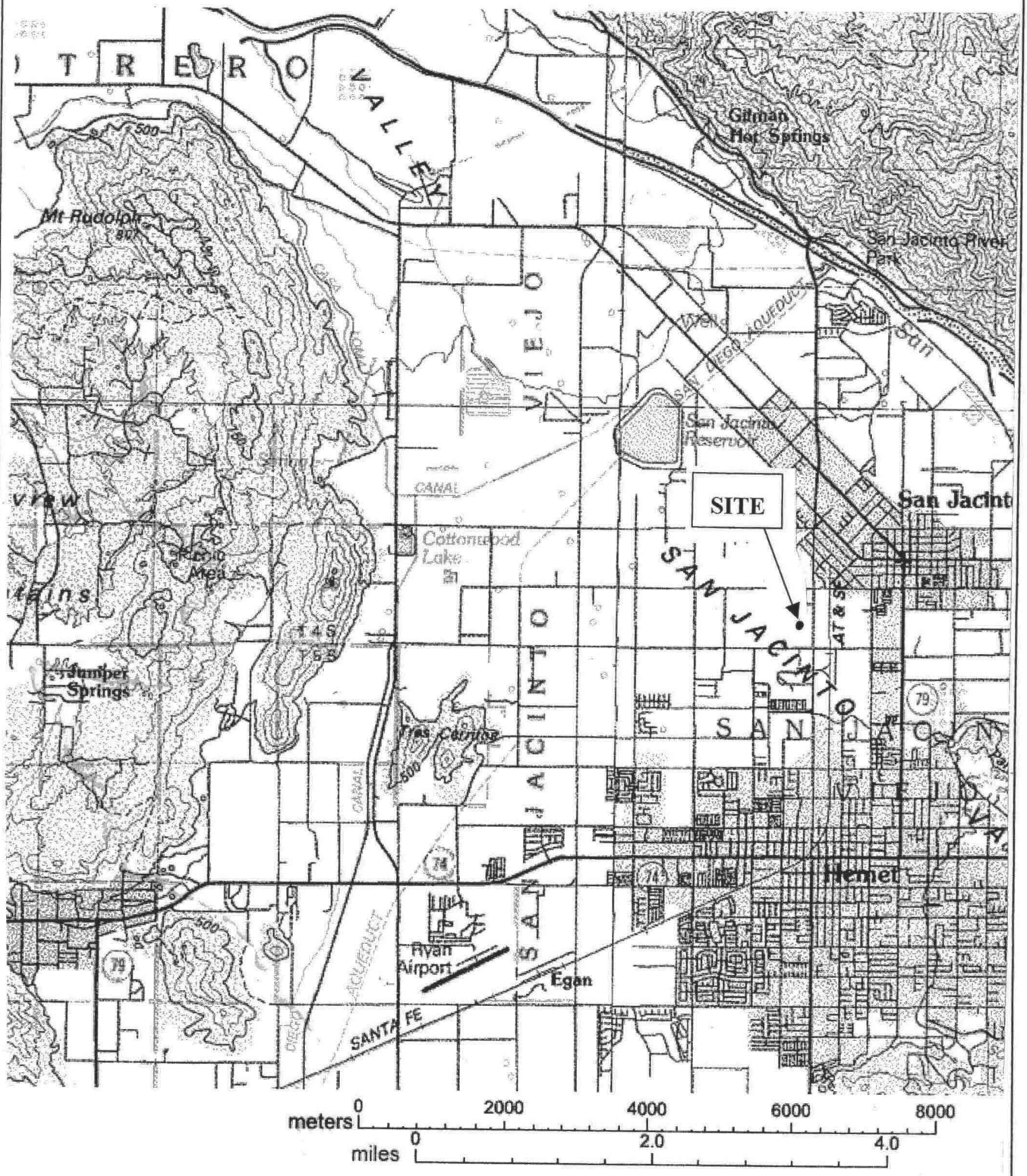
* = TVH, Benzene, and MTBE values in parenthesis are laboratory analytical results.
** = TVH mass destroyed is calculated using TVH laboratory analytical results.
ppmV = concentration in "Parts per Million by Volume"
TVH = total volatile hydrocarbon
SCFM = flow rate in Standard Cubic Feet per Minute
NA = not analyzed
-- = not applicable.
100 lb/lb-mole = average molar weight of gasoline
379 $ft^3$/lb-mole = molar gasoline volume at 60°F and 1 atmosphere

# TABLE 3
## Summary of Vapor Sample Analytical Results

Westra Dairy Farm
San Jacinto, CA

| Sample ID | Date Collected | VFH (ppmv) | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | Methl *tert*-Butyl Ether (ppmv) | Lab |
|---|---|---|---|---|---|---|---|---|
| U.S. EPA Methods | | 8015M | 8260B | | | | | |
| VE-1 START | 5/7/01 | 3,000 | 14 | 70 | 14 | 83 | 400 | Del Mar |
| VE-1-MID | 5/7/01 | 3,000 | 27 | 120 | 23 | 139 | 410 | Del Mar |
| VE-1-END | 5/7/01 | 2,300 | 17 | 57 | ND<9.2 | 24 | 270 | Del Mar |

**Notes:**
VFH = Volatile fuel hydrocarbons
Del Mar = Del Mar Analytical, Inc., Irvine, California
ppmv = parts per million by volume

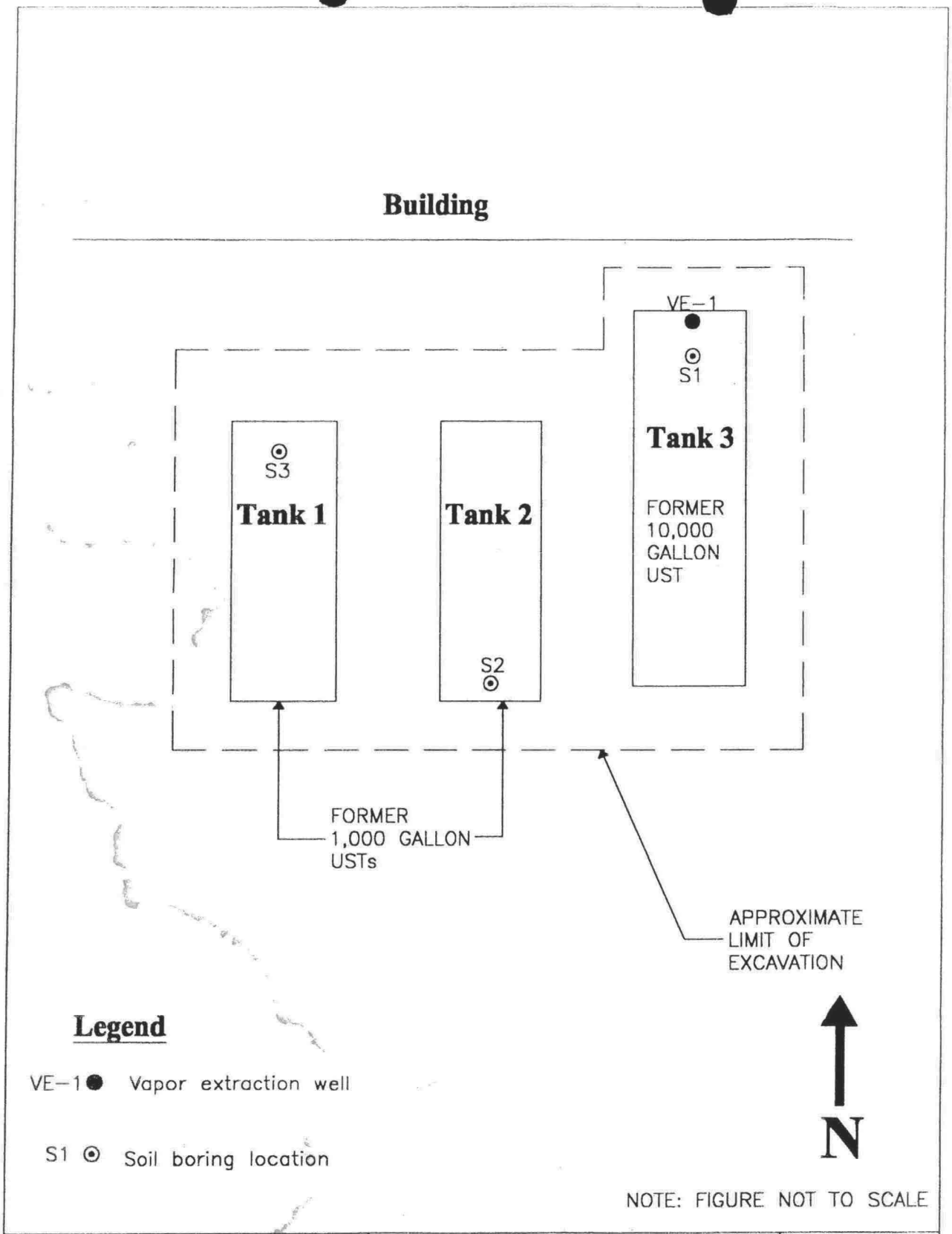



STRATUS
ENVIRONMENTAL, INC.

WESTRA DAIRY FARM
870 NORTH SANDERSON AVENUE
SAN JACINTO, CALIFORNIA

SITE LOCATION MAP

FIGURE
**1**
PROJECT NO.
01-0313




| | | |
|---|---|---|
| STRATUS ENVIRONMENTAL, INC. | **WESTRA DAIRY FARM**<br>**870 NORTH SANDERSON AVE.**<br>**SAN JACINTO, CALIFORNIA**<br><br>**SITE PLAN** | **FIGURE**<br>**2**<br><br>**PROJECT NO.**<br>**1016-870-1** |

# ATTACHMENT A

## Boring Log and Well Details

SOIL BORING LOG  Boring No. VE-1  Sheet 1 of 1

Client: Westra Dairy  Date: 5/7/01
Address: San Jacinto, CA  Drilling Company: Cascade  rig type: H.S.A. / CME
Driller:
Project No: 1016-870-1  Method: H.S.A.  hole diam.: 8"
Logged By: EPAK

Well Pack: sand: 9 ft. to 20 ft. #3; bent.: 2 ft. to 9 ft. chips; grout: ft. to ft.
Well Construction: casing: 0-10'  screen interval: 10-20'  casing diam.: 2"  screen slot size: 0.02"
Depth to GW: ▽ first encountered groundwater NA  ▼ static groundwater NA

| Sample Type | Sample No. | Blow Count | Sample Time | Sample Recov. | Well Construct. | Depth Scale | LITHO COLUMN | Descriptions of Materials and Conditions | PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | blank casing 2" dia. | 1 | | UST Fill Material (~0-10') | |
| | | | | | | 2 | | | |
| | | | | | | 3 | | | |
| | | | | | | 4 | | | |
| | — | 4,6,9 | 0845 | 18" | | 5 | Sm | Silty Sand; lt to med. brown; fine grained; moist | 1473 |
| | | | | | | 6 | | | |
| | | | | | | 7 | | | |
| | | | | | | 8 | | | |
| | | | | | | 9 | | | |
| | — | 3,4,7 | 8:55 | 18" | | 10 | SP | Sand w/ Silt; dk grysh brn; fine sand w/ trace med + crs sd; sl micaceous; moist | 1280 |
| | | | | | 0.02" Slot well screen | 11 | | | |
| | | | | | | 12 | | | |
| | | | | | | 13 | | | |
| | | | | | | 14 | | | |
| | — | 7,9,11 | 0903 | 18" | | 15 | Sm/ SP | Sand w/ Silt; lt. gray-brn; fine-med. grain sand; interbeds of silt + clay; moist | 1640 |
| | | | | | | 16 | | | |
| | | | | | | 17 | | | |
| | | | | | | 18 | | | |
| | | | | | | 19 | | | |
| | — | 8,8,12 | 0912 | 18" | | 20 | | As Above | 1115 |

Comments:
TD = 20 ft. bgs
Drilled on N. side of former E. UST

STRATUS ENVIRONMENTAL, INC.

# ATTACHMENT B

## Certified Analytical Report

Del Mar Analytical

2852 Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-9596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Stratus Environmental, Inc.
6481 Orangethorpe, Suite 8
Buena Park, CA 90620
Attention: Ron Bailey

Project ID: Westra Dairy Farm
San Jacinto, CA
Report Number: IKE0236

Sampled: 05/07/01
Received: 05/08/01

## VOLATILE FUEL HYDROCARBONS in Air (EPA 8015B MOD)

| Analyte | Method | Batch | Reporting Limit | Sample Result | Dilution Factor | Date Extracted | Date Analyzed | Data Qualifiers |
|---|---|---|---|---|---|---|---|---|
| | | | mg/m³ | mg/m³ | | | | |
| **Sample ID: IKE0236-01 (VE-1-START - Air)** | | | | | | | | |
| **Volatile Fuel Hydrocarbons** | EPA 8015B MOD | I1E0830 | 20 | **12000** | 2 | 5/8/01 | 5/8/01 | QG |
| **Sample ID: IKE0236-02 (VE-1-MID - Air)** | | | | | | | | |
| **Volatile Fuel Hydrocarbons** | EPA 8015B MOD | I1E0830 | 200 | **12000** | 20 | 5/8/01 | 5/8/01 | QG |
| **Sample ID: IKE0236-03 (VE-1-END - Air)** | | | | | | | | |
| **Volatile Fuel Hydrocarbons** | EPA 8015B MOD | I1E0830 | 200 | **9300** | 20 | 5/8/01 | 5/8/01 | QG |

**Del Mar Analytical, Irvine**
Pat Abe
Project Manager

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# LABORATORY REPORT

Prepared For: Stratus Environmental, Inc.
6481 Orangethorpe, Suite 8
Buena Park, CA 90620

Attention: Ron Bailey
Project: Westra Dairy Farm
San Jacinto, CA

Sampled: 05/07/01
Received: 05/08/01
Reported: 05/11/01

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Buena Park, CA 90620
Attention: Ron Bailey

Project ID: Westra Dairy Farm
San Jacinto, CA
Report Number: IKE0236

Sampled: 05/07/01
Received: 05/08/01

## VOLATILE FUEL HYDROCARBONS in Air (EPA 8015B MOD.)

| Analyte | Method | Batch | Reporting Limit | Sample Result | Dilution Factor | Date Extracted | Date Analyzed | Data Qualifiers |
|---|---|---|---|---|---|---|---|---|
| | | | ppmv | ppmv | | | | |
| **Sample ID: IKE0236-01 (VE-1-START - Air)** | | | | | | | | |
| **Volatile Fuel Hydrocarbons ppmv** | EPA 8015B MODI1E0830 | | 4.8 | **3000** | 2 | 5/8/01 | 5/8/01 | QV |
| **Sample ID: IKE0236-02 (VE-1-MID - Air)** | | | | | | | | |
| **Volatile Fuel Hydrocarbons ppmv** | EPA 8015B MODI1E0830 | | 48 | **3000** | 20 | 5/8/01 | 5/8/01 | QV |
| **Sample ID: IKE0236-03 (VE-1-END - Air)** | | | | | | | | |
| **Volatile Fuel Hydrocarbons ppmv** | EPA 8015B MODI1E0830 | | 48 | **2300** | 20 | 5/8/01 | 5/8/01 | QV |

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Attention: Ron Bailey

Project ID: Westra Dairy Farm
San Jacinto, CA
Report Number: IKE0236

Sampled: 05/07/01
Received: 05/08/01

## BTEX and MTBE in Air by GC/MS (EPA 5030B/8260B MOD)

| Analyte | Method | Batch | Reporting Limit | Sample Result | Dilution Factor | Date Extracted | Date Analyzed | Data Qualifiers |
|---|---|---|---|---|---|---|---|---|
| | | | mg/m³ | mg/m³ | | | | |
| **Sample ID: IKE0236-01 (VE-1-START - Air)** | | | | | | | | |
| **Benzene** | EPA 8260B | MODI1E0822 | 40 | **46** | 10 | 5/8/01 | 5/9/01 | |
| **Ethylbenzene** | EPA 8260B | MODI1E0822 | 40 | **60** | 10 | 5/8/01 | 5/9/01 | |
| **Toluene** | EPA 8260B | MODI1E0822 | 40 | **260** | 10 | 5/8/01 | 5/9/01 | |
| **o-Xylene** | EPA 8260B | MODI1E0822 | 40 | **95** | 10 | 5/8/01 | 5/9/01 | |
| **m,p-Xylenes** | EPA 8260B | MODI1E0822 | 40 | **260** | 10 | 5/8/01 | 5/9/01 | |
| **Methyl-tert-butyl Ether (MTBE)** | EPA 8260B | MODI1E0822 | 100 | **1400** | 10 | 5/8/01 | 5/9/01 | |
| *Surrogate: Dibromofluoromethane (80-120%)* | | | | *96.4 %* | | | | |
| *Surrogate: Toluene-d8 (80-120%)* | | | | *99.0 %* | | | | |
| *Surrogate: 4-Bromofluorobenzene (80-120%)* | | | | *94.2 %* | | | | |
| **Sample ID: IKE0236-02 (VE-1-MID - Air)** | | | | | | | | |
| **Benzene** | EPA 8260B | MODI1E0822 | 40 | **85** | 10 | 5/8/01 | 5/9/01 | |
| **Ethylbenzene** | EPA 8260B | MODI1E0822 | 40 | **100** | 10 | 5/8/01 | 5/9/01 | |
| **Toluene** | EPA 8260B | MODI1E0822 | 40 | **460** | 10 | 5/8/01 | 5/9/01 | |
| **o-Xylene** | EPA 8260B | MODI1E0822 | 40 | **170** | 10 | 5/8/01 | 5/9/01 | |
| **m,p-Xylenes** | EPA 8260B | MODI1E0822 | 40 | **450** | 10 | 5/8/01 | 5/9/01 | |
| **Methyl-tert-butyl Ether (MTBE)** | EPA 8260B | MODI1E0822 | 100 | **1500** | 10 | 5/8/01 | 5/9/01 | |
| *Surrogate: Dibromofluoromethane (80-120%)* | | | | *98.0 %* | | | | |
| *Surrogate: Toluene-d8 (80-120%)* | | | | *100 %* | | | | |
| *Surrogate: 4-Bromofluorobenzene (80-120%)* | | | | *95.0 %* | | | | |
| **Sample ID: IKE0236-03 (VE-1-END - Air)** | | | | | | | | |
| **Benzene** | EPA 8260B | MODI1E0822 | 40 | **54** | 10 | 5/8/01 | 5/8/01 | |
| Ethylbenzene | EPA 8260B | MODI1E0822 | 40 | ND | 10 | 5/8/01 | 5/8/01 | |
| **Toluene** | EPA 8260B | MODI1E0822 | 40 | **220** | 10 | 5/8/01 | 5/8/01 | |
| o-Xylene | EPA 8260B | MODI1E0822 | 40 | ND | 10 | 5/8/01 | 5/8/01 | |
| **m,p-Xylenes** | EPA 8260B | MODI1E0822 | 40 | **100** | 10 | 5/8/01 | 5/8/01 | |
| **Methyl-tert-butyl Ether (MTBE)** | EPA 8260B | MODI1E0822 | 100 | **990** | 10 | 5/8/01 | 5/8/01 | |
| *Surrogate: Dibromofluoromethane (80-120%)* | | | | *99.2 %* | | | | |
| *Surrogate: Toluene-d8 (80-120%)* | | | | *99.8 %* | | | | |
| *Surrogate: 4-Bromofluorobenzene (80-120%)* | | | | *95.0 %* | | | | |

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Stratus Environmental, Inc.
6481 Orangethorpe, Suite 8
Buena Park, CA 90620
Attention: Ron Bailey

Project ID: Westra Dairy Farm
San Jacinto, CA
Report Number: IKE0236

Sampled: 05/07/01
Received: 05/08/01

## BTEX and MTBE in Air by GC/MS (EPA 5030B/8260B MOD.)

| Analyte | Method | Batch | Reporting Limit | Sample Result | Dilution Factor | Date Extracted | Date Analyzed | Data Qualifiers |
|---|---|---|---|---|---|---|---|---|
| | | | ppmv | ppmv | | | | |
| **Sample ID: IKE0236-01 (VE-1-START - Air)** | | | | | | | | |
| **Benzene ppmv** | EPA 8260B | MODI1E0822 | 13 | **14** | 10 | 5/8/01 | 5/9/01 | |
| **Ethylbenzene ppmv** | EPA 8260B | MODI1E0822 | 9.2 | **14** | 10 | 5/8/01 | 5/9/01 | |
| **Toluene ppmv** | EPA 8260B | MODI1E0822 | 11 | **70** | 10 | 5/8/01 | 5/9/01 | |
| **o-Xylene ppmv** | EPA 8260B | MODI1E0822 | 9.2 | **22** | 10 | 5/8/01 | 5/9/01 | |
| **m,p-Xylenes ppmv** | EPA 8260B | MODI1E0822 | 9.2 | **61** | 10 | 5/8/01 | 5/9/01 | |
| **Methyl-tert-butyl Ether (MTBE) ppm** | EPA 8260B | MODI1E0822 | 28 | **400** | 10 | 5/8/01 | 5/9/01 | |
| *Surrogate: Dibromofluoromethane ppmv (80-120%)* | | | | *96.4 %* | | | | |
| *Surrogate: Toluene-d8 ppmv (80-120%)* | | | | *99.2 %* | | | | |
| *Surrogate: 4-Bromofluorobenzene ppmv (80-120%)* | | | | *94.2 %* | | | | |
| **Sample ID: IKE0236-02 (VE-1-MID - Air)** | | | | | | | | |
| **Benzene ppmv** | EPA 8260B | MODI1E0822 | 13 | **27** | 10 | 5/8/01 | 5/9/01 | |
| **Ethylbenzene ppmv** | EPA 8260B | MODI1E0822 | 9.2 | **23** | 10 | 5/8/01 | 5/9/01 | |
| **Toluene ppmv** | EPA 8260B | MODI1E0822 | 11 | **120** | 10 | 5/8/01 | 5/9/01 | |
| **o-Xylene ppmv** | EPA 8260B | MODI1E0822 | 9.2 | **39** | 10 | 5/8/01 | 5/9/01 | |
| **m,p-Xylenes ppmv** | EPA 8260B | MODI1E0822 | 9.2 | **100** | 10 | 5/8/01 | 5/9/01 | |
| **Methyl-tert-butyl Ether (MTBE) ppm** | EPA 8260B | MODI1E0822 | 28 | **410** | 10 | 5/8/01 | 5/9/01 | |
| *Surrogate: Dibromofluoromethane ppmv (80-120%)* | | | | *98.1 %* | | | | |
| *Surrogate: Toluene-d8 ppmv (80-120%)* | | | | *100 %* | | | | |
| *Surrogate: 4-Bromofluorobenzene ppmv (80-120%)* | | | | *94.9 %* | | | | |
| **Sample ID: IKE0236-03 (VE-1-END - Air)** | | | | | | | | |
| **Benzene ppmv** | EPA 8260B | MODI1E0822 | 13 | **17** | 10 | 5/8/01 | 5/8/01 | |
| Ethylbenzene ppmv | EPA 8260B | MODI1E0822 | 9.2 | ND | 10 | 5/8/01 | 5/8/01 | |
| **Toluene ppmv** | EPA 8260B | MODI1E0822 | 11 | **57** | 10 | 5/8/01 | 5/8/01 | |
| o-Xylene ppmv | EPA 8260B | MODI1E0822 | 9.2 | ND | 10 | 5/8/01 | 5/8/01 | |
| **m,p-Xylenes ppmv** | EPA 8260B | MODI1E0822 | 9.2 | **24** | 10 | 5/8/01 | 5/8/01 | |
| **Methyl-tert-butyl Ether (MTBE) ppm** | EPA 8260B | MODI1E0822 | 28 | **270** | 10 | 5/8/01 | 5/8/01 | |
| *Surrogate: Dibromofluoromethane ppmv (80-120%)* | | | | *99.4 %* | | | | |
| *Surrogate: Toluene-d8 ppmv (80-120%)* | | | | *100 %* | | | | |
| *Surrogate: 4-Bromofluorobenzene ppmv (80-120%)* | | | | *94.9 %* | | | | |

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Attention: Ron Bailey

Project ID: Westra Dairy Farm
San Jacinto, CA
Report Number: IKE0236

Sampled: 05/07/01
Received: 05/08/01

## METHOD BLANK/QC DATA

## VOLATILE FUEL HYDROCARBONS in Air (EPA 8015B MOD)

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: I1E0830 Extracted: 05/08/01** | | | | | | | | | | |
| **Blank Analyzed: 05/08/01 (I1E0830-BLK1)** | | | | | | | | | | |
| Volatile Fuel Hydrocarbons | ND | 10 | mg/m³ | | | | | | | *QG* |
| **LCS Analyzed: 05/08/01 (I1E0830-BS2)** | | | | | | | | | | |
| Volatile Fuel Hydrocarbons | 317 | 10 | mg/m³ | 286 | | 111 | 70-130 | | | *QG* |

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Sampled: 05/07/01
Received: 05/08/01

## METHOD BLANK/QC DATA

## VOLATILE FUEL HYDROCARBONS in Air (EPA 8015B MOD.)

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: I1E0830 Extracted: 05/08/01** | | | | | | | | | | |
| **Blank Analyzed: 05/08/01 (I1E0830-BLK1)** | | | | | | | | | | |
| Volatile Fuel Hydrocarbons ppmv | ND | 2.4 | ppmv | | | | | | | *QV* |

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San Jacinto, CA
Report Number: IKE0236

Sampled: 05/07/01
Received: 05/08/01

## METHOD BLANK/QC DATA

## BTEX and MTBE in Air by GC/MS (EPA 5030B/8260B MOD)

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: I1E0822 Extracted: 05/08/01** | | | | | | | | | | |
| **Blank Analyzed: 05/08/01 (I1E0822-BLK1)** | | | | | | | | | | |
| Benzene | ND | 4.0 | mg/m³ | | | | | | | |
| Ethylbenzene | ND | 4.0 | mg/m³ | | | | | | | |
| Toluene | ND | 4.0 | mg/m³ | | | | | | | |
| o-Xylene | ND | 4.0 | mg/m³ | | | | | | | |
| m,p-Xylenes | ND | 4.0 | mg/m³ | | | | | | | |
| Methyl-tert-butyl Ether (MTBE) | ND | 10 | mg/m³ | | | | | | | |
| *Surrogate: Dibromofluoromethane* | *49.1* | | *mg/m³* | *50.0* | | *98.2* | *80-120* | | | |
| *Surrogate: Toluene-d8* | *51.6* | | *mg/m³* | *50.0* | | *103* | *80-120* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *49.6* | | *mg/m³* | *50.0* | | *99.2* | *80-120* | | | |
| **LCS Analyzed: 05/08/01 (I1E0822-BS1)** | | | | | | | | | | |
| Benzene | 51.5 | 4.0 | mg/m³ | 50.0 | | 103 | 75-130 | | | |
| Ethylbenzene | 54.8 | 4.0 | mg/m³ | 50.0 | | 110 | 75-135 | | | |
| Toluene | 53.0 | 4.0 | mg/m³ | 50.0 | | 106 | 75-130 | | | |
| o-Xylene | 53.8 | 4.0 | mg/m³ | 50.0 | | 108 | 75-130 | | | |
| m,p-Xylenes | 111 | 4.0 | mg/m³ | 100 | | 111 | 75-135 | | | |
| Methyl-tert-butyl Ether (MTBE) | 48.2 | 10 | mg/m³ | 50.0 | | 96.4 | 65-135 | | | |
| *Surrogate: Dibromofluoromethane* | *49.9* | | *mg/m³* | *50.0* | | *99.8* | *80-120* | | | |
| *Surrogate: Toluene-d8* | *51.3* | | *mg/m³* | *50.0* | | *103* | *80-120* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *50.2* | | *mg/m³* | *50.0* | | *100* | *80-120* | | | |

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San Jacinto, CA
Report Number: IKE0236

Sampled: 05/07/01
Received: 05/08/01

## METHOD BLANK/QC DATA

## BTEX and MTBE in Air by GC/MS (EPA 5030B/8260B MOD.)

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch: I1E0822 Extracted: 05/08/01** | | | | | | | | | | |
| **Blank Analyzed: 05/08/01 (I1E0822-BLK1)** | | | | | | | | | | |
| Benzene ppmv | ND | 1.3 | ppmv | | | | | | | |
| Ethylbenzene ppmv | ND | 0.92 | ppmv | | | | | | | |
| Toluene ppmv | ND | 1.1 | ppmv | | | | | | | |
| o-Xylene ppmv | ND | 0.92 | ppmv | | | | | | | |
| m,p-Xylenes ppmv | ND | 0.92 | ppmv | | | | | | | |
| Methyl-tert-butyl Ether (MTBE) ppmv | ND | 2.8 | ppmv | | | | | | | |
| *Surrogate: Dibromofluoromethane ppmv* | *6.32* | | *ppmv* | *6.43* | | *98.3* | *80-120* | | | |
| *Surrogate: Toluene-d8 ppmv* | *12.6* | | *ppmv* | *12.2* | | *103* | *80-120* | | | |
| *Surrogate: 4-Bromofluorobenzene ppmv* | *6.97* | | *ppmv* | *7.03* | | *99.1* | *80-120* | | | |

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San Jacinto, CA
Report Number: IKE0236

Sampled: 05/07/01
Received: 05/08/01

## DATA QUALIFIERS AND DEFINITIONS

**QG** Carbon range C6-C12 quantitated against a gasoline standard.

**QV** The molecular weight of 100 was used to convert Volatile Fuel Hydrocarbons from mg/m3 to ppm by volume (ppmv).

**ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

**NR** Not reported.

**RPD** Relative Percent Difference

**Del Mar Analytical, Irvine**
Pat Abe
Project Manager

*The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.*

File
UST

# California Regional Water Quality Control Board
## Santa Ana Region


**Winston H. Hickox**
*Secretary for Environmental Protection*

Internet Address: http://www.swrcb.ca.gov/rwqcb8
3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (909) 782-4130 - FAX (909) 781-6288

**Gray Davis**
*Governor*


*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.swrcb.ca.gov/rwqcb8.*

December 26, 2001

Mr. Cal Westra
Westra Family Trust
870 North Sanderson Avenue
San Jacinto, California 92582

**SUBJECT:** **NO FURTHER ACTION**
**WESTRA DAIRY FARM TANKS**
**870 NORTH SANDERSON AVENUE**
**SAN JACINTO, CALIFORNIA 92582**
**UST CASE NO. 083303601T**

Dear Mr. Westra:

This letter confirms the completion of the site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Enclosed is the Case Summary for the referenced site for your records.

Based upon the available information, including current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action that is related to the underground storage tank removal is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721(e).

Please provide documentation of well abandonment to this office to complete our file. Please contact Rose Scott of our office at (909) 320-6375, if you have any questions regarding this matter.

Sincerely,

K t V. Bttl

for Gerard J. Thibeault
Executive Officer

Enclosure: Case Closure Summary

cc: Sharon Boltinghouse, County of Riverside
Ronald Bailey, Stratus Environmental, Inc.
Ed McGlothlin, Consolidated Waste Industries

# CASE SUMMARY

## I. AGENCY INFORMATION

| | |
|---|---|
| Agency Name: California Regional Water Quality Control Board, Santa Ana Region | Address: 3737 Main Street, Suite 500 |
| city/state/zip: Riverside, CA 92501-3348 | Phone: (909) 320-6375 or (909)-782-4130 |
| Staff: Rose T. Scott | Title: Associate Engineering Geologist |

## II. CASE INFORMATION

| | |
|---|---|
| Site Name: | Westra Dairy Farm |
| Location: | 870 N. Sanderson Ave., San Jacinto, California 92582 |
| RB Case # | 083303601T |

| Responsible Parties | Address | Phone Number |
|---|---|---|
| Cal Westra<br>Westra Family Trust | 870 N. Sanderson Ave.<br>San Jacinto, California 92582 | (909) 239-0247 |

| Tank No. | Size In Gallons | Contents | Closed in-place Removed? | Date |
|---|---|---|---|---|
| 1 | 1,000 gallons | Gasoline | Removed | December 14, 1999 |
| 2 | 1,000 gallons | Gasoline | Removed | December 14, 1999 |
| 3 | 10,000 gallons | Gasoline | Removed | December 14, 1999 |

## III. RELEASE AND SITE CHARACTERIZATION INFORMATION

| | |
|---|---|
| Cause & type of release: underground tanks | |
| Site characterization complete: YES [ x ] NO | Closure report dated: February 21, 2000 |
| Monitoring Wells installed: YES [ ] NO [ x ] | Proper screened interval: YES [ ] NO [ ] NA [ x ] |
| Highest groundwater depth below surface:<br>120 feet estimated | Lowest depth:<br>120 feet estimated |
| Flow Direction: esimated to the east | Most sensitive current groundwater use: |
| Groundwater Sub-Basin: San Jacinto –Intake and Upper Pressure | Reports(s) filed: California Regional Water Quality Control Board |
| Report(s) on file? Yes | 3737 Main Street, Suit 500, Riverside, CA 92501-3348 |

| TREATMENT AND DISPOSAL OF AFFECTED MATERIAL | | | |
|---|---|---|---|
| MATERIAL | AMOUNT | ACTION TREATMENT OR DISPOSAL W/DESTINATION | Date |
| Soil | 120 tons | Excavation and Offsite Disposal | December 1999 |

| MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS – BEFORE & AFTER CLEANUP | | | | |
|---|---|---|---|---|
| CONTAMINANT | SOIL (mg/kg) | | WATER (µg/l) | |
| | Before | After | Before | After |
| Total Petroleum Hydrocarbons – Gasoline (8015) | NA | 5,290 | NA | NA |
| Benzene | NA | 36.8 | NA | NA |
| MTBE | NA | 377 | NA | NA |
| Toluene | NA | 638 | NA | NA |
| Ethylbenzene | NA | 200 | NA | NA |
| Xylenes | NA | 352 | NA | NA |

NA - Not applicable

**IV. CLOSURE**

Does completed corrective action protect beneficial uses per the regional board basin plan?
YES [ x ] NO [ ]

Does the corrective action protect public health for current land use? YES [ x ] NO [ ]

**SITE MANAGEMENT REQUIREMENTS**
Should corrective action be reviewed if land use changes?
YES [ x ] NO [ ]

Monitoring or vapor wells decommissioned: YES [ ] NO [ x ] N/A [ ]
Number decommissioned: none

List of enforcement actions taken: none
List enforcement action rescinded: none

**VII. ADDITIONAL COMMENTS, DATA, ETC.**

On December 14, 1999, three gaolsine underground storage tanks (USTs) were removed from the site under the direction of Riverside County. The tank area was over-excavated by Consolidated Waste Industries, and the contaminated soil (approximately 120 tons) was transported to TPS recycling in Adelanto, California. The highest concentrations of petroleum hydrocarbons detected beneath the gasoline tanks are shown on the preceding table. These are the concentrations left in place at the bottom of the excavation. On March 15, 2000, the County of Riverside Health Services Agency Department of Environmental Health transferred this case to our office for Regional Board oversight for jurisdictional reasons.

In October 2000, three borings were drilled at the site to depths of 60 to 70 feet below ground surface (bgs). Groundwater was not detected to a depth of 70 feet below ground surface. The expected depth to groundwater is reported to be 120 feet or greater. The site is underlain by sandy silt, silty sand and gravelly sand. The highest concentrations of petroleum hydrocarbons were detected in the 15-foot sample from Boring S-1. In addition to the contaminants identified in the table above, the following compounds were

detected: Naphthalene at 32.3 mg/kg, N-propylbenzene at 34.6 mg/kg, 1,2,4-trimethylbenzene at 248.0 mg/kg, 1,3,5-trimethylbenzene at 82.8 mg/kg, and 2-Methylnaphthalene at 33.6 mg/kg. The concentrations significantly decreased with depth indicating that the extent of petroleum hydrocarbons was limited to between 15 and 20 feet bgs. In the soil samples collected at 25, 35 and 60 feet bgs, TPH, MTBE, toluene, ethylbenzene and xylenes were detected at low concentrations (less than 0.5 mg/kg). Petroleum hydrocarbons were not detected in boring S-2 and were only detected at low concentrations (0.147 mg/kg TPH, 0.009 mg/kg benzene, 0.031 mg/kg toluene, 0.012 mg/kg xylenes and 0.186 mg/kg MTBE) in the 15 and 20-foot samples from boring S-3, indicating that the lateral extent of petroleum hydrocarbons in soil was also limited.

In December 2000, Regional Board staff recommended an extended vapor extraction test in order to evaluate the mass of petroleum hydrocarbons in the soil available for vapor recovery. On May 7, 2001, one vapor extraction well was installed in the area of the highest concentrations of petroleum hydrocarbons in soil and a 7-hour vapor extraction test was conducted. Vapor samples were collected at the beginning, middle and end of the test. The highest concentrations were detected at the mid-point of the test. The influent concentrations of TPH and MTBE decreased from the beginning to the end of the test from 3,000 and 400 ppmv to 2,300 and 270 ppmv, respectively. Concentrations of benzene increased from 0.14 ppmv at the beginning of the test to 27 ppmv at the middle and 0.17 ppmv at the end. MTBE also increased slightly during the mid-test sampling. At a flow rate of 30 scfm, only 9.55 pounds of hydrocarbons were removed during the test. The results of the test indicated that there is not a significant source of petroleum hydrocarbons remaining in the soil that would pose a threat to groundwater resources.

No further action is recommended for the following reasons:

- The areas primarily affected by the release were remediated by excavation and off-site disposal of approximately 120 tons of soil containing petroleum hydrocarbons.
- Assessment results indicated the residual petroleum hydrocarbons in soil are limited to an area estimated to have a 15-foot radius between 15 and 20 feet bgs, southeast of the maintenance building.
- Concentrations in extracted vapors during the vapor extraction test did not indicate a significantly rich source of petroleum hydrocarbons in soil.
- Groundwater is expected to be at a depth of 120 feet, at least 60 feet below the deepest detected compound (MTBE at a concentration of 0.089 mg/kg of MtBE, using EPA Method 8021) and 100 feet beneath the deepest detected benzene (0.006 mg/kg).

**VIII. RWQCB AGENCY RESPONSE**

Regional Board Staff:

| | |
|---|---|
| Name: Rose T. Scott | Title: Associate Engineering Geologist |
| Signature: Rose T. Scott | Date: 12/26/01 |

| | |
|---|---|
| Name: Kenneth R. Williams - Senior Engineering Geologist | Response: Concurs with Closure |
| Signature: Kenneth R. Williams | Date: 12/26/01 |

# Westra Family Trust

PO Box 1038
Mira Loma, CA 91752-1038

SANTA ANA REGION
RECD DATE
APR 17 2002
Sam
EGH

April 15, 2002

California Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3348

Subject: Well Abandonment

**Westra Dairy Farms Tanks**
870 N. Sanderson Avenue
San Jacinto, CA 92582
UST Case No. 083303601T

Dear Mr. Gerard J Thibeault:

In response to your letter dated December 26,2001 the study well at the above location has been properly sealed and abandoned. Please use this letter as our confirmation of the completion of the site investigation and remedial action.

No further action is necessary.

We thank you as a family for all your work in the above mentioned case.

Sincerely,

Cal Westra
Partner

A: RTS/KRW

# California Regional Water Quality Control Board
## Santa Ana Region

Winston H. Hickox
*Secretary for Environmental Protection*

Internet Address: http://www.swrcb.ca.gov/rwqcb8
3737 Main Street, Suite 500, Riverside, California 92501-3348
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Gray Davis
*Governor*

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Please provide documentation of well abandonment to this office to complete our file. Please contact Rose Scott of our office at (909) 320-6375, if you have any questions regarding this matter.

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NA - Not applicable

**IV. CLOSURE**

Does completed corrective action protect beneficial uses per the regional board basin plan?
YES [ x ] NO [ ]

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Should corrective action be reviewed if land use changes?
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**VIII. RWQCB AGENCY RESPONSE**

Regional Board Staff:

| | |
|---|---|
| Name: Rose T. Scott | Title: Associate Engineering Geologist |
| Signature: *Original Signed by R. Scott* | Date: |

| | |
|---|---|
| Name: Kenneth R. Williams - Senior Engineering Geologist | Response: Concurs with Closure |
| Signature: Original Signed by K. Williams | Date: |

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

# WESTRA DAIRY FARM (T0606599136) - (MAP)

SIGN UP FOR EMAI

870 SANDERSON
SAN JACINTO, CA 92582
RIVERSIDE COUNTY
*LUST CLEANUP SITE* (INFO)
*COMPLETED - CASE CLOSED AS OF 12/26/2001* - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

**CLEANUP OVERSIGHT AGENCIES**
SANTA ANA RWQCB (REGION 8) *(LEAD)* - *CASE #: 0*
***CASEWORKER: ROSE SCOTT***
RIVERSIDE COUNTY LOP
***CASEWORKER: Riverside County LOP***

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | Site Maps / Documents | Community Involvement | *Related Cases*

## Regulatory Profile

PRINTABLE CASE SUMM

**CLEANUP STATUS** - DEFINITIONS
**COMPLETED - CASE CLOSED AS OF 12/26/2001** - CLEANUP STATUS HISTORY

**POTENTIAL CONTAMINANTS OF CONCERN**
GASOLINE

**POTENTIAL MEDIA OF CONCERN**
SOIL

**FILE LOCATION**

**DESIGNATED GROUNDWATER BENEFICIAL USE(S)** - DEFINITIONS
MUN, AGR, IND, PROC - Note: Also incl parts of 802.15.

**DWR GROUNDWATER SUB-BASIN NAME**
San Jacinto (8-005)

**CALWATER WATERSHED NAME**
San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)

## Site History

No site history available



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Draft

Recirculated Draft Environmental Impact Report No. 2

# Villages of San Jacinto

State Clearinghouse No. 2004122132

AUGUST 2009


PREPARED FOR:

**City of San Jacinto**
248 E. Main Street
San Jacinto, CA 92583

PREPARED BY:

**Dudek**
605 Third Street
Encinitas, CA 92024

DUDEK

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A NOP, Initial Study

B LESA Model

C Biological Resources Technical Report (Dudek, August 2005)
**RCA Confirmation Letter (Western Riverside County Regional Conservation Authority, November 17, 2008)**

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D Cultural Resources Technical Report (ASM Affiliates, Inc., December 2004)

E Fault Investigation (Leighton & Associates, Inc., March 31, 2004)
Additional Geotechnical Studies (Leighton & Associates, Inc., August 31, 2005, June 30, 2006, October 31, 2006)

F Geotechnical Investigation (Leighton & Associates, Inc., February 28, 2005)

G Water, Wastewater and Irrigation Study
Preliminary Drainage Study (RBF Consulting, May 2006)
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Summary Drainage Study for Phases 1-1C (RBF Consulting, December 12, 2006)
**Preliminary Hydrology and Hydraulics Study (JLC Engineering & Consulting, Inc., February 2009)**
**Preliminary Water Quality Management Plan (JLC Engineering & Consulting, Inc., February 2009)**
**Lake Preliminary Design Report (Pacific-Aquascape, Inc.)**

H Traffic Impact Analysis (Urban Crossroads, September 2005)
Alternate Tenaya Traffic Analysis due to the High School Alternative Land Use (Urban Crossroads, January 5, 2006) Tenaya Trip Generation Comparison (Urban Crossroads, March 9, 2006)
**Traffic Impact Analysis (Urban Crossroads, April 24, 2009)**

I Air Quality Analysis Models (Dudek, November 2006)
2003–2005 South Coast Air Quality Management District Air Quality Data
**URBEMIS 2007 Construction and Operational Emissions, Greenhouse Gas Emissions Models (Dudek, July 2009)**
**Localized Significance Thresholds Analysis Report (Dudek, July 2009)**

J Noise Analysis Models (Dudek, October 2006)
**Revised Noise Analysis Models (Dudek, April 2009)**

K Water Supply Assessment (Eastern Municipal Water District, December 15, 2004)
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# SECTION 1.0
# EXECUTIVE SUMMARY

## PROJECT SETTING

The Villages of San Jacinto project site is approximately 475.1 acres in size and is located in the City of San Jacinto in northwestern Riverside County, California (see *Figure 1-1, Regional Map*). The project site is located in the northwestern portion of the City (see *Figure 1-2, Vicinity Map*). The project is located along Sanderson Avenue which is one of the City's main north-south transportation routes (see *Figure 1-3, Site Location Map*). The project site is bordered by undeveloped agricultural land to the north (and future westward extension of Ramona Boulevard), Sanderson Avenue to the east, Odel Avenue to the west, and undeveloped agricultural land and a municipal wastewater treatment plant to the south. The project site has been used as pasture land and/or a farming operation, similar to surrounding properties, for over one hundred years. The San Jacinto Valley has traditionally supported agriculture and rural residential land uses, but has been experiencing increased urbanization in the past several years.

The site is generally flat and is located on the alluvial plain of the San Jacinto River. The site elevation above sea level ranges from 1,455 feet along the northern edge to 1,490 feet in the southeastern corner. The southeastern corner of the site is a former cattle feed lot with several remaining animal shade structures. The remainder of the land consists primarily of vacant former agricultural land. Vegetation on site consists of weedy invasive species that have accumulated since the majority of agricultural production was discontinued. There are scattered sod fields in the northern portions of the property which is the only remaining agricultural operation. Several unnamed, unimproved dirt roadways traverse the site and are associated with former and current agricultural operations. Irrigation canals run along the edges of fields in support of sod farming activities. A detention basin is located along the north-central edge of the project site.

## PROJECT DESCRIPTION

The project would consist of development of mostly vacant former agricultural lands into a suburban development including residential, commercial, mixed-use, public facility and open space/recreational uses. The 475.1-acre site would be divided into 18 "Planning Areas" (PA). Each planning area would consist of a specific land use type with some having subareas of the particular land use. The following presents a summary of the proposed development while a detailed description is contained in Chapter 3 of this document.

### Residential

Residential land uses would consist of 80.6 acres of low density and detached residential with 6,000-square-foot minimum lots and 117.9 acres of medium density residential having lot sizes

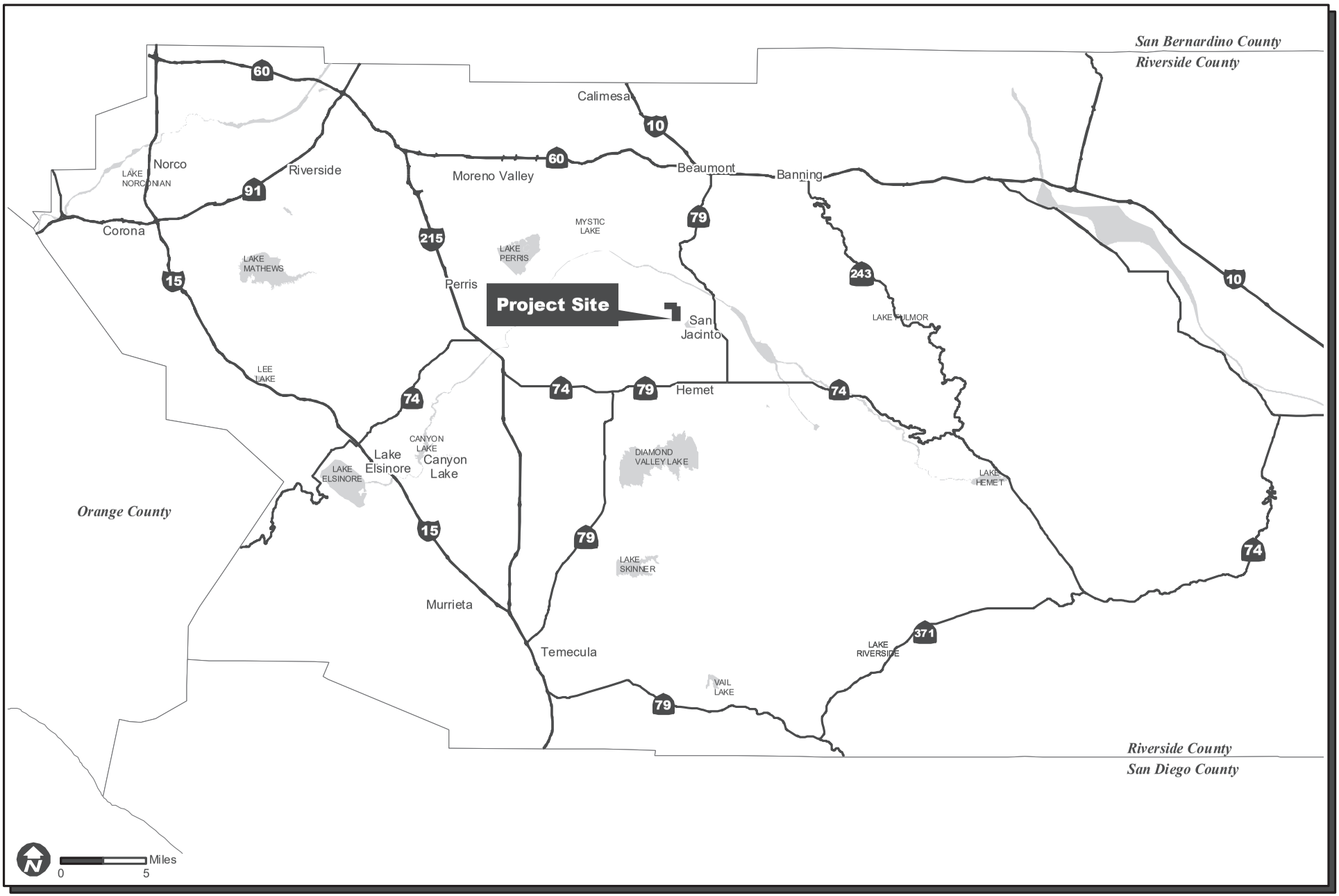
of 4,000 square feet and 5,000 square feet. The medium density residential development will have densities between 5.1 to 6.2 units per acre and a total of 657 dwelling units. Medium density residential is intermixed throughout the site and includes Planning Areas 1, 2, 4, 7, 8, 9, and 10. Low density uses would consist of single family residential lots with a density of approximately 4.5 dwelling units per acre, and a total of 359 dwelling units. The low-density development would be located in Planning Areas 3, 5, 6, 13, and 19. A total of 1,016 dwelling units are proposed with an allowance of up to 1,329 units if the proposed school site is not developed as discussed below.

**Commercial**

Commercial development would be focused in the southeast corner of the project site within PA 11. This development is intended to result in approximately 247,000 square feet of neighborhood retail commercial uses on 22.7 acres. This designation is intended to meet the provision for retail commercial land uses as set forth in the San Jacinto General Plan Land Use Element and to provide an accessible local shopping center for the proposed project and nearby communities. This would allow for a wide range of businesses including grocery store, drug store, cleaners, restaurants, fast food, and specialty stores. The Specific Plan for the project includes Conceptual Design Guidelines and Development Standards for commercial development of this Planning Area. Comprehensive Design Guidelines will need to be reviewed and approved by the City prior to development of the Planning Area.

**Mixed-Use**

Mixed-use development will be provided within the 26.3-acre Planning Area 12. This designation is intended to provide for a broad range of land uses, with the primary focus on municipal uses such as library, police and fire facilities and other development such as business and professional park uses including dental and medical offices, real estate offices, banks, etc. This area could also provide accessory uses to the primary facilities such as coffee shop, printers, postal/shipping outlets etc. This designation provides for a maximum of 343,000 square feet of building area and will have a maximum height limit of 45 feet. Conceptual Design Guidelines for commercial uses are provided in the project Specific Plan, but Comprehensive Design Guidelines will need to be reviewed and approved by the City prior to development of the Planning Area.




# Villages of San Jacinto EIR
## Regional Map

FIGURE 1-1

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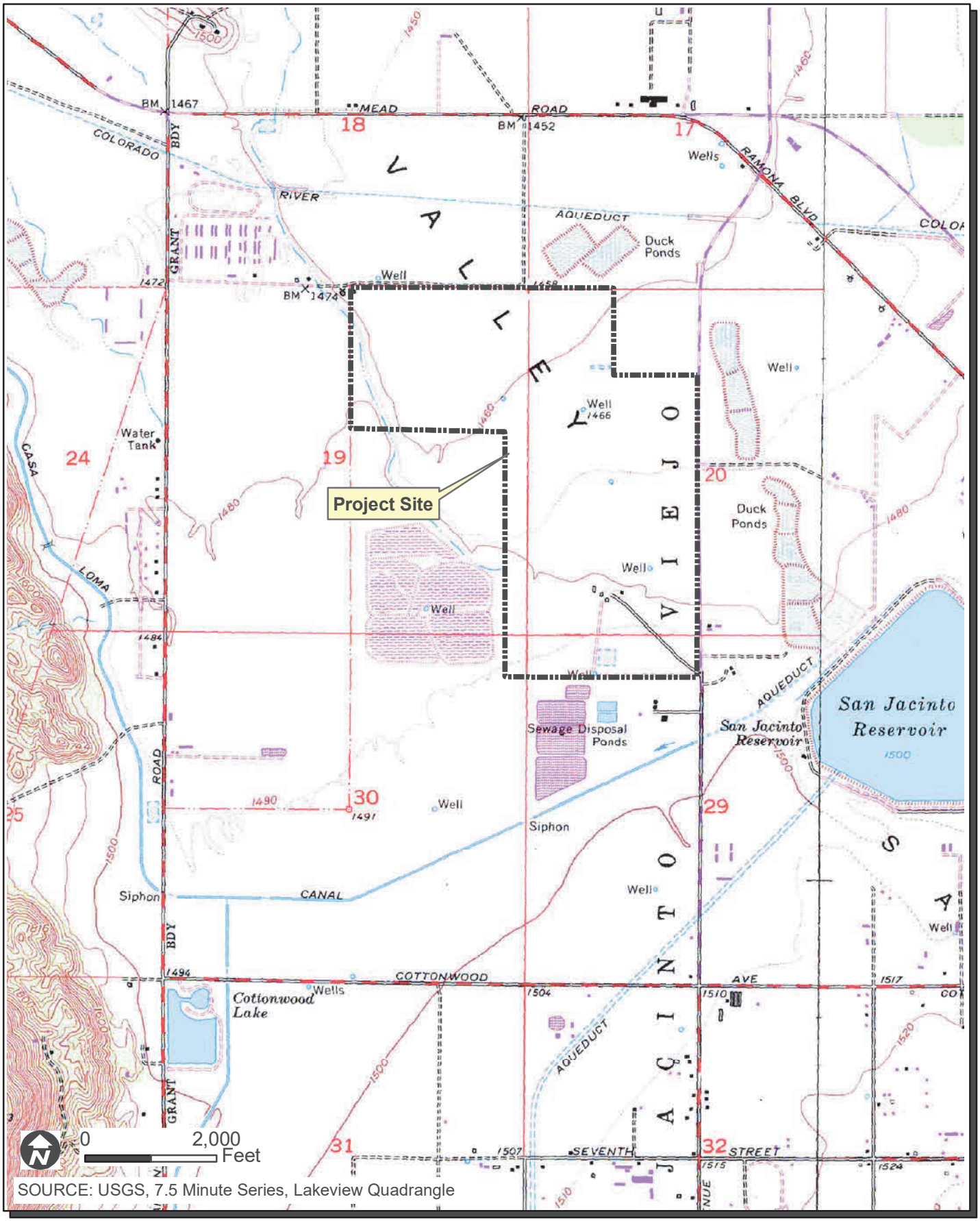


Villages of San Jacinto EIR

Vicinity Map

FIGURE 1-2

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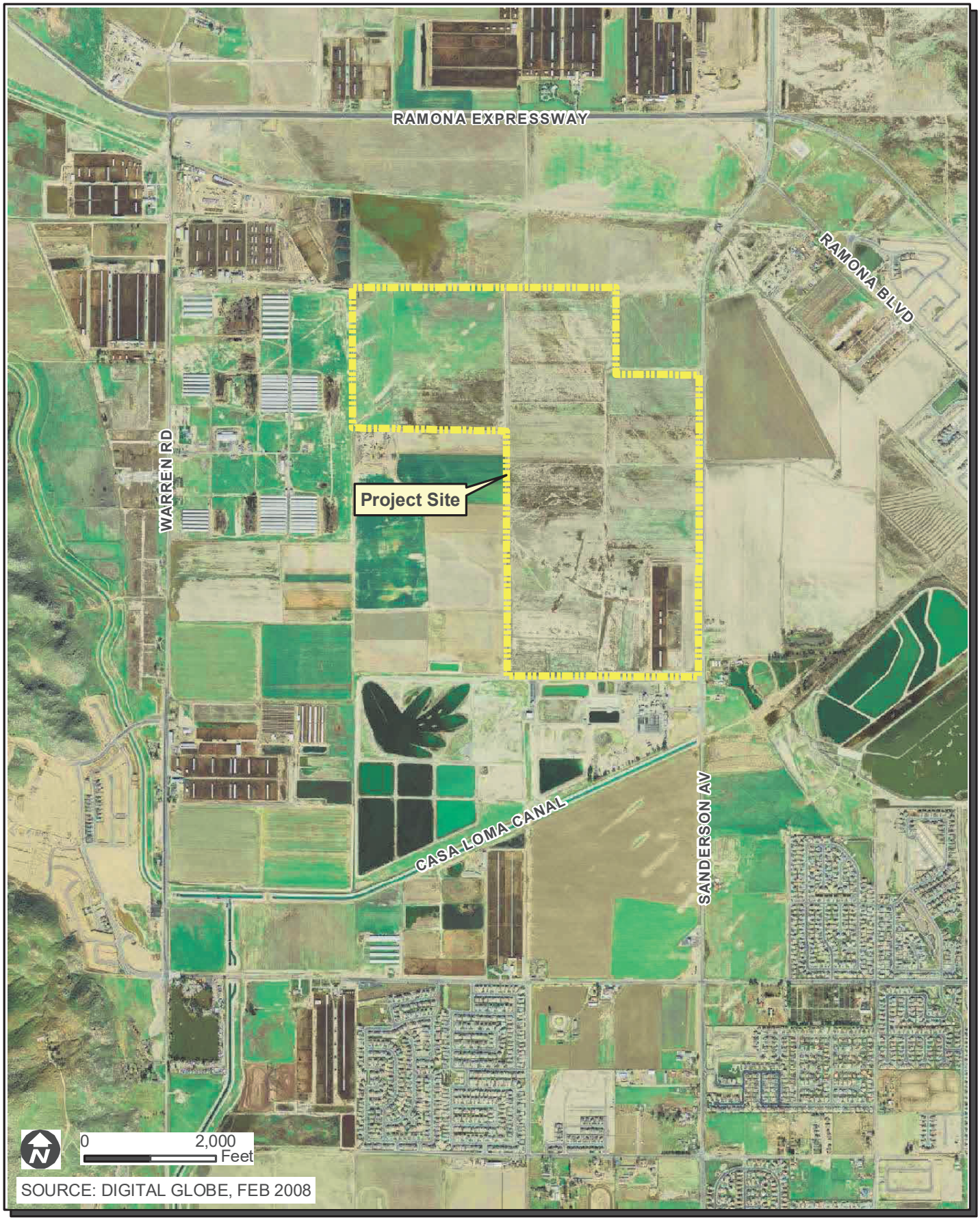


Villages of San Jacinto EIR

**Site Location Map**

FIGURE 1-3

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### School

As noted in *Table 3-2*, Planning Area 14 is designated for a proposed high school by San Jacinto Unified School District (District). The 69.1 acre high school site would be located southwest of the future intersection of Cawston Avenue and Ramona Boulevard. Preliminary plans for the school include baseball and softball fields, a track/football stadium, gymnasium, performing arts facility and classroom space for up to 2,000 students. Final plans for the school would be processed separately from the Villages of San Jacinto Specific Plan through the District Board of Trustees and the California Division of the State Architect. If the District does not choose to construct a high school on this site, it will instead be used for residential uses. Under this scenario, Planning Area 14 would be developed with 200 low-density residences (minimum 6,000-square-foot lots) and 113 medium-density residences (5,000-square-foot lots). Because final planning for the school would be undertaken by the District, as its own lead agency under CEQA, this EIR's impact analysis of the school is limited to a programmatic level.

### Parks and Recreational Amenities

Following is a summary of the recreational amenities and park facilities planned for the proposed project. Further discussion of parks and recreation, including the requirement for provision of adequate parkland is contained in Section 5.12.4.

#### *Public Parks*

The proposed project includes three public parks totaling approximately 41 acres. The largest of the public parks is the 33.4-acre Community Park in Planning Area 15C north of Bridge Street in the southern portion of the proposed development. This park will provide soccer and baseball fields, concession area, as well as barbeque and picnic areas overlooking the proposed lake. Public parks in Planning Areas 15B and 15D provide just over seven acres of various active and passive recreational opportunities.

#### *Private Parks*

The two private parks in Planning Areas 15A and 15E will provide passive recreation for nearby residents such as tot lots, shade structures, pathways and picnic areas.

#### *Lake House and Swim Lagoon*

Other recreational amenities include a 5.1-acre Lake House Beach Club and Swim Lagoon within Planning Area 16. This will be a private facility for residents and will feature a Swim Lagoon with sandy beach, play island, lap pool, play pool, fire pits, open turf area and shade

structures. The clubhouse will provide an exercise room, activity room, restroom/changing rooms and office space.

***Lake***

The 11-acre private lake will be located primarily between Planning Areas 7 and 8 and adjacent to the Swim Lagoon. It will feature a concrete trail surrounding the lake and connecting to the community park in PA 15C. No swimming or boating will be allowed on the lake, but it will provide recycled water for irrigation of common landscaping within the community.

***Paseos***

A total of 9.6 acres of landscaped paseos will serve as pedestrian linkages between land uses and will create landscaped buffer areas between Planning Areas. These paseos will be a minimum of 50 feet wide and have 10-foot-wide concrete trails.

**Open Space**

In addition to the above parks and recreational amenities, approximately 15.2 acres of open grass-lined drainage channels/basins would be constructed along the western perimeter of the project site. A vegetated open detention basin will be located in the northwest corner of the project site. A total of 2.4 acres of landscape easements are provided in various locations throughout the project site. The proposed system of open spaces would provide both on-site and off-site visual benefits to compensate for the loss of existing open space character of the site.

**Access**

Roadway right-of-way would be located throughout the development and would provide access to and from as well as within the project. Sanderson Avenue and Odell Avenue would serve as primary access points for the project. Ramona Boulevard will be constructed to provide access along the north edge of the project site. Cawston Avenue would serve as the major north-south arterial through the project while De Anza Drive would serve as the major east–west arterial within the development taking access from Sanderson Avenue and connecting to Cawston Avenue. Modifications to Sanderson Avenue, Odell Avenue and Cawston Avenue would be required with project development. Improvements may include traffic light installation and additional turn lanes into the development from perimeter streets, where necessary. Secondary access to Planning Area 19 would be provided by the planned extension of Odell Avenue north to Ramona Expressway. The northern extent of Cawston Avenue would be terminated at the location of the proposed future alignment of Ramona Boulevard until this roadway is complete, at which time the dead ended Cawston Avenue would be retrofitted to form a functional intersection with Ramona Boulevard.

Improvements to SR 79 within western Riverside County is currently being planned by Riverside County Transportation Commission (RCTC)/Caltrans within the general vicinity of the project. Due to the conceptual nature of the ultimate alignment of the future SR 79 corridor, an on/off ramp into or near the proposed development is not contemplated as a project feature. Should roadway improvements be necessary to accommodate an ultimate SR 79 alignment, modifications to the project and preparation of a supplemental environmental document may be necessary. As of April 2004, the City has adopted a locally-preferred alignment for SR 79 which directs the roadway to the east of the proposed project. The Draft EIR/EIS for this project is expected to be circulated for public review in late 2009 with construction to begin in 2011. In late 2006, the City also selected a locally-preferred alignment for Mid-County Parkway, a future regional east-west roadway approximately 1,000 feet north of the project site which is a joint Caltrans/RCTC and Federal Highway Administration (FHWA) project. The 32- mile route will connect the San Jacinto area with the Corona area. Final environmental approvals are expected to be obtained by late 2010 to 2011 with construction set to begin sometime in 2013 (www.midcountyparkway.org).

**Sewer and Water Service**

The project would involve installation of an on-site sewer and water distribution system. Water and sewer service would be provided by Eastern Municipal Water District and be extended into the project via new conveyance facilities consistent with the District's approved master plan expansion program. The project, along with other future development planning in the western portion of the City of San Jacinto, would contribute to the need for expansion of the Eastern Municipal Water District's Hemet/San Jacinto Regional Water Reclamation Facility located to the south. The expansion of this facility is being analyzed by Eastern Municipal Water District (CEQA Lead Agency) in a separate environmental document.

Recycled Water Service. The project would utilize reclaimed water from the adjacent Eastern Municipal Water District Hemet/San Jacinto Regional Water Reclamation Facility. Recycled water would be utilized for lake/water features as well as common area irrigation needs throughout the proposed community. Recycled water would not be used for private landscaping such as front or back yards.

**Storm Drain System**

The project incorporates a drainage plan that will not impact upstream and downstream property owners but will provide flood protection for the overall project site. The Drainage Plan will incorporate a vegetative channel and a detention/water quality basin, which are designated as Line V and Detention Basin V. These two facilities are the major backbone infrastructure that will collect the runoff that emanates from off-site and on-site areas. Line V and Detention Basin

V have been designed to convey and control the interim flow rate and ultimate flow rate. The interim flow rate results in a runoff rate that exceeds the ultimate condition flow rate. The interim condition will require the construction of two interim culvert facilities and the reconstruction of an earthen roadway to eliminate ponding east of DeAnza Drive and Sanderson Avenue intersection. These interim drainage facilities are required to control and convey the interim flow rates originating from the off-site area. Several storm drain laterals will provide flood protection for the on-site Planning Areas. Further details of the Drainage Plan are contained in *Section 5.8, Water Quality and Hydrology*.

**Tentative Map**

A draft tentative map (TM 36188) has also been prepared for the project. *Figure 3-5, Tentative Tract Map*, shows individual residential lots, mixed use and commercial areas and accessory uses including open space, lakes and roadways. In summary, the Tentative Tract Map, which further defines the Specific Plan Land Use Plan (described above), would allow the following housing units and other land uses to be developed on the project site:

***Unit Type Summary***

- 6,000-square-foot lots – 359 units
- 5,000-square-foot lots – 349 units
- 4,000-square-foot lots – 308 units

  TOTAL 1,016 units

- 69.1-acre high school site
- 22.7 acres of commercial uses
- 26.3 acres of mixed-use
- 5.1-acre lake house and Swim Lagoon
- 43.0 acres for parks
- 11.0 acres for lake surfaces
- 24.2 acres for water quality/detention basin facilities
- 15.2 acres for drainage channels
- 9.6 acres for paseos
- 48.0 acres for roadways

## Alternatives Summary

The following is a summary of the three (3) alternatives carried forward for analysis in this EIR. The complete alternatives analysis is contained in Section 10.0 of this document. In addition to the CEQA-mandated consideration of a No Project scenario, two (2) alternatives were selected based on their ability to fulfill the basic objectives of the proposed project, as well as their capability to reduce any potentially significant adverse impacts of the project. A comparison summary of the alternatives is provided below, and impacts have been quantified wherever possible.

- Alternative 1: No Project/No Development Alternative
- Alternative 2: Existing General Plan Designation Alternative
- Alternative 3: Reduced Density Alternative

***No Project/No Development Alternative*** assumes that the project site would not be developed and the former agricultural operations (sod farm and cattle feeding area) would continue.

***Existing General Plan Designation Alternative*** The existing General Plan designations establish 136.5 acres of low density residential and 239.5 acres of medium density residential. This would allow for a maximum of 2,390 medium density dwellings (10 du/ac maximum) and up to 682 low density dwellings (5 du/ac maximum) for a total of 3,072 dwelling units under the existing General Plan.

***Reduced Density Alternative*** would involve the development of a low density housing tract with approximately 1-acre lots. Due to drainage and infrastructure needs, this alternative would consist of approximately 350 single-family homes (on approximately 350 acres), 41 acres of parks, 27 acres of greenbelts, 14 acres of drainage basin, 18 acres of lake surfaces, 18 acres of roadways and a 3-acre clubhouse. Due to the existing nature of the site topography, this project alternative would be prepared, graded and designed in a similar fashion as the proposed project.

*Table 1-1, Alternatives Summary,* provides a summary of alternatives as they compare to the proposed project. Each alternative was analyzed for its potential impact on environmental issues that were determined to be either significant and mitigable or significant and unmitigable in the proposed project condition. Issues such as land use and planning were not found to be significant, therefore analysis was not provided for each alternative.

## Table 1-1
## Alternatives Summary

| Environmental Issue | Proposed Project | No Project/No Development | Existing General Plan Designation | Reduced Density |
|---|---|---|---|---|
| Landform Alteration/ Aesthetics | Mitigable Impacts | Reduced impacts due to lack of changed aesthetic nature | Similar, but does not provide as many transitions between land uses | Similar |
| Agricultural Resources | Unmitigable Impacts | No Impact | Similar | Similar |
| Biological Resources | Mitigable Impacts | No Impact | Similar | Similar |
| Geology and Soils | Mitigable Impacts | No Impact | Similar | Similar |
| Cultural Resources | Mitigable Impacts | No Impact | Similar | Similar |
| Paleontological Resources | Mitigable Impacts | No Impact | Similar | Similar |
| Water Quality/ Hydrology | Mitigable Impacts | No Impact | Similar | Similar but less impervious surface due to less intensity of land use. |
| Transportation/ Circulation/Access | Mitigable Project Impacts<br><br>Unmitigable Cumulative Impacts | No traffic impacts, but would not facilitate City's goal of installing infrastructure in western San Jacinto | Similar, but would result in higher traffic volumes that may not be completely mitigated. | Less impacts due to less overall trips |
| Air Quality | Unmitigable Impacts | No Impact | Greater Impacts | Less impacts but likely still significant and unmitigable due to non-attainment status of basin |
| Noise | Mitigable Impacts | No Impact | Greater Impacts | Similar |
| Public Services/Utilities | Mitigable Impacts | No Impact | Similar, but water use and other utility use would be much higher under this alternative | Less impacts due to less demand for services |
| Hazards/Risk of Upset | Mitigable Impacts | No Impact | Similar | Similar |
| Meets Most Project Objectives? | Yes | No | No | No |

## Summary of Environmental Impacts

*Table 1-2, Summary of Environmental Impacts*, provides a comprehensive list of all project impacts and associated mitigation measures. A statement as to whether residual impacts would occur after mitigation is applied is also provided.

## Table 1-2
## Summary of Environmental Impacts

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| **Landform Alteration and Aesthetics** | | |
| 1. The project would introduce additional night lighting within the project vicinity as well as potential new sources of glare (i.e., glass and reflective exterior surfaces). Particularly the commercial components of the site have the potential to produce significant night lighting impacts upon rural agriculture uses in the vicinity as well as proposed residential land uses within the project itself. Metal or other reflective exterior surfaces and finishes within the commercial components of the site could create new sources of light or glare resulting in significant glare impacts for adjacent residential, park, and agricultural uses. | 5.2-a To avoid light and glare impacts, future submittals for commercial portions of the project development shall include a photometric lighting plan. The lighting plan shall demonstrate that project lighting is shielded from surrounding properties and that only the minimum amount of lighting required for safety purposes is provided to avoid adverse effects on surrounding areas. In general, lighting fixtures shall be shielded downward and away from the adjacent residential areas and public roadways. Commercial development plans shall also be reviewed to ensure the avoidance of substantial areas of reflective surfaces for building exteriors. | 1. Incorporation of mitigation will reduce impacts to below a level of significance. |
| 2. Should Planning Area 14 be purchased by the San Jacinto Unified School District for development as a high school, any potential light or glare impacts would need to be addressed by the School District in the course of their environmental compliance for that project. However, potential homebuyers in the vicinity should be made aware that potential outdoor lighting impacts may occur. | 5.2-b A Notice-to-Property Owner shall be recorded on a separate buyer information sheet with the final map providing notice to potential future property owners in the vicinity of the school site (i.e., Planning Areas 1, 3 and 19) that there may be lighted ball fields in the future should the school district proceed with plans for the proposed high school. | 2. Incorporation of mitigation will reduce impacts to below a level of significance. |
| **Agricultural Resources** | | |
| 1. Development of the proposed project would potentially result in significant urban/rural land use conflicts between the planned residential development and existing agricultural uses surrounding the project site. Conflicts would potentially include fertilizer and pesticide application drift into the proposed residential area, residential | 5.3-a A Notice-to-Property Owner shall be recorded on a separate buyer information sheet with the final map providing notice to potential future property owners of the proposed development that the property is located in an area of active agricultural land uses which may potentially result in inconvenience and/or discomfort associated with adjacent agricultural operations including noise, odors and dust generation, and chemical drift. | 1. The proposed mitigation would serve to alleviate land use conflicts associated with new residential development and existing agricultural land uses. However, this impact would remain significant and unavoidable until surrounding land converts to the ultimate planned uses prescribed under the City's General Plan. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| complaints about noise and dust resulting from site preparation activities associated with adjacent agricultural uses, and increased trespassing onto agricultural lands. | | |
| 2. The proposed project would irreversibly convert land currently under agricultural production and identified as containing significant agricultural resources to urban uses and would contribute to incremental urbanization of a predominantly rural area sustaining existing agricultural land uses. | None. | 2. The City's General Plan EIR (January 2006) discusses a number of reasons mitigation for loss of agriculture is infeasible. Rising land costs to replace agricultural lands, rising water costs, labor costs, urbanization and environmental regulations all contribute to ongoing conversion of farmland. Without property owner cooperation and substantial financial incentives, it is infeasible to provide permanent on or offsite mitigation to replace converted farmland. Therefore, no feasible mitigation measures are available to reduce this impact below a level of significance. |
| **Biological Resources** | | |
| 1. Sensitive vegetation communities on the Villages of San Jacinto Project site include 4.22 acres of open water, 0.23 acre of freshwater marsh, 0.07 acre of southern willow woodland, 0.21 acre of herbaceous wetlands, 0.01 acre of cismontane alkali marsh, and 0.01 acre of intermittent unvegetated stream channel. These areas are under the jurisdiction of RWQCB and/or CDFG. All impacts to RWQCB/CDFG jurisdictional areas are considered significant. | 5.4-a Mitigation for impacts to jurisdictional wetlands and non-wetlands waters will consist of: (1) off-site creation, (2) a combination of off-site creation and enhancement of wetlands of equal or higher habitat quality, or (3) purchase of wetlands mitigation credits in an approved mitigation bank. Because wetlands/waters on the Villages of San Jacinto project site are isolated, of low overall quality (contain large quantities of non-native species), and are surrounded by agricultural lands, they do not provide high quality habitat for riparian-dependent wildlife species, therefore mitigation onsite would not result in equal or greater wetland habitat value. Mitigation for on-site wetlands/waters impacts would be a biologically equivalent or superior alternative to avoidance of these impacts. The above not withstanding, wetlands areas created, enhanced, or preserved through the project's wetlands mitigation plan would | 1. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| | be connected to other wetlands/riparian/riverine areas and would provide overall biological value to the peregrine falcon and other sensitive wildlife and plant species. Wetland mitigation ratios are based on past experience developing appropriate mitigation for impacts to similar wetland and/or Waters of the US.<br>**Herbaceous Wetlands, Open Water, Freshwater Marsh and Intermittent Stream Channel**<br>Mitigation for impacts to 4.22 acres of open water, 0.23 acre of freshwater marsh, 0.21 acre of herbaceous wetlands, and 0.01 acre of intermittent unvegetated stream channel would be accomplished through creation or purchase of wetlands mitigation credits from an approved mitigation bank at a 1:1 ratio (i.e., 4.67 acres total). (see Section 5.4 in the EIR),<br>**Cismontane Alkali Marsh**<br>Mitigation for impacts to 0.01 acre of cismontane alkali marsh would be accomplished through the creation, or a combination of creation and enhancement, of wetlands of equal or higher habitat quality at a 3:1 ratio (i.e., 0.03 acre). Mitigation can also be accomplished through the purchase of wetlands mitigation credits in an approved mitigation bank.<br>**Southern Willow Woodland**<br>Mitigation for impacts to 0.07 acre of southern willow woodland would be required at a ratio of 4:1 (i.e., 0.28 acre) (see *Section 5.4 in the EIR)*. Mitigation can be accomplished through the creation, or a combination of creation and enhancement of wetlands of equal or higher habitat quality. Mitigation can also be accomplished through the purchase of wetland mitigation credits in an approved mitigation bank. | |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| 2. Impacts to the burrowing owl are covered in accordance with the Species Conservation Objectives for the burrowing owl listed in the MSHCP. That said, in order to comply with the specific Burrowing Owl Survey Area provisions of the MSHCP, mitigation for direct impacts to known individuals will require mitigation. | 5.4-b Per MSHCP, because of the site does not support long term conservation value for burrowing owls , mitigation for impacts to this pair of owls can include passive or active relocation of owls following accepted protocols per the burrowing owl Species Account in Volume II-B of the MSHCP. In addition, MSHCP requires that:<br>*"Pre-construction presence/absence surveys for burrowing owl within the survey area where suitable habitat is present will be conducted for all Covered Activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one way doors and collapse of burrows) will occur when owls are present outside the nesting season."*<br>Because impacts to other sensitive wildlife species are covered under the MSHCP, no additional mitigation is proposed for impacts to these species. However, if construction activity is to take place during the breeding season (*i.e.,* January through October), a one-time biological survey for nesting bird species would be conducted within the proposed impact area no earlier than 72 hours prior to construction. This survey is necessary to assure avoidance of impacts to nesting native birds (per the federal Migratory Bird Treaty Act). If nesting birds are detected within vegetation which is to be impacted, the nest location(s) will be protected. A buffer of 25 to 300 feet (specific width to be determined by the project biologist according to species of bird) around the nest will be avoided until fledging.<br><br>5.4-c MSHCP requires that night lighting shall be directed away from the MSHCP conservation area. Shielding will be incorporated by the project to ensure that ambient lighting in the MSHCP conservation area is not increased; therefore impacts on potential adjacent MSHCP conservation area lands due to increased lighting would be avoided. | 2. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| 3. Due to the project's location adjacent to land that could potentially be conserved through the MSHCP Plan, potential indirect impacts related to invasive species may occur. | 5.4-d Table 6.2 of the MSHCP lists landscape plant species that shall be avoided for all portions of developments that are located adjacent to (within 1,000 feet) the MSHCP conservation areas. These plant species will be avoided on the areas of the Villages of San Jacinto project site adjacent to Criteria Cells 2775 and 2878 to the west of the project site. This would be achieved by including language in the residential sale documents to ensure that future property owners understand the types of plants that are restricted. Sample language for inclusion in sale documents would be submitted to the Planning Department for approval prior to approval of a certificate of occupancy. Therefore no indirect effects due to invasive species are anticipated. | 3. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| **Cultural Resources** | | |
| 1. Due to the presence of five previously recorded sites located within one mile of the project and the fact that the project is located within an alluvial setting, potentially significant archeological resources could be unearthed during site grading. | 5.5-a In order to reduce the potential for disturbance or damage to unknown archaeological resources, monitoring of mass grading activities of the site during . by a qualified archaeologist is required. Should the monitor observe disturbance of resources that could be important archaeological artifacts, the monitor shall have the power to stop grading in the immediate area of discovery in order to allow for a resource study and recovery/curation effort (if necessary) to occur. | 1. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| **Geology and Soils** | | |
| 1. Many portions of the site are characterized as having unsuitable compressible soils not suitable for structural support. Location of a structure on an unstable geological unit or soil would be a significant impact. | 5.6-a The on-site soils are suitable for reuse as compacted fill, provided they are relatively free of organic materials, debris and oversize materials. The optimum lift thickness to produce a uniformly compacted fill will depend on the type and size of compaction equipment used. In general, fill will be placed in uniform lifts not exceeding 8 inches in thickness. Fill soils will be placed and compacted to a minimum 92% relative compaction at a minimum of 2% above the optimum moisture content. | 1. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| | Fill slopes shall be overbuilt a minimum of 2 feet and trimmed back to the compacted core or rolled with a weighted sheepsfoot compaction roller as the fill slope height increases in maximum 4-foot increments. Placement and compaction of fill shall be performed in accordance with City grading ordinances and minimum compacted standard under the observation and testing of a qualified geotechnical engineer.<br>All loosely packed exploration trench backfill shall be removed and recompacted in accordance with project geotechnical guidelines. An engineering geologist shall be present to observe all excavations to confirm limits of faulting. If exposures differ from anticipated conditions, further investigations and/or additional structural setbacks can be required. | |
| 2. The perched groundwater table may be located between 5 and 22 feet. A shallow groundwater table can present hazards during site development. | 5.6-b. To facilitate the grading operations, on-site irrigation water shall be reduced or ceased for a period of 3 to 6 months prior to the start of grading. Further, the contractor will pothole the upper 12 to 14 feet of soil prior to the start of grading operations to determine if shallow groundwater will affect the planned grading.<br>In localized areas where shallow groundwater conditions exist such that removals cannot be performed to the required depths or where deeper excavations (such as in the proposed "lake" areas) are proposed at or below the existing perched groundwater, methods of localized dewatering will be required including the use of well points and/or interceptor ditch methods. Alternative ground stabilization methods such as deep dynamic compaction shall be required. Deep dynamic compaction is a means of physically compacting the subsurface soils by repeatedly dropping a heavy weight (typically a large concrete block) to densify the underlying soils to a predetermined density. After proposed grading plans are developed, these areas shall be further reviewed by a qualified geotechnical engineer. | 2. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| 3. Potential site ground rupture, as determined by the Leighton and Associates Fault Investigation, is considered moderate to high. Ground rupture due to on-site faults could potentially affect existing and future facilities (such as gas, electrical, water mains, etc.) that traverse fault zones on the site. Secondary seismic effects due to strong ground shaking, ground rupture, liquefaction and seismically induced settlement are considered significant. | 5.6-c. A structural setback zone of 50 feet on either side of the encountered fault zone, and as much as 75 feet on the "down-block" side shall be observed for structures intended for human occupancy (2,000 hours/year). This preliminary setback zone will be refined as the grading concept is developed and possible additional site studies are performed. The Fault Location Map (Plate 2) within the Fault Investigation shows required preliminary structural setbacks. However, the final setback limits shall be determined during grading or future studies as the fault trace is exposed, identified and surveyed for lateral and vertical location. The setbacks shall be shown on all project plans.<br><br>To reduce the effects and magnitude of the earthquake-induced settlements, remedial grading shall occur. Following remedial grading, differential dynamic settlements are anticipated to be approximately 2 inches in a horizontal distance of 40 feet. Additional analysis will be performed by a qualified geotechnical specialist to further refine earthquake-induced settlement. Based on a review of the rough grading plans by a qualified geotechnical specialist, remedial grading requirements will be revised.<br><br>To reduce the potential adverse secondary seismic effects, mitigation of compressible alluvial soils to support the planned development at areas such as free-face slopes ("green belt" detention basins, channels etc.), the project perimeter (where removals may be limited by property restraints) and planned lake areas will require additional geotechnical stability design by a qualified geotechnical engineer after project plans are developed. | 3. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 4. The volume change of excavated on-site materials upon recompaction is expected to vary with materials, density, insitu moisture content, location and intended compaction effort. Therefore, it is likely that on-site ground rupture could potentially affect future | 5.6-d. While it is difficult to determine the level of subsidence and shrinkage risk, site grading must include a balance area or ability to adjust import quantities to accommodate some variation. Relative compaction rates must be followed as they appear in the February 28, 2005, Leighton and Associates Technical Report. As stated in the February 28, 2005, | 4. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| site improvements. Based on the site specific fault investigation, the potential for site ground rupture during a seismic event is considered moderate to high. | Leighton Report, due to the agricultural discing of the surface soils, a subsidence value of 0.2 feet must be applied when evaluating earthwork volumes. | |
| 5. The relatively loose saturated alluvial deposits on site are considered susceptible to liquefaction hazards. | 5.6-e. To reduce the potential for liquefaction and earthquake-induced settlements at the site, the following guidelines will be implemented. For preliminary design purposes, a minimum removal and recompaction of 10 feet (as measured from finish grade) will be used in cut areas on that portion of the site designated as having a high potential for liquefaction (roughly the northern one third to one half of the site).<br>In cut areas outside the area designated as high potential for liquefaction, a minimum overexcavation of 5 feet below finish grade must be used. For areas designated as "fill" a minimum removal of 5 feet will be used, provided a minimum total thickness of 10 feet of properly compacted fill is maintained below the lowest adjacent finish grade (including lowest adjacent street elevation). The removal depths for the infrastructure roadways shall be a minimum 5 feet below pavement subgrade. These estimates are for preliminary design planning only and will be revised based on our review of rough grading plans. These preliminary estimates will be revised upon review of the proposed grading concept plan. These alluvial soils must be removed down to medium dense to dense, relatively non-porous alluvium material as determined by the geotechnical consultant. Undercuts will be made 1:1 next to existing roadways that will remain after grading. Cut slopes shall be replaced as properly compacted fill.<br>The excavated materials will be moisture conditioned or dried back, as appropriate, to achieve the required minimum relative compaction. Saturated soils may need to be dried back or mixed with drier on-site materials and shall be thoroughly mixed prior to fill placement. The resultant excavation will be filled and compacted in this lifts to a minimum 92% relative | 5. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| | compaction at a minimum of 2% above the optimum moisture content. A minimum 90% relative compaction may be acceptable in the southern portion of the site. This will be determined during review of rough grading plans.<br>After completion of the required removal of unsuitable soils, the approved surface will be scarified, moisture conditioned as needed and compacted prior to placing fill. If subgrade conditions at the approved bottoms are wet and "pumping" near the required removal depth, the scarification and moisture conditioning will not be necessary. Stabilization measures where shallow groundwater conditions are expected at or near the required removal depth may include the use of a stabilization fabric and/or coarse gravel/graded rock and gravel. Where shallow groundwater conditions are present, alternative ground improvement guidelines shall be followed (see Mitigation Measure 5.5-b). Further evaluation of these specific areas will be necessary after draft grading plans are prepared. | |
| 6. Manufactured slopes that are planned for construction on the site would be susceptible to slope stability hazards. Slopes adjacent to severe flow direction changes may be susceptible to increases scour erosion and slope stability. | 5.6-f. All slopes will be provided with appropriate surface drainage features and landscaped with drought-tolerant, slope-stabilizing vegetation as soon as possible after grading to reduce the potential for erosion. Berms will be provided at the top of fill slopes to direct water away from slope faces. Lot drainage shall be directed such that runoff on slope faces is minimized. Oversteepening of slopes must be avoided during fine grading and building construction. Although not anticipated, if seepage is encountered in slopes, special drainage features may be necessary.<br>5.6-g. For slopes that are will be adjacent to ditches or other water conveyance features, proper protection including rip rap or other slope protection devices as designed by the project civil engineer would be required. Slope stability and the potential for scour shall be required in the design drainage alignment. | 6. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| **Paleontological Resources** | | |
| 1. Since the proposed project lies within a geologic formation with high resource bearing potential and the project would necessitate recompaction of potential fossil bearing alluvium, impacts to paleontological resources are considered to be significant. Impacts to paleontological resources could occur during excavation and site development when geologic formations that have resource bearing potential are disturbed. Impacts would occur when fossils are physically destroyed by such activities. | 5.7-a. Prior to beginning any excavation work, the developer or its contractor shall demonstrate that a qualified paleontologist has been retained to carry out a paleontological resources mitigation program. A paleontological monitor shall be on site at all times during grading activities that disturb non-undocumented fill soils or formations. If fossils are discovered, the paleontologist or paleontological monitor shall have the authority to halt construction in the immediate area of discovery until such a time that a complete assessment of the resources can be conducted. If resources are found that are determined to be significant, the paleontological monitor shall direct activities to recover the resources. Prepared fossils, along with copies of all pertinent field notes, photos and maps shall be deposited in a scientific institution with paleontological collections, such as the San Bernardino County Museum. | 1. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| **Water Quality and Hydrology** | | |
| 1. Implementation of the project would increase the amount of impervious surfaces within the local area which would result in increased runoff and reduced on-site water percolation. Increasing an area's impervious surface may result in drainage problems and flooding. | 5.8-a. The project is located within the San Jacinto – Area Drainage Plan (SJ-ADP), which is a financing mechanism used to offset costs for construction of proposed Master Drainage Plan (MDP) facilities. The project will be charged a per-acre fee in order to pay a fair share of the price of area-wide drainage facilities. | 1. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 2. All lake and drainage features on site would be constructed so they are above the groundwater table so as to prevent intermixing of ground and surface waters. That said, it is possible that during project construction, groundwater may be encountered. | 5.8-b. If dewatering becomes necessary during construction, all discharges shall be in accordance with Santa Ana Regional Water Quality Control Board requirements which mandate that dewatered groundwater be tanked and hauled to a legal disposal site for treatment. Dewatering shall not occur in on-site drainages or water features. In addition, if dewatering becomes necessary during construction, a National Pollution Discharge Elimination System dewatering permit shall be obtained from the Santa Ana Regional Water Quality Control Board. | 2. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| 3. The northern portion of the project site is located within the 100-year floodplain of the San Jacinto River. Development within the floodplain would result in an impedence to flow and an increase in the base flood elevation. Because a portion of the proposed development is proposed to be constructed within the limits of the 100-year floodplain, development of the proposed project will result in potentially significant impacts relating to flood hazards. | 5.8-c. All buildings shall be located outside of the 100-year floodplain. The applicant shall process a Flood Insurance Rate Map (FIRM) map revision. Further, the applicant shall obtain a Conditional Letter of Map Revision (CLOMR) prior to issuance of building permits. The project applicant, or subsequent property owners, shall obtain flood insurance, to the extent required by law, to protect against any damage that might occur during a flood event. It must be noted that at the time of EIR publication, the applicant and City had initiated the CLOMR process with the Riverside County Flood Control and Water Conservation District. | 3. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 4. Development of the proposed project may result in an increase in pollutant load due to sedimentation. Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water or gravity. Sediment from erosion, primarily during construction, is quite often a major project pollutant of concern. A potentially significant impact could occur during construction related to sedimentation. | 5.8-d. During construction, the project will incorporate all City of San Jacinto construction Best Management Practices (BMPs). These BMPs include the following:<br>• Erosion control BMPs including temporary seeding, permanent seeding, etc.<br>• Soil stabilization BMPs<br>• Sediment control BMPs including silt fence perimeter controls, surface roughening, tree or natural vegetation preservation and protection, temporary gravel construction entrance/exit, temporary diversions, permanent diversions, outlet stabilization, inlet protection, temporary sediment basins and gravel bay barriers.<br>• Wind erosion BMPs<br>• Minimize contact with Stormwater BMPs including BMPs for construction vehicles and equipment maintenance, fueling and washing, materials maintenance and construction material loading, unloading and access area controls.<br>• Non-storm water BMPs<br>• Post-construction BMPs | 4. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| | 5.8-e. The project applicant will need to develop a Stormwater Pollution Prevention Plan (SWPPP) pursuant to NPDES Storm Water Discharge Associated with Construction Activity Guidelines (Water Quality Order 99-08-DWQ). The SWPPP will identify all BMPs that will prevent construction pollutants from contacting storm water. Measures shall also be designed so as to prevent all products of erosion from moving off site into receiving waters. Provisions will also be included to ensure that BMPs are monitored and success recorded. | |
| 5. Development of the proposed project may result in an increase in pollutant load due to sedimentation. Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water or gravity. Sediment from erosion, primarily during construction, is quite often a major project pollutant of concern. A potentially significant impact could occur during construction related to sedimentation. | 5.8-f. Structural Best Management Practices (BMPs) are required for new development to improve water quality of stormwater runoff. In order to meet NPDES regulations, the design volume or design flow to be treated must reduce pollutants to the Maximum Extend Practicable (MEP). This project will incorporate a water quality extended detention basin to provide water quality treatment for the runoff emanating from the project site, a volume-based BMP, and a flow-based BMP. Once the project is complete, maintenance will be the responsibility of the Villages of San Jacinto homeowners association.<br>In addition to sizing techniques, several quantity-control Best Management Practices (BMPs) shall be implemented to control runoff:<br>• Rainfall shutoff devices shall be used to prevent irrigation during and after precipitation;<br>• Irrigation systems shall utilize a dripping system to eliminate nuisance run-off; and<br>• Backflow preventer/pressure regulators shall be installed.<br>• The project applicant will need to develop a Water Quality Management Plan pursuant to NPDES Permit #CAS 618033, order # R8-2002-001. The Water Quality Management Plan will identify all final site BMP requirements. | 5. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| | The following BMPs may be incorporated into final site designs:<br>• Construct community streets, sidewalks and parking lot aisles to the minimum widths necessary;<br>• Incorporate landscape treatment for parking lot runoff;<br>• Use unit pavers or other equivalent porous material to construct walkways, alleys and other low-traffic areas;<br>• Utilize trees in landscaping plans to maximize canopy interception and water conservation;<br>• Plant native trees and maximize canopy interception and water conservation;<br>• Drain rooftops into adjacent landscaping prior to discharging to the storm drain;<br>• Vegetate slopes with native or drought tolerant vegetation; and<br>• Install energy dissipaters at the outlets of new storm drains that enter the regional storm drain system that eventually feeds into the San Jacinto River.<br>• Utilize and install "high to medium efficiency" Post Construction BMP filtration system within the proposed water quality basin that would help reduce as many bacteria and viruses as possible from entering the downstream local stormwater collection system. This system must follow the specifications of the California Stormwater Handbook to ensure that the system provides maximum bacteria/viral capture. | |
| **6. Transportation, Circulation, and Access** | | |
| 1. The project may result in significant impacts to local circulation systems if site specific improvements are not implemented in conjunction with each phase of the project (refer to *Figures 5.9-5 thru 5.9-8*). | **Phase I**<br>5.9-a The following measures shall implemented prior to issuance of the first residential and commercial building permits and as depicted on *Figure 5.9-5*:<br>• Construct Sanderson Avenue at its ultimate half-section width as an Urban Arterial roadway from the project's northerly boundary to the project's southerly boundary in | 1. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| | conjunction with development.<br>• Construct De Anza Drive at its ultimate full-section width as a secondary roadway from Cawston Avenue to Sanderson Avenue in conjunction with development.<br>• Construct Bridge Street at its ultimate half-section width as a secondary roadway from Street "A" to Sanderson Avenue.<br>• Construct Cawston Avenue at its ultimate half-section width as a secondary roadway from the Phase II southerly boundary to De Anza Drive.<br>• Participate in fair share fees to construct a traffic signal at the following intersection in conjunction with Phase I of the development:<br>o Sanderson Avenue (NS) at:<br>De Anza Drive (EW)<br>• Construct a traffic signal at the following intersection in conjunction with Phase I of the development:<br>o Sanderson Avenue (NS) at:<br>Bridge Street (EW)<br>• Provide stop sign, stop bar, and stop legend at all project driveways that intersect with public roadways and do not meet traffic signal warrants.<br>• Driveway 15 shall be restricted to right in/right out only access.<br>• Sight distance at each project access shall be reviewed with respect to standard Caltrans and City of San Jacinto sight distance standards at the time of preparation of final grading landscape and street improvement plans.<br>• On site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site. | |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| | **Phase II**<br><br>5.9-b The following measures shall be implemented prior to issuance of the 432nd residential permit, any additional commercial building permits and as depicted on *Figure 5.9-6*:<br>• Construct Cawston Avenue at its ultimate full-section width as a secondary roadway along the Phase II Cawston Avenue boundaries in conjunction with Phase II of the development.<br>• Driveway 14 shall be restricted to right in/right out only access.<br>• Provide stop sign, stop bar, and stop legend at all project driveways that intersect with public roadways and do not meet traffic signal warrants.<br>• Sight distance at each project access shall be reviewed with respect to standard Caltrans and City of San Jacinto sight distance standards at the time of preparation of final grading landscape and street improvement plans.<br>• On site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site.<br><br>**Phase III**<br><br>5.9-c The following measures shall be implemented prior to issuance of the 754th residential permit, the high school, any additional commercial building permits and as depicted on *Figure 5.9-7*:<br>• Construct Odell Avenue at its ultimate half-section width as a secondary roadway from Ramona Boulevard to the project's southerly boundary in conjunction with Phase III development.<br>• Construct Cawston Avenue at its ultimate full-section | |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
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| | width as a secondary roadway from Ramona Boulevard to the Phase II northerly boundary in conjunction with Phase III development.<br>• Construct Ramona Boulevard at its ultimate half-section width as a secondary roadway from Odell Avenue to Sanderson Avenue in conjunction with Phase III development.<br>• Driveway 5 at Ramona Boulevard shall be restricted to right in/right out only access.<br>• Participate in fair share fees to construct a traffic signal at the following intersection in conjunction with Phase III of the development:<br>o Cawston Avenue (NS) at:<br>Ramona Boulevard (EW)<br>• Provide stop sign, stop bar, and stop legend at all project driveways that intersect with public roadways and do not meet traffic signal warrants.<br>• Sight distance at each project access shall be reviewed with respect to standard Caltrans and City of San Jacinto sight distance standards at the time of preparation of final grading landscape and street improvement plans.<br>• On site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site.<br>• Construct secondary access for PA 19 as approved by the City Engineer.<br><br>**Phase IV**<br><br>5.9-d The following measures shall be implemented prior to issuance of the final remaining commercial building permits and as depicted on *Figure 5.9-8*:<br>• Construct Cawston Avenue at its ultimate half-section width as a secondary roadway from Bridge Street to De | |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| | Anza Drive in conjunction with Phase IV development.<br>• Construct Bridge Street at its ultimate full-section width as a secondary roadway from Cawston Avenue to Street "A" in conjunction with Phase IV development.<br>• Construct the remaining half of Bridge Street as a secondary roadway from Street "A" to Sanderson Avenue in conjunction with Phase IV development.<br>• Driveway 10 at Bridge Street shall be restricted to right in/right out only access.<br>• Driveway 12 at Bridge Street shall be restricted to right in/right out only access.<br>• Driveway 16 at Sanderson Avenue shall be restricted to right in/right out only access.<br>• Construct traffic signals at the following intersections in conjunction with Phase IV of the development:<br>o Driveway 3 (NS) at:<br>Ramona Boulevard (EW) (Only if High School is constructed)<br>• Street "A"/Driveway 11 (NS) at:<br>Bridge Street (EW)<br>• Street "B"/Driveway 13 (NS) at:<br>Bridge Street (EW)<br>• Participate in fair share fees to construct a traffic signal at the following intersection in conjunction with Phase IV of the development:<br>o Cawston Avenue (NS) at:<br>Bridge Street (EW)<br>• Provide stop sign, stop bar, and stop legend at all project driveways that intersect with public roadways and do not meet traffic signal warrants.<br>• Sight distance at each project access shall be reviewed with respect to standard Caltrans and City of San Jacinto sight distance standards at the time of preparation of final grading landscape and street improvement plans. | |

## Table 1-2 (Continued)

| Topic / Impacts | | Mitigation Measures / Design Features | Level of Significance after Mitigation |
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| | | On site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site. | |
| 2. Intersections are projected to operate at unacceptable LOS E or F during the peak hours without improvements. Some required improvements would exceed the General Plan typical roadway cross sections and are therefore not feasible. Improvements in excess of the ultimate planned roadway cross-sections at the study intersections would not be required to achieve acceptable LOS for cumulative conditions with completion of the MCP and SR 79 projects. However, it should be noted that completion of these regional improvements can't be determined by the City. | 5.9-e | Because the project, along with many others in the area, is contributing to the city-wide need for street improvements, the project will need to contribute to the Riverside County TUMF and City of San Jacinto DIF programs. As discussed in Section 5.9.2, these fees are collected as part of a funding mechanism aimed at ensuring that local and regional highway capacity keeps pace with projected growth throughout the area. Eligible facilities for funding by the City's DIF program are identified on the City's Facility Needs List, which currently extends through the year 2020. *Table 5.9-17, Estimated TUMF and DIF Fee Calculations,* includes estimated fee calculations for the proposed project based on current fee rates.<br>Many off-site circulation improvements required as a result of project impacts would be mitigated through participation in the TUMF fee program. Many of the off-site improvements that are needed will be planned, designed and constructed by the City, Riverside County Transportation Department, Riverside County Transportation Commission, other cities or a combination of the above.<br>In order to ensure that all off-site traffic improvements are constructed by the City (or the County/RCTC), prior to construction of specific project phases, the City shall ensure that the improvements are made to compensate for the project's contribution to off-site circulation issues. The project applicant's payment of TUMF and DIF fees will allow the financing mechanism to conduct such improvements. | 2. The project would contribute to a significant unavoidable impact for cumulative traffic conditions if the MCP and SR 79 projects are not in place upon completion of the first phase of project development. Because the City can not guarantee that these regional facilities would be in place prior to project build-out, a significant, cumulative impact to regional traffic may occur in the absence of these facilities. |
| 3. The additional worker and construction-related truck trips to and from the project site would potentially affect traffic operations at project area intersections during peak hours. | 5.9-f | The contractor for each phase of the project shall be required to prepare and implement a traffic control plan (TCP) in order to monitor construction equipment, deliveries and construction worker traffic to eliminate any potential hazards to surrounding roadways due to abnormally high traffic into or out of the site | 3. Incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| | for a concentrated period of time. Each traffic control plan shall outline when flagging operations may be necessary (during large construction equipment arrival or deportation, etc.). | |
| **Air Quality** | | |
| 1. The maximum construction-generated $PM_{10}$ emissions of 36.58 pounds per day would be below the SCAQMD's quantitative significance threshold of 150 pounds per day. Although such fugitive dust would be short term and would only last during the duration of grading activity, such emissions could cause a public nuisance or further exacerbate the existing $PM_{10}$ nonattainment situation in the SCAB. | 5.10-a Consistent with SCAQMD Rule 403, it is required that fugitive dust generated by grading and construction activities be kept to a minimum with a goal of retaining dust on the site, by following the dust control measures listed below:<br>a) During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems shall be used to prevent dust from leaving the site and to create a crust after each day's activities cease.<br>b) During construction, water truck or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas later in the morning and after work is completed for the day and whenever winds exceed 15 miles per hour.<br>c) Soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation.<br>d) Reduce speeds on unpaved roads to less than 15 miles per hours.<br>e) Halt all grading and excavation operations when wind speeds exceed 25 miles per hour.<br>f) Dirt and debris spilled onto paved surfaces at the project site and on the adjacent roadways shall be swept, vacuumed, and/ or washed at the end of each workday.<br>g) Should minor import/ export of soil materials be required, all trucks hauling dirt, sand, soil, or other loose material to and from the construction site shall be tarped and maintain a minimum two feet of freeboard. | 1. Incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| | h) At a minimum, at each vehicle egress from the project site to a paved public road, install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long (or as otherwise directed by SCAQMD).<br>i) Review and comply with any additional requirements of SCAQMD Rule 403. | |
| 2. Vehicle exhaust results from internal combustion engines used by construction equipment and vehicle which results in emissions of $NO_x$, VOCs, and CO. Such emissions will be below SCAQMD thresholds, but should be further reduced through the use of project design features and mitigation. | 5.10-b The following shall be adhered to during project grading and construction to reduce VOC, NOx, and CO from construction equipment:<br>a) Heavy-duty diesel-powered construction equipment manufactured after 1996 (with federally mandated "clean" diesel engines) shall be utilized.<br>b) The engine size of construction equipment shall be the minimum size.<br>c) The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest number is operating at any on time.<br>d) Construction equipment shall be maintained in tune per the manufacturer's specifications.<br>e) Catalytic converters shall be installed on gasoline-powered equipment..<br>f) Diesel catalytic converters shall be installed.<br>g) Diesel powered equipment shall be utilized in lieu of electric equipment. | 2. Less than significant impact. Incorporation of mitigation will further reduce emission levels. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| 3. The application of architectural coatings (exterior/interior paint and other finishings) would produce VOC emissions that would exceed the SCAQMD's quantitative significance threshold of 75 pounds per day. This impact is considered significant. | 5.10-c The project developer shall use zero-Volatile Organic Compounds (VOC)-content architectural coatings during project construction/ application of paints and other architectural coatings to reduce ozone precursors. If zero-VOC paint cannot be utilized, developer shall avoid application of architectural coatings during the peak smog season: July, August, and September. Developer shall procure architectural coatings from a supplier in compliance with the requirements of SCAQMD's Rule 1113 (Architectural Coatings).<br>The following websites provide information/ lists of manufacturers related to zero-VOC content coatings:<br>a) http://www.aqmd.gov/prdas/brochures/ paintguide.html<br>b) http://www.delta-institute.org/publications/ paints.pdf<br>c) http://www.cleanaircounts.org/factsheets/ FS%20PDF/Low%20VOC%20Paint.pdf | 3. Although mitigation is proposed, impacts would remain significant and unmitigable. |
| 4. The projected operational emissions from both area source and vehicular emissions are substantially above the SCAQMD significance criteria for all pollutants except SOx. | 5.10-d The applicant shall incorporate the following energy conservation measures into project building plans:<br>• Install low NOx water heaters and space heaters<br>• Install heat transfer modules in furnaces<br>• Use light colored, water-based paint and light-colored roofing materials to the satisfaction of the City.<br>• Install solar panels for water heating systems and other facilities and/ or use water heaters that heat water only on demand.<br>• Use passive solar cooling/ heating.<br>• Maximize the use of natural lighting.<br>• Install energy efficient appliances and lighting.<br>• Use landscaping to shade buildings and parking lots.<br><br>In addition to the above area source mitigations/ required site design features, the following mitigation measures are required in order to minimize long term vehicular impacts: | 4. Although mitigation is proposed, impacts would remain significant and unmitigable. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | | Level of Significance after Mitigation |
|---|---|---|---|
| | | • Provide preferential parking spaces for employee carpools and vanpools in the commercial and business park land uses.<br>• Install covered bus stops to encourage use of mass transportation.<br>• Coordinate with the local transit agency to provide public transit to the project site.<br>• Develop, in coordination with the City of San Jacinto, public outreach programs to promote alternative methods of transportation. | |
| 5. Due to the unknown nature of RCTC-planned transportation improvements, CO hot spots must be assumed. This would result in significant impacts. | 5.10-e | To mitigate the traffic conditions that could result in potential CO "hotspots," the project applicant shall participate in funding off-site traffic improvements which are needed to serve cumulative future traffic conditions through payment of appropriate traffic mitigation fees (Riverside County TUMF and City of San Jacinto DIF fees). TUMF provides a key funding source for General Plan improvements within the project area, including the required improvements related to the Ramona Expressway. It should be noted that this mitigation measure also appears as Mitigation Measure 5.9-e. | 5. Although mitigation is proposed, impacts would remain significant and unmitigable. |
| **Noise** | | | |
| 1. Significant noise impacts may occur from exterior noise exposure above 65 dB CNEL for residential, commercial, and park uses located adjacent to the planned ROW for roadway facilities. | 5.11-a | Residential lots located adjacent to Sanderson Avenue shall include an 11 foot high noise barrier; residential lots adjacent to Ramona Boulevard and Cawston Avenue (between Ramona Boulevard and De Anza Street) shall require noise barriers a minimum of 6 feet in height. The project noise barriers must have a surface density of at least four pounds per square foot, and have no openings or cracks. The noise barriers may be constructed of acrylic glass, any masonry material, earthern berm or a combination of these materials | 1. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | | Mitigation Measures / Design Features | | Level of Significance after Mitigation | |
|---|---|---|---|---|---|
| 2. | Noise levels associated with the commercial activities would vary depending on the number of delivery trucks, loading dock areas and customer traffic generated by the commercial site. Similarly, HVAC equipment noise would vary depending on the number and types of equipment selected. Typical roof-top HVAC packaged units generate noise levels of approximately 70 dB at ten feet from the source. These noise sources may result in significant impacts depending on their make, model, location, proximity to adjacent receptors, etc. | 5.11-b | Individual acoustical analyses shall be prepared as part of site plan/development plan review for future commercial development applications submitted to the City, to ensure noise levels would comply with the City's Draft General Plan noise standards (maximum exterior noise levels of 65 dB CNEL; maximum interior noise levels of 45 dB CNEL) and not result in significant noise impacts at adjacent park land or residences. The applicant for each commercial development proposal would have the responsibility to commission or fund the required acoustical analysis. Although the future building-specific noise study will determine exact specifications, it is likely that interior noise mitigation would consist of sound-rated windows and mechanical ventilation systems for the commercial buildings. All required noise control measures identified in the acoustical analysis shall be made conditions of ultimate development approval to ensure that all measures are implemented to fully mitigate anticipated noise impacts. | 2. | Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 3. | Traffic-related noise exposure levels within exterior use areas for the schools (i.e., playground, sports fields, athletic courts, etc.) could exceed acceptable noise standards, thereby resulting in potentially significant noise impacts.<br>Future school buildings that are located in areas exposed to a noise level greater than 60 dB CNEL could exceed an interior noise level of 45 dB CNEL. This would result in a potentially significant impact.<br>There are also residential areas proposed immediately adjacent to the north and east of the elementary school site. Specific residential setback information and the location of the schools facilities are not available. Therefore, until more specific | 5.11-c | For the high school site, the specified noise barriers along Ramona Boulevard and Cawston Avenue shall be installed to protect exterior use areas of the site from traffic-related noise; OR if the School District desires to forego the construction of the specified noise barriers in favor of selective location of exterior use space, a site specific acoustical analysis shall be prepared to determine adequate noise control for traffic-related noise (i.e., use of buildings to shield exterior use areas, etc.), to ensure that noise levels do not exceed 65 dB CNEL at exterior use areas. The School District would have the responsibility to commission or fund the acoustical analysis to evaluate traffic noise control if the sound walls specified herein are not incorporated into the high school development design. All required noise control measures identified in the acoustical analysis shall be made conditions of development approval. | 3. | Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| setback and school design information is available the elementary school noise impact upon residential land uses to the north and east are considered potentially significant. | 5.11-d A Notice-to-Property Owner shall be recorded on a separate buyer information sheet with the final map providing notice to potential future property owners in the vicinity of the school site (i.e., Planning Areas 1, 3 and 19), stating that they could be exposed to noise associated with outdoor activities at the high school. The disclosure will function to make potential buyers aware of the anticipated noise levels/impacts, such that particularly noise-sensitive individuals would have the opportunity to decide against purchase of a home which is subject to these periodic noise conditions. | |
| 4. Two new freeways, State Route 79 (SR 79) and Mid County Parkway (MCP) are currently in various planning stages. Detailed design drawings are not available for these two freeways. However, it is anticipated that the alignments of both freeways would be located at least 1,000 or more feet from the project site. As the area develops, there would be buildings and other structures that would most likely provide shielding between the freeways and the project site that would substantially attenuate the traffic noise. However, for the purposes of the project noise analysis it was conservatively assumed that the potential noise contribution from future SR 79 and MCP freeways would be 60 dB CNEL at the north and east boundaries of the project site. | 5.11-e For residences proposed within the future 60 dB CNEL contour, an interior acoustical analysis shall be required prior to the issuance of building permits to ensure that the interior CNEL would not exceed 45 dB. Interior noise mitigation would most likely consist of sound-rated windows and mechanical ventilation systems for the homes. All required noise control measures identified in the acoustical analysis shall be made conditions of building permit issuance. | 4. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 5. The generation of construction activities during sensitive time periods for adjacent land uses is considered a significant nuisance. As such, project generated construction noise would pose a potentially significant effect on noise-sensitive | 5.11-f Future project-related site preparation and construction activities shall be limited to the hours between 7:00 am and 6:00 pm, Monday through Saturday. No construction shall occur on Federal holidays (e.g., Thanksgiving, July 4th, Labor Day, etc.). Construction equipment maintenance shall be limited to the same hours. Non-noise-generating | 5. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| receptors. | construction activities such as interior painting are not subject to these restrictions. | |
| **Public Services and Utilities** | | |
| 1. The proposed development would result in a minor incremental increase in demand for fire protection services and, with consideration of future cumulative increases in demand for fire protection services associated with other development proposals and area-wide growth, could potentially result in decreased levels of service within the project area and city-wide. This would constitute a significant impact. | 5.12-a The Developer shall be required to pay the Development Impact Mitigation Fees, as determined to be necessary by the development agreement, City Community Development Department and Public Works Department to offset impacts on City fire services. The current estimated fee amount is outlined in *Table 5.12-1, Fire Facilities Fee Derivation Summary*. | 1. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 2. The proposed development would result in a minor incremental increase in demand for police services and, with consideration of future cumulative increases in demand for police services associated with other development proposals and area-wide growth, could potentially result in decreased levels of service within the project area and city-wide. This would constitute a significant impact. | 5.12-b The Developer shall be required to pay the Development Impact Mitigation Fees, as determined to be necessary by the development agreement, City Community Development Department and Public Works Department to offset impacts on police services. Current fee amounts are summarized in *Table 5.12-2, Police Facilities Fee Derivation Summary.* | 2. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 3. Should potential school site in the Specific Plan area not be developed by the District in a timely manner, new student generation of the proposed development may substantially exceed the capacity levels of existing school facilities. As such, impacts to school facilities resulting from the development of the Villages of San Jacinto, as well as potential cumulative impacts of the development in combination with other anticipated projects in the area, are considered potentially | 5.12-c The Developer shall be required to pay the Development Impact Mitigation Fees, as determined to be necessary by the development agreement, City Community Development Department, Public Works Department and San Jacinto School District, to offset impacts on school facilities.<br><br>Requiring payment of the school facility mitigation fees would aid in acquiring the additional resources to provide adequate school facilities necessary to accommodate existing and future residents. Therefore, contribution of the mitigation fees by the | 3. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| significant. | developer would ensure that adequate mitigation is provided to reduce potential direct and cumulative school impacts to less than significant levels. Should the developer assist the City in facilitating the construction of the school site identified in the Specific Plan, the City may decide to waive or reduce some portion of the school mitigation fees typically required to an appropriate lesser amount in consideration of the partial mitigation provided by developer-assisted, on-site school facility construction. | |
| 4. Due to the influx of population, the project could result in inconsistencies with AB 393 which governs the quantities jurisdictions, such as the City of San Jacinto, can contribute to local landfill facilities. This would result in a potentially significant impact. | 5.12-d Demolition and/or excess construction materials shall be separated on site for reuse/recycling or proper disposal (e.g., concrete asphalt). During grading and construction, separate bins for recycling of construction materials and brush shall be provided on site.<br><br>5.12-e Landscaping shall be designed and located to utilize drought tolerant species, minimize irrigation, and to reduce green waste generation.<br><br>5.12-f The developer shall develop and submit a Solid Waste Management Plan to be reviewed and approved by the City Public Works Solid Waste Division and Planning and Development, and shall include:<br>• Provision of space and/or bins for the storage of recyclable materials within the project site,<br>• Methods of waste collection<br>• Information programs to future residents regarding disposal of hazardous wastes. | 4. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| **Hazards/Risk of Upset** | | |
| 1. Due to the historic use of approximately 20 acres of the property as a heifer raising farm, the presence of manure may result in significant environmental impacts related to methane gas exposure. | 5.13a In order to ensure that methane hazards do not exist on the 20 acre portion of the site formerly used for heifer raising activities, the Riverside County's Methane Investigation Protocol shall be followed during and after site preparation. After grading of the 20 acres, methane gas sampling and any associated mitigation mechanism installation shall occur in accordance with the most recent Riverside County Department of Environmental Health protocols. | 1. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 2. The issuance of the Regional Water Quality Control Board's "no further action" letter indicates that hazardous materials previously present on the site have been removed to a level that no longer poses a threat to the environment. Therefore, while the project site contains historic environmental hazards, these hazards have been removed and would no longer pose significant health risks to the public or environment. That said, regulatory procedures may be required to officially determine the site safe for reuse. | 5.13b The Regional Water Quality Control Board and Department of Health Services shall be notified of potential site reuse in accordance with the December 26, 2001, "no further action" letter provided for the remediated leaking underground storage tanks. These agencies may require additional processing or testing depending on the ultimate reuse of the specific area contaminated. In order to ensure that regulatory compliance has been met, on-site soils shall be tested prior to grading to determine the presence of contaminants. Testing results will help determine if permissible levels of contaminants have been exceeded. If levels have been exceeded, impacted soils shall be remediated in accordance with Riverside County Department of Health Service protocol. | 2. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 3. Historic windmills were often powered by diesel fuel. The diesel fuel source was often stored in underground storage tanks. During the Phase I Site Assessment, diesel storage tanks were not noted nor did they appear on federal or state databases within the vicinity of the old windmill. That said, often underground storage tanks are unreported and therefore could be discovered during grading. If an underground storage tank or stained soil or soil with a petroleum hydrocarbon odor is uncovered, a potentially significant impact could occur. | 5.13c The former windmill site shall be flagged prior to site grading. During site grading near the former windmill site, a qualified hazardous materials specialist shall monitor grading activities. If an underground storage tank or petroleum hydrocarbon odor-laden soil is uncovered near the old windmill site, grading and site work shall cease and the Regional Water Quality Control Board and Riverside County Department of Health Services notified. A remediation plan shall be developed to ensure that all contaminated soil and structures are removed, handled and disposed of in accordance with existing state and local regulations. Sampling in the area of impacted soils shall continue until contaminant levels reach an acceptable risk. | 3. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| 4. Petroleum stained soil was observed beneath the diesel above ground storage tank located northwest of the reservoir, near the irrigation groundwater well located southwest of the reservoir and on the floor of the equipment shed, beneath three oil containing 55-gallon drums. | 5.13d In order to mitigate for potential hazards associated with petroleum stained soil beneath diesel storage tanks and on the floor of the equipment shed beneath 55-gallon oil storing drums, collection of surface and near surface samples by a qualified hazardous materials specialist must occur. Following removal of the equipment shed, observations will be made for any stained soil beneath the shed. If stained areas are observed, surface and near surface samples shall be collected. Testing for contaminant levels must occur and an assessment of significance under state and local hazardous material regulations must follow. Once contaminant levels are determined, the Regional Water Quality Control Board and Riverside County Department of Environmental Health must be contacted to determine the proper mitigation method prior to site redevelopment. Any soil and other materials contaminated with hazardous materials may be considered hazardous waste and therefore must be disposed of in accordance with federal, state and local regulations. | 4. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 5. Debris, including old equipment, water heaters, trash, etc. were observed in several piles throughout the site. In order to avoid potential significant impacts related to improper disposal of debris piles. | 5.13e During removal of debris piles, a qualified hazardous materials specialist shall be on site. The hazardous materials specialist will conduct a site assessment of debris pile content and direct disposal accordingly. All waste products will be disposed of in accordance with state and local laws. | 5. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 6. Two septic systems are located on site. | 5.13f In order to mitigate for potential hazards associated with existing septic tanks on site, the construction contractor shall remove the tanks and residue material in accordance with Riverside County Department of Environmental Health protocol. The project applicant will then be required to provide proof of septic tank removal to the City prior to issuance of building permits. | 6. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |
| 7. Once the project is developed, domestic water will come from imported water sources from Eastern Municipal Water District rather than on-site groundwater supplies. Three on-site groundwater wells and any additional | 5.13g In order to prevent groundwater contamination, the three on-site groundwater wells and vapor monitoring well, and any additional wells uncovered during site development, shall be abandoned and decommissioned in accordance with Regional Water Quality Control Board and Riverside County | 7. Potential impacts would be significant but incorporation of mitigation will reduce impacts to below a level of significance. |

## Table 1-2 (Continued)

| Topic / Impacts | Mitigation Measures / Design Features | Level of Significance after Mitigation |
|---|---|---|
| wells that are discovered during site development will need to be closed as part of the project and may have environmental impacts. | Department of Health protocols. The project applicant will be required to provide proof of well decommissioning to the City prior to issuance of building permits. | |
| 8. Due to the age of many on-site buildings, the potential for asbestos-laden and lead-based paint materials exist on site. | 5.13h Prior to demolition of onsite buildings, an asbestos survey shall be performed by a certified asbestos abatement contractor. Findings in the survey shall be used to determine what precautions shall be taken during demolition activities. If asbestos is present, removal shall occur in accordance with Riverside County Department of Environmental Health protocol.<br><br>5.13i All building material suspected to contain lead-based paint shall be tested prior to demolition. If lead-based paints are present, removal shall occur in accordance with Riverside County Department of Environmental Health protocol. | 8. Potential impacts would be less than significant. |

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# SECTION 2.0
# INTRODUCTION

## 2.1 PURPOSE AND SCOPE OF THE RECIRCULATED DEIR

A Draft Environmental Impact Report (DEIR) for the Villages of San Jacinto Specific Plan was originally circulated for a 45-day public comment period in April 2006 (State Clearinghouse No. 2004122132). After the close of public review, the project applicant proposed several project description changes, including a revised drainage scenario, an extension of the project build-out, and inclusion of a development agreement as an additional discretionary action. As Lead Agency, the City of San Jacinto determined that these changes necessitated a Recirculated Draft EIR (RDEIR). Consequently, the City prepared an RDEIR to address the project description changes, which was circulated for a 45-day public review period in January 2007. Although the entire EIR was recirculated, only the environmental topics that were revised were subject to an additional review and comment period by the public: Those topics included geology and soils, water quality and hydrology, air quality, noise, and public services and utilities. During March 2007, a Final EIR was prepared to address comments received during the two public review periods. The City Planning Commission recommended approval of the project and certification of the Final EIR in April 2007. Minor changes in the project description delayed consideration of the project before the City Council until June 2008, and subsequently the project was continued in order to respond to questions, comments, and concerns raised at the June 2008 City Council meeting. Partially in response to City Council comments and current market demand, the applicant chose to update the Villages of San Jacinto Specific Plan and the Land Use Plan and to recirculate the EIR a second time to adequately notify the public of the revised project's potential environmental impacts.

Section 15088.5 of the State California Environmental Quality Act (CEQA) Guidelines requires lead agencies to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the DEIR for review but before certification. New information can include changes in the project or environmental setting as well as additional data or other information. Since new information that was not previously described in the April 2006 DEIR or the January 2007 RDEIR has become available, the City has determined that it is appropriate to prepare this RDEIR No. 2 for public review.

As required by State CEQA Guidelines Section 15088, the City will evaluate comments received on the RDEIR No. 2. The comments and responses will be included in the Final EIR as a separate section along with revised EIR text necessitated by the response to comments (if necessary). Comments on the RDEIR No. 2 should be limited to the EIR sections/environmental issues that were modified. The following section describes the new information analyzed in this

RDEIR No. 2. The RDEIR No. 2 will retain the same SCH number (noted above) in order to establish a reference to the prior documents prepared for this project.

## 2.2 BACKGROUND AND CONTENT OF THE RECIRCULATED DEIR

Consistent with the requirements of Section 15088.5(c) of the State CEQA Guidelines, this RDEIR contains all sections of the DEIR. However, in accordance with CEQA requirements, comments on the RDEIR shall be limited to the EIR sections that have changed. The following sections have been modified. All section numbering is consistent with the section numbering of the April 2006 DEIR.

**Section 1.0, Executive Summary**: The Executive Summary has been updated to reflect the revised project description, all new mitigation measures, and any additional significant impacts that have occurred due to project changes.

**Section 2.0, Introduction:** This section includes a summary of all sections that have changed since preparation of the April 2006 DEIR and January 2007 RDEIR, and a brief description of the history of the project's EIR process to date.

**Section 3.0, Project Description:** Project features that have been revised include the project site plan, mixture of land uses, drainage and other infrastructure components of the Specific Plan, the tentative map, and construction phasing. Graphics in this section have been revised to show those changes.

**Section 4.0, Environmental Setting:** This section has been updated to describe changes in existing land use on the site since preparation of the April 2006 DEIR and January 2007 RDEIR.

**Section 5.1, Land Use, Planning, and Zoning:** This section has been revised to reflect the newly proposed land use plan and its relationship with the existing City General Plan. Since the City's General Plan was being updated during preparation of the original DEIR, the revised RDEIR section has been updated to reflect the final, adopted General Plan Update (May 2006). The land use graphics have also been updated to reflect the revised land use plan and tentative map. The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance.

**Section 5.2, Landform Alteration and Aesthetics:** This section has been revised to reflect revised visual resource General Plan policies included in the 2006 General Plan Update, newly proposed land uses, and revised open space corridors that may impact the ultimate visual appearance of the site once developed. The discussion of existing visual quality has been updated to reflect the changed site appearance including absence of the cattle feed lot and removal of

most of the agriculture. The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance and the potential visual impact of a proposed 11-foot sound wall. Updated photos of the project site are also included.

**Section 5.3, Agricultural Resources:** This section has been amended to reflect the fact that cattle are no longer being raised on the site and the majority of agricultural operations have ceased. The impact analysis has been revised to provide a discussion of each CEQA threshold of significance. There is also a discussion which explains the reasons there are no feasible mitigation measures to replace converted farmland.

**Section 5.4, Biological Resources:** This section has been revised to clarify that mitigation for project impacts to jurisdictional wetlands would be provided off-site since the on-site wetlands were found to be of low overall quality (containing large quantities of non-native species), and do not provide high quality habitat for wildlife species due to the surrounding agricultural lands. The impact analysis has been revised to provide a discussion of each CEQA threshold of significance and to clarify minor technical specifics regarding the status of species found or expected to be encountered onsite.

**Section 5.5, Cultural Resources:** This section was revised to clarify the lack of historical integrity of the onsite structure and to explain the existing Soboba Consulting Services Contract which helps avoid potential impacts to unmarked Native American burial sites or other impacts to lands considered sacred by local Native American peoples. The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance.

**Section 5.6, Geology and Soils:** This section has been amended to reflect the modified site plan and to show the structural setback zones on the updated land use plan. The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance.

**Section 5.7, Paleontological Resources:** The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance.

**Section 5.8, Water Quality and Hydrology:** This section has been revised to reflect impacts associated with changes in the updated drainage study provided in *Appendix G* and includes the updated Drainage Plan depicted in the Specific Plan. It also contains a summary of updated water quality issues discussed in the revised Specific Plan and in the *Lake Preliminary Design Report* (Pacific Aquascape, Inc. 2009). The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance.

**Section 5.9, Transportation, Circulation, and Access:** A modified traffic study has been prepared to reflect the revised project and changed surrounding circulation system conditions, and is summarized in this section. The entire updated traffic report is contained in Appendix H.

The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance.

**Section 5.10, Air Quality:** This section has been updated to reflect (1) revised and new ambient air quality standards, (2) changes in attainment status with federal and state ambient air quality standards in the South Coast Air Basin, (3) ambient air quality data for the San Jacinto River Valley, and (4) other regulatory changes since January 2007. This analysis also includes a comparison of the project to the South Coast Air Quality Management District's Local Significance Thresholds. Construction and operational emissions have been revised using the current air quality model as well as the land uses and trip generation rates associated with the revised project. This section also includes a discussion of greenhouse gases and global climate change, in order to comply with legislative and CEQA mandates that have been established subsequent to the preparation of the DEIR and first RDEIR. The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance. Revised and new air quality models are contained in Appendix I.

**Section 5.11, Noise:** The acoustical analysis has been updated to reflect changes in the new traffic report as well as the revised land use plan. Revised noise analysis models are contained in Appendix J. The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance.

**Section 5.12, Public Services and Utilities:** The revised drainage plan has been incorporated into the Public Services and Utilities section to assess the potential impacts to stormwater runoff from development of the proposed project. This section includes figures that update the water and sewage systems to reflect changes in the Specific Plan. In addition, development impact fees, consumption, and other project impacts have been updated to reflect the revised unit number, commercial square footage, and related impact discussions. The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance.

**Section 5.13, Hazards/Risk of Upset:** This section reflects changes in existing site conditions including removal of cattle and some of the buildings. The impact analysis has been revised to provide a discussion of each individual CEQA threshold of significance.

**Section 6.0, Cumulative Impacts:** This section has been updated to include new projects that have been proposed since 2005 and to confirm the status/project descriptions of all projects that were listed in the 2006 Draft EIR. Projects that were included in the original cumulative impact analysis that are no longer active/being contemplated have been removed. The cumulative impact analysis has been revised based on the City's updated list of active projects.

**Section 7.0, Effects Found Not to be Significant:** The population and housing discussion has been updated to reflect the correct number of housing units.

**Section 9.0, Significant Irreversible Environmental Changes:** A discussion has been added to this section to identify significant environmental effects that cannot be avoided if the proposed project is implemented. The population and housing discussion has been updated to reflect the correct number of housing units.

**Section 10.0, Project Alternatives:** This section was revised to update reference to the recently revised City of San Jacinto General Plan. It also reflects changes to the project description and project impacts, clarification of the reasons an alternate site location is infeasible, and further clarification as to the reasons each alternative would or would not meet project objectives.

**Section 11.0, References:** This section includes a comprehensive listing of all new sources of information used in the preparation of the RDEIR No. 2.

**Section 12.0, List of Preparers:** This section was revised to include the project team members who participated in preparation of the RDEIR No. 2.

## 2.3 RELATION TO DEIR

Consistent with the requirements of CEQA Guidelines Section 15087, this RDEIR No. 2 is being made available on August 27, 2009, for public review for a period of 45 days. The public review period ends on October 12, 2009. During this period, the general public, agencies, and organizations may submit written comments on the RDEIR to the lead agency. Pursuant to procedures set forth in CEQA Guidelines Section 15088.5(f)(2), reviewers are requested to limit their comments to the materials contained in this RDEIR.

As required under CEQA Guidelines Section 15087 and 15088.5(d), the City has sent a Notice of Availability to all organizations and members of the public who were on the City's distribution list for the DEIR and to any additional persons or organizations that have requested copies of the DEIR and any individuals/organizations who commented on the April 2006 DEIR or the January 2007 RDEIR. It should be noted that all comment letters previously submitted for the April 2006 Draft EIR and the January 2007 Recirculated Draft EIR are still part of the project record.

## 2.4 PURPOSE AND SCOPE OF THE EIR

EIRs are informational documents "which will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project" (Section 15121 of the CEQA Guidelines). The purpose of this RDEIR No. 2 is to evaluate changes in potential environmental effects of the proposed Villages of San Jacinto Specific Plan development from previous drafts. This RDEIR No. 2 is intended for use by both decision makers and the public. It provides relevant information concerning the potential environmental effects and mitigation

associated with the development and function of a residential, commercial, and mixed-use type development on the site. The Lead Agency for the project is the City of San Jacinto.

## 2.5 CEQA REQUIREMENTS

**CEQA Compliance**

This EIR has been prepared in accordance with CEQA (Public Resources Code Section 21000 et seq.); the CEQA Guidelines published by the Resources Agency of the State of California (California Code of Regulations Sections 15000 et. seq, as amended); and the City of San Jacinto Environmental Review Procedures.

**Notice of Preparation**

In compliance with Section 15082 of the CEQA Guidelines, the City of San Jacinto Planning and Building Department circulated a Notice of Preparation (NOP), dated December 27, 2004, to interested agencies, groups, and individuals. All comments received during the NOP public notice period were considered during the preparation of the April 2006 DEIR. The NOP and comments are included in *Appendix A* of this RDEIR No. 2. Based on the scope of analysis for the April 2006 DEIR, the following issues were determined to be potentially significant and are therefore included in *Sections 5.0* through *9.0* of this RDEIR No. 2 (revised sections are listed in *Section 2.2* above):

- Land Use, Planning, and Zoning
- Landform Alteration/Aesthetics
- Agricultural Resources
- Biological Resources
- Cultural Resources
- Geology and Soils
- Paleontological Resources
- Water Resources and Water Quality
- Transportation, Circulation, and Access
- Air Quality
- Noise
- Public Services and Utilities
- Hazards/Risk of Upset.

## 2.6 USES OF EIR/TYPE OF EIR

As the designated Lead Agency, the City of San Jacinto has assumed responsibility for preparing this document. The RDEIR No. 2 has been made available for review to the public and public agencies for 45 days to provide comments on the "sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (Section 15204 of the CEQA Guidelines).

The proposed Villages of San Jacinto RDEIR No. 2 is intended to be a "project" EIR. As stated in CEQA Guidelines Section 15161, a Project EIR "should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction and operation." Specific project details, including overall planning, construction, and operation, are known at this time; therefore, a project-specific level of analysis is appropriate for this RDEIR.

## 2.7 AREAS OF CONTROVERSY

Per CEQA Guidelines Section 15123, an EIR shall contain a summary that identifies each significant effect of the project and mitigation measures (See *Table 1-2, Summary of Environmental Impacts*) as well as “areas of controversy” and “issues to be resolved.” The project assumes that the locally preferred alignment of a future State Route 79 corridor is chosen. Some property owners in the vicinity have raised objections at prior public hearings for this project regarding the locally preferred alignment.

Eastern Municipal Water District (EMWD) requested in its May 16, 2006 letter responding to the April 2006 Draft EIR that they would like between a 1,320 to 2,000 foot buffer between its water reclamation facility and the nearest residential areas within the proposed project. As discussed in Section 5.1.4, the nearest residential lots to the treatment plant would be located over 1,000 feet from the plant boundary and would be separated by mixed use, commercial, recreation and internal roadways.

## 2.8 ISSUES TO BE RESOLVED

Section 5.9, Transportation, Circulation and Access, indicates that in the absence of planned regional transportation facilities (i.e., the Mid-County Parkway or MCP and SR-79 improvements), the project would contribute to a significant unavoidable impact for cumulative traffic conditions if the MCP and SR-79 projects are not in place upon completion of the first phase of project development. Because the City can not guarantee that these regional facilities would be in place prior to project build-out, a significant, cumulative impact to regional traffic may occur in the absence of these facilities.

## 2.9 RELATIONSHIP TO OTHER DOCUMENTS

This document utilizes a number of planning documents as detailed in *Section 5.1, Land Use*. These documents include the City of San Jacinto General Plan (adopted on May 4, 2006); the Zoning Ordinance of the City of San Jacinto (updated April 22, 2008); the City of San Jacinto Redevelopment Plan; the Transportation Uniform Mitigation Fee (TUMF) 10-Year Strategic Plan (adopted by the Western Riverside Council of Governments (WRCOG) in June 2004); the Western Riverside County Multiple Species Habitat Conservation Plan (adopted June 17, 2003); the Southern California Association of Governments (SCAG) Growth Management Plan ; and the South Coast Air Quality Management District Air Quality Management Plan (adopted August 1, 2003); These documents are incorporated by reference in this document per the provisions of Section 15150 of the State CEQA Guidelines.

# SECTION 3.0
# PROJECT DESCRIPTION

## 3.1 PROJECT LOCATION

The proposed project is located in the City of San Jacinto (the City) in northwestern Riverside County, California (*Figure 3.0-1, Regional Map*). The project site is located in the northwestern portion of the City (*Figure 3.0-2, Vicinity Map*). The project is located along Sanderson Avenue, which is one of the City's main north–south transportation routes. The project site is bordered by undeveloped agricultural land to the north (and future westward extension of Ramona Boulevard), Sanderson Avenue to the east, Odell Avenue to the west, and undeveloped agricultural land and a municipal wastewater treatment plant to the south (*Figure 3.0-3, Site Location Map*). The proposed project is scheduled to be constructed in several phases (see *Phasing and Construction Planning*, page 3-18).

Land uses in the project area consist mainly of agricultural operations, including sod farms, dry farming, animal grazing pastures, and dairies. Several parcels within this portion of San Jacinto are in the process of being developed with residential subdivisions or commercial centers. Two drainage features, associated with the nearby San Jacinto River, are located within the vicinity of the project: Casa Loma Canal and San Jacinto Reservoir. The Colorado River Aqueduct is located north of the project. The Eastern Municipal Water District (EMWD) Hemet/San Jacinto Regional Water Reclamation Facility is located directly south of the project site.

State Route 79 (SR-79) and Sanderson Avenue serve as major north–south transportation corridors through this portion of the City. Ramona Expressway, located north of the project site, serves as the main east–west arterial through the City. Enhanced access to the western portion of San Jacinto will occur through the future widening and realignment of SR-79 and Ramona Expressway.

## 3.2 PROJECT SITE BACKGROUND

The project site is approximately 475.1 acres in size. The project site has been used as pasture land and/or a farming operation, similar to surrounding properties, for over one hundred years. In 1978, a 20-acre area of the project site was converted to a cattle raising facility. In 1997, a majority of the remaining property was leased to the Quality Turf Company. The San Jacinto Valley has traditionally supported agriculture and rural residential land uses, but has recently been experiencing increased urbanization.

One residence and one small outbuilding are located on the project site (see *Figure 5.13-1*). The residence and the outbuilding (likely a former equipment storage shed) are both abandoned. A

portion of the project site is currently used for sod farming generally in the northwestern portion of the site.

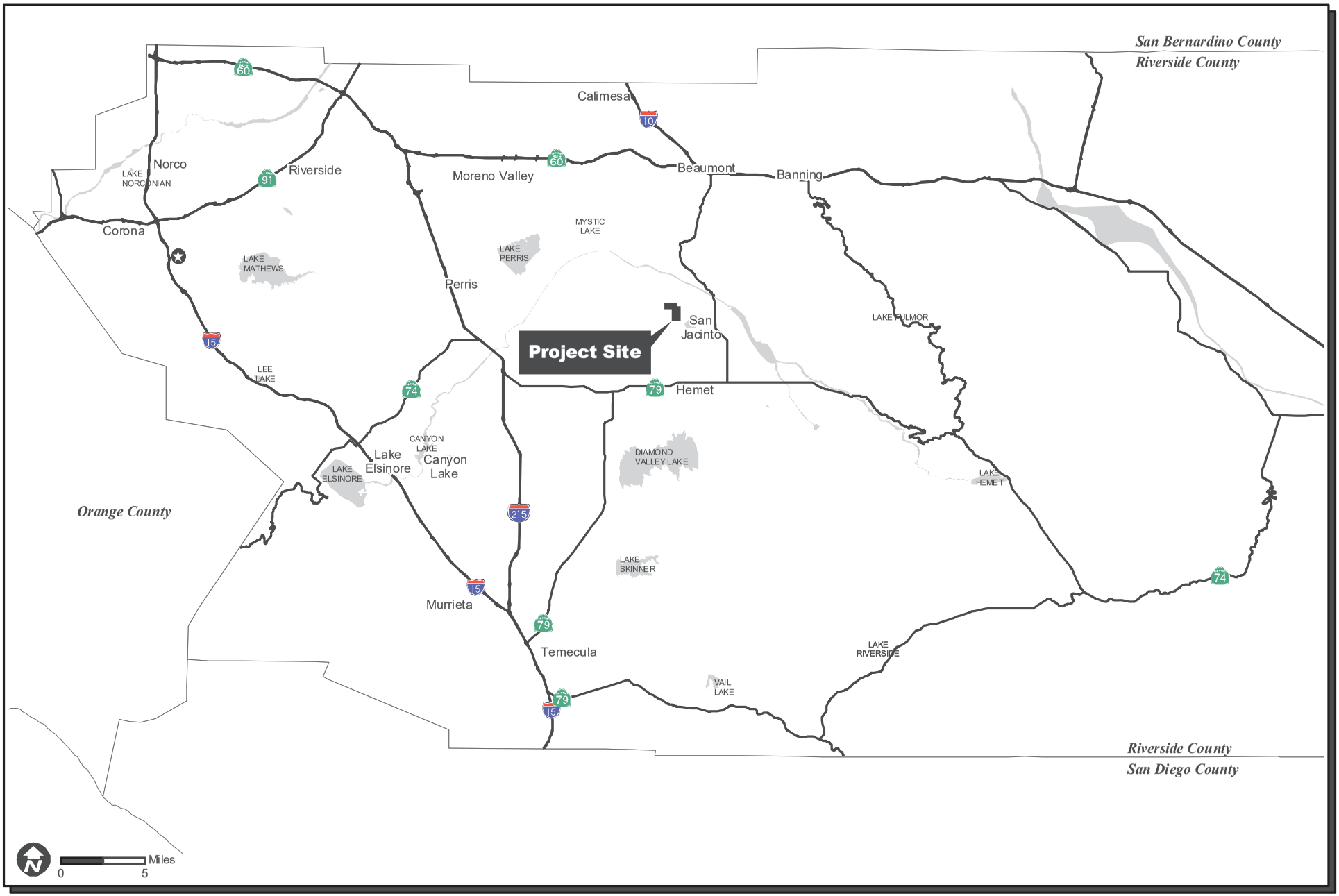
## 3.3 SITE DESCRIPTION

The site is generally flat and is located on the alluvial plain of the San Jacinto River. The site elevation above sea level ranges from 1,455 feet along the northern edge to 1,490 feet in the southeastern corner. The southeastern corner of the site is a former cattle feed lot with several remaining shade structures associated with that operation. The remainder of the land consists primarily of vacant former agricultural land. Vegetation on site consists of weedy invasive species that have accumulated since the majority of agricultural production was discontinued. There are scattered sod fields in the northern portions of the property, which is the only remaining agricultural operation. Several unnamed, unimproved dirt roadways traverse the site and are associated with former and current agricultural operations. Irrigation canals run along the edges of fields in support of sod farming activities. A detention basin is located along the north-central edge of the project site.

## 3.4 PROJECT OBJECTIVES

Specific objectives for the proposed project include the following:

- Provide for the establishment of a master-planned community through implementation of a Specific Plan, consisting of a maximum of 1,329 dwelling units, which is consistent with the scale and character of planned uses in surrounding areas.
- Provide a variety of detached single-family lot sizes in traditional subdivision layouts that are marketable within the evolving economic and demographic profile of the City of San Jacinto.
- Provide public and private recreational amenities for the benefit of residents of this community and of the City of San Jacinto.
- Provide drought-tolerant and water-efficient landscaping for the community.
- Incorporate recycled water from EMWD to supply the lake and irrigate landscaping to minimize the use of potable water.
- Provide development opportunities for municipal, office, professional, and neighborhood retail commercial land uses within the community to support the economic growth of the City and to reduce the reliance of automobile use within the surrounding community.
- Consider topographic, geologic, hydrologic, and environmental opportunities and constraints to create a design that safely accommodates seismic and hydrologic hazards.




# Villages of San Jacinto EIR
## Regional Map

FIGURE 3.0-1

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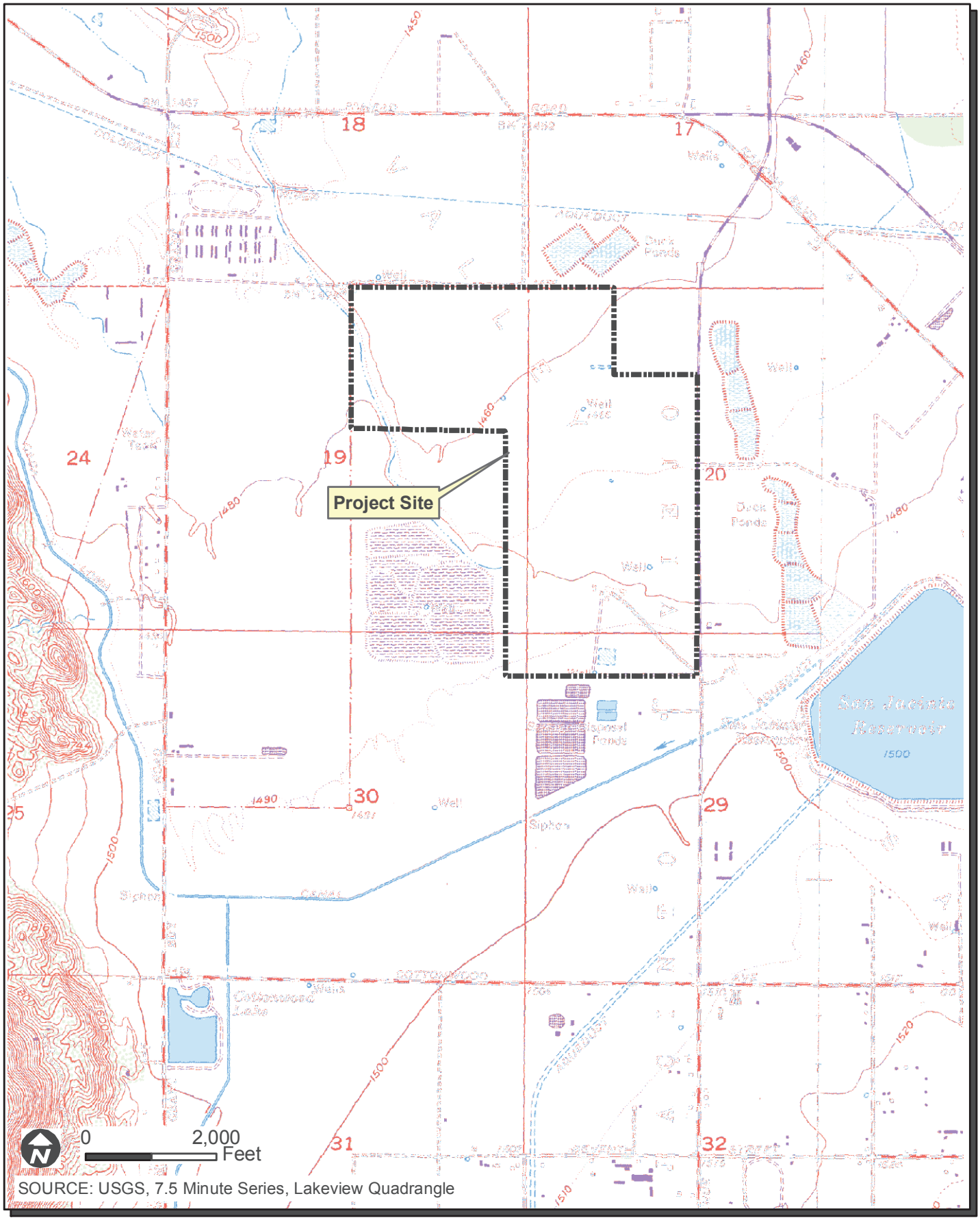


SOURCE: USGS, 7.5 Minute Series, Lakeview Quadrangle

Villages of San Jacinto EIR

**Vicinity Map**

FIGURE 3.0-2

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Villages of San Jacinto EIR

Site Location Map

FIGURE 3.0-3

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- Provide a system of public and community facilities within residential neighborhoods to support development in an efficient and timely manner.
- Provide a development with unified design elements, such as architecture, landscaping, color palette, paving, walls, fencing, signage, and entry treatments.
- Develop an environment that is visually attractive, efficient, and effectively organized, which includes a pleasing landscape palette.
- Integrate the project with the character of the surrounding community and establish development that results in logical, coordinated growth.
- Establish a circulation system that meets projected traffic volumes and accommodates a variety of transportation modes and encourages alternatives to automobile use within the community.

## 3.5 PROJECT FEATURES

The project would consist of development of an existing agricultural operation into a suburban development, including residential, commercial, public facility, and open space uses. The 475.1-acre site would be divided into several "Planning Areas" (PAs). Each PA would consist of a distinct land use type. Land use statistics are summarized in *Table 3.0-1, Planned Land Uses,* and land uses and densities anticipated in each PA are listed in *Table 3.0-2, Planned Land Uses by Planning Area*. *Figure 3.0-4, Specific Plan Land Use Plan*, provides a generalized site development plan depicting each PA and associated land use. *Table 3.0-2* provides a summary of the intensity of use planned within each PA.

The following is a detailed description of each of the proposed land uses within the proposed project, which is illustrated on *Figure 3.0-4, Specific Plan Land Use Plan,* and delineated in *Table 3.0-1, Planned Land Uses*.

**Residential**

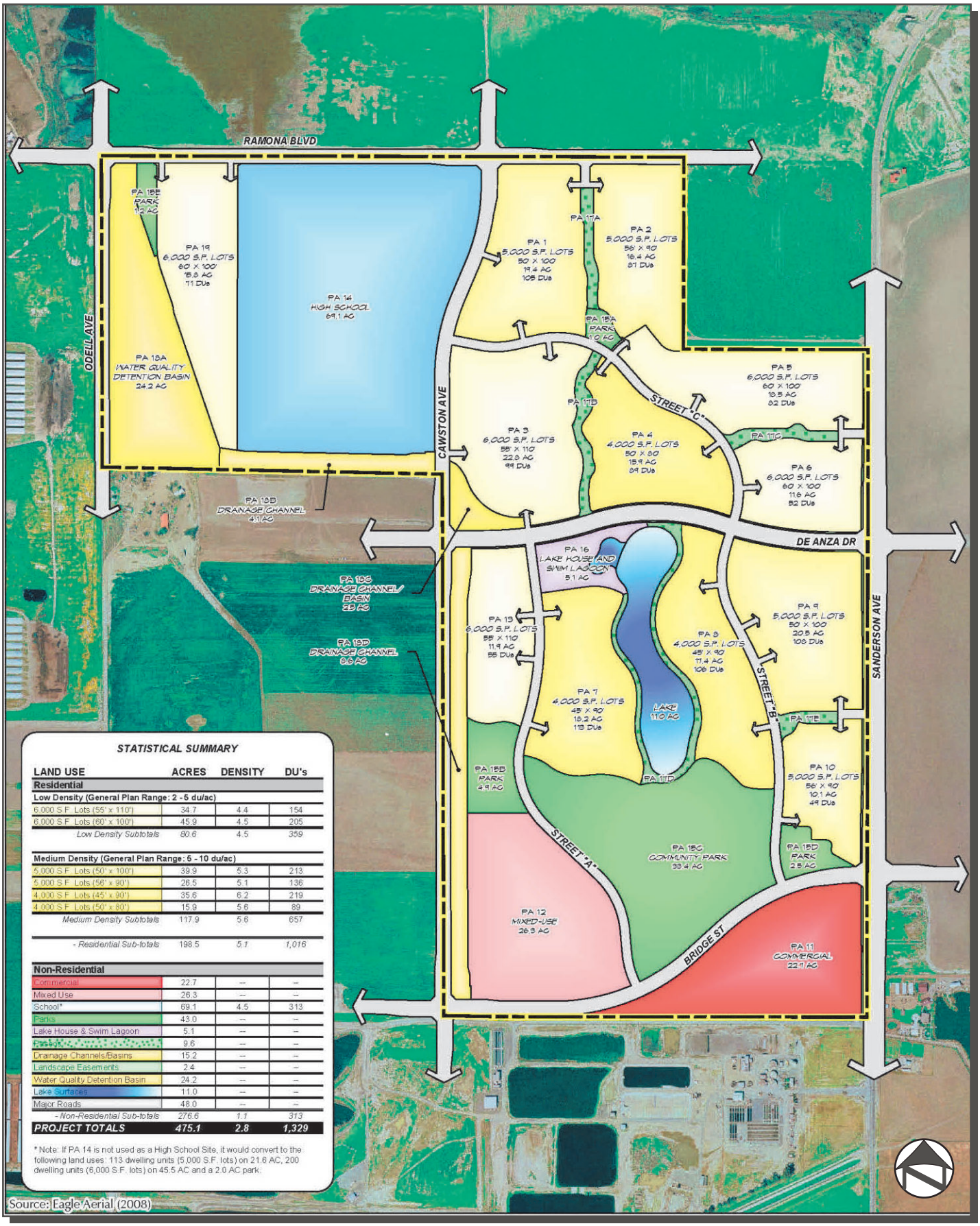
Residential land uses would consist of two General Plan density categories: Low Density Residential, LDR (2.1 to 5.0 dwelling units/acre (DU/AC)), and Medium Density Residential, MDR (5.1 to 10.0 DU/AC) (San Jacinto General Plan 2006). The LDR category will be built within PAs 3, 5, 6, 13, and 19 and will result in a maximum of 359 dwelling units on 80.6 acres. Each residential lot will be a minimum of 6,000 square feet, and overall density will be 4.5 dwelling units per acre. The MDR category will be built within PAs 1, 2, 4, 7, 8, 9, and 10 with a total of 349 residences having 5,000-square-foot minimum lot sizes and 308 residences having 4,000-square-foot minimum lot sizes. In the event that PA 14 is not used by the San Jacinto Unified School District for a proposed new high school, a portion of this area (45.5 acres) would be developed with 200 residential lots under the LDR designation, and the remaining portion

(23.6 acres) would be developed with 113 single-family lots under the MDR designation, including a 2 acre park site.

**Table 3.0-1 Planned Land Uses**

| Land Use Type | Acres | Density (Dwelling Units/Acre) | Maximum Dwelling Units |
|---|---|---|---|
| **Residential (overall)** | **198.5** | **5.1** | **1,016** |
| Low Density | | | |
| 6,000-square-foot lots | 80.6 | 4.5 | 359 |
| Medium Density | | | |
| 5,000-square-foot lots | 66.4 | 5.3 | 349 |
| 4,000-square-foot lots | 51.5 | 6.0 | 308 |
| **Non Residential (overall)** | **276.6** | **1.1** | **313** |
| Commercial | 22.7 | — | — |
| School | 69.1 | 4.5 | 313* |
| Mixed-Use | 26.3 | — | — |
| Open Space | | | |
| Parks | 43.0 | — | — |
| Lake House/Swim Lagoon | 5.1 | — | — |
| Paseos | 9.6 | — | — |
| Drainage Channels/Basins | 15.2 | — | — |
| Landscape Easements | 2.4 | — | — |
| Water Quality Detention Basin | 24.2 | — | — |
| Lake Surface | 11.0 | — | — |
| Major Roads | 48.0 | — | — |
| **Total** | **475.1** | **2.8** | **1,329** |

* If PA 14 is not used as a High School Site, it would convert to the following land uses: 113 dwelling units (5,000-square-foot lots) on 21.6 acres, 200 dwelling units (6,000-square-foot lots) on 45.5 acres and a 2.0 acre park.




**STATISTICAL SUMMARY**

| LAND USE | ACRES | DENSITY | DU's |
|---|---|---|---|
| **Residential** | | | |
| **Low Density (General Plan Range: 2 - 5 du/ac)** | | | |
| 6,000 S.F. Lots (55' x 110') | 34.7 | 4.4 | 154 |
| 6,000 S.F. Lots (60' x 100') | 45.9 | 4.5 | 205 |
| *Low Density Subtotals* | *80.6* | *4.5* | *359* |
| **Medium Density (General Plan Range: 5 - 10 du/ac)** | | | |
| 5,000 S.F. Lots (50' x 100') | 39.9 | 5.3 | 213 |
| 5,000 S.F. Lots (56' x 90') | 26.5 | 5.1 | 136 |
| 4,000 S.F. Lots (45' x 90') | 35.6 | 6.2 | 219 |
| 4,000 S.F. Lots (50' x 80') | 15.9 | 5.6 | 89 |
| *Medium Density Subtotals* | 117.9 | 5.6 | 657 |
| *- Residential Sub-totals* | 198.5 | *5.1* | *1,016* |
| **Non-Residential** | | | |
| Commercial | 22.7 | -- | -- |
| Mixed Use | 26.3 | -- | -- |
| School* | 69.1 | 4.5 | 313 |
| Parks | 43.0 | -- | -- |
| Lake House & Swim Lagoon | 5.1 | -- | -- |
| Parkway | 9.6 | -- | -- |
| Drainage Channels/Basins | 15.2 | -- | -- |
| Landscape Easements | 2.4 | -- | -- |
| Water Quality Detention Basin | 24.2 | -- | -- |
| Lake Surfaces | 11.0 | -- | -- |
| Major Roads | 48.0 | -- | -- |
| *- Non-Residential Sub-totals* | *276.6* | *1.1* | *313* |
| ***PROJECT TOTALS*** | ***475.1*** | ***2.8*** | ***1,329*** |

* Note: If PA 14 is not used as a High School Site, it would convert to the following land uses: 113 dwelling units (5,000 S.F. lots) on 21.6 AC, 200 dwelling units (6,000 S.F. lots) on 45.5 AC and a 2.0 AC park.

Source: Eagle Aerial (2008)

SPECIFIC MAP SOURCE: T&B PLANNING CONSULTANTS, May 2009

Villages of San Jacinto EIR

**Specific Plan Land Use Plan**

FIGURE 3.0-4

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**Table 3.0-2 Planned Land Uses by Planning Area**

| Land Use | Acres | Density (DU/AC) | Dwelling Units |
|---|---|---|---|
| **Residential** | | | |
| PA 1 – 5,000-square-foot lots (50' x 100') (Medium Density) | 19.4 | 5.4 | 105 |
| PA 2 – 5,000-square-foot lots (56' x 90') (Medium Density) | 16.4 | 5.3 | 87 |
| PA 3 – 6,000-square-foot lots (55' x 110') (Low Density) | 22.8 | 4.3 | 99 |
| PA 4 – 4,000-square-foot lots (50' x 80') (Medium Density) | 15.9 | 5.6 | 89 |
| PA 5 – 6,000-square-foot lots (60' x 100') (Low Density) | 18.5 | 4.4 | 82 |
| PA 6 – 6,000-square-foot lots (60' x 100') (Low Density) | 11.6 | 4.5 | 52 |
| PA 7 – 4,000-square-foot lots (45' x 90') (Medium Density) | 18.2 | 6.2 | 113 |
| PA 8 – 4,000-square-foot lots (45' x 90') (Medium Density) | 17.4 | 6.1 | 106 |
| PA 9 – 5,000-square-foot lots (50' x 100') (Medium Density) | 20.5 | 5.3 | 108 |
| PA 10 – 5,000-square-foot lots (56' x 90') (Medium Density) | 10.1 | 4.9 | 49 |
| PA 13 – 6,000-square-foot lots (55' x 110') (Low Density) | 11.9 | 4.6 | 55 |
| PA 19 – 6,000-square-foot lots (60' x 100') (Low Density) | 15.8 | 4.5 | 71 |
| *Residential Subtotal* | *198.5* | *5.1* | *1,016* |
| **Non Residential** | | | |
| PA 11 – Commercial | 22.7 | — | — |
| PA 12 – Mixed-Use | 26.3 | — | — |
| PA 14 – High School* | 69.1 | 4.5 | 313* |
| PA 15A and 15E – Private Neighborhood Parks | 2.2 | — | — |
| PA 15B, 15C and 15D – Public Neighborhood and Community Parks | 40.8 | — | — |
| PA 16 – Beach Club & Swim Lagoon | 5.1 | — | — |
| PA 17A–17E – Paseos | 9.6 | — | — |
| PA 18A – Water Quality Detention Basin | 24.2 | — | — |
| PA 18B, 18C and 18D – Drainage Channels/Basin | 15.2 | — | — |
| Landscape Easements | 2.4 | — | — |
| Lake Surface | 11.0 | — | — |
| Major Roads | 48.0 | — | — |
| *Non-Residential Subtotal* | *276.6* | — | *313** |
| **Total** | **475.1** | **2.8** | **1,329** |

* If PA 14 is not used as a High School Site, it would convert to the following land uses: 113 dwelling units (5,000-square-foot lots) on 21.6 acres, 200 dwelling units (6,000-square-foot lots) on 45.5 acres and a 2.0-acre park.

## Commercial

Commercial development would be focused in the southeast corner of the project site within PA 11. This development is intended to result in approximately 247,000 square feet of neighborhood retail commercial uses on 22.7 acres. This designation is intended to meet the provision for retail commercial land uses as set forth in the San Jacinto General Plan Land Use Element and to provide an accessible local shopping center for the proposed project and nearby communities

that allows for a wide range of businesses, including grocery store, drug store, cleaners, restaurants, fast food, and specialty stores. The Specific Plan for the project (T&B Planning Consultants 2009) includes Conceptual Design Guidelines and Development Standards for commercial development of this PA. Comprehensive Design Guidelines will need to be reviewed and approved by the City prior to development of the PA.

**Mixed-Use**

Mixed-use development will be provided within the 26.3-acre PA 12. This designation is intended to provide for a broad range of land uses, with the primary focus on municipal uses and other development, such as business and professional park uses, including dental and medical offices, real estate offices, and banks. This area could also provide accessory uses to the primary facilities, such as coffee shop, printers, and postal/shipping outlets. This designation provides for a maximum of 343,000 square feet of building area and will have a maximum height limit of 45 feet. Conceptual Design Guidelines for commercial uses are provided in the project Specific Plan, but Comprehensive Design Guidelines will need to be reviewed and approved by the City prior to development of the PA.

**Schools**

As noted above in *Table 3.0-2*, PA 14 is designated for a proposed high school by San Jacinto Unified School District (District). The 69.1-acre high school site would be located southwest of the future intersection of Cawston Avenue and Ramona Boulevard. Preliminary plans for the school include baseball and softball fields, a track/football stadium, gymnasium, performing arts facility and classroom space for up to 2,000 students. Final plans for the school would be processed separately from the Villages of San Jacinto Specific Plan through the District Board of Trustees and the California Division of the State Architect. If the San Jacinto Unified School District does not choose to construct a high school on this site, it will instead be used for residential uses. Under this scenario, PA 14 would be developed with 200 low-density residences (minimum 6,000-square-foot lots) and 113 medium-density residences (5,000-square-foot lots) along with a 2-acre park site.

**Parks and Recreational Amenities**

Following is a summary of the recreational amenities and park facilities planned for the proposed project. Further discussion of parks and recreation, including the requirement for provision of adequate parkland is contained in Section 5.12.4.

### *Public Parks*

The proposed project includes three public parks totaling approximately 41 acres. The largest of the public parks is the 33.4-acre Community Park in Planning Area 15C north of Bridge Street in the southern portion of the proposed development. This park will provide soccer and baseball fields, concession area, as well as barbeque and picnic areas overlooking the proposed lake. Public parks in Planning Areas 15B and 15D provide just over seven acres of various active and passive recreational opportunities.

### *Private Parks*

The two private parks in Planning Areas 15A and 15E will provide passive recreation for nearby residents such as tot lots, shade structures, pathways and picnic areas.

### *Lake House and Swim Lagoon*

Other recreational amenities include a 5.1-acre Lake House Beach Club and Swim Lagoon within Planning Area 16. This will be a private facility for residents and will feature a Swim Lagoon with sandy beach, play island, lap pool, play pool, fire pits, open turf area and shade structures. The clubhouse will provide an exercise room, activity room, restroom/changing rooms and office space.

### *Lake*

The 11-acre private lake will be located primarily between Planning Areas 7 and 8 and adjacent to the Swim Lagoon. It will feature a concrete trail surrounding the lake and connecting to the community park in PA 15C. No swimming or boating will be allowed on the lake, but it will provide recycled water for irrigation of common landscaping within the community.

### *Paseos*

A total of 9.6 acres of landscaped paseos will serve as pedestrian linkages between land uses and will create landscaped buffer areas between Planning Areas. These paseos will be a minimum of 50 feet wide and have 10-foot-wide concrete trails.

## Infrastructure

The *Villages of San Jacinto Specific Plan* (T&B Planning Consultants 2009) details a number of infrastructure plans that will be incorporated into project development. These include a Circulation Plan, Drainage Plan, and Water and Sewer Plans. In addition, a Lake Preliminary Design Report was prepared to address lake design and water quality management systems. These plans are summarized below and discussed in more detail in the relevant sections of this EIR.

### *Circulation Plan*

Roadways would be located throughout the development and would provide access to and from as well as within the project. Sanderson Avenue and Odell Avenue would serve as primary access points for the project. Once constructed, Ramona Boulevard would provide connection at the north edge of the project site. Cawston Avenue would serve as the major north–south arterial through the project while De Anza Drive would serve as the major east–west arterial within the development, taking access from Sanderson Avenue and connecting to Cawston Avenue. Bridge Street will also provide east–west access at the southern end of the development from either Cawston Avenue or Sanderson Avenue. The internal roadway network will include three streets designed as Modified Local Streets (Streets A, B, C) that connect the various PAs. The network will also include standard Local Streets that will connect individual neighborhoods. Roadway classifications are in compliance with City of San Jacinto and County of Riverside Road Standards.

### *Water Plan*

Water service will be provided to the project by EMWD and be extended into the project via new conveyance facilities consistent with the EMWD's Northwest San Jacinto Area Master Plan. Domestic water will be conveyed via a proposed 16-inch pipeline in Sanderson Avenue and 12-inch pipelines within De Anza Drive; Bridge Street, Ramona Boulevard; and Streets A, B, and C.

### *Recycled Water Service*

Recycled water pipelines will be installed concurrently with domestic lines. Recycled water would be utilized to maintain the lake water level as well as common area irrigation needs throughout the proposed community. Recycled water will not be used for private landscaping such as front or back yards. Proposed 8-inch recycled water lines will be installed within internal project roadways. Initially, the recycled water system will be provided from domestic water sources within Sanderson Avenue and Ramona Boulevard, but, ultimately, a pumping facility will use stored recycled water in the lake to supply water for irrigation. A Water Supply Assessment was completed by EMWD. The developer will be required to prepare a Plan of Service in accordance with EMWD standards prior to final engineering and construction of all domestic and recycled water lines. This will ensure that pipe sizing and any additional infrastructure facilities are adequate to serve the project and are in conformance with EMWD's Master Plan.

### *Sewer Plan*

The project site is within the EMWD service area for wastewater collection and treatment. There is an existing 8-inch force main along Sanderson Avenue which conveys flows into an existing treatment facility located just south of the project boundary. Proposed sewer facilities will range between 12 to 30 inches per the EMWD Master Plan. Streets A, B, and C will have 10-inch lines

that flow to a 15-inch line in Cawston Avenue, while an additional 15-inch line is planned for Odell Avenue. Both of the 15-inch lines will gravity flow toward a 30-inch line in Ramona Boulevard, which will then continue to gravity flow toward the existing EMWD treatment plant. A Plan of Service Study will be completed in accordance with EMWD standards prior to final engineering and construction of all sanitary sewer lines. This will ensure that pipe sizing and any additional infrastructure facilities are adequate to serve the project and are in conformance with EMWD's Master Plan.

***Drainage Plan***

The project site generally drains in a northwesterly direction toward the San Jacinto River, primarily in a sheet flow pattern. The northerly portion of the project site is within the 100-year floodplain. The drainage plan provides 100-year flood protection for the interim and ultimate conditions. The interim condition is based on the absence of the San Jacinto Master Drainage Plan (MDP) systems being in place, while the ultimate condition assumes all the MDP facilities are constructed and functional. The implementation of the San Jacinto MDP is based on the timing of the development of the surrounding area. As a result, the construction timeline for the proposed San Jacinto MDP drainage facilities is unknown. Consequently, the project incorporates a drainage plan that will not impact upstream and downstream property owners but will provide flood protection for the overall project site. The Drainage Plan will incorporate a vegetative channel and a detention/water quality basin, which are designated as Line V and Detention Basin V. These two facilities are the major backbone infrastructure that will collect the runoff that emanates from off-site and on-site areas. Line V and Detention Basin V have been designed to convey and control the interim flow rate and ultimate flow rate. The interim flow rate results in a runoff rate that exceeds the ultimate condition flow rate. The interim condition will require the construction of two interim culvert facilities and the reconstruction of an earthen roadway to eliminate ponding east of the DeAnza Drive and Sanderson Avenue intersection. These interim drainage facilities are required to control and convey the interim flow rates originating from the off-site area. Several storm drain laterals will provide flood protection for the on-site PAs. Further details of the Drainage Plan are contained in *Section 5.8 Water Quality and Hydrology*.

***Lake Preliminary Design Report***

This report discusses safety features for the proposed lake shoreline, water depth and temperature, treatment of runoff, and water quality management. The treatment process involves reduced concentration of dissolved pollutants, nutrients, and salts through flushing of the lake water volume by utilizing the lake as the irrigation supply source; reduction of nutrient concentrations from inflows, nitrogen and phosphorous, and prevention of algal blooms by using constructed gravel biofilter beds that utilize "biological filtration," and maintaining oxygen levels

through aeration promoting oxygen exchange to prevent anaerobic conditions, which allows natural processes to occur, such as denitrification for removal of nitrogen. The lake operation and maintenance program also includes routine debris removal, algae control, aquatic weed control, pump maintenance, and biofilter maintenance. These processes ensure continued aesthetic appeal and desirable water quality as well as control of vectors, such as mosquitoes and flies.

**Tentative Map**

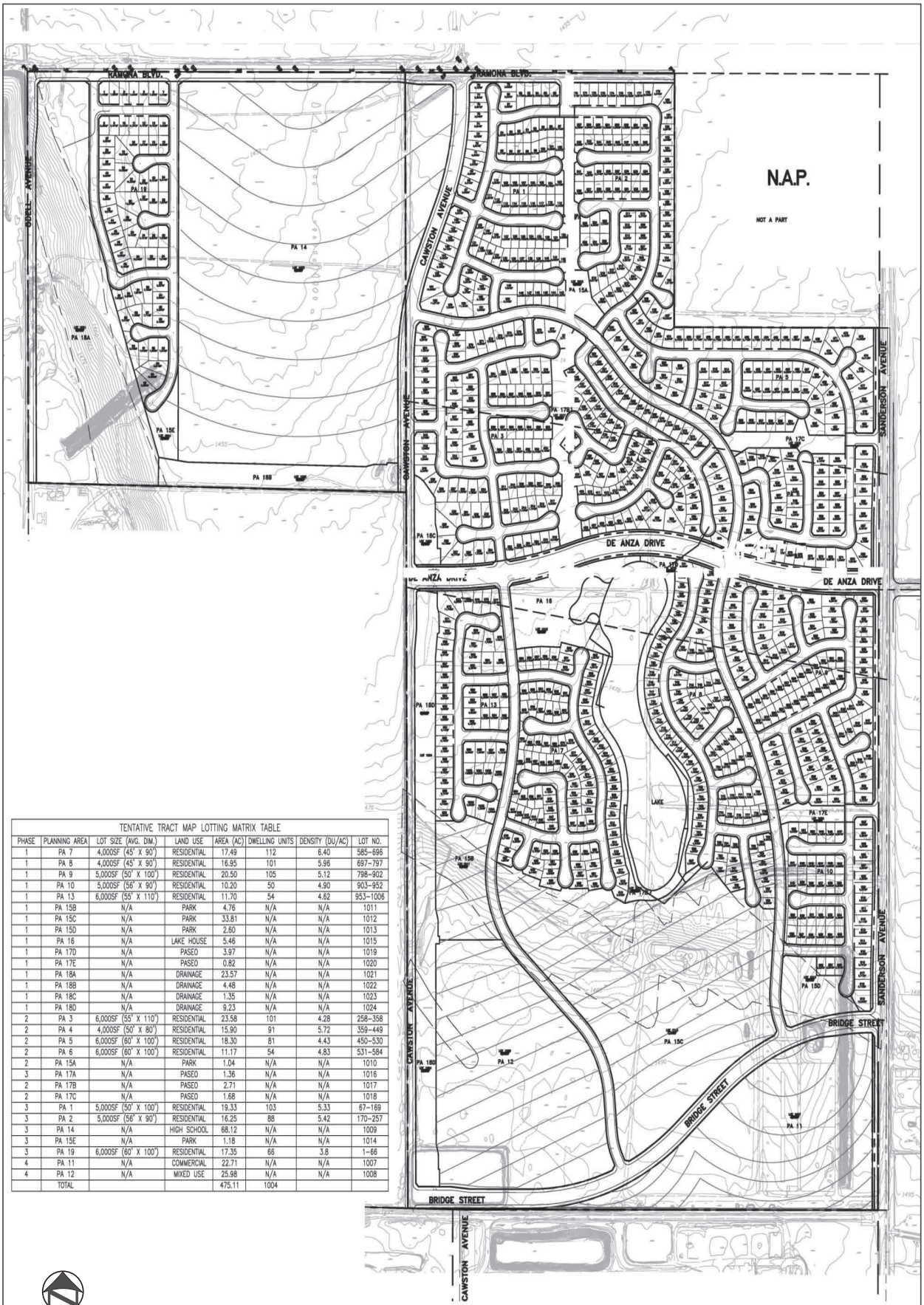
A draft tentative map (TM 36188) has also been prepared for the project. *Figure 3.0-5, Tentative Tract Map*, shows individual residential lots, mixed use and commercial areas and accessory uses, including open space, lakes, and roadways. In summary, the Tentative Tract Map, which further defines the Specific Plan Land Use Plan (described above), would allow the following housing units and other land uses to be developed on the project site:

***Unit Type Summary***

- 6,000-square-foot lots: 359 units
- 5,000-square-foot lots: 349 units
- 4,000-square-foot lots: 308 units

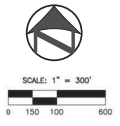
TOTAL: 1,016 units

- 69.1-acre high school site
- 22.7 acres of commercial uses
- 26.3 acres of mixed-use
- 5.1-acre lake house and Swim Lagoon
- 43.0 acres for parks
- 11.0 acres for lake surfaces
- 24.2 acres for water quality/detention basin facilities
- 15.2 acres for drainage channels
- 9.6 acres for paseos
- 48.0 acres for roadways




TENTATIVE TRACT MAP LOTTING MATRIX TABLE

| PHASE | PLANNING AREA | LOT SIZE (AVG. DIM.) | LAND USE | AREA (AC) | DWELLING UNITS | DENSITY (DU/AC) | LOT NO. |
|---|---|---|---|---|---|---|---|
| 1 | PA 7 | 4,000SF (45' X 90') | RESIDENTIAL | 17.49 | 112 | 6.40 | 585–696 |
| 1 | PA 8 | 4,000SF (45' X 90') | RESIDENTIAL | 16.95 | 101 | 5.96 | 697–797 |
| 1 | PA 9 | 5,000SF (50' X 100') | RESIDENTIAL | 20.50 | 105 | 5.12 | 798–902 |
| 1 | PA 10 | 5,000SF (56' X 90') | RESIDENTIAL | 10.20 | 50 | 4.90 | 903–952 |
| 1 | PA 13 | 6,000SF (55' X 110') | RESIDENTIAL | 11.70 | 54 | 4.62 | 953–1006 |
| 1 | PA 15B | N/A | PARK | 4.76 | N/A | N/A | 1011 |
| 1 | PA 15C | N/A | PARK | 33.81 | N/A | N/A | 1012 |
| 1 | PA 15D | N/A | PARK | 2.60 | N/A | N/A | 1013 |
| 1 | PA 16 | N/A | LAKE HOUSE | 5.46 | N/A | N/A | 1015 |
| 1 | PA 17D | N/A | PASEO | 3.97 | N/A | N/A | 1019 |
| 1 | PA 17E | N/A | PASEO | 0.82 | N/A | N/A | 1020 |
| 1 | PA 18A | N/A | DRAINAGE | 23.57 | N/A | N/A | 1021 |
| 1 | PA 18B | N/A | DRAINAGE | 4.48 | N/A | N/A | 1022 |
| 1 | PA 18C | N/A | DRAINAGE | 1.35 | N/A | N/A | 1023 |
| 1 | PA 18D | N/A | DRAINAGE | 9.23 | N/A | N/A | 1024 |
| 2 | PA 3 | 6,000SF (55' X 110') | RESIDENTIAL | 23.58 | 101 | 4.28 | 258–358 |
| 2 | PA 4 | 4,000SF (50' X 80') | RESIDENTIAL | 15.90 | 91 | 5.72 | 359–449 |
| 2 | PA 5 | 6,000SF (60' X 100') | RESIDENTIAL | 18.30 | 81 | 4.43 | 450–530 |
| 2 | PA 6 | 6,000SF (60' X 100') | RESIDENTIAL | 11.17 | 54 | 4.83 | 531–584 |
| 2 | PA 15A | N/A | PARK | 1.04 | N/A | N/A | 1010 |
| 3 | PA 17A | N/A | PASEO | 1.36 | N/A | N/A | 1016 |
| 2 | PA 17B | N/A | PASEO | 2.71 | N/A | N/A | 1017 |
| 2 | PA 17C | N/A | PASEO | 1.68 | N/A | N/A | 1018 |
| 3 | PA 1 | 5,000SF (50' X 100') | RESIDENTIAL | 19.33 | 103 | 5.33 | 67–169 |
| 3 | PA 2 | 5,000SF (56' X 90') | RESIDENTIAL | 16.25 | 88 | 5.42 | 170–257 |
| 3 | PA 14 | N/A | HIGH SCHOOL | 68.12 | N/A | N/A | 1009 |
| 3 | PA 15E | N/A | PARK | 1.18 | N/A | N/A | 1014 |
| 3 | PA 19 | 6,000SF (60' X 100') | RESIDENTIAL | 17.35 | 66 | 3.8 | 1–66 |
| 4 | PA 11 | N/A | COMMERCIAL | 22.71 | N/A | N/A | 1007 |
| 4 | PA 12 | N/A | MIXED USE | 25.98 | N/A | N/A | 1008 |
| | TOTAL | | | 475.11 | 1004 | | |




SOURCE: C & V Consulting, Inc., February 2009

Villages of San Jacinto EIR
**Tentative Tract Map**

FIGURE 3.0-5

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## Phasing and Construction Planning

The project is designed to be developed in four phases over an approximate 9-year period in response to market demands and according to a logical and orderly extension of roadways, public utilities, and infrastructure. Development may occur more rapidly or more slowly, depending on the marketability of the community. Project Phasing is shown on *Figure 3.0-6, Conceptual Phasing Plan,* and detailed in *Table 3.0-3, Project Phasing Plan*. It should be noted that the public parks, the private lake, Lake House Beach Club and Swim Lagoon, drainage channels, and detention basins will be constructed as part of Phase I; and that the High School site (PA 14), may, if purchased by the school district, be developed earlier than indicated on the Conceptual Phasing Plan.

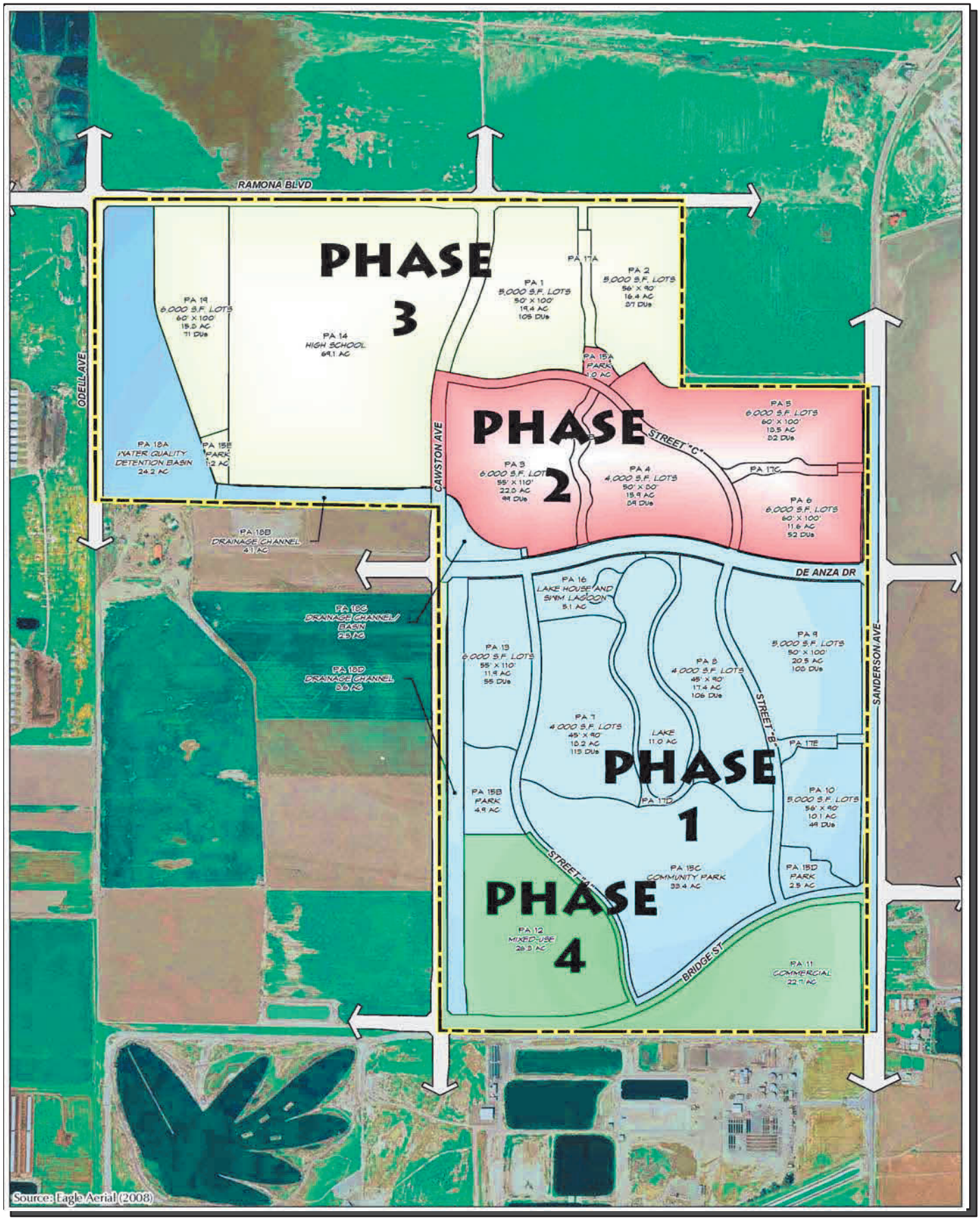
The project will be built out in four phases based on the absorption rate of the prior community phase. Each phase will entail fine grading (mass grading will be performed as part of Phase I), followed by installation of sewer, storm drain, and water infrastructure; installation of water crossings; installation of curb and gutter framework for the street system; paving; and construction of residences and commercial/mixed-use buildings. Phase I is anticipated to begin in the winter of 2011 and will last approximately 49 months. Phase I would include mass grading the entire site and will be finished upon completion of 431 residential units. Construction of Phase II will begin at roughly the time Phase I has sold out (estimated January 2016) and will take approximately 24 months to complete. Phase II will be finished upon completion of 322 residential units. Phase III will begin at roughly the time Phase II has sold out (estimated January 2018) and will take approximately 72 months to complete. Phase III will be finished upon completion of 263 residential units, and the high school (or 313 additional residential units if the high school is not developed on-site). Phase IV will begin at roughly the time Phase III has sold out (estimated January 2024) and will take approximately 120 months to complete. Phase IV will be finished upon completion of the project's commercial/mixed-use development. Completion of the project is estimated to be by December 2033.

## Table 3.0-3
## Project Phasing Plan

| Land Use | Acres | Dwelling Units |
|---|---|---|
| **Phase I** | | |
| PA 7 – 4,000-square-foot lots (45' x 90') | 18.2 | 113 |
| PA 8 – 4,000-square-foot lots (45' x 90') | 17.4 | 106 |
| PA 9 – 5,000-square-foot lots (50' x 100') | 20.5 | 108 |
| PA 10 – 5,000-square-foot lots (56' x 90') | 10.1 | 49 |
| PA 13 – 6,000-square-foot lots (55' x 110') | 11.9 | 55 |
| PA 15B, 15C, and 15D – Parks | 40.8 | — |
| PA 16 – Lake House and Swim Lagoon | 5.1 | — |
| PA 17 – Lake Trail Paseo | 3.6 | — |
| Lake Surface | 11.0 | — |
| PA 17E – Paseo | 1.0 | — |
| PA 18A – Water Quality/Detention Basin | 24.2 | — |
| PA 18B – Drainage Channel | 4.1 | — |
| PA 15C – Drainage Channel | 2.5 | — |
| PA 18D – Drainage Channel | 8.6 | — |
| Sanderson Landscape Easement | 2.4 | — |
| Circulation | 20.6 | — |
| **Phase I Subtotal** | **202.0** | **431** |
| **Phase II** | | |
| PA 3 – 6,000-square-foot lots (55' x 110') | 22.8 | 99 |
| PA 4 – 4,000-square-foot lots (50' x80') | 15.9 | 89 |
| PA 5 – 6,000-square-foot lots (60' x100') | 18.5 | 82 |
| PA 6– 6,000-square-foot lots (60' x100') | 11.6 | 52 |
| PA 15A – Neighborhood Park | 1.0 | — |
| PA 17B – Paseo | 2.0 | — |
| PA 17C – Paseo | 1.5 | — |
| Circulation | 6.5 | — |
| **Phase II Subtotal** | **79.8** | **322** |
| **Phase III** | | |
| PA 1 – 5,000-square-foot lots (50' x 100') | 19.4 | 105 |
| PA 2 – 5,000-square-foot lots (56' x 90') | 16.4 | 87 |
| PA 14 – High School* | 69.1 | 313 |
| PA 15E – Neighborhood Park | 1.2 | — |
| PA 17A – Paseo | 1.5 | — |
| PA 19 – 6,000-square-foot lots (60' x 100') | 15.8 | 71 |
| Circulation | 10.3 | — |
| **Phase III Subtotal** | **133.7** | **576** |
| **Phase IV** | | |
| PA 11 – Commercial | 22.7 | — |
| PA 12 – Mixed-Use | 26.3 | — |
| Circulation | 10.6 | — |
| **Phase IV Subtotal** | **59.6** | **0** |
| **TOTAL** | **475.1** | **1,329** |

* If PA 14 is not used as a High School Site, it would convert to the following land uses: 113 dwelling units (5,000-square-foot lots) on 21.6 acres, 200 dwelling units (6,000-square-foot lots) on 45.5 acres and a 2.0-acre park.

SOURCE: T&B Planning Consultants 2009




0 1,000 Feet

Villages of San Jacinto EIR

**Conceptual Phasing Plan**

FIGURE 3.0-6

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## 3.6 DISCRETIONARY ACTIONS

A list of discretionary actions known to be required and the agencies responsible for their approval are listed below; however, this EIR covers all federal, state, and local governmental approvals that may be needed to construct or implement the project, whether explicitly listed or not. All known Responsible and Trustee Agencies as defined by CEQA Guidelines 15381 and 15386 and a list of all subsequent actions anticipated within the scope of this EIR are listed.

In order to implement the project as described above, the City Council will need to take the following actions:

- EIR Certification
- Mitigation Monitoring and Reporting Program Adoption
- General Plan Amendment from LDR, MDR, High Density Residential (HDR), Open Space (OS), Park (P), and Community Commercial (CC) to Specific Plan (SP)
- Municipal Zoning Code Amendment from R-1, R-2 Planned Unit Development (PUD), R-3, and C-2 Zones to Specific Plan (SP)
- Specific Plan #1-04 Adoption
- Design Review Approval
- Tentative Tract Map No. 36188 Approval
- Development Agreement Adoption.

The following additional permits/approval may be required of other Responsible and/or Trustee Agencies that may be considered responsible agencies under CEQA. This EIR may be utilized by the following agencies during CEQA compliance for their specific permit issuance or discretionary action approval:

- Regional Water Quality Control Board: Clean Water Act Section 401 Water Quality Certification, Waste Discharge Requirement, and approval of the Storm Water Pollution Prevention Plan (SWPPP).
- Regional Water Quality Control Board: Official closure action and approval of reuse plan pertaining to historical hazardous materials located on site.
- Riverside County Department of Environmental Health: Official closure action and approval of reuse plan pertaining to historical hazardous materials located on site.
- San Jacinto Unified School District: Construction and operational approval for school site.
- California Department of Fish and Game: Section 1600 Streambed Alteration Agreement.
- EMWD: Water Availability Assessment pursuant to SB 610.

## 3.7 INTERAGENCY CONSULTATIONS

The project will or has required the City to engage in the following interagency consultation processes:

**Senate Bill 18**

Senate Bill 18 requires a City to notify any Native American tribe or group who has previously expressed interest in the project study area or who has historically inhabited the project area to determine if they view the project site as a significant point of ancestral heritage. This consultation is required when the City is considering a General Plan Amendment such as proposed for this project. The City conducted consultation per Senate Bill 18 during the early planning process for the project (2005). Given the elapsed time, the City will contact all applicable Native American groups during late summer/fall 2009 to determine if they have any further comments regarding the proposed project.

**Federal Clean Water Act/California Fish and Game Code**

Pursuant to Section 401 of the Federal Clean Water Act and Section 1600 of the California Fish and Game Code, any modification to surface waters must fist obtain a permit from the Regional Water Quality Control Board and California Department of Fish and Game, respectively. The applicant will be required to obtain permits to alter existing onsite water and/or wetlands prior to grading activities.

**Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)**

The City is a signatory to the Western Riverside County MSHCP and therefore has the obligation to implement the MSHCP in accordance with all applicable protocols. The City reviewed the project biological resource studies to determine consistency with reserve design and other plan requirements. Although the project is not located within MSHCP "criteria cells," the City contacted the Western Riverside County Regional Conservation Authority, the joint powers authority tasked with overall MSHCP implementation, to confirm that the project is not located within criteria cells and therefore submittal of the project for Joint Project Review was not necessary. The Western Riverside County Regional Conservation Authority confirmed that the project was not located within a criteria cell in a letter dated November 17, 2008.

**Storm Water Pollution Prevention Plan**

Pursuant to the National Pollution Discharge Elimination System, any project that would disturb soils during construction is required to prepare a Storm Water Pollution Prevention Plan. This

Plan shall be approved by the Regional Water Quality Control Board. The applicant will prepare and process this Plan prior to project grading.

**Hazardous Material Closure/Reuse**

In order to obtain permission for reuse of a site that formerly supported hazardous materials or substances (ie, such as methane or the former leaking underground storage tank), the Regional Water Quality Control Board and the Riverside County Department of Environmental Health must approve a closure and reuse plan prior to site disturbance. The applicant will prepare such a plan and process it through both agencies.

**Water Supply Assessment**

For all projects that would result in construction of more than 500 dwelling units, local municipalities must consult with the applicable water agency to determine whether adequate water supplies exist to serve the proposed project. Because the project proposes up to 1,329 dwelling units, the 500 unit maximum would be exceeded, therefore this interagency coordination requirement would be triggered. The City received a Water Supply Assessment from Eastern Municipal Water District on December 15, 2004. The City also received confirmation that the December 15, 2004 Water Supply Assessment was still valid in a May 11, 2009 letter.

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# SECTION 4.0
# ENVIRONMENTAL SETTING

In accordance with Section 15125 of the CEQA Guidelines, the general environmental setting for the project area is provided in this section. More detailed descriptions of the setting specifically pertaining to each environmental issue are provided at the beginning of each impact issue area addressed in *Section 5.0*.

## 4.1 PHYSICAL SETTING

The site is generally flat and is located on the alluvial plain of the San Jacinto River. The site elevation above sea level ranges from 1,455 feet along the northern edge to 1,490 feet in the southeastern corner. The southeastern corner of the site is a former cattle feed lot with several remaining shade structures. The remainder of the land consists primarily of vacant former agricultural land. Vegetation on site consists of weedy invasive species that have accumulated since the majority of agricultural production was discontinued. There are scattered sod fields in the northern portions of the property, which is the site of the only remaining agricultural operation. Several unnamed, unimproved dirt roadways traverse the site and are associated with former and current agricultural operations. Irrigation canals run along the edges of fields in support of current or former sod farming activities. A detention basin is located along the north-central edge of the project site. There is one abandoned residence and former storage shed located in the east central portion of the site (see *Figure 5.13-1*).

The San Jacinto River is the dominant landform in the project area. The river, which is located less than 1 mile from the project site, is contained within a broad valley formation that is characterized by flat, alluvial terraces surrounded by stark mountains. The project is surrounded by existing agricultural operations on three sides, with the San Jacinto Valley Regional Water Reclamation Facility along the southern boundary of the site. The San Jacinto River area comprises a flat, perennial river characterized by wetland vegetation within the immediate channel and then drier habitats, such as grassland and coastal sage scrub, further from the low flow area. Due to its flat nature and alluvial setting, much of the San Jacinto River floodplain has been utilized for active agriculture for over 100 years.

As discussed previously, agricultural operations on the site have mostly ceased to be active with the exception of some sod farming in the northwest portion of the site. However, the project site contains state-designated Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. *Section 5.3, Agricultural Resources,* describes the impact of converting these designated lands in greater detail. There are no unique aesthetic or visual resources on site (see *Section 5.2, Landform Alteration and Aesthetics*, for additional clarification regarding on-site visual resources). Although the site is highly disturbed from a biological resource perspective,

sensitive and unique wildlife species exist on site (*Section 5.4, Biological Resources,* provides a greater description of on-site biological resources). The project site does not contain any unique cultural resources (*Section 5.5, Cultural Resources*, provides a greater description of on-site cultural resources). The project site contains two fault areas on site (see *Section 5.6, Geology and Soils,* for further discussion of on-site geotechnical resources). The site does not contain any natural hydrologic features; however, it is characterized by the on-site irrigation canals and detention basins. The project site is located near the San Jacinto River; the river's 100-year floodplain traverses part of the project site (see *Section 5.8, Water Quality and Hydrology,* for further discussion on the project's on-site hydrologic features).

On-site infrastructure includes dirt driveways/roadways, a septic system, well water service, and constructed agricultural detention basins to assist with on-site drainage. Currently, public utilities, including electric, gas, and phone service, are located on site.

## 4.2 APPLICABLE LAND USE PLANS

Section 15125 (d) of the CEQA Guidelines requires that a discussion of the project's relationship to the applicable general plan and relevant regional plans be provided. The consistency analysis for the proposed project with applicable plans, policies, and regulations is provided in *Section 5.1, Land Use, Planning, and Zoning,* of this EIR. The following is a list of plans, policies, and regulations that are applicable to the proposed project:

- City of San Jacinto General Plan
- City of San Jacinto General Plan Update
- City of San Jacinto Municipal Zoning Code
- Western Riverside County Multiple Species Habitat Conservation Plan
- South Coast Air Pollution Control District Regional Air Quality Strategies
- Southern California Association of Government's Regional Comprehensive Plan.

# SECTION 5.0
# ENVIRONMENTAL ANALYSIS

## 5.1 LAND USE, PLANNING, AND ZONING

### 5.1.1 Introduction and Methodology

This section describes the planned land uses associated with the proposed Villages of San Jacinto Specific Plan and Tentative Map and discusses potential project impacts to land use, planning, and zoning that would occur as a result of project implementation. The following discussion includes a description of existing land uses surrounding the project site and provides an analysis of the proposed development's compatibility with planned and existing surrounding land uses. The discussion also evaluates the consistency of the proposed project with all relevant plans and policies, including those policies and development standards of the City's General Plan, Zoning Ordinance, and the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

The character of existing land use was determined by field survey, review of aerial photography of the project site and surrounding area, and review of existing documentation and site descriptions. Issues of land use compatibility were analyzed in the context of existing and planned land uses, policies, and planning programs. In addition, issues of land use compatibility have been analyzed in the context of physical environmental factors, such as agriculture, noise, air quality, aesthetics, and traffic, discussed in detail in the respective sections of this EIR.

Applicable City and regional planning documents were reviewed to identify all applicable plans, policies, and development standards to evaluate potential project impacts to existing planning programs. A consistency analysis was conducted for each applicable policy identified and mitigation measures have been provided to address potential project inconsistencies with relevant plans and policies.

### 5.1.2 Existing Conditions

**Existing Land Uses**

The 475.1-acre project site is located in the northwest portion of the City of San Jacinto in an area consisting primarily of agricultural uses. The southeastern corner of the site is a former cattle feed lot with several remaining shade structures. The remainder of the land consists primarily of vacant former agricultural land. Vegetation on site consists of weedy invasive species that have accumulated since the majority of agricultural production was discontinued. There are scattered sod fields in the northern portions of the property, which entail the only remaining agricultural operations.

As illustrated in *Figure 5.1-1*, *Existing Land Uses*, the project site is located in a rural area within approximately 1.25 miles south of the San Jacinto River. The north property boundary of the project site is generally bound by the proposed road alignment for the Ramona Boulevard extension. Beyond this proposed road extension, land uses north of the site consist primarily of cultivated agricultural use in addition to duck ponds, the Colorado River Aqueduct, and the Ramona Expressway. Agricultural land uses occupy most areas west of the of the project site and include cultivated lands and cattle operations. A municipal wastewater treatment plant is located directly south of the project site and the San Jacinto Reservoir is located southeast of the property. The east side of the project site is generally bound by North Sanderson Avenue. Immediately east of North Sanderson Avenue, land uses consist of agricultural cultivation and low density residential use. Land use patterns begin to transition to urban-related uses continuing east-southeast of the project area toward downtown San Jacinto located southeast of the project site.

The project site is accessible directly from North Sanderson Avenue or indirectly via various agricultural roads taking access from the Ramona Expressway, Cottonwood Avenue, and Warren Road.

According to the Tentative Map/New Development Map accessed on the City's website (City of San Jacinto 2005), a number of new residential and commercial development projects have been approved or are in the City review process within the City including the area surrounding the project site. *Figure 5.1-2*, *Surrounding Projects*, depicts surrounding projects within the San Jacinto area at the time of EIR publication. Details of these projects can be found in *Table 6-1*, *Cumulative Projects List*, in *Section 6.0*, *Cumulative Impacts.*

## Land Use Plans and Policies

### *City of San Jacinto General Plan*

The City of San Jacinto General Plan identifies community goals and planning issues for future growth of the City and establishes goals and policies to provide a comprehensive basis for implementation of plans and programs to achieve community goals. The General Plan contains seven individual Elements: Land Use, Housing, Circulation, Natural Resources Management, Noise, Public Safety and Community Services and Facilities. Existing applicable land use designations and policies are addressed in the policy consistency analysis for the proposed project. The most recent General Plan was adopted on May 4, 2006, and the latest General Plan Land Use Map was approved in February 2009.

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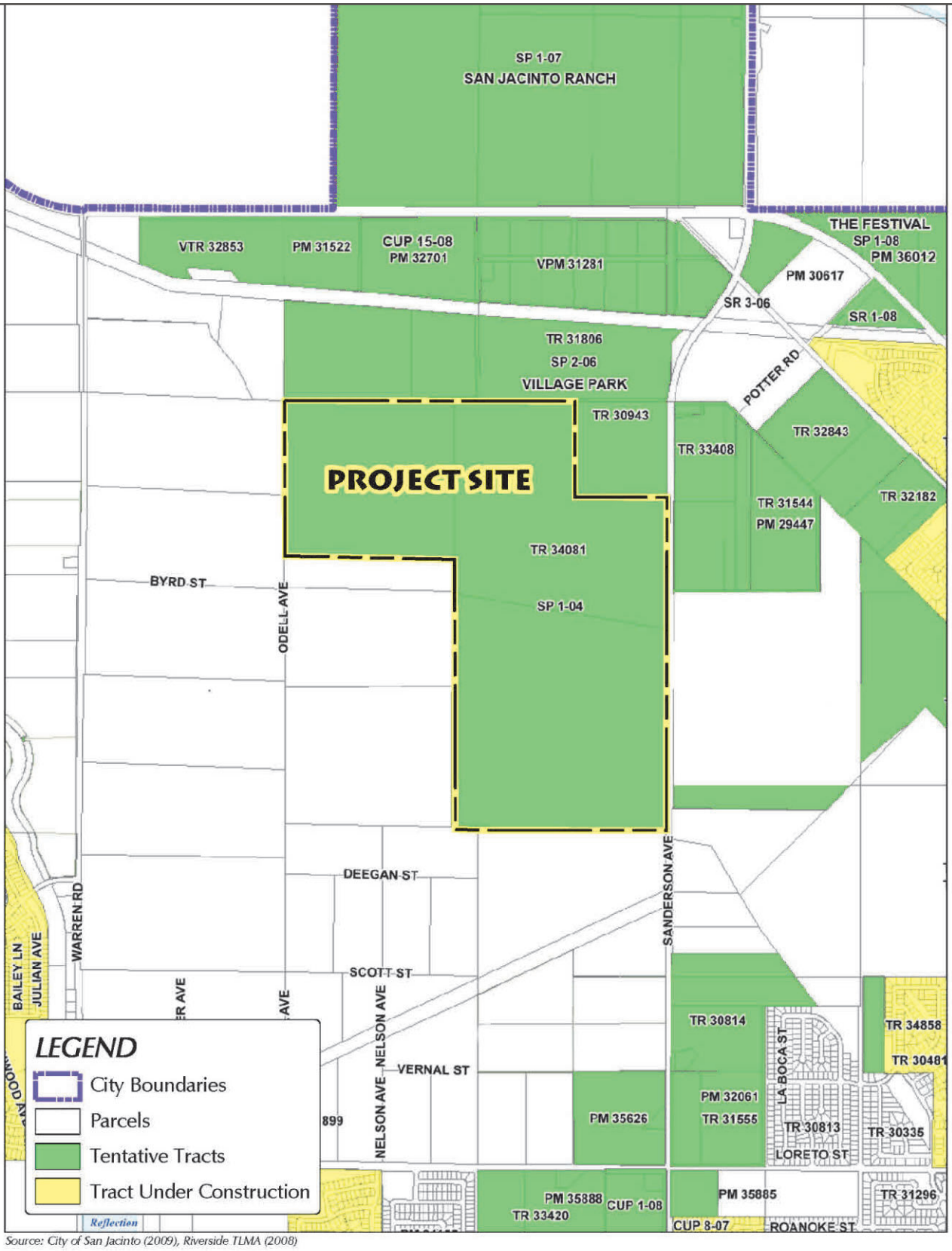


*Source: City of San Jacinto (2009), Riverside TLMA (2008)*

Villages of San Jacinto EIR

**Surrounding Projects**

FIGURE 5.1-2

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*Figure 5.1-3*, *General Plan and Specific Plan Comparison*, shows that the General Plan designations on the project site have a mix of land uses, which include Community Commercial (CC), Open Space Recreation (OS), Low Density Residential (LDR), and Medium Density Residential (MDR).

As shown on *Figure 5.1-3*, the easternmost portion of the site contains approximately 54.4 acres of the CC land use designation, which typically allows for development of a broad range of service and retail commercial activities at various densities. The central and western portions of the site contain about 44.7 acres of the Open Space land use designation, which is intended to maintain general open space areas for purposes of conservation of natural and scenic resources and protection of public property from natural hazards. Limited residential use is permitted in areas designated as Open Space at a maximum density of 1 unit per 40 acres and limited park and recreation uses are permitted at a maximum Floor Area Ratio (FAR) of 0.10:1.

The remaining portion of the site is designated LDR (136.5 acres) and MDR (239.5 acres). The northwest portion of the site is predominantly designated as LDR, which allows for detached single-family residential development at a maximum density of 5 units per acre. The MDR land use designation exists on approximately half of the site and permits single-family attached and detached units, duplexes, triplexes, fourplexes, townhouses, condominiums, and mobile home parks at a maximum density of 10 units per acre. *Table 5.1-1, General Plan and Specific Plan Comparison,* presents a comparison of acreage and dwelling units of the proposed Specific Plan and existing General Plan designations.

**Table 5.1-1**
**General Plan and Specific Plan Comparison**

| Land Use | General plan | | | Specific Plan | | |
|---|---|---|---|---|---|---|
| | Acres | Density | Max. DU | Acres | Density | Max. DU |
| *Residential* | | | | | | |
| Residential Low Density | 136.5 | 2.1-5.0 du/ac | 682 | 80.6 | 4.5 du/ac | 359 |
| Residential Medium Density | 239.5 | 5.1-10.0 du/ac | 2395 | 117.9 | 5.3-6.0 du/ac | 657 |
| Residential Subtotal | 376 | — | 3,077 | 198.5 | — | 1,016 |
| *Non-Residential* | | | | | | |
| Commercial | 54.4 | — | — | 22.7 | — | — |
| Mixed Use | — | — | — | 26.3 | — | — |
| School | — | — | — | 69.1 | — | 313* |
| Parks | — | — | — | 43.0 | — | — |
| Open Space | 44.7 | — | — | 67.5 | — | — |
| Non-Residential Subtotal | 99.1 | — | — | 276.6 | — | 313 |
| **Total** | **475.1** | **—** | **3,077** | **475.1** | **—** | **1,329** |

### *City of San Jacinto Zoning Ordinance*

The Zoning Ordinance of the City of San Jacinto contains site-specific zoning designations and associated development standards that serve to implement the goals and policies of the General Plan.

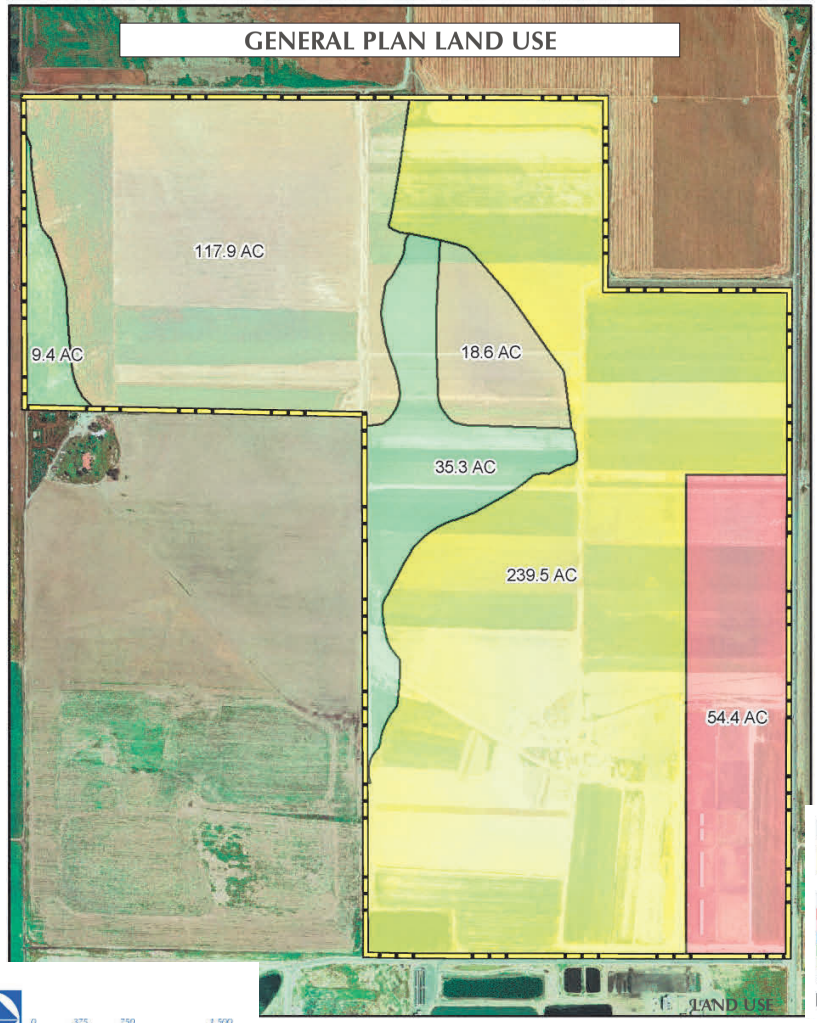
As shown on *Figure 5.1-4 Zoning and Specific Plan Comparison*, the project site is currently zoned One Family Zone (R-1), Two Family Zone -Planned Unit Development Overlay (R-2 PUD), Multiple Family Zone (R-3), and General Commercial Zone (C-2). The distribution of zoning designations on the site generally corresponds with the land use designation with the southeast corner of the site zoned as C-2 for general commercial uses, most of the northwest portion of the site zoned R-1 for low density residential development, and the majority of the site zoned R-2 for medium density residential development. The main difference between the current zoning and proposed Specific Plan is that rather than high density residential as designated in the southwest corner of the site, the project will provide mixed use and park development in that area.

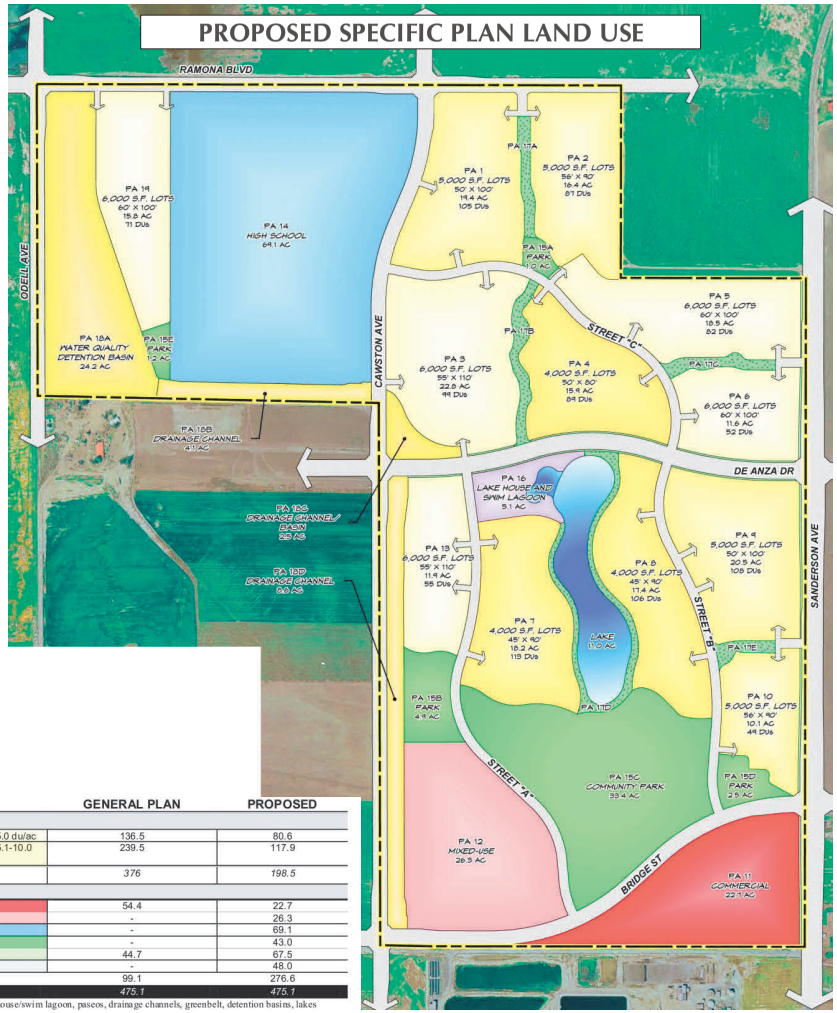
### *City of San Jacinto Redevelopment Plan*

The City of San Jacinto and Soboba Springs Redevelopment Plans and corresponding 5-year implementation plans address issues related to eliminating blighted areas in designated redevelopment project areas. The Redevelopment Plans address a total of 27 project areas located primarily in the urbanized eastern portion of the City. Due to the location of the project area in the more rural western portion of the City, plans and policies associated with the Redevelopment Plans are not applicable to the proposed project.

### *Transportation Uniform Mitigation Fee 10-Year Strategic Plan (TUMF)*

The Western Riverside Council of Governments (WRCOG) is a council comprising members that represent 15 local jurisdictions in western Riverside County, including the City of San Jacinto. The WRCOG functions to facilitate collective examination by the various representative jurisdictions of issues that are regional in nature such as air quality and traffic. In June 2004, the WRCOG adopted the Transportation Uniform Mitigation Fee (TUMF) 10-Year Strategic Plan (TUMF) and Transportation Improvement Program Development Guidelines.




| LAND USE (Acres) | GENERAL PLAN | PROPOSED |
|---|---|---|
| **Residential** | | |
| Low Density (General Plan Range: 2.1-5.0 du/ac | 136.5 | 80.6 |
| Medium Density (General Plan Range: 5.1-10.0 du/ac | 239.5 | 117.9 |
| *- Residential Sub-totals* | *376* | *198.5* |
| **Non-Residential** | | |
| Commercial | 54.4 | 22.7 |
| Mixed Use | - | 26.3 |
| Schools | - | 69.1 |
| Parks | - | 43.0 |
| Open Space* | 44.7 | 67.5 |
| Major Roads | - | 48.0 |
| *- Non Residential Sub-totals* | 99.1 | 276.6 |
| *PROJECT TOTALS* | *475.1* | *475.1* |

* Specific Plan Open Space includes: lake house/swim lagoon, paseos, drainage channels, greenbelt, detention basins, lakes

0 375 750 1,500 Feet

SOURCE: T & B PLANNING CONSULTANTS, February 2009

Z:\Projects\j592401\MAPDOC\MAPS\Initial Study\Fig5.1-3.cdr

Villages of San Jacinto EIR

**General Plan Comparison – Current Update General Plan vs. Proposed Specific Plan Land Use**

FIGURE 5.1-3

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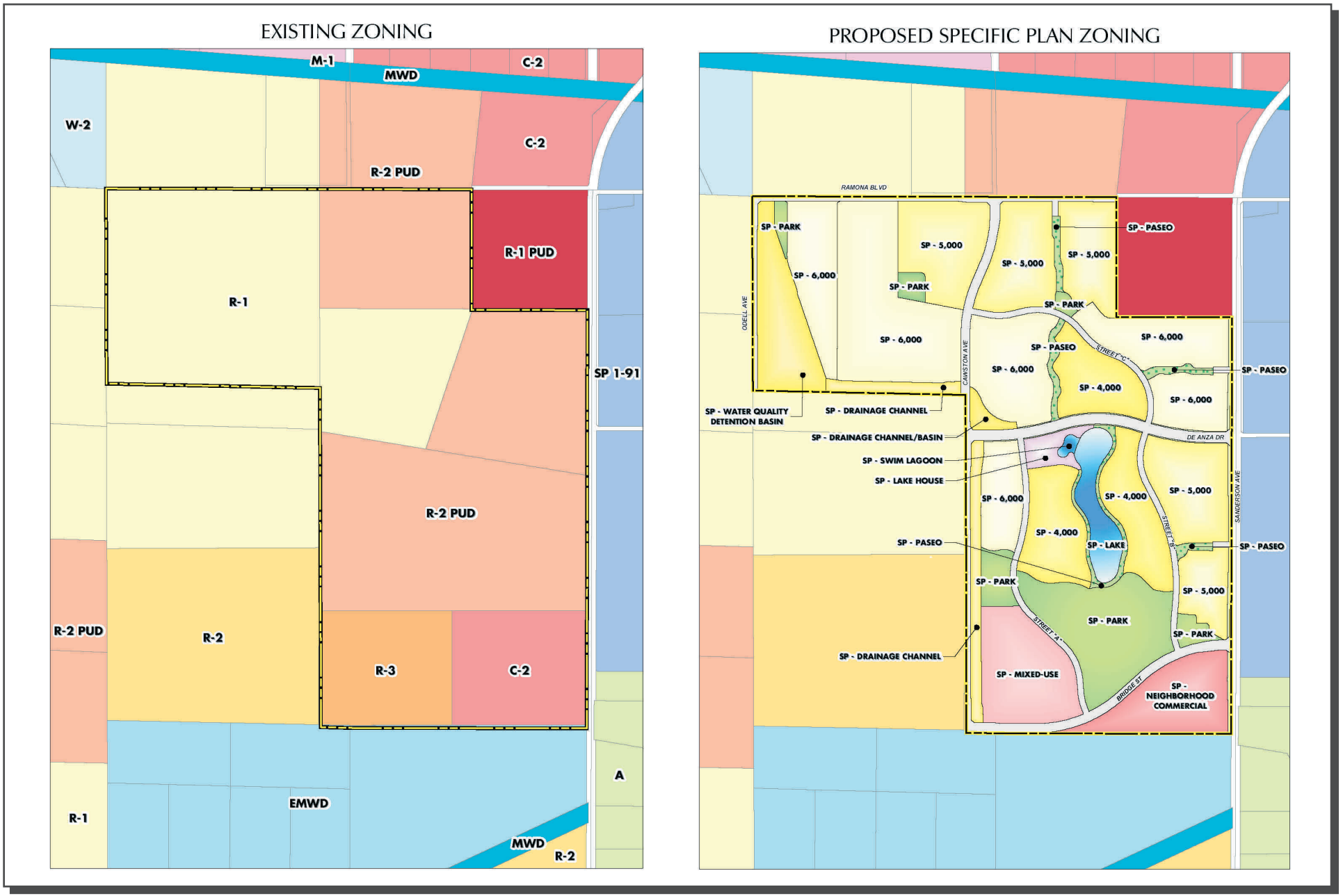


Source: T&B PLANNING CONSULTANTS, July 2009

Villages of San Jacinto EIR

FIGURE 5.1-4

# Zoning Comparison - Existing Zoning vs. Proposed Specific Plan Zoning

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The purpose of the TUMF program is to establish a comprehensive funding source to mitigate the cumulative regional transportation impacts of new development on regional arterial highways (Parsons Brinckerhoff Quade & Douglas, Inc, June 2004). The TUMF program has five primary goals that are articulated as a basis for developing specific regional project priorities and selection criteria. These goals are summarized as follows:

- Sustain Mobility – Mitigate the transportation system impacts of new development
- System Continuity – Enhance the continuity of the regional arterial highway system
- Project Development – Encourage systematic project development and provide flexibility to advance TUMF projects promptly through completion
- Leverage Funds – Secure additional matching funds for TUMF system improvements
- Regional Benefit – Ensure TUMF program revenues are distributed to maximize mitigation of new development impacts.

The TUMF program is intended to address cumulative traffic impacts of new development to the region; therefore, TUMF program funded improvements are focused primarily on regional arterial highways. New development in western Riverside County places additional demand on the regional transportation system to provide safe and convenient access for new residents and employees. The additional demand on the transportation facilities reduces mobility absent adequately and timely funded infrastructure improvements constructed to meet growing demands. As such, the WRCOG has developed and implemented the TUMF program which requires new development to contribute revenues to partially fund improvements that will mitigate the transportation impacts of new developments. TUMF investments are then focused on those regional facilities most impacted by new development.

### *Western Riverside County Multiple Species Habitat Conservation Plan*

The Western Riverside County MSHCP is a comprehensive, long-term habitat conservation program which addresses the needs of a variety of biological resources. The MSHCP provides for the conservation of approximately 160 species and covers approximately 1.25 million acres of land in Riverside County which is experiencing rapid urbanization. The primary goal of the MSHCP is to develop and manage sustainable preserve areas within existing and expanding urban areas. The preserve areas and management efforts contained in the final MSHCP will affect land use planning in the entire City of San Jacinto area.

### *Southern California Association of Governments Growth Management Plan*

The Southern California Association of Governments (SCAG) Growth Management Plan contains recommendations for methods to direct development and build-out of the region in

ways to minimize traffic congestion and protect environmental resources, including efforts to balance land uses, particularly jobs and housing. Goals of the SCAG Management Plan are reflected in the City's General Plan and individual plan elements.

***South Coast Air Quality Management Plan***

The South Coast Air Quality Management District (SCAQMD) Governing Board adopted the 2003 Air Quality Management Plan (AQMP) on August 1, 2003. The 2003 AQMP updates the attainment demonstration for the federal standards for ozone and particulate matter ($PM_{10}$); replaces the 1997 attainment demonstration for the federal carbon monoxide (CO) standard, provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal nitrogen dioxide (NO2) standard that the SCAB has met since 1992.

The South Coast AQMP includes a number of policies and measures to achieve federal and state standards for healthful air quality in the region. The City's General Plan strives to comply with the AQMP by planning land uses in relation to circulation systems, promoting commercial and industrial land uses with convenient access to transportation corridors, and encouraging a balance of land uses that facilitates a complimentary association between jobs and housing.

## 5.1.3 Significance Criteria

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on land use, planning and zoning if it:

1. Physically divides an established community.
2. Conflicts with any applicable plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, zoning ordinance, etc.) adopted for the purpose of avoiding or mitigating an environmental effect.
3. Conflicts with any applicable habitat conservation plan or natural community conservation plan.
4. Introduces a land use that is incompatible with existing or proposed surrounding land uses.

## 5.1.4 Impacts

***Would the project physically divide an established community?***

As described in detail in *Section 3.0*, *Project Description*, the proposed project would develop commercial, residential, recreation and school facility land uses in the Specific Plan project area. *Table 3-1* illustrates the total acreage committed to each proposed land use.

The City's General Plan Land Use Map and Zoning Ordinance generally designate the project site and adjacent surrounding land area for future residential and commercial development and, as such, a variety of residential/commercial developments have been approved in the vicinity or are in the City review process. According to the City's Tentative Map/New Development Map illustrating various development projects recently approved or pending City review, a number of new residential and commercial development projects have been approved, or are in the City review process, in the area surrounding the project site.

The project site's location in an existing rural area surrounded by land that currently supports agricultural uses is likely to result in a physical division of a relative contiguous rural area and associated agricultural community. That said, due to existing residential and commercial land use and zoning designations of the subject site and adjacent land, and the apparent pattern of pending residential and commercial development proposals in the vicinity of the project site, it is anticipated that the project area will experience a pattern of rural agricultural land use conversion to urban-type uses which would ultimately alleviate potential land use conflicts between existing agricultural uses and planned residential development. Therefore, no significant impacts related to the division of an established community would occur.

***Would the project conflict with any applicable plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, zoning ordinance, etc.) adopted for the purpose of avoiding or mitigating an environmental effect?***

**Land Use Plans and Policies**

***City of San Jacinto General Plan***

The City requires that a Specific Plan be developed for all projects involving 100 acres or more. Government Code Section 65450 states that a planning agency may "prepare specific plans for the systematic implementation of the general plan for all or part of the area covered by the general plan." The project, as proposed, will require an amendment to the General Plan Land Use Map to develop a Specific Plan and modify the land use designations of the project site to remove the HDR designation from the subject property and to reconfigure the existing CC, OS,

LDR, and MDR land use designations, and school site, consistent with the distribution of the land uses for the planned development of the proposed Specific Plan. The proposed Specific Plan is intended to incorporate and implement the comprehensive goals and policies of the City's General Plan for the more detailed development plan of the Villages of San Jacinto. The project land use scenario is generally consistent with the latest General Plan Update Land Use Plan. Therefore, the potential inconsistency with the existing General Plan Land Use Map is considered less than significant from a Land Use Plan Map perspective.

*Table 5.1-2*, *General Plan Policy Consistency Analysis*, identifies the City's General Plan policies that are applicable to the proposed Specific Plan and development project. For each listed policy, *Table 5.1-2* includes a discussion of potential project consistency/inconsistency with the policy to determine if the proposed Villages of San Jacinto Specific Plan would conflict with the policy and thereby result in an environmental impact. Environmental issues raised in the policy consistency analysis are also addressed in other sections of this EIR and are referenced where relevant.

**Table 5.1-2**
**General Plan Policy Consistency Analysis**

| Policy | Project Consistency |
|---|---|
| **Land Use Element:** The Land Use Element is a guide to land use planning within the City of San Jacinto and affects many of the issues addressed in the other General Plan elements. The Land Use Element identifies the type and location of future land uses within the City. The specific land uses and their location within the community in turn affect the remaining General Plan elements. For example, the location and type of land uses outlined in the Land Use Element affect the circulation system that is identified in the Circulation Element, and the allowable density of residential land identified in the Land Use Element affects the Housing Element policies. The land uses identified in the Land Use Element also reflect the community's goals for its future form and character. | |
| ***Land Use Policy Goal: Balance of Land Uses*** *– Develop a balanced land use pattern that meets community needs for residential, commercial, industrial, public, and recreational uses.* | |
| LU Policy 1.1: Promote a land use composition in San Jacinto that provides a balance or surplus between the generation of public revenues and the cost of providing community services and facilities. | The community provides for a variety of public facilities, including educational, municipal, and recreational land uses, as well as residential land uses. The community also designates approximately 22.7 acres for commercial land uses and 26.3 acres of mixed-use land uses. It is anticipated that these mixed-use and commercial land uses will generate additional revenue streams for the City, including sales tax. In addition, the project will be required to contribute development impact fees to cover its "fair share" cost of providing public services and facilities to the site, including fire protection, police protection, and libraries. As such, the balanced land uses provided by THE VILLAGES OF SAN JACINTO will contribute to public revenues and the project is therefore consistent with, and will result in the implementation of, this General Plan policy. |
| LU Policy 1.2: Create housing opportunities that match employment opportunities within the community. | THE VILLAGES OF SAN JACINTO Specific Plan establishes a high quality, master-planned community that provides for a wide range of residential home product types on lot sizes ranging from 4,000, 5,000, to 6,000 square feet. This variety of lot sizes will result in home sizes designed to appeal to a wide range of potential residents and available in a range of prices. |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| | Furthermore, THE VILLAGES OF SAN JACINTO combines housing, employment, and retail activities on one site. The community contains a maximum of 1,329 residential units, 22.7 acres of commercial land uses, and 26.3 acres of mixed-use land uses (including commercial, office, retail and municipal uses). This balance of land uses within the community contributes towards a greater balance between jobs and housing within the City. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| LU Policy 1.4: Provide public/institutional land use designations and development standards that encourage the location and operation of adequate public facilities to serve the community.<br>LU Policy 1.6: Maintain land use designations and regulations that permit the successful development and operation of public and private educational facilities at appropriate locations within the planning area. | THE VILLAGES OF SAN JACINTO provides a 69.1-acre site for use as a High School campus by the San Jacinto Unified School District in Planning Area 14, 40.8 acres of public parks, and the provision of 26.3 acres of mixed-use land uses (which may include public, municipal, and educational uses). Furthermore, this Specific Plan provides for the development of adequate infrastructure (circulation, water, sewer, etc.) necessary to ensure successful implementation of these public/institutional land uses. Additionally, this Specific Plan provides for amenities, such as landscaping and monumentation, and includes development standards and design guidelines to ensure a high quality of development. Maintenance responsibilities and financing mechanisms also are identified in this Specific Plan to ensure successful long-term operation of these public/institutional land uses. THE VILLAGES OF SAN JACINTO is therefore consistent with these policies. |
| LU Policy 1.5: Plan and designate adequate open space and parkland to meet the community's parks, open space, and recreational needs. | The community's maximum potential build-out of 1,329 homes would result in approximately 4,000 community residents (at a rate of 3.01 persons per household). The site is planned for a neighborhood park by the General Plan (see Figure CSF-3, Parks and Public Facilities) and per the requirements of the Quimby Act, the community would require approximately 20 acres of active parkland. THE VILLAGES OF SAN JACINTO Specific Plan exceeds this requirement by providing active public park facilities totaling approximately 40.8 acres (Planning Area 15B, 15C, and 15D), in addition to the private recreation facilities and paseos that are provided on 68.7 acres. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| LU Policy 1.3: Attract light industry and other compatible employment generating businesses.<br>LU Policy 1.7: Encourage additional retail development to increase sales tax revenues and expand the range of services available to the community.<br>LU Policy 1.8: Encourage the development of business parks and office parks to expand the number and type of job opportunities in San Jacinto. | THE VILLAGES OF SAN JACINTO includes opportunities for a variety of commercial activities that would generate employment and sales tax revenue. Specifically, 22.7 acres of commercial land uses are located within Planning Area 11 in the southeastern portion of the community and provide for neighborhood retail, entertainment, restaurant and employment opportunities. Additionally, a 26.3-acre mixed-use area (Planning Area 12), which allows for retail commercial, entertainment, office, and municipal land uses, is located in the southwestern portion of the community. The land uses permitted in Planning Area 12 create additional employment opportunities. This variety of land uses within the community would create new jobs, increase sales tax revenues for the City, and expand the range of services available to the surrounding area. THE VILLAGES OF SAN JACINTO is therefore is consistent with these policies. |
| LU Policy 1.9: Support the provision of outdoor gathering places such as plazas, greens and squares to strengthen social interaction and provide | Section V, *Design Guidelines*, requires the construction of outdoor gathering places such as plazas and green spaces within the commercial and mixed-use area create opportunities for social |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| visual relief in developed areas. | gatherings. The community also includes landscaped paseos and a private lake and swim club to encourage and support social activities within the community. Furthermore, the community features 40.8 acres of public parks containing picnic areas, BBQ pits, benches, tot lots, and other amenities that encourage social interaction. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| ***Land Use Policy Goal: Manage and Direct Growth*** *– Manage and direct growth so that the community and its neighborhoods are protected and enhanced.* | |
| LU Policy 2.1: Assure that new development is complementary to the existing character of the City. | THE VILLAGES OF SAN JACINTO will develop the site with a similar building scale and development intensity commonly found in the community. The design theme of THE VILLAGES OF SAN JACINTO is based on a contemporary interpretation of historical southern California architectural styles and features a relaxed landscape feel reminiscent of rural communities. The Specific Plan also includes architectural design standards for site planning, architectural theme and details, building mass and scale, materials and color to create a high-quality living environment, as wellcomplement and enhances the existing character of the City and the surrounding community. |
| LU Policy 2.2: Encourage infill development to be consistent with and complement the bulk, scale, intensity, and character of the existing surroundings. | |
| LU Policy 2.3: Ensure that development corresponds to the provision of community services and facilities and new development funds its share of improvements (e.g., parks, schools, trails, utilities). | THE VILLAGES OF SAN JACINTO provides for the development of public parks, public/municipal uses, and a high school. In addition, the community provides for the development of private parks and trails. As described in detail Specific Plan Section IV.7, *Project Phasing Plan*, THE VILLAGES OF SAN JACINTO provides for the development of infrastructure necessary to service the planned land uses and community facilities. The community master developer will also be required to pay development impact fees to cover the project's fair share of community services, including fire protection, police protection, and libraries. Therefore, THE VILLAGES OF SAN JACINTO is consistent with, and results in the implementation of, this General Plan policy. |
| LU Policy 2.4: Ensure that adequate infrastructure and public services are provided in concert with development so that no negative fiscal or service impact occurs as a result of new development. | |
| LU Policy 2.7: Locate retail and commercial land uses along major circulation routes at major intersections where there is maximum access and visibility. | THE VILLAGES OF SAN JACINTO includes 22.7 acres of commercial land uses along Bridge Street and Sanderson Avenue. In addition, the community includes 26.3 acres of mixed-use land uses along Bridge Street at the planned extension of Cawston Avenue. Bridge Street acts as a major circulation axis between Sanderson Avenue and Cawston Avenue, and will facilitate efficient access to-and-from the site for patrons and employees, while providing maximum visibility; therefore, ensuring consistency with this policy.<br><br>It is important to note that the General Plan anticipates that community commercial land uses would be developed on the project site, immediately adjacent to Sanderson Avenue, as depicted on Figure III-2, *General Plan Map*. The project accommodates the commercial uses anticipated by the General Plan, but locates these uses at the southern portion of the site, along Bridge Street (as described above). The layout of mixed-use and commercial land uses planned by THE VILLAGES OF SAN JACINTO is preferred in lieu of the layout identified in the General Plan, as it provides a buffer between the EMWD wastewater treatment plant immediately adjacent to the southern site boundary and the open space and residential uses planned by the project. |
| LU Policy 2.8: Direct higher density housing and higher intensity employment around commercial uses and job centers near transit nodes and areas served by a well-developed transportation network. | |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| LU Policy 2.9: Where feasible and beneficial to the City and its residents, encourage the joint use of public facilities. | The project includes accommodations for a variety of public facilities (including a high school, public parks, and other municipal uses). The location of these planned uses within the community and their proximity to complementary uses, such as residential and commercial land uses, promotes the joint use of these facilities. Consequently, THE VILLAGES OF SAN JACINTO is consistent with this policy. |
| ***Land Use Policy Goal: Environmental Compatibility*** *– Foster development in San Jacinto that ensures the compatibility of land uses with environmental conditions.* | |
| LU Policy 3.1: Limit development in the hillsides, ridgelines, floodplains, and other high risk areas. | As discussed in Specific Plan Section III.B, *Environmental Setting*, the site is relatively flat and slopes gently to the northwest; no prominent slopes, hillsides or floodplains exist on-site. The northerly portion of the site is located within the 100-year floodplain. The drainage system (refer to Specific Plan Section IV.3, *Drainage Plan*) has been designed to convey and attenuate 100-year storm flows and provide flood protection for the site. A complete, detailed discussion of potential adverse impacts associated with 100-year storm flows is contained in the EIR accompanying this Specific Plan. As concluded in the EIR, with the incorporation of design measures and mitigation – as needed – implementation of the project will not result in substantial risk to humans or structures. |
| LU Policy 3.4: Preserve prominent ridgelines by restricting development on slopes of 40% or higher. | |
| LU Policy 3.2: Explore methods to preserve areas of severe natural hazards, such as landslides, ground subsidence, liquefaction, and flooding as open space. | As discussed in the EIR that accompanies the specific plan for THE VILLAGES OF SAN JACINTO, and as indicated in the Specific Plan, earthquake faults do traverse portions of the site. However, as shown on Figure III-6 of the Specific Plan, *Structural Setbacks*, the site has been designed to preserve areas located in the identified fault zone as recreational open space. As discussed above, the site is not subject to substantial adverse effects related to flooding. Accordingly, THE VILLAGES OF SAN JACINTO is consistent with this policy. |
| LU Policy 3.3: Permit the joint-use of preserve areas and easements such as seismic faults and drainage basins for open space and recreational uses. | A portion of the Casa-Loma segment of the San Jacinto Fault Zone Complex traverses a portion of the site. The fault segment and the surrounding fault zone buffer is inappropriate for development of residential uses or habitable structures. THE VILLAGES OF SAN JACINTO utilizes a majority of the fault zone area for active and passive recreational uses, site drainage, and internal circulation and is consistent with this policy. |
| ***Land Use Policy Goal: Land Use and Circulation Compatibility*** *– Promote high quality development that ensures compatibility with surrounding land uses and major transportation corridors.* | |
| LU Policy 4.1: Evaluate the compatibility of new development with surrounding uses when reviewing development proposals and designing the circulation system improvements. | THE VILLAGES OF SAN JACINTO will result in the development of the site with a mix of land uses consistent with the General Plan land use designations for the site. The land uses on-site will be developed with a similar building scale and development intensity commonly found in the surrounding community. Development on-site will be required to be consistent with Section V, Design Guidelines, of THE VILLAGES OF SAN JACINTO, which includes architectural design standards for site planning, architectural theme and details, building mass and scale, materials and color to create a high-quality living environment. In addition, as described in Specific Plan Section III, THE VILLAGES OF SAN JACINTO provides adequate circulation and infrastructure improvements to accommodate development of the site. |
| LU Policy 4.2: Ensure that new development is compatible with the physical characteristics of the site, surrounding land uses, and available public infrastructure. | |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| LU Policy 4.3: Maximize commercial, retail, and employment opportunities along the City's major corridors and intersections, including SR-79, the Ramona Expressway, Sanderson, and Cottonwood. | As discussed above in the response to General Plan policy 2.7, THE VILLAGES OF SAN JACINTO Specific Plan provides 22.7 acres of commercial land uses and 26.3 acres of mixed-use adjacent to major circulation corridors. The location of mixed-use and commercial land uses along major circulation corridors will maximize visibility of these land uses and will provide site patrons and employees with adequate, efficient circulation to-and-from the site. |
| LU Policy 4.4: Ensure new development provides roadways that meet the City's standards based on the classifications shown in the Circulation Master Plan and the level of traffic expected to be generated by the proposed project. | THE VILLAGES OF SAN JACINTO Specific Plan includes a roadway network which provides safe and efficient circulation to individual planning areas and land uses. The Specific Plan includes full- and half-width improvements to the following General Plan Circulation Element roadway segments on-site: Sanderson Avenue, De Anza Drive, Bridge Street, Odell Avenue, Cawston Avenue, and Ramona Boulevard. In addition, the project provides for the construction of on-site local roads. All roadways improvements will be constructed to meet City of San Jacinto standards. The community's Circulation Plan, conceptually illustrated on Figure IV-2, *Project Circulation Plan*.<br><br>The EIR that accompanies THE VILLAGES OF SAN JACINTO Specific Plan evaluates traffic and circulation impacts that may occur upon implementation of this project and provides mitigation measures to reduce identified impacts to a level below significance, when feasible. The Planning Commission and City Council will review the EIR to ensure adequate provision of circulation facilities.<br><br>Therefore, THE VILLAGES OF SAN JACINTO Specific Plan is consistent with, and results in the implementation of, this policy of the General Plan. |
| LU Policy 4.5: Minimize the number of vehicular access points on major corridors by using reciprocal access agreements whenever feasible. | As depicted on Specific Plan Figure IV-2, *Project Circulation Plan*, the project has been designed to minimize vehicular access points on major circulation corridors, including Sanderson Avenue. |
| LU Policy 4.6: Enhance pedestrian access both within shopping centers and to and from commercial uses to reduce vehicle trips generated within the City. | Section V, *Design Guidelines*, requires that structures within Planning Area 11 (Neighborhood Commercial) and Planning Area 12 (Mixed Use Commercial) be oriented in a pedestrian-friendly manner to take advantage of park views. The commercial land uses are required to provide either street-facing entrances and/or entrances that are easily accessed from the park and parking areas. The scale of the buildings and plan are pedestrian-friendly and encourage pedestrian activity between structures. The design principles set forth in Section V, *Design Guidelines*, requires major projects or individual buildings at key locations within the commercial area to incorporate public plazas at focal points and at activity centers. Furthermore, parking lots within the commercial area shall be pedestrian-friendly in nature, with walkways provided in appropriate locations. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| ***Land Use Policy Goal: Resource Preservation*** *– Preserve and protect the City's cultural, historic, agricultural, and visual resources.* | |
| LU Policy 6.1: Balance the benefits of development with potential impacts to existing cultural resources. | The EIR that accompanies THE VILLAGES OF SAN JACINTO Specific Plan evaluates impacts to cultural resources that may occur upon implementation of this project and provides mitigation measures, as necessary, to reduce identified impacts to a level below significance. The |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| | Planning Commission and City Council will review the EIR to ensure adequate protection of cultural resources. |
| LU Policy 6.3: Use landscaping for screening, solar control, parking lot shade, and other beautification purposes throughout the City. | THE VILLAGES OF SAN JACINTO Specific Plan includes an extensive set of landscape design guidelines to ensure the community is developed with a cohesive theme that weaves together the residential, recreational, and other components of the community. The landscape design guidelines include provisions for streetscapes, edge conditions between uses, monumentation and community walls and fences, as well as provisions to screen incompatible uses. In addition, the Specific Plan includes guidelines for site design and landscaping and provides solar control and maximizes energy efficiency (see Specific Plan Section V.E., *Energy Efficiency Guidelines*. Therefore, THE VILLAGES OF SAN JACINTO Specific Plan is consistent with this General Plan policy. |
| LU Policy 6.4: Encourage outdoor gathering spaces, such as mini-parks and plazas that encourage social interaction and also enhance the visual character of the community. | The land use plan for THE VILLAGES OF SAN JACINTO includes numerous outdoor gathering spaces, including public community parks, private paseos, a private lake, and a private lake house and swim lagoon. These outdoor spaces will include passive and active recreational opportunities, picnic areas, BBQ pits, benches, tot lots, landscaping and other amenities that encourage social interaction (as described in Specific Plan Section V, *Design Guidelines*). |
| LU Policy 6.5: Encourage the use of project design features that reduce impacts to important and local regional environmental resources. | THE VILLAGES OF SAN JACINTO has been carefully planned to minimize impacts to important environmental resources. The drainage plan for the project has been designed to minimize water quality impacts and maximize protection from flood flows; the landscape plan has been designed to maximize water conservation. In addition, the lake on-site will contain recycled water and will be used to irrigate on-site landscaping, further reducing the impact on the water supply.<br><br>The EIR that accompanies THE VILLAGES OF SAN JACINTO Specific Plan includes a detailed evaluation of the project's potential to result in significant direct and/or indirect impact to the environment impacts. The EIR includes mitigation measures that will be required in order to reduce impacts to below a level of significance, when feasible. The Planning Commission and City Council will review the EIR to ensure adequate protection of environmental resources.<br><br>Accordingly, THE VILLAGES OF SAN JACINTO is consistent with this General Plan policy. |
| LU Policy 6.10: Promote the maintenance of private and public properties to enhance the visual appearance of the community. | Section IV, Specific Plan, of THE VILLAGES OF SAN JACINTO Specific Plan includes a comprehensive maintenance plan (Table IV-4) and a list of potential maintenance entities for various public and private amenities within the community (Table IV-5). It is anticipated that maintenance responsibilities for common public facilities will be divided between the Master Homeowners' Association, Neighborhood Associations, and the City's Landscaping, Lighting and Park District #2 (LLPD#2), and the Riverside County Flood Control District. Final decisions regarding maintenance entities shall be made at a future stage of project design review and in concert with City departments. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| ***Land Use Policy Goal: Economic Development*** *– Capitalize on the City's many economic development opportunities to promote a strong and economically health community.* | |
| LU Policy 7.1: Promote the economic stability of the San Jacinto Area by encouraging diversification of the City's commercial and industrial base by:<br>Encouraging a variety of industries to locate in San Jacinto, including retail, high technology, manufacturing, and professional services in order to promote the development of a mixed economic base; and<br>Encourage the expansion of existing businesses if possible and extending efforts at business retention. | The project includes approximately 26.3 acres of mixed-use and 22.7 acres of commercial land uses. The Specific Plan allows these areas to be developed with a variety of uses, including but not limited to retail commercial, entertainment, restaurant, municipal, professional service, and office park land uses. Development of these uses on-site will positively contribute to the economic stability of the San Jacinto Area. As such, THE VILLAGES OF SAN JACINTO is consistent with, and results in the implementation of, this General Plan policy. |
| ***Land Use Policy Goal: Community Design*** *– Encourage thoughtful community design that enhances San Jacinto's quality of life.* | |
| LU Policy 9.1: Ensure new development is compatible with its natural surroundings and the built environment in terms of architecture, scale, grading, and massing. | The design theme of THE VILLAGES OF SAN JACINTO is based on a contemporary interpretation of historical southern California architectural styles and features a relaxed landscape feel reminiscent of rural communities. The Specific Plan also includes architectural design standards for site planning, architectural theme and details, building mass and scale, materials and color to create a high-quality living environment. The implementation of this design theme and development standards will ensure that land uses provided by this Specific Plan complement the natural surroundings as well as the growth and development that is anticipated to occur. |
| LU Policy 9.3: Support pedestrian-friendly and pedestrian-scaled development that encourages more social interaction and less automobile use, including mixed use and clustered developments. | THE VILLAGES OF SAN JACINTO includes an extensive sidewalk, trail, and paseo system connecting residences with the commercial areas, high school site, mixed-use area, and recreational amenities, thereby encouraging pedestrian activity. Furthermore, the community's mixed-use area may include public, professional offices, entertainment uses, churches, libraries emergency services, theatres and public plazas. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| LU Policy 9.4: Provide public spaces and activity centers that encourage involvement, physical activity, and community pride. | THE VILLAGES OF SAN JACINTO provides for parks to encourage active recreation, and a system of trails and paseos is provided to encourage pedestrian and bicycle activity within the community. In addition, the community also features a lake and a lake house and swim lagoon, which will serve as a focal point of the community activities and source of community identification. The planned high school in Planning Area 14 is another element of the community that may be a source of community activities. Accordingly, the project would be consistent with this General Plan policy. |
| LU Policy 9.5: Support "green" and "sustainable" developments that respect and conserve the region's important resources. | Section V, *Design Guidelines*, includes a plant palette that requires the use of drought-tolerant plants and recycled water for irrigation. Furthermore, Section V, *Design Guidelines*, includes detailed Energy Efficiency Guidelines that identify elements in the site planning, design and construction phases of this Specific Plan that can and should be implemented to achieve a standard of energy efficient performance which is desirable for the homeowner, the landlord, the environment, and builder/developer. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
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| LU Policy 9.6: Require the use and maintenance of extensive landscaping in new development and redevelopment projects to beautify the surroundings, screen outdoor uses, provide shade, establish pedestrian paths, buffer incompatible land uses, and provide visual interest. | Specific Plan Section V, *Design Guidelines*, includes a detailed description of the landscape design guidelines for the project, including streetscapes, monumentation, walls and fences. Implementation of the landscape design guidelines will provide visual interest throughout the community while uniting the various components of the community (i.e., residential uses, recreational uses, commercial uses) with a common design vocabulary. Specific Plan Section IV.8, *Comprehensive Maintenance Plan*, provides a comprehensive list of maintenance responsibilities for public and private entities to ensure that the community maintains a high level of quality. THE VILLAGES OF SAN JACINTO is consistent with, and results in the implementation of, this General Plan policy. |
| LU Policy 9.7: Encourage public art, such as murals, sculptures, creative street furniture, and fountains in new public and private developments. | THE VILLAGES OF SAN JACINTO Specific Plan provides for entry treatments and includes design criteria to encourage the creation of public gathering places with site amenities (which may include murals, sculptures, fountains, etc.). In addition, the project provides street furniture in accordance with City of San Jacinto requirements. As such, the project is consistent with this General Plan policy. |
| LU Policy 9.8: Develop and enforce development standards and design guidelines that provide clear yet flexible direction for achieving quality community design in new development and redevelopment projects throughout the community. | Section V, *Design Guidelines*, establishes standards to provide for high-quality development and to provide an aesthetically cohesive environment for THE VILLAGES OF SAN JACINTO community.<br><br>The Landscaping Design Guidelines are comprised of key components such as, streetscapes, edge conditions between land uses, monumentation, community walls and fences, parks, and paseos. These guidelines also present requirements relating to the appropriate and water conserving plant palette and ensure that they are compatible with the community design theme. The Architectural Design Guidelines are intended to provide a basis for decisions regarding the structural environment to be built. The architectural design guidelines also include standards for site planning and home layout, as well as for commercial and mixed use development.<br><br>The guidelines identified in Specific Plan Section V provide developers with clear, yet flexible, guidelines to provide quality development on-site. |
| **Community Services and Facilities Element:** The Community Services and Facilities Element addresses the services and infrastructure needed to serve the community. Much of the City of San Jacinto is undeveloped or under agricultural production and is not adequately served by existing community services and facilities to meet the needs of future development. As a result, most future development in the City requires the expansion of services and facilities to meet this increase in demand. Planning for this future increase in demand will ensure that the community service and facility need of future residents are met, while avoiding adverse impacts to the existing community. | |
| ***Community Services and Facilities Goal: Law Enforcement*** *– Provide for the protection of San Jacinto residents and businesses through maintenance of an adequate force of police officers, appropriate physical planning of new development, and a high level of public involvement in crime prevention.* | |
| CS&F Policy 1.1: Maintain adequate levels of law enforcement service. | The project master developer will be required to pay sufficient development impact fees to cover the project's share of community services and facilities, including police protection services. In addition, one or more Home Owners' Associations will be established for the community. The Home Owners' Association(s) may establish a |
| CS&F Policy 1.2: Improve law enforcement services through increased cooperation with County, State and Federal law enforcement agencies. | |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
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| CS&F Policy 1.3: Provide sufficient staffing and facilities to minimize response times to emergency situations. | community involvement crime prevention program (for example, a neighborhood watch program). THE VILLAGES OF SAN JACINTO is therefore consistent with these General Plan policies. |
| CS&F Policy 1.4: Continue collaboration with other jurisdictions in providing back-up services, equipment, and personnel, when feasible and necessary. | |
| CS&F Policy 1.5: Expand community outreach programs and promote community involvement in crime prevention. | |
| CS&F Policy 1.6: Require design features in new development to reduce potential for crime. | THE VILLAGES OF SAN JACINTO Section V, *Design Guidelines*, includes numerous design features that promote safety and reduce criminal activity. These design features include special considerations for the siting of parks, paseos and cul-de-sacs, the use of locked key or security card access gates at paseo/park connections, the lighting of house numbers, the orientation of alley-loaded or rear-load homes towards the adjacent paseo areas, security lighting and sizing of trails within paseos to allow police patrol, and more. Parks have been oriented to provide for "eyes on the street" by surrounding residences and easy police patrol and emergency vehicle access from adjacent streets. Furthermore, homes shall be oriented to face park areas, and to fencing material shall be carefully selected to ensure maximum visibility of the parks from public areas. Common parking areas within the commercial, mixed-use, park, and school areas shall be well-lit for security purposes. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| ***Community Services and Facilities Goal: Fire Protection*** *– Work with RCOFD to provide a sufficient level of fire protection.* | |
| CS&F Policy 2.1: Work closely with RCOFD in determining and meeting community needs for fire protection services, facilities, and personnel. | The project master developer will be required to pay sufficient development impact fees to cover the project's share of community services and facilities, including fire protection services. Payment of these fees will offset the incremental increase in demand for fire protection services/facilities that will result from the project. In addition the RCOFD is a reviewing agency of this Specific Plan and subsequent implementing actions will be required to comply with all applicable RCOFD site design standards and regulations. Accordingly, THE VILLAGES OF SAN JACINTO is consistent with these General Plan policies. |
| CS&F Policy 2.2: Periodically evaluate the level of fire protection service to ensure that San Jacinto has appropriate levels of fire protection service to maintain the adopted level of service standards. | |
| CS&F Policy 2.4: Plan for the location of convenient and adequate fire stations to serve the existing and future residents of San Jacinto. | |
| CS&F Policy 2.3: Enforce the continued maintenance of private property, such as weed abatement, to reduce the incidents of fire hazards. | Private property within the community shall be maintained by the HOA or the individual homeowners. Furthermore, Section IV, *Specific Plan*, of THE VILLAGES OF SAN JACINTO Specific Plan establishes comprehensive maintenance plan (Table IV-4) and a list of potential maintenance entities for various public and private amenities within the community (Table IV-5). THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| CS&F Policy 2.5: Provide and maintain adequate infrastructure, including fire hydrants, fire stations, fire flows, and access points, that meet RCOFD's standards. | The project circulation plan provides adequate primary and secondary emergency access. In addition, the master water plan has been designed to ensure that future development of the site can accommodate applicable infrastructure requirements (including minimum fire flows). Fire protection infrastructure (e.g., fire hydrants) and fire |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
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| | protection design features (e.g., fire lanes) will be identified on future site plans and/or conditional use permits and are subject to review and approval by the City of San Jacinto. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| ***Community Services and Facilities Goal: Public Education*** *– San Jacinto is located within the San Jacinto Unified School District (SJUSD) and the Hemet Unified School District (HUSD). Mount San Jacinto College (MSJC) is also located within the City. The City must closely coordinate with SJUSD, HUSD, and MSJC to ensure a sufficient level of public education is available to the community.* | |
| CS&F Policy 3.2: Promote the development and siting of quality educational facilities to meet the needs of future residents through increased cooperation between the City and school districts. | THE VILLAGES OF SAN JACINTO provides a 69.1-acre site for use as a High School campus by the San Jacinto Unified School District in Planning Area 14 and allows for possible expansion of the High School campus into Planning Area 19. Additionally, THE VILLAGES OF SAN JACINTO Specific Plan permits the development of Planning Areas 12 and 13 as school sites. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| CS&F Policy 3.5: Minimize the impacts of schools on adjacent properties. | Section V, *Design Guidelines*, of THE VILLAGES OF SAN JACINTO Specific Plan includes design guidelines for transitions between various types of land uses, including residential and public facility/educational uses. The intent of these guidelines are to anticipate and eliminate possible conflicts between land uses. Future development of the site will be required to be consistent with the design guidelines for land use transitions, thus ensuring that impacts of schools on adjacent properties are minimized. |
| ***Community Services and Facilities Goal: Water Service*** *– Work with local, regional, and State water agencies to provide sufficient levels of water service.* | |
| CS&F Policy 4.1: Provide sufficient levels of water service to meet the water needs of the community through the orderly extension of infrastructure and provision of adequate water supplies.<br><br>CS&F Policy 4.2: Work closely with the Eastern Municipal Water District and the Lake Hemet Municipal Water District to maintain an adequate level of water service in the planning area. | The Eastern Municipal Water District (EMWD) has prepared a Water Supply Assessment report for the project. The report concludes that EMWD is projected to have adequate water supply to service the project. In addition, the project would minimize its demand for water supplies through the extensive use of recycled water for landscape irrigation; the use of drought-tolerant, native landscape materials; the recommended use of water-efficient faucets, toilets, and shower heads; and the recommended use of water-efficient, zoned irrigation systems. A detailed discussion of the project's impacts to the local water supply is found in the EIR that accompanies THE VILLAGES OF SAN JACINTO Specific Plan.<br><br>The master water plan for the community provides a water distribution system that is based on EMWD requirements and will adequately serve the community in a manner consistent with the EMWD Northwest San Jacinto Area Master Plan.<br><br>Based on the foregoing, THE VILLAGES OF SAN JACINTO is consistent with these General Plan policies. |
| CS&F Policy 4.3: Encourage water conservation as a means of preserving water resources. | As shown in Figure IV-5, *Master Water Plan*, recycled water pipelines will be installed concurrently with domestic lines. The water from this recycled water system will be used to manage the lake and for irrigation purposes. In addition, Section V, *Design Guidelines*, includes a plant palette that requires the use of drought-tolerant plants. Furthermore, Section V, *Design Guidelines*, includes detailed Energy Efficiency |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| | Guidelines, including water conservation measures that identify elements in the site planning, design and construction phases of this Specific Plan that can and should be implemented to achieve a standard of energy efficient performance which is desirable for the homeowner, the landlord, the environment, and builder/developer. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| ***Community Services and Facilities Goal: Sewer Service*** *– Work with the Eastern Municipal Water District to provide a wastewater collection, treatment, and disposal system to adequately serve existing and future development in San Jacinto.* | |
| CS&F Policy 5.3: Ensure compatible development occurs surrounding the San Jacinto Waste Water Treatment Facility. | THE VILLAGES OF SAN JACINTO has been carefully designed and planned to ensure that development on-site is compatible with the San Jacinto Waste Water Treatment Facility, which is located immediately adjacent to the southern project boundary. The mixed-use and commercial land uses (Planning Areas 11 and 12) buffer the community from the Waste Water Treatment Facility and complement the residential and recreational components of the community. In addition, three public parks (Planning Areas 15B, 15C, and 15D) provide an additional buffer between the off-site Waste Water Treatment Facility and planned residential uses. Accordingly, implementation of THE VILLAGES OF SAN JACINTO Specific Plan would ensure that compatible development occurs adjacent to the Waste Water Treatment Facility and would ensure that community residents are not exposed to adverse edge-effects. As such, the project is consistent with this General Plan policy. |
| CS&F Policy 5.4: Encourage water conservation as a means of reducing sewage generation. | THE VILLAGES OF SAN JACINTO encourages the use of water-efficient faucets, high-efficiency toilets, and water conserving shower heads to maximize water conservation and reduce sewage generation. The project encourages the use of a pool filtration system with a zero water backwash system to reduce the need to drain the pool for regular maintenance purposes. In addition, as described in Section V, Design Guidelines, the plant palette for the project has been designed to feature native or naturalized, drought-resistant plant material, and the conceptual landscape design will minimize the use of turf. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| CS&F Policy 5.5: Expand the use of reclaimed water. | As shown in Figure IV-5, *Master Water Plan*, recycled water pipelines will be installed concurrently with domestic lines. The water from this recycled water system will be used to maintain the lake volume and provide water storage for irrigation purposes. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| CS&F Policy 5.6: To reduce potential negative impacts to groundwater, minimize the use of septic systems. | THE VILLAGES OF SAN JACINTO Specific Plan does not provide for the use of septic systems on site. Wastewater generated by the community will conveyed via a sanitary sewer system to existing EMWD sewer facilities, as described in Specific Plan Section 4.B, and conceptually illustrated in Figure IV-6, *Master Sewer Plan*. |
| ***Community Services and Facilities Goal: Power*** *– Work effectively with providers of natural gas and electricity to provide sufficient levels of these services.* | |
| CS&F Policy 6.1: Work closely with local service providers in determining and meeting the needs of the community for energy. | Energy demands associated with the project are addressed through long-range planning by energy purveyors and can be accommodated as they occur. Therefore, project implementation is not anticipated to result in adverse impacts related to energy demand. Required electrical transmission lines on-site would be installed by the responsible energy |
| CS&F Policy 6.4: Minimize the visual and environmental impacts of the development and | |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| operation of energy facilities on the community. | utility. THE VILLAGES OF SAN JACINTO is consistent with these policies of the General Plan. |
| ***Community Services and Facilities Goal: Communications*** *– Work effectively with providers of communications to provide sufficient levels of these services.* | |
| CS&F Policy 7.2: Encourage all new development to provide the technology to support multiple telecommunications facilities and providers such as multi-media products, wireless technologies, and satellite communications. | THE VILLAGES OF SAN JACINTO will accommodate telecommunications as necessary and required to service the project site. If feasible, the master developer will work with an internet provider to establish a project-wide wifi network. THE VILLAGES OF SAN JACINTO is, therefore, consistent with the San Jacinto General Plan. |
| ***Community Services and Facilities Goal: Flood Control*** *– Work effectively with providers of flood control services and facilities to provide and maintain sufficient levels of service.* | |
| CS&F Policy 8.1: Ensure that adequate flood control facilities are provided to protect the lives and property of San Jacinto's residents. | As described in THE VILLAGES OF SAN JACINTO EIR, the community provides for adequate flood control facilities. Furthermore, a portion of the regional area drainage plan, the San Jacinto Valley Master Drainage Plan, traverses THE VILLAGES OF SAN JACINTO community along its western boundary. The community design acknowledges and accommodates these regional drainage facilities, utilizing a series of storm water channels, water quality control basins, and detention basins to collect and transport stormwater through the site. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| ***Community Services and Facilities Goal: Waste Disposal*** *– Work effectively with providers of waste disposal to provide sufficient levels of these services.* | |
| CS&F Policy 9.1: Reduce the amount of solid waste requiring disposal at landfills. | Section V, *Design Guidelines*, includes detailed Energy Efficiency Guidelines that identify elements in the site planning, design and construction phases of this Specific Plan that can and should be implemented to achieve a standard of energy efficient performance which is desirable for the homeowner, the landlord, the environment, and builder/developer. Included within the Energy Efficiency Guidelines are specific recommendations to minimize the amount of landfill waste generated by the project, including the use of long-lasting construction products (for example, engineered lumber) and sustainable building materials. In addition, THE VILLAGES OF SAN JACINTO Specific Plan encourages the provisions of exterior storage areas for recyclables and adequate recycling containers in public areas, in addition to the establishment (by the HOA) of community compost sites for green waste. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| ***Community Services and Facilities Goal: Recreation and Open Space*** *– Provide sufficient parks, recreational, and open space facilities.* | |
| CS&F Policy 10.1: Work with the Valley-Wide Recreation and Park District and other organizations to provide active and passive parks, recreational, and open space facilities that meet the needs of all segments of the community. | The community's maximum potential buildout of 1,329 dwelling units would result in approximately 4,000 community residents (at a rate of 3.01 persons per household). Per the requirements of the Quimby Act, the community would require approximately 20 acres of active parkland. THE VILLAGES OF SAN JACINTO Specific Plan exceeds this requirement by providing an extensive paseo and trail system and 40.8 acres of active public park facilities (Planning Area 15B, 15C, and 15D). In addition to the public parks, paseos, and trails, the community includes a 1.0-acre private neighborhood park (Planning Area 15A), a 1.2-acre private neighborhood park (Planning Area 15E), and a private 5.1-acre Lake |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
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| | House and Swim Lagoon. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| CS&F Policy 10.2: Cooperate with private developers and public agencies to create a network of equestrian, biking, and hiking trails that link to adjacent regional and local trails networks. | THE VILLAGES OF SAN JACINTO links the residential, commercial, recreational, mixed-use, and school land uses via a 9.6-acre system of paseos, which connects to city sidewalks. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| CS&F Policy 10.3: Use flood control facilities for passive recreational activities when appropriate. | Flood control facilities, including drainage channels and detention basins, have been incorporated into the design of the project (Planning Areas 18A-18D). The flood control facilities provided on-site are not considered appropriate for recreational activities. As such, THE VILLAGES OF SAN JACINTO is consistent with this General Plan policy. |
| CS&F Policy 10.4: Encourage the joint use of City and other public agency facilities for recreational purposes, education, and flood control whenever feasible. | THE VILLAGES OF SAN JACINTO provides for a high school campus and a mixed-use area (which may accommodate public/municipal/ institutional land uses). The distribution of these land uses adjacent to recreational and residential uses promotes the joint use of public facilities. |
| CS&F Policy 10.5: When feasible, use less developable or undevelopable lands, including utility corridors, fault zones, channels, and easements for passive and active recreational uses that have minimal potential for impacts on the environment. | The project site contains a portion of the Casa-Loma segment of the San Jacinto fault zone project. The fault segment and the surrounding fault zone buffer are inappropriate for development with residential uses or habitable structures. THE VILLAGES OF SAN JACINTO utilizes a majority of the fault zone area for active and passive recreational uses, flood control facilities, and internal circulation – uses that have a minimal potential for impacts on the environment or residents/visitors of the site. Accordingly, the project is consistent with this General Plan policy. |
| CS&F Policy 10.6: Encourage the development of private recreational facilities to expand recreational opportunities of the City's residents. | THE VILLAGES OF SAN JACINTO includes a variety of public and private recreational amenities. In addition to the 40.8 acres of public parks and an extensive paseos and trails system, the community includes a 1.0-acre private neighborhood park (Planning Area 15A), a 1.2-acre private neighborhood park (Planning Area 15E), and a 5.1-acre Lake House and Swim Lagoon. In addition, the uses permitted in Planning Area 12 include private recreation such as skating rinks, health clubs, etc. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| CS&F Policy 10.7: Encourage neighborhood groups, organizations, clubs and businesses to take a greater interest and financial responsibility in the improvement of the park and recreation system in the City. | THE VILLAGES OF SAN JACINTO Specific Plan provides 40.8 acres of active public park facilities (Planning Area 15B, 15C, and 15D). In addition to the public parks, the community includes a 1.0-acre private neighborhood park (Planning Area 15A), a 1.2-acre private neighborhood park (Planning Area 15E), a 5.1-acre Lake House and Swim Lagoon, and a paseo system. Private recreational facilities will be maintained by a Homeowners' Association and public facilities will be maintained by the City of San Jacinto, pursuant to the maintenance responsibility schedule established within this Specific Plan. THE VILLAGES OF SAN JACINTO is consistent with this policy. |
| CS&F Policy 10.8: Actively pursue all available sources of financing for parkland acquisition and maintenance. | |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
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| **Circulation Element:** The City of San Jacinto is served by a diverse circulation network consisting of roadways, rail service and trails. Convenient access to the community has been provided for many years by a combination of regional and local roadways. The Circulation Element guides the continued development and improvement of the circulation system to support existing and planned development, while the Land Use Element identifies the City's existing and planned development pattern. The development of additional land in the future will increase the demand for local and regional roadway improvements and construction. The Circulation Element also establishes acceptable roadway service levels and identifies improvements to maintain the service levels. The use of other modes of transportation, such as transit, walking and bicycling is promoted to reduce the demand on the circulation system and to improve air quality. | |
| ***Circulation Goal: Local Circulation System*** *– Provide for the protection of San Jacinto residents and businesses through maintenance of an adequate force of police officers, appropriate physical planning of new development, and a high level of public involvement in crime prevention.* | |
| C Policy 1.1: Provide a balanced circulation system that ensures the safe and efficient movement of people and goods throughout the City.<br><br>C Policy 1.2: Improve the San Jacinto circulation system to desired standards in concert with land development to maintain sufficient levels of service. | THE VILLAGES OF SAN JACINTO Specific Plan includes a roadway network which provides safe and efficient vehicular and pedestrian circulation to individual planning areas and land uses. The Specific Plan includes full- and half-width improvements to the following General Plan Circulation Element roadway segments on-site: Sanderson Avenue, De Anza Drive, Bridge Street, Odell Avenue, Cawston Avenue, and Ramona Boulevard. In addition, the project provides for the construction of on-site local roads. All roadways improvements will be constructed to meet City of San Jacinto standards. The community's Circulation Plan, conceptually illustrated on Figure IV-2, *Project Circulation Plan*.<br><br>The EIR that accompanies THE VILLAGES OF SAN JACINTO Specific Plan evaluates traffic and circulation impacts that may occur upon implementation of this project and provides mitigation measures to reduce identified impacts to a level below significance, when feasible. The Planning Commission and City Council will review the EIR to ensure adequate provision of circulation facilities.<br><br>Therefore, THE VILLAGES OF SAN JACINTO Specific Plan is consistent with, and results in the implementation of, this policy of the General Plan. |
| C Policy 1.6: Require new development to provide roadway, sidewalk, and median improvements that enhance the visual character of the roadway system and encourage pedestrian and bicycle safety. | THE VILLAGES OF SAN JACINTO is consistent with this policy and implementation program because the community includes a Circulation Plan that allows traffic to move efficiently on-site and off-site. As described in THE VILLAGES OF SAN JACINTO EIR, implementation of the proposed Circulation Plan would result in an efficient and safe roadway system for vehicles, pedestrians, and bicyclists. The Master Developer for THE VILLAGES OF SAN JACINTO is required to provide roadway, sidewalk, landscaped parkways, and raised or landscaped median improvements to internal project roadways and project frontage roads in accordance to the traffic study prepared by Urban Crossroads. Furthermore, Specific Plan Section V, *Design Guidelines*, includes landscape guidelines that serve to ensure the aesthetic and cohesive appearance of the community's streetscapes. An extensive trails and paseo system is also included in THE VILLAGES OF SAN JACINTO.<br><br>Furthermore, THE VILLAGES OF SAN JACINTO Circulation Plan is consistent with the circulation requirements and roadway configurations included in the adopted General Plan. THE VILLAGES OF SAN JACINTO is therefore is consistent with this policy. |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
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| C Policy 1.7: Encourage the provision of traffic calming measures in new residential areas and planned developments. | As described in Specific Plan Section IV.2, *Circulation Plan*, THE VILLAGES OF SAN JACINTO traffic calming measures may be installed along major pedestrian corridors within the community, Cawston Avenue between De Anza Drive and Ramona Boulevard (if determined to be necessary and appropriate by the project traffic engineer and the City). These traffic calming measures will promote safe pedestrian circulation through the site and will ensure consistency with this General Plan policy. |
| ***Circulation Goal: Alternative Modes of Travel*** *– Promote the increased use of public and multi-modal transportation, and provide adequate facilities for these modes of transportation.* | |
| C Policy 4.1: Require developers to incorporate facilities for public and other alternative modes of transportation, such as park-and-ride lots, bicycle and pedestrian trails, bicycle racks, and bus turnouts in the design of future developments. | THE VILLAGES OF SAN JACINTO encourages alternative modes of transportation through an extensive trails, paseo, and sidewalk system. Furthermore, park and ride lots may be accommodated within Planning Area 11 (Commercial) of Planning Area 12 (Mixed-Use), and Sanderson Avenue is a bus route. Any amenities for public transportation, (such as bus benches or turn-outs) would be incorporated into the design of the project at the tentative map stage as directed by the City of San Jacinto. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| C Policy 4.2: Incorporate design features such as bus turnouts, bicycle racks and park-and-ride lots into public improvement projects that promote and support the use of public and alternative modes of transportation. | |
| C Policy 4.3: Link Community Commercial development, employment centers, public facilities, and community parks and open spaces to the alternative transportation system, wherever feasible. | THE VILLAGES OF SAN JACINTO provides an extensive, interconnected circulation system that links residential, educational, recreational, mixed-use and commercial land uses and promotes pedestrian and bicycle travel via trails, paseos, and sidewalks. The project is therefore consistent, and results in the implementation of, these policies. |
| C Policy 4.4: Require Specific Plans and Planned Unit Developments to include well-developed and funded alternative transportation features. | |
| ***Circulation Goal: Trails System*** *– Provide an extensive and regionally linked public bicycle, pedestrian, and equestrian trails system.* | |
| C Policy 5.1: Provide and maintain an extensive trails network that supports bicycles, pedestrians and horses and is linked to the trails systems of adjacent jurisdictions. | As illustrated in Figure V-29, *Conceptual Trails and Parks Plan*, the project provides an extensive system of sidewalks, trails, and paseos that link the residential, educational, recreational, mixed-use and commercial components of the community. The sidewalks, trails, and paseos have been designed to accommodate pedestrian and bicycle use. THE VILLAGES OF SAN JACINTO is consistent with this policy. |
| C Policy 5.2: Link major activity centers, residential neighborhoods, schools, shopping centers and employment centers through bicycle, equestrian and pedestrian trails. | |
| C Policy 5.3: Encourage the use of open space and utility easements for bicycle and pedestrian trails, where feasible. | |
| C Policy 5.4: Require Specific Plans and Planned Unit Developments to include well-developed and designed trails that link to adjacent existing or planned local and/or regional trails. | |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| ***Circulation Goal: Transportation Demand Management*** *– Create transportation management strategies to comply with the County Congestion Management Plan.* | |
| C Policy 6.1: Create and implement transportation demand and congestion management mitigation measures in areas experiencing high levels of congestion. | The EIR that accompanies THE VILLAGES OF SAN JACINTO Specific Plan evaluates the project's consistency with the Congestion Management Plan and establishes mitigation measures (as necessary) to reduce identified impacts to below a level of significance (as feasible). The Planning Commission and City Council will review the EIR to ensure adequate provision of circulation facilities and future development will be required to comply with the mitigation measures established in the EIR. As such, THE VILLAGES OF SAN JACINTO is consistent with these General Plan policies. |
| C Policy 6.2: Review development proposals for compliance with the Congestion Management Plan. | |
| C Policy 6.3: Require developers to assist with improvements to the circulation system that will minimize congestion related to their projects. | THE VILLAGES OF SAN JACINTO is consistent with this policy and implementation program because the project includes street design which allows traffic to move efficiently on-site and off-site. As part of implementation of the Specific Plan, the Master Developer is responsible for constructing full-width improvements to internal roadways, including Street "A," Street "B," Street "C," De Anza Drive, and portions of Cawston Avenue. The Master Developer is also responsible for constructing half-width improvements to community frontage roads, including Ramona Boulevard, Sanderson Avenue (from Ramona Boulevard to the southern community boundary), O'Dell Avenue, and portions of Cawston Avenue. A traffic study was prepared by Urban Crossroads, which provides recommendations for improvements. As described in THE VILLAGES OF SAN JACINTO EIR, implementation of the proposed Circulation Plan would result in an efficient and safe roadway system. |
| **Resource Management Element:** The San Jacinto Resource Management Element meets the State requirements for the Conservation ands Open Space Elements as defined in Sections 65302(d) and 65301(e) of the Government Code, respectively. According to these requirements, the Conservation Element must contain goals and policies to protect and maintain natural resources such as water, soils, wildlife and minerals, and prevent wasteful resource exploitation, degradation and destruction. The Open Space Element must contain goals and policies to manage open space areas including undeveloped lands and environmentally constrained areas. Specifically, the Open Space Element must address several open space categories such as those used for the preservation of natural resources and managed production of resources, as well as open space maintained for public health and safety reasons. This last category of open space is addressed in more detail in the Public Safety Element. Although briefly mentioned in this Element, the Community Services and Facilities Element provides a detailed description of the parks, trails and recreational facilities in San Jacinto. | |
| ***Resource Management Goal: Natural Resources*** *– Conserve and protect natural resources.* | |
| RM Policy 1.2: Work closely with the County of Riverside to implement the Multiple Species Habitat Conservation Plan that meets the goal of preservation, but allows for economic development of the community. | The Specific Plan is consistent with this policy. As stated in Section 5.4, Biological Resources, the project is consistent with the Western Riverside County MSHCP, and will not interfere with the City, other jurisdictions or the Western Riverside County Regional Conservation Authority's ability to implement the MSHCP. . |
| RM Policy 1.7: Encourage the planting of native trees and drought tolerant vegetation. | THE VILLAGES OF SAN JACINTO Section V, *Design Guidelines*, includes the community's plant palette. This palette includes California native and drought tolerant plants which compatible with the San Jacinto area climate, and which reflect the overall theme of THE VILLAGES OF SAN JACINTO Specific Plan, and are drought tolerant. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| ***Resource Management Goal: Water Resources*** *– Conserve and protect surface water, ground water and imported water resources.* | |
| RM Policy 2.1: Coordinate water quality and supply programs with responsible water agencies. | A Waster Supply Assessment report has been prepared for the project by EMWD. Based on the findings of the Water Supply Assessment, EMWD projects that they will have adequate supply to serve the project. Accordingly, THE VILLAGES OF SAN JACINTO is not anticipated to adversely affect the local water supply and would be consistent with this General Plan policy. |
| RM Policy 2.2: Ensure the placement of infrastructure for water supply and treatment to support development in areas designated for urban growth. | THE VILLAGES OF SAN JACINTO Section IV, *Specific Plan*, describes the community's Master Water Plan. Based on EMWD requirements, the recommended water distribution system to provide services to THE VILLAGES OF SAN JACINTO is shown on Figure IV-5, *Master Water Plan*. Prior to final engineering and construction of all domestic and recycled water lines, a Plan of Service Study will be completed in accordance with EMWD standards to ensure the aforementioned pipe sizes and any additional infrastructure facilities as required to serve this project are in conformance with EMWD's Master Plan. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| RM Policy 2.3: Ensure sufficient water capacity is available for new development. | |
| RM Policy 2.4: Protect the aquifer and encourage ground water recharge. | As discussed in the EIR that accompanies THE VILLAGES OF SAN JACINTO Specific Plan, implementation of the project is not anticipated to result in any adverse impacts related to local groundwater resources or groundwater recharge. The project is therefore consistent with these policies. |
| RM Policy 2.5: Cooperate with federal, State, and county governments and other agencies on the maintenance and improvement of the quality and quantity of local and regional groundwater resources. | |
| RM Policy 2.6: Promote water conservation by encouraging the use of reclaimed water, promoting the use of water efficient landscaping and requiring development to utilize water conservation measures such as water efficient plumbing and xeriscape landscaping. | As shown in Figure IV-5, *Master Water Plan*, recycled water pipelines will be installed concurrently with domestic lines. The water from this recycled water system will be used to restore the lake and for irrigation purposes. In addition, Section V, Design Guidelines, includes a plant palette that requires the use of drought-tolerant plants. Furthermore, Section V, *Design Guidelines*, includes detailed Energy Efficiency Guidelines that identify elements in the site planning, design and construction phases of this Specific Plan that can and should be implemented to achieve a standard of energy efficient performance which is desirable for the homeowner, the landlord, the environment, and builder/developer. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| RM Policy 2.10: Expand the use of reclaimed water, whenever feasible. | |
| ***Resource Management Goal: Agricultural Resources*** *– Where appropriate, conserve agricultural lands and avoid the premature conversion of agricultural land to urban uses.* | |
| RM Policy 5.2: Foster development techniques and agricultural practices that minimize the incompatibility of agricultural activities with urban development while maximizing agricultural production. | THE VILLAGES OF SAN JACINTO has been designed to minimize impacts on adjacent land uses, including agricultural uses. Development of the site is expected to follow the phasing plan depicted on Figure IV-9, *Conceptual Phasing Plan*. Conformance with the phasing plan will further minimize incompatibility with adjacent residential uses. |
| RM Policy 5.3: Protect agricultural lands from premature conversion to urban uses. | The project site is planned for residential and commercial development as shown in the General Plan, and is neither protected by an agricultural overlay zone nor located in an agricultural preserve. Implementation of THE VILLAGES OF SAN JACINTO will develop the site in accordance with the City's overall vision for the area as identified in the General Plan and will |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| | not result in the premature conversion of agricultural lands to urban uses. |
| ***Resource Management Goal: Air Quality*** *– Improve Air Quality* | |
| RM Policy 6.3: Achieve a greater balance between jobs and housing in San Jacinto. | THE VILLAGES OF SAN JACINTO combines housing, employment, and retail activities on one site. The community contains 1,329 residential units, 22.7 acres of commercial land uses, and 26.3 acres of mixed-use land uses. This balance of land uses within the community would contribute towards a greater balance between jobs and housing within the City. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| RM Policy 6.8: In appropriate areas, allow mixed use development that combines housing, employment, and retail activities on one site. | |
| RM Policy 6.5: Promote energy conservation and recycling by the public and private sectors. | Section V, *Design Guidelines*, includes detailed Energy Efficiency Guidelines that identify elements in the site planning, design and construction phases of this Specific Plan that can and should be implemented to achieve a standard of energy efficient performance which is desirable for the homeowner, the landlord, the environment, and builder/developer. Included within the Energy Efficiency Guidelines are specific recommendations to maximize energy efficiency and water quality/conservation (i.e., green building standards), minimize landfill waste (by providing adequate recycling areas/containers, for example), and encouraging pedestrian activity and use of bike paths. |
| RM Policy 6.10: Support sustainable development patterns and green building standards that reduce energy use. | |
| RM Policy 6.6: Encourage alternative modes of transportation to reduce vehicular emissions and improve air quality. | THE VILLAGES OF SAN JACINTO includes an extensive trails, paseo, and sidewalk system that encourages alternative modes of transportation between the residences, school, commercial areas, recreational amenities, and mixed-use area. Use of the alternative circulation options by pedestrians and bicycles will reduce vehicular emissions and will improve local air quality. THE VILLAGES OF SAN JACINTO is therefore consistent with these policies. |
| RM Policy 6.7: Encourage pedestrian scale development and pedestrian friendly access to reduce vehicle emissions. | |
| ***Resource Management Goal: Energy Conservation*** *– Promote the conservation of energy.* | |
| RM Policy 7.1: Encourage the efficient use of energy resources. | Section V, *Design Guidelines*, includes detailed Energy Efficiency Guidelines that identify elements in the site planning, design and construction phases of this Specific Plan that can and should be implemented to achieve a standard of energy efficient performance which is desirable for the homeowner, the landlord, the environment, and builder/developer. The design recommendations have been categorized according to the following goals: 1) Maximize Energy Efficiency; 2) Maximize Water Quality and Conservation; 3) Minimize Landfill Waste; 4) Promote Health by Improving Indoor Air Quality; and 5) Encourage Pedestrian Activities and Use of Bike Paths. The use of energy efficient building materials, equipment, and design will reduce operating costs and contribute to the reduction in environmental impacts associated with air quality, hydrology, water quality, hazards, and utilities. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| RM Policy 7.3: Support the use of energy efficient building materials, equipment, and design in City facilities and infrastructure. | |
| **Public Safety Element:** The purpose of the Public Safety Element is to identify and address those features or characteristics existing in or near the City that represent a potential hazard to the citizens, structures, and infrastructure in the community. The Public Safety Element establishes policies to minimize the danger to residents, workers and visitors while identifying actions needed to manage crises such as earthquakes, fires and floods. Additionally, the Public Safety Element contains specific policies and programs to regulate existing and proposed development in hazard-prone areas. Emergency preparedness and evacuation routes are also addressed. | |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| ***Public Safety Goal: Natural Hazards*** *– Minimize the risk of injury and the loss of life and property related to geologic conditions, seismic activity, wildfires, and flooding.* | |
| PS Policy 1.1: Reduce the risk of impacts from geologic and seismic hazards by applying proper and up to date land use planning, development engineering, building construction, and retrofitting requirements. | The project site contains a portion of the Casa-Loma segment of the San Jacinto fault zone project. The fault segment and the surrounding fault zone buffer are inappropriate for development with residential uses or habitable structures. THE VILLAGES OF SAN JACINTO utilizes a majority of the fault zone area for active and passive recreational uses, flood control facilities, and internal circulation – uses that have a minimal potential for impacts on the environment or residents/visitors of the site.<br><br>In addition, a geotechnical engineering report was prepared for the project and is discussed in the EIR that accompanies THE VILLAGES OF SAN JACINTO Specific Plan. Mandatory compliance with the design recommendations included within the project geotechnical report, State building code, and City of San Jacinto building requirements will ensure that adverse impacts related to geologic and seismic hazards will be reduced to the maximum feasible extent.<br><br>Accordingly, implementation of the project is consistent with this General Plan policy. |
| PS Policy 1.2: Encourage landscaped open space uses for areas within identified fault zones, and prohibit residential development in these areas. | As described in the geotechnical report prepared by Leighton & Associates for THE VILLAGES OF SAN JACINTO EIR, a California Earthquake Fault Hazard Zone traverses several portions of the project. Based on analysis of the fault trace and disturbance zones, the report recommended structural setback limits from faults for residential development. These setback criteria were utilized during the design process, resulting in parks provided on the portions of the project where faults exist. THE VILLAGES OF SAN JACINTO is therefore is consistent with this policy. |
| PS Policy 1.5: Protect the community from flooding hazards by providing and maintaining flood control facilities and limiting development within the flood plain. | The northerly portion of the site is located within the 100-year floodplain. The drainage system (refer to Specific Plan Section IV.3, *Drainage Plan*) has been designed to convey and attenuate 100-year storm flows and provide flood protection for the site. A maintenance plan has been established in THE VILLAGES OF SAN JACINTO Specific Plan to ensure that on-site drainage facilities operate at maximum efficiency. A complete, detailed discussion of potential adverse impacts associated with 100-year storm flows is contained in the EIR accompanying this Specific Plan. As concluded in the EIR, with the incorporation of design measures and mitigation – as needed – implementation of the project will not result in substantial adverse impacts related to flood hazards. |
| ***Public Safety Goal: Human Activity Hazards*** *– Protect the community from hazards related to air pollution, dam inundation, hazardous materials, structural fires, ground transportation, and criminal activity.* | |
| PS Policy 2.6: Provide sufficient levels of police, fire, and emergency response service to reduce the risk of criminal activity. | Upon ultimate development of the site, the master developer of THE VILLAGES OF SAN JACINTO will be required to contribute development impact fees to cover its "fair share" cost of providing sufficient public services and facilities to the site, including fire protection, police protection, and emergency response service. The project is therefore consistent with this General Plan policy. |

## Table 5.1-2 (Continued)

| Policy | Project Consistency |
|---|---|
| PS Policy 2.7: Ensure projects include design features that promote safety and reduce criminal activity. | THE VILLAGES OF SAN JACINTO Section V, Design Guidelines, includes numerous design features that promote safety and reduce criminal activity. These design features include special considerations for the siting of paseos and cul-de-sacs, the potential use of locked key or card gates at paseo/park connections, the lighting of house numbers, the orientation of alley-loaded or rear-load homes towards the adjacent paseo area, and more. Homes shall be oriented to face park areas, and to fencing material shall be careful selected to ensure maximum visibility of the park from public areas. Common parking areas within the commercial, mixed-use, park, and school areas shall be well-lit for security purposes. THE VILLAGES OF SAN JACINTO is therefore consistent with this policy. |
| **Noise Element:** The Noise Element addresses noise sources in the community and identifies ways to reduce the impacts of these noise sources. The Noise Element contains policies and programs to achieve and maintain noise levels compatible with various types of land uses. The Element identifies those land uses that are sensitive to noise and assures that noise-generating land use are located so that they do not impact those sensitive areas. | |
| ***Noise Goal: Noise and Land Use Planning*** *– Minimize the effects of noise through proper land use planning and development techniques.* | |
| N Policy1.1: Use the City's adopted noise/land use compatibility standards as a guide for future planning and development decisions. | THE VILLAGES OF SAN JACINTO incorporates several design elements to minimize noise impacts on sensitive receptors. A buffer is provided along Sanderson Avenue to minimize effects of traffic related noise on community residents, and on-site residential uses are buffered from the off-site Waste Water Treatment Facility and on-site mixed-use and commercial land uses.<br><br>A noise analysis was conducted for THE VILLAGES OF SAN JACINTO and is summarized in the EIR accompanying this Specific Plan. As described in the EIR, this analysis evaluated potential noise impacts and provided mitigation to reduce levels to below the required CNEL for residential and non-residential land uses. With incorporation of these mitigation measures, no significant noise impacts will result upon implementation of THE VILLAGES OF SAN JACINTO, and the project is therefore consistent with this policy. |
| N Policy 1.2: Require noise control measures, such as berms, walls, and sound attenuating construction in areas of new development or rehabilitation. | |
| N Policy 1.3: When necessary, require buffer areas between noise sources and sensitive receptors. | |
| N Policy 1.4: Use creative techniques to mitigate potential noise incompatibilities, particularly in areas with a mixture of uses. | |
| ***Noise Goal: Transportation Related Noise*** *– Minimize the effects of transportation-related noise.* | |
| N Policy 2.1: Reduce transportation-related noise impacts to sensitive land uses through the use of noise control measures. | Where appropriate and necessary, THE VILLAGES OF SAN JACINTO provides buffers to minimize transportation-related noise impacts to sensitive land uses. In addition, the Specific Plan establishes planning and site design criteria that would result in the reduction of unwanted sound, to the maximum feasible extent. As described in detail in the EIR accompanying THE VILLAGES OF SAN JACINTO Specific Plan, a noise analysis was prepared for the project and provided mitigation to reduce levels to acceptable levels for sensitive uses. With mandatory compliance with these mitigation measures, no significant noise impacts will result upon implementation of THE VILLAGES OF SAN JACINTO, and the project is therefore consistent with this policy. |
| N Policy 2.2: Require sound-reduction design in development projects impacted by transportation-related noise, particularly along highways and major arterials. | |

**Table 5.1-2 (Continued)**

| Policy | Project Consistency |
|---|---|
| **Housing Element:** The Housing Element is a guide for housing within the City of San Jacinto. The Element provides an indication of the need for housing in the community in terms of affordability, availability, adequacy, and accessibility. The Element provides a strategy to address housing needs and identifies a series of specific housing programs to meet community needs. A detailed Housing Needs Assessment was prepared as part of the Housing Element update and serves as the technical background document to the Housing Element. | |
| ***Housing Goal: Provide Adequate Housing Sites*** *– Provide Adequate sites for new residential construction to meet the needs of all segments of the community without compromising the character of the City.* | |
| ***Housing Goal: Assist in Development of Housing*** *– Assist in the development of a housing supply which is affordable to all segments of the community.* | |
| H Policy 2.2: Provide adequate sites for a range of housing types and prices. | THE VILLAGES OF SAN JACINTO provides for a maximum of 1,329 homes in a variety of residential product types and styles and home sizes, including single-family homes on 4,000 s.f., 5,000 s.f., and 6,000 s.f. lots. This variety of residential housing products would appeal to homebuyers of different incomes and family sizes. These homes would be required to conform to the Design Guidelines included in Section V, ensuring the development of an attractive and safe community. THE VILLAGES OF SAN JACINTO is therefore is consistent with this policy. |
| H Policy 3.1: All for the development of housing affordable to all income groups by utilizing a variety of public and private efforts. | |
| H Policy 3.3: Promote the development of attractive and safe housing to meet community needs. | |

### *City of San Jacinto Zoning Ordinance*

The proposed Specific Plan includes a zone change for the property which would result in removing the existing C-2, R-1, R-2 (PUD) and R-3 zoning designations and application of a Specific Plan zoning designation to the entire site. The Villages of San Jacinto Specific Plan is generally consistent with the provisions of the General Plan and Zoning Ordinance which require initiation of Specific Plans for large-scale planned development. When adopted by legislative action, the Specific Plan document will serve both planning and regulatory functions for the proposed development. The intent of the Specific Plan zoning designation is to establish base zoning and applicable development standards specific to the defined project area to direct new growth and development in the process of implanting the General Plan. Adopted Specific Plan zoning and development standards will take precedence over the general standards of the Zoning Ordinance, except where the Specific Plan does not contain an applicable development standard, in which case the standards of the Zoning Ordinance apply.

### *Transportation Uniform Mitigation Fee 10-Year Strategic Plan (TUMF)*

The WRCOG is a council which is comprised of members representing 15 local jurisdictions in western Riverside County, including the City of San Jacinto. The WRCOG functions to facilitate collective assessment of regional issues, such as traffic, by the various representative jurisdictions. In June 2004, WRCOG adopted the TUMF 10-Year Strategic Plan and Transportation Improvement Program Development Guidelines.

The purpose of the TUMF program is to establish a comprehensive funding source for infrastructure improvements to mitigate cumulative regional transportation impacts of new development on regional arterial highways (Parsons Brinckerhoff Quade & Douglas, Inc. 2004). The WRCOG has developed and implemented the TUMF program which requires new development to contribute revenues to partially fund improvements that will mitigate the transportation impacts of new developments. The proposed project would be required to contribute funds to the TUMF program based on the proposed number of residential dwelling and the applicable defined residential land use fee rate to ensure project compliance with the program. Additional discussion of the proposed project's compliance with applicable TUMF program requirements is included in *Section 5.9*, *Transportation*, *Circulation, and Access.*

**South Coast Air Quality Management Plan**

The South Coast Air Quality Management District Governing Board adopted the 2003 Air AQMP on August 1, 2003, and adopted the 2007 AQMP on June 1, 2007. The 2003 AQMP updates the attainment demonstration for the federal standards for $O_3$ and $PM_{10}$; replaces the 1997 attainment demonstration for the federal CO standard, provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal $NO_2$ standard that the SCAB has met since 1992. The 2007 AQMP includes the same updates as the 2003 AQMP and also incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. As part of the 2007 AQMP, the SCAQMD request that EPA "bump up" the $O_3$ nonattainment status from severe to extreme to allow additional time for the SCAB to achieve attainment with the federal standard. The additional time would provide for implementation of state and federal measures that apply to sources over which the SCAQMD does not have control. The 2007 AQMP has been approved by CARB but is undergoing review by EPA.

The South Coast AQMP includes a number of policies and measures to achieve federal and state standards for healthful air quality in the region. The City's General Plan strives to comply with the AQMP by planning land uses in relation to circulation systems, promoting commercial and industrial land uses with convenient access to transportation corridors, and encouraging a balance of land uses that facilitates a complimentary association between jobs and housing. Additional discussion of potential project air quality impacts and applicable AQMP program requirements is included in *Section 5.10.*

***Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?***

**Western Riverside County Multiple Species Habitat Conservation Plan**

The Western Riverside County MSHCP is a comprehensive, long-term habitat conservation program which addresses the needs of a variety of biological resources. The primary goal of the MSHCP is to develop and manage sustainable preserve areas within existing and expanding urban areas. The preserve areas and management efforts contained in the final MSHCP will affect land use planning in the entire City of San Jacinto area. *Section 5.4*, *Biological Resources*, provides an in depth discussion of the project's relationship and consistency with the Western Riverside County MSHCP.

***Would the project introduce a land use that is incompatible with existing or proposed surrounding land uses?***

The proposed project would potentially result in significant urban/rural land use conflicts between the planned residential, commercial and mixed use development and existing agricultural uses surrounding the project site. Such conflicts could include fertilizer and pesticides application drift into the proposed residential area, residential complaints about noise and dust resulting from site preparation activities associated with adjacent agricultural activities, and increased trespassing onto agricultural lands. Additional discussion of potential project impacts associated with rural agricultural and urban residential land use conflicts is included in *Section 5.3*, *Agricultural Resources.*

Development of the proposed Villages of San Jacinto Specific Plan area is located immediately adjacent to the Hemet/San Jacinto Regional Water Reclamation Facility currently owned and operated by the Eastern Municipal Water District (EMWD). New residential development located near industrial-type facilities such as the wastewater treatment plant can result in potentially significant land use conflicts derived from residential complaints about noise and odors generated from plant operations. However, the proposed Specific Plan would designate land directly adjacent to the wastewater treatment facility as commercial and mixed-use business park. The commercial and mixed-use areas are buffered from on-site residential land uses by parks and intervening roadways. The nearest residential lots to the treatment plant would be located over 1,000 feet from the plant boundary. As such, the proposed Villages of San Jacinto development incorporates buffers into the development to minimize potential land use impacts between the proposed residential, commercial development, and the adjacent wastewater treatment facility. Additional discussion of potential land use conflicts associated with plant operation odors is included in *Section 5.10*, *Air Quality*, and plant operation noise is included in *Section 5.11*, *Noise.* Noise impacts potentially associated with traffic generated by the project are

not expected to result in significant noise impacts along access roads to and within the project area, as described in *Section 5.11.*

## 5.1.5 Mitigation Measures

The proposed project would not divide an established community or conflict with applicable plans, policies or regulations including the Western Riverside Multiple Habitat Conservation Plan. Therefore, no mitigation is proposed for these issues. Mitigation is provided in *Section 5.2, Landform Alteration and Aesthetics*, and *Section 5.11, Noise*, which requires notification of homeowners in the vicinity of the school site that there may be lighting impacts and noise associated with outdoor activities in the future should the school district proceed with plans for the proposed high school. Additionally, mitigation requiring notification for potential urban/rural land use conflicts between the project and existing agricultural uses is provided in *Section 5.3, Agricultural Resources* .

## 5.1.6 Residual Impacts/Level of Significance after Mitigation

Land use and planning impacts, outside of those related to noise, aesthetics, and agricultural resources (as indicated above in *Section 5.1.5*), have not been identified, therefore mitigation measures are not necessary.

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# 5.2 LANDFORM ALTERATION AND AESTHETICS

## 5.2.1 Introduction and Methodology

This section addresses the potential for the Villages of San Jacinto project to produce visual impacts or affect visual character upon implementation. The analysis primarily focuses on the large-scale configuration and distribution of land use types on the site, and architectural/design standards of the Specific Plan.

Existing visual conditions were compiled through a site visit and review of aerial photographs. Public vantage points near the proposed project site were identified and the existing visual character summarized. Analysis of impacts is based on an assessment of how the view would change in addition to an assessment of the project's compliance with viewshed and other aesthetic policies in the City's General Plan.

## 5.2.2 Existing Conditions

**Existing Setting**

The project site is located in the San Jacinto Valley. The San Jacinto Valley is a northwest/southeast trending geographic feature formed by an "elbow" in the San Jacinto Mountain Range. The face of the San Jacinto Range faces southwest along the easterly side of San Jacinto Valley; at the southern end of the San Jacinto Valley near the town of Hemet, the San Bernardino range swings westward and the face of the range is oriented northwest. On the westerly side of the San Jacinto Valley, the valley is defined by the Lakeview Mountains and Bernaconi Hills. Vistas of the surrounding mountain ranges are essentially available in all directions within San Jacinto and are an important component of the regional aesthetic landscape. The San Jacinto River flows in a generally northwest to southeast direction approximately 1.5 miles north of the project site. This river is a dry wash during most of the year except for short periods following substantial rainfall or snowmelt occurring in the San Jacinto Mountains. The river course is not visible from the project site.

The project site is oriented with a long axis approximately north/south. The project site is essentially flat with surface elevation ranging from approximately 1,455 feet above mean sea level (AMSL) along the northern edge to approximately 1,490 feet AMSL in the southeastern corner. By contrast, Mt. Rudolph (the highest peak in the Lakeview Mountains west of the site) is at elevation 2,649 AMSL. The Bernaconi Hills have a peak elevation of approximately 2,100 feet AMSL; Mt. Edna (a part of the San Bernardino Range north of the project) is at elevation 2,587 AMSL; San Jacinto Peak towers above the valley floor at approximately 10,830 feet AMSL. Given the elevation difference between the ground surface at the site and surrounding mountain features, background mountain views are currently available across the subject site

from the public roadways surrounding the site. Existing views from surrounding roadways are discussed in greater detail in the sub-section below.

**Existing Visual Quality of Project Site**

The visual character of the site itself can be described as primarily vacant, former agricultural land. Vegetation on site consists of weedy invasive species or natural vegetation that has accumulated since the majority of agricultural production was discontinued. Existing on-site improvements and activities include covered shade structures as part of a former cattle feed lot in the southern portion of the property, an abandoned house and scattered debris in the south-central portion of the site, primarily fallow field along the eastern property boundary, and scattered sod fields in the northern portions of the property. The aesthetic quality of the site itself would be considered low for the portions containing structural development and moderate for the cultivated agricultural portions of the site. However, as shown in the site photos below, cultivated agriculture is not highly visible from adjacent roadways.

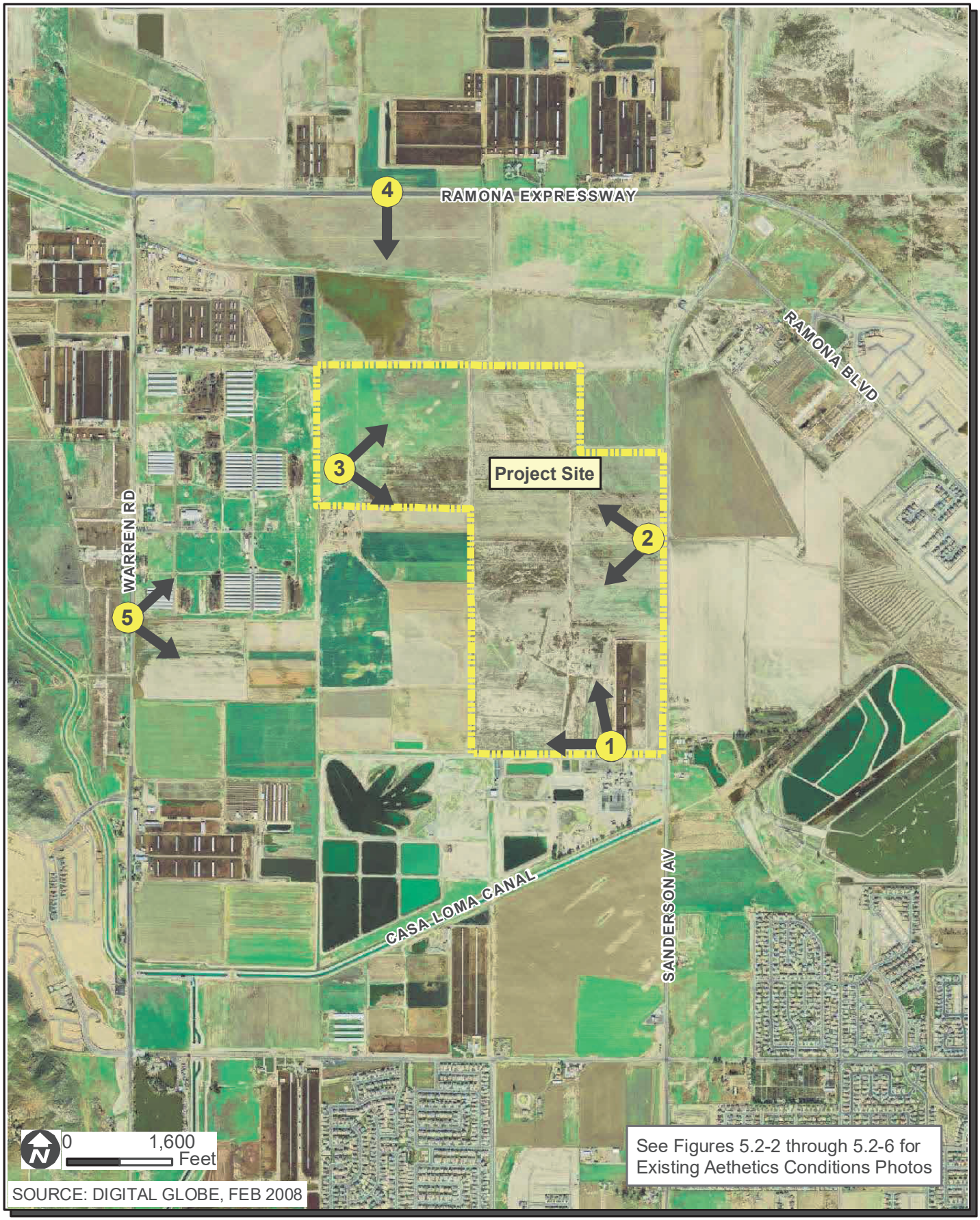
The site is essentially flat and there are no unique visual resources on site, such as tree stands, rock outcrops or water bodies. Therefore there are no current landforms of visual significance that exist on the site.

*Figures 5.2-1* through *5.2-6* depict the existing visual quality of the project site as well as existing mountain views available from within and adjacent to the site.

**Existing Views**

The project site is generally visible from three existing primary viewpoints within the City of San Jacinto, each associated with a roadway. The project site is not visible from any existing roadway facility to the south of the subject site. Sanderson Avenue (east), Ramona Expressway (north), and Warren Avenue (west) each provide existing view opportunities of the project site. Each of the existing views described below are illustrated in *Figures 5.2-2 to 5.2-6.*

Sanderson Avenue is currently a heavily traveled regional roadway facility oriented north/south and located along the east side of the subject property. The roadway is at the same elevation as the site and views of the site are directly available to drivers on this roadway. The posted speed is 55 MPH and the site is approximately 6,000 feet (or roughly 1 mile) long; mobile viewers therefore have approximately 1 minute of exposure to direct views of the site along Sanderson Avenue when driving at the posted speed limit. Clearly visible elements of the property's visual character from this vantage *(Figures 5.2-2* and *5.2-3*) include covered shade structures associated with the former feed lot, an abandoned house to the west of former feed lot, and fallow agricultural land in the foreground with mountain vistas in the background to the west and north.




Villages of San Jacinto EIR

## Existing Aesthetics Conditions Photo Index Map

FIGURE 5.2-1

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**Photo 1: View from southern property boundary facing west to north.**

Villages of San Jacinto EIR

## Existing Aesthetics Conditions

FIGURE 5.2-2

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Photo 2: View from Sanderson Avenue facing west.

Villages of San Jacinto EIR

**Existing Aesthetics Conditions**

FIGURE 5.2-3

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**Photo 3: View from western property boundary facing east.**

Villages of San Jacinto EIR

## Existing Aesthetics Conditions

FIGURE 5.2-4

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Photo 4: Existing View from Ramona Expressway South Across Subject Property

Villages of San Jacinto EIR

**Existing Aesthetics Conditions**

FIGURE 5.2-5

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**Photo 5: View from Warren Avenue facing east.**

Villages of San Jacinto EIR

## Existing Aesthetics Conditions

FIGURE 5.2-6

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Ramona Expressway is currently a heavily traveled regional roadway facility oriented roughly east/west and located approximately one half mile to the north of the project's northern property boundary. At this vantage distance, the site is primarily a component of the background vista which is subordinate to the mountains (San Jacinto Range). The posted speed is 65 MPH and the site is approximately 4,800 feet wide; mobile viewers therefore have approximately 1 minute of exposure to distant views of the site along Ramona Expressway while driving at the posted speed limit (*Figure 5.2-5*). The existing on-site structures are barely visible from this vantage point, and would probably not be noticed by a mobile viewer.

Warren Avenue is currently a heavily traveled regional roadway facility oriented north/south and located approximately one half mile to the west side of the subject property. At this vantage distance, the site is again primarily a component of the background vista, which is subordinate to the mountains (San Bernardino Range and San Jacinto Mountains). The posted speed is 45 MPH and the site is approximately 6,000 feet (or roughly one mile) long; however, structures on the property immediately adjacent to the west side of the project site occupy about two thirds of the length of the project site. Therefore, distant views from Warren Avenue to the site are available roughly along the southern-most 2,000 feet of the property. This one glimpse of the site, at 45 MPH would equate to about 0.5 minute for the mobile viewer (*Figure 5.2-6*). The existing improvements on the property (i.e., covered shade structures and abandoned house) are barely visible and are completely subordinate to the background mountain views.

*Figure 5.2-4* depicts an internal view from the northwest corner of the subject property facing east. Primary views from this location include fallow agricultural land in the foreground; sod fields that can be seen in the mid-foreground, scattered in the distance adjacent to Sanderson Avenue; and the dominant view is of the San Jacinto Mountains in the background.

## Applicable Visual Policies

### *City of San Jacinto General Plan*

The current City of San Jacinto General Plan was adopted May 4, 2006. The General Plan is the primary long-range planning document that guides growth and development in San Jacinto. There are a number of goals and policies in the Land Use Element and Resource Management Element that are relevant to visual resources as described below.

### *Land Use Element*

The following goals and policies relate to maintaining and enhancing the visual character of the community and surrounding scenic vistas.

Land Use Goal 2 Manage and direct growth so that the community and its neighborhoods are protected and enhanced.

*Policy 2.1* Assure that new development is complementary to the existing character of the City.

*Policy 2.7* Locate retail and commercial land uses along major circulation routes at major intersections where there is maximum access and visibility.

Land Use Goal 6 Preserve and protect the City's cultural, historic, agricultural, and visual resources.

*Policy 6.7* Preserve and enhance public views of the mountains and hillsides and other scenic vistas.

*Policy 6.10* Promote the maintenance of private and public properties to enhance the visual appearance of the community.

Land Use Goal 9 Encourage thoughtful community design that enhances San Jacinto's quality of life.

*Policy 9.1* Ensure new development is compatible with its natural surroundings and the built environment in terms of architecture, scale, grading and massing.

*Policy 9.6* Require the use and maintenance of extensive landscaping in new development and redevelopment projects to beautify the surroundings, screen outdoor uses, provide shade, establish pedestrian paths, buffer incompatible land uses and provide visual interest.

*Policy 9.8.* Develop and enforce development standards and design guidelines that provide clear yet flexible direction for achieving quality community design in new development and redevelopment projects throughout the community.

***Resource Management Element***

Resource Management Goal 3 Prevent incompatible development in areas that should be preserved for scenic, historic, conservation, mineral extraction, or public safety purposes.

*Policy 3.1:* Ensure incompatible development is avoided in those areas that are designated for scenic, historic, conservation, mineral extraction, or public safety purposes.

## 5.2.3 Significance Criteria

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on landform alteration and aesthetics if it:

1. Has a significant adverse effect on a scenic vista
2. Substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
3. Substantially degrades the existing visual character or quality of the site and its surroundings
4. Creates a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

## 5.2.4 Impacts

The proposed Specific Plan contains several aesthetic features that have been assumed as part of the project and therefore shape the following impact analysis.

**Applicable Visual Policies**

An assessment of the project's relationship to visual resource policies in the General Plan is summarized below in *Table 5.2-1*, *Consistency Determinations for General Plan Policies*.

## Table 5.2-1
## Consistency Determinations for General Plan Policies

| Policy | Consistency Determination |
|---|---|
| **General Plan Land Use Element** | |
| **Land Use Goal 2: Manage and direct growth so that the community and its neighborhoods are protected and enhanced.** | |
| Policy 2.1: Assure that new development is complementary to the existing character of the City. | The Specific Plan sets forth the architectural and site design guidelines for the project, which ensures consistent high quality development that reflects the scale and development intensity of the community while allowing for flexibility in design. Therefore, the project is consistent with this policy. |
| Policy 2.7: Locate retail and commercial land uses along major circulation routes at major intersections where there is maximum access and visibility | The commercial portion of the project will be located adjacent to Sanderson Avenue, a major entry point into the City where it intersects with the future Bridge Street, which is one of the main project access points. Therefore, the project is consistent with this policy. |
| **Land Use Goal 6: Preserve and protect the City's cultural, historic, agricultural, and visual resources.** | |
| Policy 6.7: Preserve and enhance public views of the mountains and hillsides and other scenic vistas. | Mountain views are currently afforded across the site from public roadways in the project vicinity. Some lower mountain views may be temporarily obstructed by the project in some areas. Although there may be brief, interrupted views for passing motorists, there will be no permanent view blockage from surrounding areas. |
| Policy 6.10: Promote the maintenance of private and public properties to enhance the visual appearance of the community. | The project will provide a significant enhancement to the community by utilizing a variety of compatible architectural styles, and specific standards and design guidelines for each Planning Area. It will also include extensive landscape treatments along adjacent highways and internal streets as well as the paseo walkways between land uses. |
| **Land Use Goal 9: Encourage thoughtful community design that enhances San Jacinto's quality of life.** | |
| Policy 9.1: Ensure new development is compatible with its natural surroundings and the built environment in terms of architecture, scale, grading and massing. | The project Specific Plan establishes compatible design guidelines, including landscape design for roadways, parks, and other common use areas, and architectural guidelines for all residences, commercial and mixed-use development. These guidelines will ensure that each of the project components relate to one another as well as to surrounding land uses. |
| Policy 9.6: Require the use and maintenance of extensive landscaping in new development and redevelopment projects to beautify the surroundings, screen outdoor uses, provide shade, establish pedestrian paths, buffer incompatible land uses and provide visual interest. | The project Specific Plan establishes landscaping design guidelines that provide a variety of landscape treatments along adjacent highways and internal streets, which include planted medians, parkway trees, shrubs, and groundcovers. There will also be landscaped walkways, drainages, and parks, which separate the various land uses. |
| Policy 9.8: Develop and enforce development standards and design guidelines that provide clear yet flexible direction for achieving quality community design in new development and redevelopment projects throughout the community | The Specific Plan Design Guidelines for architecture and landscaping ensure consistent development standards throughout the project and will therefore be consistent with this policy. |

***Would the project have a significant adverse effect on a scenic vista?***

The General Plan identifies hillside and mountain views as significant resources which should be protected and enhanced. Views to mountain backdrops/background are currently available across the site from existing roadways west, north, and south of the site. Due to the distance of the site from Ramona Expressway and Warren Road, future structural development of the Villages of San Jacinto would not physically obstruct the distant "background" views of the San Bernardino or San Jacinto mountain ranges from these roadways. The skyline and surrounding rural landscape is typical of what motorists experience as they travel along the adjacent roadways to the project site. However, development of the project may result in partial obstruction of existing lower mountain views for auto travelers along Sanderson Avenue, although this would be perceived only for a short distance, as views of the distant mountains would open up again once they have driven by the development. The project would not obstruct views of the surrounding mountains as seen from any nearby parks, trails, or other recreational uses, as these types of uses are not found in close proximity to the project site. Consequently, the proposed development, including the required 11-foot sound barrier along Sanderson Avenue (see *Section 5.11.5*, *Mitigation Measures*, *Mitigation Measure 5.11-a*), will not result in a significant visual impact to the existing views of the surrounding mountain backdrops. However, in order to soften the potential visual monotony of a continuous 11-foot wall along Sanderson Avenue, the wall will be constructed atop a landscaped berm of varying heights between 3 to 5 feet high, and would have extensive landscaping between the street and wall to help minimize any perceived visual impact of the wall. Therefore, the wall, combined with the berm will constitute an 11-foot sound barrier. According to the Specific Plan, this project frontage along Sanderson Avenue will include a 6-foot meandering sidewalk within a 16-foot landscaped parkway that features clusters of palm trees, pine trees, background shrubs and other shrub and ground cover plantings. The project site is not located within or adjacent to a State Scenic Highway (http://www.dot.ca.gov), and the project would not have a significant adverse visual impact on existing residences.

The project will include an extensive system of parks and paseos along with landscaping on major internal and adjacent roadways that will provide a consistent plant theme throughout the project. These elements along with the other open space enhancements as described above will result in a net visual improvement of the project site that provides a high quality aesthetically attractive development. Therefore, the project will not have a significant adverse impact on a scenic vista and no mitigation measures are required.

***Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

State Highway 74, which is approximately four miles south of the project site, is listed as an eligible but not officially designated State Scenic Highway on the California Scenic Highway Mapping System (http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm) in the

project vicinity. State Highway 74 is an Officially Designated State Scenic Highway approximately 5.5 miles southeast of the project site where it descends from the San Jacinto Mountains. However, due to the distance from this highway and intervening uses, the proposed project will not be visible. The proposed project does not currently support rock outcroppings or trees, and therefore would not involve disturbance of any trees, rock outcroppings or historic buildings, and would not damage a scenic resource.

***Would the project substantially degrade the existing visual character or quality of the site and its surroundings?***

**Visual Quality of Site**

The existing visual quality of the site varies from very low, for those portions with structures or other improvements, to moderate, for those areas employed for grass sod cultivation. However, the most prominent visual feature of the project site, where it is most visible along Sanderson Road, is vacant agricultural land consisting of weedy invasive species that have accumulated since the majority of agricultural production was discontinued. The cultivated agricultural portions are not highly visible from adjacent roadways. Therefore, the overall visual quality of the project site itself is considered low.

Implementation of the Villages of San Jacinto project would result in the development of the site with urban uses and structures including commercial, residential, and school buildings. The character of the site will be changed from one of mixed agriculture and fallow agriculture fields to one of a suburban/developed nature. However, the proposed project includes five parks totaling approximately 40 acres, including three public parks and two private neighborhood parks that provide a significant open space buffer among developed areas. Other open space amenities include an 11-acre lake and associated swim lagoon and beach area as well as a system of landscaped trails or "paseos" that serve as pedestrian linkages between land uses. There will also be extensive landscape treatments along adjacent highways and internal streets, which include planted medians, parkway trees, shrubs, and groundcovers, which will enhance the roadways and provide further visual contrast between proposed uses. Another feature that provides visual transition is a vegetated detention basin/drainage channel system along the western perimeter of the project site. The proposed system of open spaces would provide both on-site and off-site visual benefits to compensate for the loss of existing open space character of the site and surroundings, and would not conflict with the planned residential, commercial and open space uses in the adjacent community.

The project Specific Plan establishes compatible design guidelines including landscape design for roadways, parks and other common use areas and architectural guidelines for all residences, commercial and mixed-use development. These guidelines will ensure consistent development standards throughout the project that will not result in substantially degrading the existing visual

character or quality of the site and its surroundings. As discussed in Section 3.0, Project Description, the project will result in up to 1,329 low and medium density single-family residences, 22.7 acres of commercial uses, and 26.3 acres of mixed-use development. The residences will have a variety of architectural styles and will vary between one and two stories up to a maximum height of 35 feet. Architectural design guidelines will also be used to provide direction and inspiration for final design of the commercial and mixed use portions of the project. Building masses will be clustered to avoid long straight building facades and variation of building heights up to a maximum height of 35 feet will be required. Approval and implementation of the Specific Plan shall constitute compatibility with existing visual character, and no further mitigation measures are required.

***Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?***

**Light and Glare**

The project would introduce additional night lighting within the project vicinity as well as potential new sources of glare (i.e., glass and reflective exterior surfaces). Particularly the commercial components of the site have the potential to produce significant night lighting impacts upon adjacent uses in the vicinity as well as proposed residential land uses within the project itself. Additionally, the project will require street lighting, trail lighting, and lighting associated with outdoor recreational activities. The Specific Plan requires that there are uniform lighting standards throughout the project and that lighting along trails shall be a minimum of 20-feet from rear or side yards to reduce light spill-over effects. All exterior lights are required to be shielded and focused to minimize spill light into the night sky or adjacent properties. Should Planning Area 14 be purchased by the San Jacinto Unified School District for development as a high school, any potential light or glare impacts would need to be addressed by the School District in the course of their environmental compliance for that project. However, a mitigation measure has been added (see *Section 5.2.5*, *Mitigation Measures*, *Mitigation Measure 5.2-b)* which requires notification of homeowners in the vicinity of the school site that there may be lighted ball fields in the future should the school district proceed with plans for the proposed high school. Metal or other reflective exterior surfaces and finishes within the commercial components of the site could create new sources of light or glare resulting in significant glare impacts for adjacent residential, park, and agricultural uses. In order to reduce this potential impact to a less than significant level, mitigation is provided (see *Section 5.2.5*, *Mitigation Measures*, *Mitigation Measure 5.2-a).*

## 5.2.5 Mitigation Measures

**5.2-a** To avoid light and glare impacts, future submittals for commercial portions of the project development shall be required to prepare a photometric lighting plan. The lighting plan shall demonstrate that project lighting is shielded from surrounding properties and that only the minimum amount of lighting required for safety purposes is provided to avoid adverse effects on surrounding areas. In general, lighting fixtures shall be shielded downward and away from the adjacent residential areas and public roadways. Commercial development plans shall also be reviewed by the City to ensure the avoidance of substantial areas of reflective surfaces for building exteriors.

**5.2-b** A Notice-to-Property Owner shall be recorded on a separate buyer information sheet with the final map providing notice to potential future property owners in the vicinity of the school site (i.e., Planning Areas 1, 3, and 19) that there may be lighted ball fields in the future should the school district proceed with plans for the proposed high school.

## 5.2.6 Residual Impacts/Level of Significance after Mitigation

With the application of the above mitigation measure, project impacts related to light and glare would be reduced to levels below significance. No significant impacts related to aesthetics, visual conditions, or landform modification have been identified.

# 5.3 AGRICULTURAL RESOURCES

## 5.3.1 Introduction and Methodology

This section describes existing agricultural uses of the project site and discusses potential project impacts to local, regional, and statewide agricultural resources.

The character of existing agricultural uses of the subject site and surrounding areas was determined based on a field survey and review of aerial photography. In addition, State of California (2006) Resources Agency on-line mapping information was reviewed to assist in characterizing the agricultural resources of the site. Finally, the agricultural characteristics of the site as they relate to agricultural viability and importance as a significant agricultural resource were defined and analyzed utilizing the California Agricultural Land Evaluation Site Assessment (LESA) model (State of California 1997), included as *Appendix B*. The LESA model evaluates soil resource quality of the site, project site size, water availability, surrounding agricultural lands, and surrounding protected resource lands. These characteristics are then rated, weighed, and combined, resulting in a single numeric score that is the basis for making a determination of the project site's agricultural value, and thereby to identify the significance of potential project impacts of converting the agricultural land resources to other land uses. The LESA model is identified in the CEQA Guidelines as an optional methodology for addressing impacts to farmland and agricultural resources. Additional information regarding the LESA model is provided in *Section 5.3.4*.

## 5.3.2 Existing Conditions

**Existing Land Uses**

The 475.1-acre project site is located in the northwest portion of the City of San Jacinto in an area consisting primarily of rural agricultural uses. The project site has been used as pasture land and/or a farming operation, similar to surrounding properties, for over 100 years. The subject site formerly occupied predominantly by active agricultural cultivation in the form of turf farming with various support facilities, including roads, irrigation systems, and minor appurtenant buildings used for storage of farm materials and equipment. However, only a small portion of the project site is currently being used for turf farming, with the remainder being vacant and containing mostly weedy invasive plants or natural vegetation. In addition, the southeast portion of the site, approximately 16 acres, has been recently utilized as a feedlot (supporting an average of 500 head of cattle). Water resources used to sustain the existing agricultural operations is provided primarily as recycled water by the Eastern Municipal Water District (EMWD), which is supplemented by groundwater produced by three on-site wells for which there are no restrictions on private use. Currently, irrigation for the turf farm operation consists of a combination of 95%

reclaimed water and 5% groundwater. Water supply for the feedlot operation consists of groundwater produced by an on-site well.

Land uses north of the site continue to consist primarily of cultivated agricultural use in addition to duck ponds, the Colorado River Aqueduct, and the Ramona Expressway. Agricultural land uses occupy most areas directly west and east of the project site, including cultivated land and greenhouse operations, with the exception of rural residential development located just southeast of the project site and a residential neighborhood located northeast of the property where North Sanderson Avenue and the Ramona Expressway intersect. A municipal wastewater treatment plant owned and operated by EMWD is located directly south of the project site, and the San Jacinto Reservoir is located southeast of the property. The San Jacinto Valley has traditionally supported agriculture and rural residential land uses, but has recently been experiencing increased urbanization.

On-line mapping information posted by the State of California (2006) Resources Agency pursuant to the Farmland Mapping and Monitoring Program (accessed at www.conservation.ca.gov) indicates that the project site contains Prime Farmland, Unique Farmland, and Farmland of Statewide Importance and Local Importance defined as follows:

- Prime Farmland has the best combination of characteristics for producing crops. It produces sustained high yields when properly managed, and is not in or committed to urban development.
- Unique Farmland is other than prime farmland but capable of producing high-value crops.
- Farmland of Statewide or Local Importance does not qualify as Prime or Unique Farmlands, but is irrigated land determined to be important by state and local governments.

## 5.3.3 Significance Criteria

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on agricultural resources if it:

1. Would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use
2. Would conflict with existing zoning for agricultural use, or a Williamson Act contract
3. Would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

## 5.3.4 Impacts

***Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

The proposed project is located on a site that has been designated by the California Resources Agency as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. This impact is considered significant and is further quantified by use of the State of California (1997) Department of Conservation LESA model (see below).

Agricultural land throughout western Riverside County is under increasing pressure of conversion to urban uses. The proposed project would result in conversion of the entire project site, approximately 475.1 acres of land consisting of designated important agricultural resources, to urban-related uses.

Although analysis of agricultural impacts through use of the California Agricultural LESA model (State of California 1997) is not specifically tied to a significance criterion, the recent conversion of agricultural uses to urban land uses throughout the western Riverside County area is an issue of concern for many stakeholders. Therefore, in an abundance of caution, the LESA model is used for rating the relative quality of land resources based upon site-specific measurable features, such as soil resource quality, project site size, water availability, surrounding agricultural lands, and surrounding protected resource lands. The LESA method was developed by the Department of Conservation (in 1995), intended to provide CEQA lead agencies with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process (Public Resources Code Section 21095).

The LESA model is composed of six different factors. Two Land Evaluation factors are based on measures of soil resource quality. Four Site Assessment factors provide measures of project size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. For a given project, each of these factors is separately rated on a 100-point scale. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. It is the total project score that becomes the basis for making a determination of a project's potential significance, based upon a range of established scoring thresholds.

The LESA model worksheets are found in *Appendix B*. Using the LESA model, the Land Evaluation portion of the model equals 22.53, and the Site Assessment portion equals 38.93, for a total project score of 61.46. According to the LESA manual, a score of 60 to 79 points is considered significant unless either the Land Evaluation or Site Assessment subscore is less than

20 points. Because the Land Evaluation and the Site Assessment subscores (22.53 and 38.93, respectively) are both greater than 20, the overall score of 61.46 indicates that the agricultural lands of the project site are considered a significant resource and, therefore, conversion of the project site's agricultural lands would significantly impact the agricultural resources of the project site.

The proposed project would irreversibly convert land currently under agricultural production and identified as containing significant agricultural resources to urban uses and would contribute to incremental urbanization of a predominantly rural area sustaining existing agricultural land uses. As such, the proposed project would potentially result in a significant, unmitigable, adverse impact to agricultural resources of both local and regional importance. As discussed below in Section 5.3.6, Residual Impacts/Level of Significance after Mitigation, there are no feasible mitigation measures to reduce this impact below a level of significance.

In addition, development of the proposed project would potentially result in significant urban/rural land use conflicts between the planned development and existing agricultural uses surrounding the project site. Conflicts would potentially include fertilizer and pesticide application drift into the proposed residential area, residential complaints about noise, odor and dust resulting from site preparation activities associated with adjacent agricultural uses, and increased trespassing onto agricultural lands. Implementation of *Mitigation Measure 5.3-a,* identified in *Section 5.3.5, Mitigation Measures,* would serve to alleviate land use conflicts associated with new residential development and existing agricultural land uses. Further, fencing and vegetation set-backs contained in the Specific Plan will help to reduce potential inconsistencies with surrounding agricultural land. However, potentially significant impacts to sustained agricultural resources would result from the proposed project development, as the identified land use conflicts associated with urbanization of agricultural lands may ultimately result in making agricultural operations more difficult to sustain, and thereby more susceptible to conversion over time, resulting in cumulative impacts to agricultural resources of the area.

***Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

The proposed project would not conflict with existing zoning for agricultural use. No portion of the project site is currently zoned for agricultural use; therefore, no conflicts are anticipated to occur with respect to the proposed residential conversion of the property and existing zoning designations. In addition, the site is not covered by special agricultural status, such as a Williamson Act contract. Therefore, no impacts related to agricultural zoning or a Williamson Act contract would occur.

***Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?***

The project itself may contribute to surrounding lands being more susceptible to conversion over time, resulting in cumulative impacts to agricultural resources of the area.

## 5.3.5 Mitigation Measures

**Project-Specific Mitigation Measures**

**5.3-a** A Notice-to-Property-Owner shall be recorded on a separate buyer information sheet with the final map providing notice to potential future property owners of the proposed development that the property is located in an area of active agricultural land uses that may potentially result in inconvenience and/or discomfort associated with adjacent agricultural operations including noise, odors and dust generation, and chemical drift.

## 5.3.6 Residual Impacts/Level of Significance after Mitigation

The proposed project would result in the direct loss of agricultural land resources determined to be significant pursuant to the California Agricultural LESA model, and which are identified as important farmlands by the State of California (2006) Resources Agency Farmland Mapping and Monitoring Program. There are no identified mitigation measures that would substantially reduce the impacts associated with the permanent loss of the site's agricultural resources. The City's General Plan EIR (January 2006) discusses a number of reasons mitigation for loss of agriculture is infeasible. Rising land costs to replace agricultural lands, rising water costs, labor costs, urbanization and environmental regulations all contribute to ongoing conversion of farmland. Although the conclusion that agricultural preservation was infeasible for the above reasons was conducted several years ago, these factors are still prevalent and remain as constraining factors to agricultural conservation. Without property owner cooperation and substantial financial incentives, it is infeasible to provide permanent on or offsite mitigation to replace converted farmland. Mitigation measures for the proposed development have been identified to reduce the magnitude of significant impacts associated with potential land use conflicts resulting from development of the proposed residential development in an area supporting existing agricultural uses. However, a residual significant, unmitigable impact would remain due to the inherent incompatibility of agricultural and urban land uses, and due to the cumulative effects of pressure to convert adjacent agricultural lands associated with urban development encroachment into the predominantly rural project area.

Therefore, given the above considerations, potential project impacts to agricultural resources are considered significant and not fully mitigable. As such, pursuant to CEQA, approval of the proposed project is likely to result in significant unavoidable agricultural resource impacts and requires that the decision makers provide findings of overriding consideration of project benefits that make the significant effects acceptable.

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# 5.4 BIOLOGICAL RESOURCES

## 5.4.1 Introduction and Methodology

This section describes existing biological resources on the project site and discusses potential project impacts to resources. This analysis is based on the August 2005 Dudek and Associates Biological Resources Technical Report prepared for the project. This report is included as *Appendix C* to this EIR. Methods used to conduct the biological resources field reconnaissance and impact analysis are contained therein.

## 5.4.2 Existing Conditions

### Setting

#### *Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)*

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional habitat conservation plan (HCP) focusing on conservation of species and their associated habitats in Western Riverside County. This plan is one of several large, multi-jurisdictional habitat-planning efforts in Southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The MSHCP will allow Riverside County and its cities to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal Endangered Species Acts.

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. The MSHCP allows the participating jurisdictions to authorize "Take" of plant and wildlife species identified within the plan area. The United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) have authority to regulate the take of threatened, endangered, and rare species. Under the MSHCP, the wildlife agencies have granted "take authorization" for otherwise lawful actions—such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation area—in exchange for the assembly and management of a coordinated MSHCP conservation area.

The MSHCP is a "criteria-based plan" and does not rely on a hardline preserve map. Instead, within the MSHCP Plan Area, the MSHCP reserve will be assembled over time from a smaller subset of the Plan Area referred to as the Criteria Area. The Criteria Area consists of Criteria Cells (Cells) or Cell Groupings, and flexible guidelines (Criteria) for the assembly of conservation within the Cells or Cell Groupings have been developed for each Cell/Cell

Grouping. Cells and Cell Groupings also may be included within larger units known as Cores, Linkages, or Habitat Blocks.

The Villages of San Jacinto project is located within the San Jacinto Valley Area Plan of the MSHCP. A GIS overlay of MSHCP San Jacinto Valley Area Criteria Cells with the Villages of San Jacinto project boundary shows that the project lies outside of the Criteria Area with the exception of a small overlap of the southwestern portion of the site with Cells 2775 and 2878. This overlap is approximately 250 feet wide and extends approximately 3,240 feet along the western property boundary. This slight Cell overlap does not correspond to any observable change in site features such as biological resources or topography; the site is in active agriculture (turf grass farm) both within and outside the area of overlap. For this reason, it was agreed (personal communication, Ken Graff, Riverside Regional Conservation Authority) that the overlap is a map registration issue, and MSHCP Criteria for Cells 2775 and 2878 would not apply to the Villages of San Jacinto Project but rather to the adjacent parcels to the west (see *Figure 5.4-1*, *Project Relationship to Western Riverside County MSHCP*). A letter from Charles V. Landry, Executive Director of the Western Riverside County Regional Conservation Authority (RCA), dated November 17, 2008, provides written confirmation of the previous conversation with Mr. Graff. This letter and the letter from the City requesting the RCA's written confirmation is provided in *Appendix C*. However, certain plan-wide requirements would apply to the project, including habitat assessments/survey requirements for narrow endemic plant species and burrowing owl. The project has also been analyzed for consistency with MSHCP Section 6.1.2, Riparian/Riverine Resources.

### *Topography*

The study area ranges from flat in the central and southern regions of the project site to gently sloping in the northeastern region just east of the proposed Odell Avenue. The highest elevational area on site is the western boundary of the site [approximately 1,480 feet above mean sea level (amsl)]; the lowest elevational area is on the north-central boundary of the site [approximately 1,460 feet amsl].

### *Soils*

The project site consists of several soil categories. All of the soils developed in alluvium from granitic parent materials. Dello, Chino, and Grangeville soils are present in alluvial areas or on floodplains; Traver soils are present on valley plains and in basins. With the exception of Grangeville soils, these soils are all in shallowly-sloping areas (0%–5% slopes); Grangeville soils are sloped from 0%–15%. Dello and Chino soils are slowly permeable, while Grangeville and Traver soils are moderately well-drained. Traver soils are from slightly to strongly saline, and, in addition to other soil types not mapped on the project study area, are often associated with narrow endemic plant species.

Villages of San Jacinto EIR

# Project Relationship to Western Riverside County MSHCP

FIGURE 5.4-1

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### *Vegetation Communities*

Several native vegetation communities/land cover types as well as non-native/non-natural land covers are located on the project site. Wetland vegetation communities are also found on the project site. A total of nine vegetation communities were identified on the project site—six native and three non-native. The three non-native types include agriculture, ruderal land and disturbed/developed land. The native vegetation types include open water, freshwater marsh, southern willow woodland, disturbed herbaceous wetlands, cismontane alkali marsh, and intermittent unvegetated stream channel.

### *Wildlife Resources*

Wildlife found in the project area includes species generally associated with the habitat types identified above. A complete list of observed and expected sensitive wildlife species is provided in *Appendix C* to this EIR.

## Site Observations

*Figure 5.4-2*, *Biological Resources Map*, depicts resources observed and mapped on site during the January through August 2005 field visits to the site. It should be noted that the project site undergoes regular mechanical disturbance associated with the agricultural operations, therefore updated biological resource studies have not been prepared.

### *Vegetation Communities*

The entire 475.1 acre site was surveyed for biological resources. This survey area includes developed lands associated with the existing agricultural operations on site in addition to remaining undeveloped/undisturbed portions of the site. *Table 5.4-1*, *Existing Biological Resources*, provides a summary of each type of vegetation community found on the project site. A description of each vegetation community is included in *Table 5.4-1*.

**Table 5.4-1**
**Existing Biological Resources**

| Vegetation Community | Existing Acreage |
|---|---|
| **Native Plant Communities/Land Cover Types** | |
| Open Water | 4.22 |
| Freshwater Marsh | 0.23 |
| Southern Willow Woodland | 0.07 |
| Disturbed Herbaceous Wetlands | 0.05 |
| Disturbed Herbaceous Wetlands (CDFG jurisdiction only) | 0.16 |
| Cismontane Alkali Marsh | 0.01 |
| Intermittent Unvegetated Stream Channel | 0.01 |
| *Subtotal* | *4.75* |

**Table 5.4-1 (Continued)**

| Vegetation Community | Existing Acreage |
|---|---|
| **Non-Native Habitat Types** | |
| Agriculture | 307.08 |
| Ruderal | 126.87 |
| Disturbed/Developed | 36.42 |
| *Subtotal* | *470.37* |
| **Total** | **475.12** |

### *Open Water*

Open water (i.e., pond) is a type of aquatic area that typically lacks emergent vegetation but supports hydrophytic vegetation, such as mule fat scrub, southern willow scrub, and freshwater marsh around its margins. Ponds represent an important resource for a variety of migratory waterfowl and provide habitat for amphibians and numerous species of aquatic insects. Areas of open water, in concert with the surrounding riparian vegetation, may receive considerable use by species more typical of upland habitats during the drier times of the year.

Three areas of open water totaling 4.22 acres are present within the study area: two detention basins—one along the northern property boundary and one along the southwestern property boundary—and one shallow depression along the southeastern property boundary. At the time of the wetlands delineation, these areas were filled with water and supported a variety of waterfowl. Since the areas of open water on site have no connection to navigable Waters of the U.S., they are under the jurisdiction of CDFG and RWQCB only.

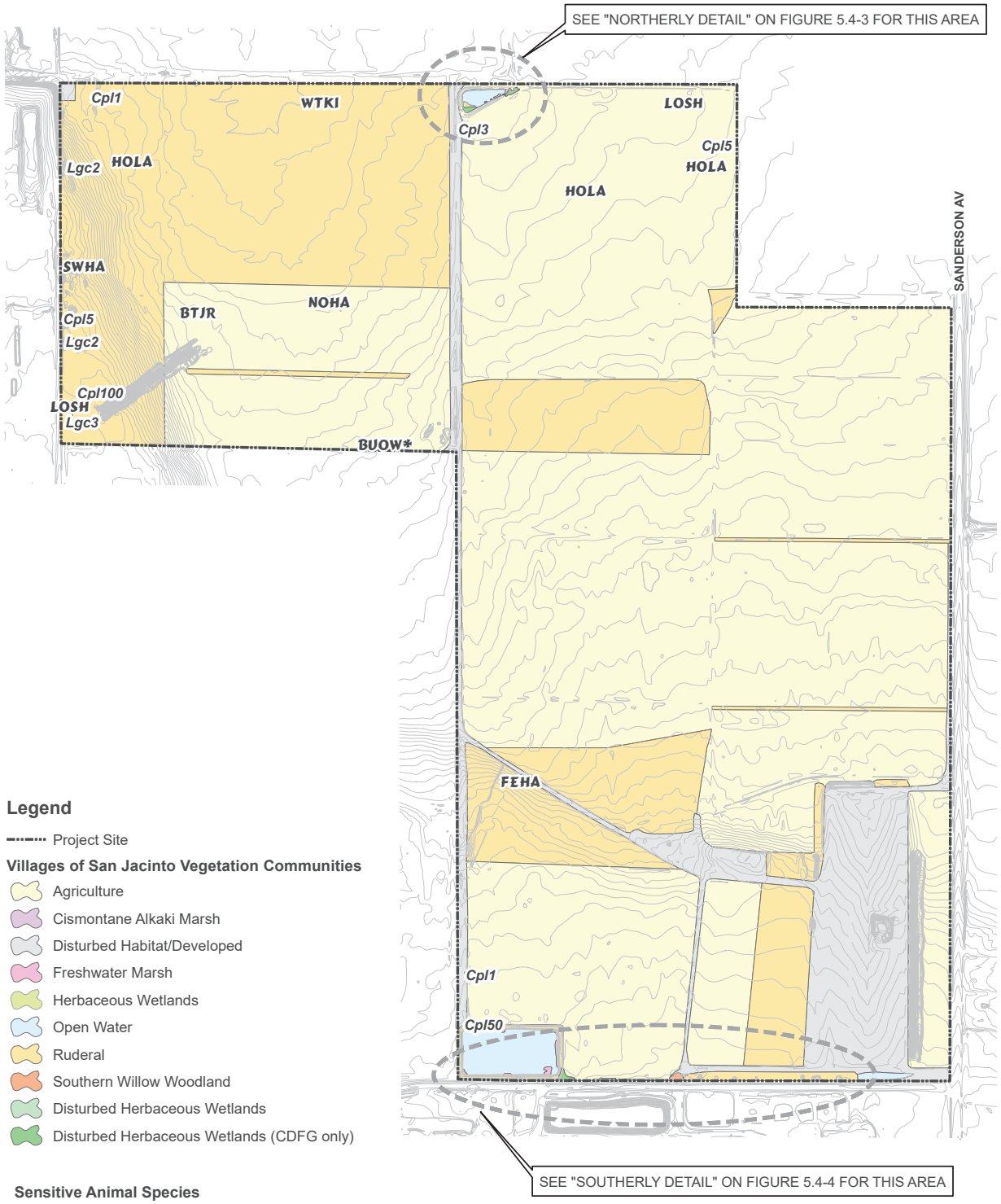
None of these areas mapped as open water on site would be classified as MSHCP riparian/riverine since they were artificially created.

### *Freshwater Marsh*

Freshwater marsh is a wetland habitat type that develops where the water table is at or just above the ground surface, such as around the margins of lakes, ponds, slow-moving streams, ditches, and seepages. It typically is dominated by tall, emergent monocots, such as cattail (*Typha* sp.) and bulrush (*Scirpus* sp.).

Freshwater marsh on site is located around the perimeters of the detention basins and along the intermittent stream channel along the southern boundary of the site. This vegetation community occupies 0.23 acre and is dominated by cattails and bulrushes. Freshwater marsh on site is under the jurisdiction of CDFG and RWQCB only.

None of the areas mapped as freshwater marsh on site would be classified as MSHCP riparian/riverine since there were artificially created.




## Legend

Project Site

**Villages of San Jacinto Vegetation Communities**

- Agriculture
- Cismontane Alkaki Marsh
- Disturbed Habitat/Developed
- Freshwater Marsh
- Herbaceous Wetlands
- Open Water
- Ruderal
- Southern Willow Woodland
- Disturbed Herbaceous Wetlands
- Disturbed Herbaceous Wetlands (CDFG only)

**Sensitive Animal Species**

- BTJR . . . *Blacktailed jackrabbit*
- BUOW* . . *Burrowing owl pair & 3 burrows*
- FEHA . . . *Ferruginous hawk*
- HOLA . . . *Horned lark flock*
- LOSH . . . *Loggerhead shrike*
- NOHA . . . *Northern harrier (in flight)*
- SWHA . . . *Swainson's hawk*
- WTKI . . . *White-tailed kite*

**Sensitive Plant Species**

*Cpl . . . Centromadia pungens ssp. laevis*
*Lgc . . . Lasthenia glabrata ssp. coulteri*

NOTE: Number after the plant label indicates individual plant count at that location.

Feet
0 300 600

TOPO SOURCE: RBF Consulting, September 2004

Villages of San Jacinto EIR
**Biological Resources Map**

FIGURE 5.4-2

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### *Southern Willow Woodland*

Southern willow woodland is similar to the southern willow scrub plant community described by Holland (1986) as "dense, broadleafed, winter-deciduous riparian thickets dominated by several species of Salix [willows], with scattered emergent *Populus fremontii* [Freemont cottonwood] and *Platanus racemosa* [western sycamore]." The understory is usually arrested in growth owing to the dense canopy. The 0.07-acre area of the study site mapped as southern willow woodland consists of a small group of larger, more mature Goodding's black willows (*Salix gooddingii*) with an open understory. Soils within this vegetation type are hydric (Chroma 1), and evidence of hydrology exists as water stained leaves and drainage patterns. This habitat is fed by two 1-foot pipes that outlet onto the property along the southern boundary. However, since this wetlands habitat type is not connected to navigable Waters of the U.S., it is not under the jurisdiction of the ACOE. Southern willow woodland on site is under the jurisdiction of CDFG and RWQCB only.

None of the areas mapped as southern willow woodland on site would be classified as MSHCP riparian/riverine since there were artificially created.

### *Disturbed Herbaceous Wetlands*

Herbaceous wetlands were mapped in association with the northern detention basin on site. Herbaceous wetlands support a predominance of low, herbaceous, hydrophytic vegetation. Within this 0.05-acre habitat type on site, yellow nutsedge (*Cyperus esculentus*), a hydrophytic species, dominates the cover. Drainage patterns are evident, and soils are considered hydric (Chroma 2 with mottles). This habitat type lacks a surface connection to navigable Waters of the U.S., however, and thus is under the jurisdiction of CDFG and RWQCB only.

Disturbed herbaceous wetlands were also mapped in an area dominated by the non-native perennial pepperweed (*Lepidium latifolium*). No indicators of hydrology are present, and soils are not hydric (Chroma 2 without mottles), so disturbed herbaceous wetlands on site are under the jurisdiction of CDFG only. A total of 0.16 acre of disturbed herbaceous wetlands are present on site.

None of the areas mapped as disturbed herbaceous wetlands on site would be classified as MSHCP riparian/riverine since there were artificially created.

### *Cismontane Alkali Marsh*

According to Holland (1986), vegetation classified as cismontane alkali marsh occurs in areas of alkaline soils that are saturated or inundated during most of the year. Characteristic species often in cismontane alkali marsh include yerba mansa (*Anemopsis californica*), sedges, salt grass, rushes, alkali heath (*Frankenia salina*), cattails, salt marsh fleabane (*Pluchea purpurascens*), and

cattails. Species dominating the 0.01-acre patch of cismontane alkali marsh along the southern property boundary include salt grass, alkali-mallow (*Malvella leprosa*), and salt heliotrope (*Heliotropium curassavicum*).

None of the areas mapped as cismontane alkali marsh on site would be classified as MSHCP riparian/riverine since there were artificially created.

***Unvegetated Intermittent Stream Channel***

Unvegetated channel refers to the intermittent drainage connecting several small patches of wetlands vegetation south of the detention basin along the southern boundary of the site. Intermittent waters generally have a surface flow that, although not perennial, may be present for relatively long periods (greater than 24 hours) following rainfall events. Intermittent waters on site vary from two to three feet in diameter and occupy 0.01 acre of the project site. These channels are under the jurisdiction of CDFG and RWQCB.

None of the areas mapped as intermittent stream channel on site would be classified as MSHCP riparian/riverine since there were artificially created.

***Agriculture***

Agricultural lands, occupying 307.08 acres, compose the majority of the site. Most of the areas mapped as agriculture consist of an active turf-grass farming operation. A cattle feed lot, in the southeastern portion of the site, was also mapped as agriculture.

***Ruderal***

Ruderal habitat was mapped in areas not in active turf-farming operations which have been allowed to recolonize with weedy, non-native vegetation. Ruderal areas on site occupy 126.87 acres and are dominated by weedy species such as henbit (*Lamium amplexicaule*), knotweed (*Polygonum arenastrum*), red-maids (*Calindrinia ciliata*), rescue grass (*Bromus catharticus*), shepherd's purse (*Capsella bursa-pastoris*), (*Sisymbrium irio*), sow thistles (*Sonchus* spp.), short-podded mustard (*Hirschfeldia incana*), cheeseweed (*Malva parviflora*), and common purslane (*Portulaca oleracea*).

***Disturbed/Developed***

Areas mapped as disturbed or developed refer to areas lacking vegetation, such as dirt roads, graded areas, structures, and buildings. A total of 36.42 acres of disturbed/developed area is present within the study area.

## Wildlife Diversity

A total of 79 species of both non-sensitive and special-status wildlife was observed or detected on site. The complete list of wildlife species identified is provided as *Appendix B* of the Biological Resources Technical Report, included as *Appendix C* to this EIR.

### *Birds*

Sixty bird species were observed during the survey visits (*Appendix B*). The diversity of birds is limited due to the high levels of agriculture and relatively low habitat quality, or lack of native habitats throughout the study area. The habitats and land covers within the study area provide foraging habitat for a variety of special-status bird species such as the burrowing owl (Speotyto [Athene] *cunicularia hypugaea*) (which is a MSHCP survey species), white-tailed kite (*Elanus caeruleus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), northern harrier, (*Circus cyaneus*), American kestrel (*Falco sparverius*) and horned lark (*Eremophila alpestris*). The ponds on site provide habitat for waterfowl including western grebe (*Aechmorphus occidentalis*), white-faced ibis (*Plegadis chihi*), northern shoveler (*Anas clypeata*), mallard (*Anas platyrhynchos*), lesser scaup (*Aythya affinis*), bufflehead (*Bucephala albeola*), ruddy duck (*Oxyura jamaicensis*), American coot (*Fulica americana*), common moorhen (*Gallinula chloropus*), least sandpiper (*Calidris minutilla*), and common snipe (*Gallinago gallinago*). A full list of species detected is presented in *Appendix B* to the Biological Resources Technical Report.

### *Reptiles and Amphibians*

Two reptile species were observed on site: side-blotched lizard (*Uta stansburiana*) and western fence lizard (*Sceloporus occidentalis*). These species are not considered special-status. No amphibian species were observed during the survey; however, one or more of the following non-sensitive species may occur within the study area: garden slender salamander (*Batrachoseps attenuatus*), western toad (*Bufo boreas*) and Pacific treefrog (*Hyla regilla*). Habitat quality for reptiles and amphibians is low, and the diversity of these species is expected to be low because of the small amount of habitat available and the likely negative effects of the active agriculture on site.

### *Mammals*

Nine mammal species, or their sign, were observed within the study area during the survey including: black-tailed jackrabbit (*Lepus californicus*), brush rabbit (*Sylvilagus bachmani*), desert cottontail (*Sylvilagus audubonii*), Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus beecheyi*), coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), bobcat (*Lynx rufus*), and domestic cattle (*Bos bovis*). Brush rabbit and black-tailed jackrabbit are considered special-status.

### *Invertebrates*

Seven non-sensitive species of butterfly and one fairy shrimp species were recorded during surveys including: Sara orange-tip (*Anthocharis sara sara*), cabbage butterfly (*Pieris rapae*), common white (*Pontia protodice*), pygmy blue (*Brephidium exile*), West Coast lady (*Vanessa annabella*), red admiral (*Vanessa atalanta rubria*), painted lady (*Vanessa cardui*), and versatile fairy shrimp (*Branchinecta lindahli*).

## Sensitive Biological Resources

### *Sensitive Habitats*

Sensitive habitats are those that are considered rare within the region, support sensitive plant and/or wildlife species, function as corridors for wildlife movement, or are regulated by local, state or federal agencies. Habitat types found on site that are considered sensitive include open water, freshwater marsh, southern willow woodland, disturbed herbaceous wetland, cismontane alkali marsh and intermittent unvegetated stream channel.

### *MSHCP Riparian/Riverine Areas, Vernal Pools and Fairy Shrimp Habitat*

No MSHCP riparian/riverine areas or vernal pools were located on site. However, some water resources on site were initially determined potentially suitable for threatened or endangered species of fairy shrimp; therefore, focused vernal pool branchiopod (i.e., fairy shrimp) surveys were conducted. No sensitive species of fairy shrimp were found on site (see *Table 5.4-2*, *Jurisdictional Waters (Including Wetlands) Present on the Villages of San Jacinto Project Site*).

**Table 5.4-2**
**Jurisdictional Waters (Including Wetlands)**
**Present on the Villages of San Jacinto Project Site**

| Plant Community | Area (Acres) | MSHCP Riverine/Riparian? | RWQCB- and/or CDFG-jurisdictional |
|---|---|---|---|
| Freshwater Marsh | 0.23 | No | Both RWQCB and CDFG |
| Southern Willow Woodland | 0.07 | No | Both RWQCB and CDFG |
| Herbaceous Wetlands | 0.03 | No | Both RWQCB and CDFG |
| Disturbed Herbaceous Wetlands | 0.02 | No | Both RWQCB and CDFG |
| Disturbed Herbaceous Wetlands | 0.16 | No | CDFG only |
| Intermittent Unvegetated Ephemeral Stream Channel | 0.01 | No | Both RWQCB and CDFG |
| Open Water | 4.22 | No | Both RWQCB and CDFG |

These areas are also under the jurisdiction of wetlands agencies as discussed below.

### *Jurisdictional Waters*

Since none of the wetlands or non-wetlands waters on site show a surface connection with "navigable Waters of the U.S.," none of these areas are under the jurisdiction of the U.S. Army Corps of Engineers (ACOE). All of these areas are under the jurisdiction of both RWQCB and CDFG, or, in the case of some areas of disturbed herbaceous wetlands, CDFG only (see *Table 5.4-2, Jurisdictional Waters (Including Wetlands) Present on the Villages of San Jacinto Project Site*). A total of 4.22 acres of open water, 0.23 acre of freshwater marsh, 0.07 acre of southern willow woodland, 0.05 acre of herbaceous wetlands (including 0.02 acre of disturbed herbaceous wetlands), 0.01 acre of cismontane alkali marsh, and 0.01 acre of intermittent unvegetated stream channel, all under the jurisdiction of RWQCB and CDFG, are present on site. An additional 0.16 acre of disturbed herbaceous wetlands under the jurisdiction of CDFG only is also present on site (See *Table 5.4-2* and *Figures 5.4-2*, *5.4-3, and 5.4-4*). Data station forms for the wetlands delineation can be found in *Appendix F* of the Biological Resources Technical Report (included in *Appendix C* to this EIR).

### *Sensitive Plants (MSHCP Narrow Endemic Plant Species)*

Because the MSHCP includes coverage for certain plant species for which limited information was available at the time of creation of the MSHCP plan (generally plants of limited distribution considered narrow endemic plants), these plants were conditionally covered by the MSHCP. For these species, surveys are required within suitable habitat. The Villages of San Jacinto project is located within MSHCP Narrow Endemic Plant Species Survey Area (NEPSA) 3. Species of concern in NEPSA 3 are Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass and Wright's trichocoronis. Focused surveys were conducted for these species. Because suitable habitat was present for the San Jacinto Valley crownscale, Parish's brittlescale, Davidson's saltscale, smooth tarplant, Coulter's goldfields, thread-leaved brodiaea, little mousetail and mud nama, focused surveys were also conducted for these species.

Prior to the survey, a search was also conducted using the CNDDB (2004) to thoroughly assess the sensitive floral resources that may occur on site. Table 4 in the Biological Resources Technical Report (included as *Appendix C* to this EIR) lists potentially occurring sensitive species according to the detailed search of the CNDDB and Dudek's knowledge of biological resources of this area. *Table 3* in the Biological Resources Technical Report (included as *Appendix C*) includes a list of all sensitive plant species, their sensitivity status, habitat associations and likelihood for presence on site. No sensitive plant species in the NEPSA 3 survey suite were located on site. Approximately 170 smooth tarplant individuals were observed on site as were approximately seven Coulter's goldfields individuals.

## Sensitive Wildlife

Table 4 in the Biological Resources Technical Report (included in *Appendix C*) includes a list of all sensitive wildlife species, their sensitivity status, habitat associations and likelihood for presence on site. A summary of this table follows:

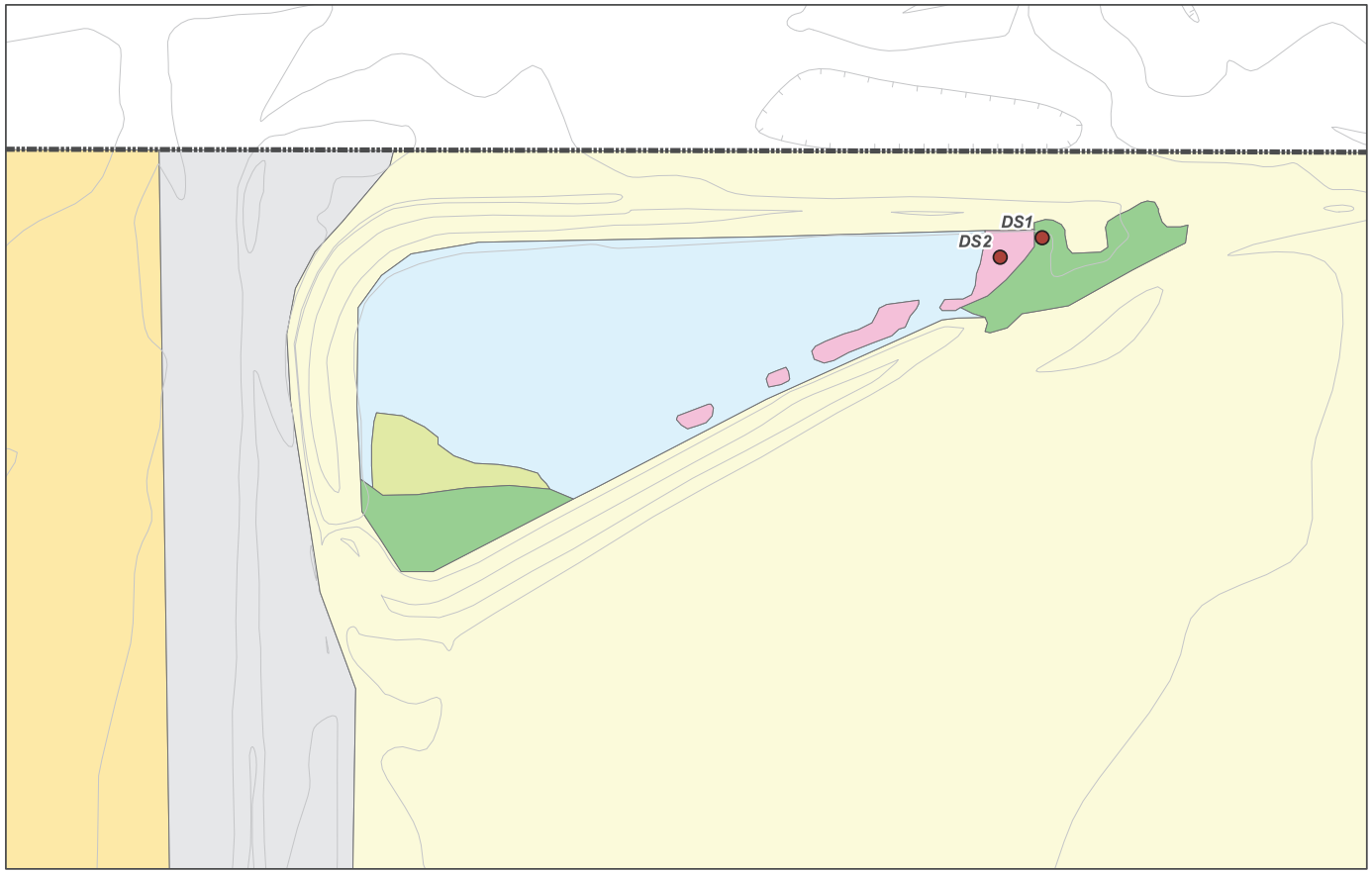
### *Reptiles and Amphibians*

No sensitive reptiles or amphibians were observed on site, and no state- or federally-listed reptiles or amphibians are expected to occur. Table 5 in the Biological Resources Technical Report (included as *Appendix C*) includes all sensitive reptiles and amphibians that have the potential to occur within the project study area. Sensitive reptile and amphibian species classified as California Special Concern (CSC) Species and having at least a moderate potential to occur on site include the western newt and the western spadefoot toad.

### *Birds*

Focused surveys for the western burrowing owl were conducted per MSHCP requirements for the project site, which is located within the Burrowing Owl Survey Area. One pair of burrowing owls and several burrows were observed during the surveys (*Figure 5.4-2*, see also Appendix E, Burrowing Owl Focused Survey Report, to the Biological Resources Technical Report, included as *Appendix C* to this EIR, for more information). The pair is assumed to be nesting on site. Two individuals of Swainson's hawk (*Buteo swainsoni*), a state-listed threatened species, were observed perched on trees within the site (*Figure 5.4-2*). Ferruginous hawk, northern harrier, and horned lark were observed foraging within the study area; the loggerhead shrike, a federal species of concern and CSC species, was observed nesting and foraging on site (*Figure 5.4-2*). White-tailed kite and turkey vulture were observed foraging on site (*Figure 5.4-2*). White-faced ibis was observed flying over the site during one survey visit. All of these species are covered species in the MSHCP.

In addition to these sensitive species observed, the great blue heron, prairie falcon, peregrine falcon, merlin and mountain plover could all utilize habitat on site during winter months. All of these species are covered species in the MSHCP. Western bluebird (sometimes considered sensitive by local environmental groups) also has a potential to forage on site during the winter months. Western bluebird is not a MSHCP covered species.




**Legend**

- Project Site

**Villages of San Jacinto Vegetation Communities**

- Agriculture
- Cismontane Alkaki Marsh
- Disturbed Habitat/Developed
- Freshwater Marsh
- Herbaceous Wetlands
- Open Water
- Ruderal
- Southern Willow Woodland
- Disturbed Herbaceous Wetlands
- Disturbed Herbaceous Wetlands (CDFG only)
- Data Station Location

N

Feet
0 25 50

TOPO SOURCE: RBF Consulting, September 2004

Villages of San Jacinto EIR

**Northerly Detailed Area - Biological Resources Map**

FIGURE 5.4-3

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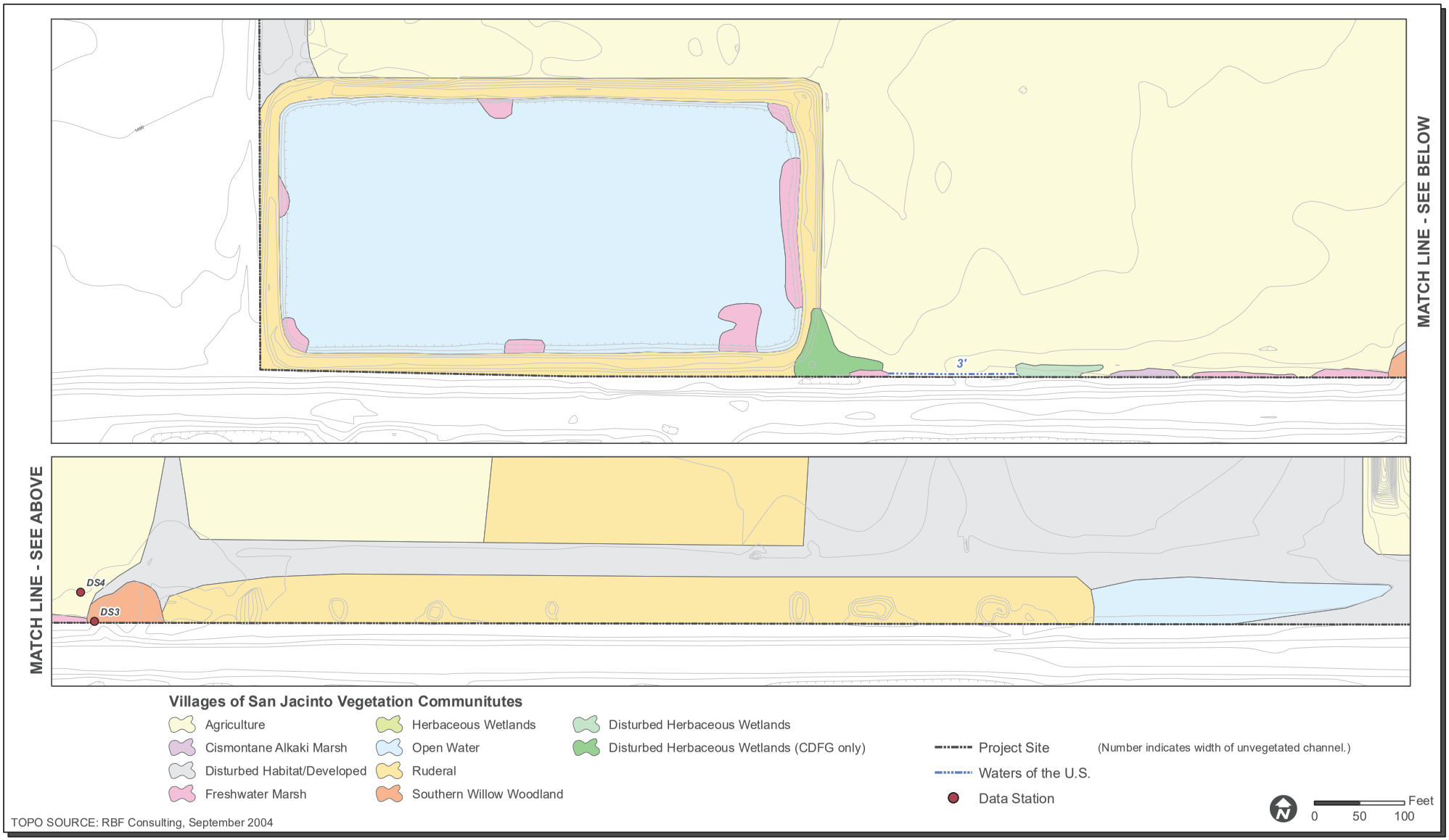


TOPO SOURCE: RBF Consulting, September 2004

Villages of San Jacinto EIR

**Southerly Detailed Area - Biological Resources Map**

FIGURE 5.4-4

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### *Mammals*

Three sensitive mammal species or their sign were observed on site: black-tailed jackrabbit, bobcat and coyote, all are covered species in the MSHCP. Three additional species were assumed to utilize habitat on site, although were not observed: long-tailed weasel, gray fox and brush rabbit. Brush rabbit is a covered species in the MSHCP while long-tailed weasel and gray fox are not.

### *Invertebrates*

No sensitive invertebrate species were observed on site during general wildlife surveys or are expected to occur within the project study area due to lack of suitable habitat (see Table 5 in Biological Resources Report). The vernal pool branchiopod survey that was conducted during the 2004-2005 wet season was negative for sensitive branchiopod species (see Appendix D of the Biological Resources Technical Report [included as *Appendix C* to this EIR] for vernal pool branchiopod survey report).

### *Fish*

No sensitive fish species were observed on site during general wildlife surveys or are expected to occur within the project study area due to lack of suitable habitat (see Table 5 in Biological Resources Technical Report, included as *Appendix C* to this EIR).

### Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the immigration and emigration of animals. Habitat linkages may function as wildlife corridors for some species and permanent habitat for others. Wildlife corridors and habitat linkages contribute to population viability in several ways: (1) they assure the continual exchange of genes between populations which helps maintain genetic diversity; (2) they provide access to adjacent habitat areas representing additional territory for foraging and mating; (3) they allow for a greater carrying capacity of species populations; and (4) they provide routes for colonization of habitat lands following local population extinctions or habitat recovery from ecological catastrophes (e.g., fires).

As illustrated in *Figure 3-3*, *Site Location Map*, the project study area is surrounded by agricultural lands to the north, east, and southwest; a water reclamation facility lies to the southeast of the site. Therefore, the project study area is not of high importance as a regional wildlife corridor or habitat linkage, i.e., it does not connect larger habitat areas or provide for regional wildlife movement. Furthermore, the site is not included a MSHCP Linkage or Constrained Linkage which has been identified constructed to maintain regional habitat linkages.

## 5.4.3 Significance Criteria

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on biological resources if it would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Services?
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption or other means?
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?

## 5.4.4 Biological Resource Impacts

***Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

No sensitive reptiles or amphibians were observed on site, and no state- or federally-listed reptiles or amphibians are expected to occur. Three sensitive mammal species or their sign were observed on site: black-tailed jackrabbit, bobcat and coyote, all are covered species in the MSHCP (see full discussion of consistency with the MSHCP below). No sensitive invertebrate species were observed on site during general wildlife surveys or are expected to occur within the project study area due to lack of suitable habitat. No sensitive fish species were observed on site during general wildlife surveys or are expected to occur within the project study area due to lack of suitable habitat.

Focused surveys for the western burrowing owl were conducted per MSHCP requirements for the project site. One pair of burrowing owls and several burrows were observed during the surveys. In order to avoid potential indirect impacts related to burrowing owls, mitigation is provided (see *Section 5.4.5*, *Mitigation Measures*, Mitigation Measure 5.4-b).

Two individuals of Swainson's hawk (*Buteo swainsoni*), a state-listed threatened species, were observed perched on trees within the site (*Figure 5.4-2*). Ferruginous hawk, northern harrier, and horned lark were observed foraging within the study area; the loggerhead shrike, a federal species of concern and CSC species, was observed nesting and foraging on site (*Figure 5.4-2*). White-tailed kite and turkey vulture were observed foraging on site (*Figure 5.4-2*). White-faced ibis was observed flying over the site during one survey visit. Because impacts to other sensitive wildlife species are covered under the MSHCP, no additional mitigation is proposed for impacts to these species. The project will therefore, not have substantial adverse impacts on any sensitive specieThe project would impact 100% of all onsite habitats, many of which are suitable habitat for special-status species regulated by local plans/policies (i.e., MSHCP) or the US Fish and Wildlife Service or California Department of Fish and Game. *Table 5.4-3*, *Impacts to Vegetation Communities and Land Covers*, provides a summary of on-site habitats.

**Table 5.4-3**
**Impacts to Vegetation Communities and Land Covers**

| Vegetation Community/Land Cover Type | Impact Acreage |
|---|---|
| **Native Plant Communities/Land Cover Types** | |
| Open Water | 4.22 |
| Freshwater Marsh | 0.23 |
| Southern Willow Woodland | 0.07 |
| Herbaceous Wetlands | 0.03 |
| Disturbed Herbaceous Wetlands | 0.18 |
| Cismontane Alkali Marsh | 0.01 |
| Intermittent Unvegetated Stream Channel | 0.01 |
| *Subtotal* | *4.75* |
| **Uplands** | |
| Agriculture | 307.08 |
| Ruderal | 126.87 |
| Disturbed/Developed | 36.42 |
| *Subtotal* | *470.37* |
| **Total** | **475.12** |

Impacts to upland habitat types are not considered significant from a biological resources perspective. Impacts to wetland habitats are considered significant (see below for a discussion of these impacts in the context of Section 404 of the Clean Water Act and the MSHCP).

***Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?***

Please see discussion below regarding the project's relationship with the MSHCP. Please see discussion above regarding the project's potential impacts to wetland or riparian habitats which may be protected under local or regional plans, policies regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.

***Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption or other means?***

Direct impacts associated with the development of the proposed project were calculated and are shown in *Table 5.4-4*, *Impacts to Jurisdictional Waters (Including Wetlands) Present on the Villages of San Jacinto Project Site)*. As is shown in the table, all biological resources within the project boundaries were considered 100% lost. This includes 4.22 acres of open water, 0.23 acre of freshwater marsh, 0.07 acre of southern willow woodland, 0.03 acre of herbaceous wetlands (including 0.18 acre of disturbed herbaceous wetlands) and 0.01 acre of intermittent unvegetated stream channel (see *Table 5.4-4*).

**Table 5.4-4**
**Impacts to Jurisdictional Waters (Including Wetlands)**
**Present on the Villages of San Jacinto Project Site**

| Plant Community | Impact Area (Acres) | MSHCP Riverine/Riparian? | RWQCB and/ or CDFG-Jurisdictional |
|---|---|---|---|
| Freshwater Marsh | 0.23 | No | Both RWQCB and CDFG |
| Southern Willow Woodland | 0.07 | No | Both RWQCB and CDFG |
| Herbaceous Wetlands | 0.03 | No | Both RWQCB and CDFG |
| Disturbed Herbaceous Wetlands | 0.02 | No | Both RWQCB and CDFG |
| Disturbed Herbaceous Wetlands | 0.16 | No | CDFG only |
| Intermittent Unvegetated Ephemeral Stream Channel | 0.01 | No | Both RWQCB and CDFG |
| Open Water | 4.22 | No | Both RWQCB and CDFG |

Impacts to these habitats are considered significant, therefore mitigation is provided (see *Section 5.4.5*, *Mitigation Measures*, Mitigation Measure 5.4.-a).

***Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

As discussed above, under Existing Conditions, the project study area is surrounded by agricultural lands to the north, east, and southwest; a water reclamation facility lies to the southeast of the site. Therefore, the project study area is not of high importance as a regional wildlife corridor or habitat linkage, i.e., it does not connect larger habitat areas or provide for regional wildlife movement. Furthermore, the site is not included a MSHCP Linkage or Constrained Linkage which has been identified constructed to maintain regional habitat linkages. Therefore, the project will not have a significant impact on established migratory wildlife corridors.

***Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

The project site is located within the MSHCP Planning Area. Consistency with this plan is discussed below. There are no other local policies ordinances protecting biological resources that would affect the proposed project.

***Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?***

As indicated in *Section 5.4.2*, *Existing Conditions*, the project has been determined not to be subject to reserve assembly criteria under the MSHCP due to the determination that cell designations located on the project site are the result of a mapping/registration error. Therefore, from a reserve assembly perspective (or absence of criteria area), the project is consistent with the MSHCP. That said, the project was also subject to additional MSHCP requirements, namely narrow endemic plant surveys, burrowing owl surveys, fairy shrimp surveys and riparian/riverine resources guidelines.

On-site water resources were also analyzed for consistency with riparian/riverine resources. While the project supports numerous wetland and water habitat, the man-made nature of these resources (largely for use in agricultural operations) eliminate them from being characterized as riparian/riverine per the MSHCP (see below for further discussion of MSHCP consistency). Therefore, the proposed project would be consistent with the MSHCP in terms of preservation of riparian/riverine resources. Suitable habitat on the project site was surveyed for sensitive fairy shrimp species. While common fairy shrimp species were observed in on-site habitat, sensitive fairy shrimp species were not observed. Therefore, the project would be consistent with MSHCP fairy shrimp survey and conservation directives. Suitable habitat was surveyed for all NEPSA 3 plant species. These species were not observed on site, therefore the project would not conflict

with MSHCP narrow endemic survey and conservation requirements. Two sensitive plant species, Coulter's goldfields (seven individuals) and smooth tarplant (approximately 170 individuals), were observed within the proposed impact area. Coulter's goldfields and smooth tarplant are covered species under the MSHCP but are not considered narrow endemic species by the MSHCP plan. These plants would be directly impacted by the proposed project. Impacts to these species would not be considered significant; the loss of 170 individuals of smooth tarplant and seven individuals of Coulter's goldfields are relatively small impacts to these species, which are fairly well distributed throughout the MSHCP plan area. In addition, these species are not MSHCP narrow endemic plants, and impacts to these species on the Villages of San Jacinto Project Site do not require any project-specific conservation measures such as salvaging for transplantation on another site. Because these species are covered under the plan, avoidance or impact minimization measures such as transplantation or seed salvaging is not necessary.

One pair of burrowing owls was observed on site. The project's impacts to these species are covered in accordance with the Species Conservation Objectives for the burrowing owl listed in the MSHCP. The project site does not support long-term conservation value for burrowing owl because of limited occupation of the species on the site. That said, in order to comply with the specific Burrowing Owl Survey Area provisions of the MSHCP, passive relocation to avoid direct impacts to known individuals will be required. In order to comply with MSHCP Burrowing Owl requirements, mitigation is provided. (see *Section 5.4.5*, *Mitigation Measures*, Mitigation Measure 5.4-b).

**Adjacent MSHCP Lands**

The Villages of San Jacinto Project is directly east of Criteria Cells 2775 and 2878. Although no development or establishment of MSHCP conservation areas has occurred as of yet in these criteria cells, some level of conservation may occur in the easternmost portions of the cells, directly adjacent to the Villages of San Jacinto Project site. Depending on proximity of these MSHCP conservation lands to the Villages of San Jacinto Project site, some level of edge effects on the conservation area may occur. Section 6.1.4 of the MSHCP, Guidelines Pertaining to the Urban/Wildlands Interface, addresses the indirect effects associated with locating development in proximity to the MSHCP conservation area and discusses measures to minimize these indirect effects. Several types of potential indirect effects on adjacent MSHCP conservation areas are discussed: drainage, toxics, lighting, noise, and exotic species.

***Drainage***

MSHCP requires that proposed developments in proximity to the MSHCP conservation area shall incorporate measures required through the NPDES requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP conservation area is not altered in an adverse way. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP conservation area. Stormwater systems shall

be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP conservation area.

The Villages of San Jacinto Project contains an extensive system of drainage basins, greenbelts, and detention basins/lakes engineered to provide for treatment of surface runoff prior to leaving the site. In addition, a SWPPP addressing construction-related and post-construction related erosion and runoff issues will be prepared and implemented (see *Section 5.8*, *Water Quality and Hydrology*). Therefore, indirect impacts on potential adjacent MSHCP conservation area lands due to drainage of harmful elements are not anticipated.

***Toxics***

Land uses proposed in proximity to the MSHCP conservation area that use chemical bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, habitat, or water quality are required to incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP conservation area. Although chemical bioproducts such as manure are not anticipated to be used on the Villages of San Jacinto Project site, project design measures and implementation of the SWPPP as discussed above would also prevent discharge of potential toxics into any adjacent MSHCP conservation areas. Therefore, indirect impacts on potential adjacent MSHCP conservation area lands due to toxic materials on the Villages of San Jacinto Project site are not anticipated.

***Lighting***

Due to the land uses proposed by the project, an increase in night lighting is anticipated. In order to avoid potential indirect impacts related to night lighting, mitigation is provided (see *Section 5.4.5*, *Mitigation Measures*, Mitigation Measure 5.4-c).

***Noise***

The MSHCP requires that "proposed noise-generating land uses affecting the MSHCP conservation area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources." For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards. Since the proposed land uses on a portion of the project site would be located adjacent to offsite MSHCP criteria cells include residential, school, park, and commercial/mixed use, noise is not expected to exceed residential noise standards (see *Section 5.11*, *Noise*). Therefore, impacts on potential adjacent MSHCP conservation lands due to increased noise are not anticipated.

***Invasives***

Due to the project's location adjacent to land that could potentially be conserved through the MSHCP Plan, potential indirect impacts related to invasive species may occur. In order to avoid potential impacts, mitigation is provided (see *Section 5.4.5*, *Mitigation Measures*, Mitigation Measure 5.4-d).

Indirect impacts to adjacent vegetation communities primarily would result from adverse "edge effects" as cited above. For the proposed project, the potential indirect impacts resulting from construction activities include dust, noise, and general human presence that may temporarily (or in the case of general human presence, permanently) disrupt species and habitat vitality and lead to construction-related soil erosion and runoff. However, all project grading will be subject to the typical restrictions (e.g., Best Management Practices) and requirements that address erosion and runoff, including the federal Clean Water Act, NPDES, and preparation of a SWPPP. In addition, as the site is surrounded by agriculture and an EMWD water reclamation facility, impacts to sensitive vegetation types adjacent to the project site are highly unlikely. See *Section 5.8*, *Water Quality and Hydrology*.

***Non-MSHCP Covered Species***

The June 17, 2003, Final MSHCP EIR/EIS analyzed other, non-covered species considered to be sensitive in the western Riverside County area. This EIR determined that other species which were not covered under the plan, would not be significantly affected by adoption of the plan. Therefore, any non-covered species in the MSHCP would not be considered significant.

## 5.4.5 Mitigation Measures

**Project Specific Mitigation Measures**

**5.4-a** Mitigation for impacts to jurisdictional wetlands and non-wetlands waters as required by RWQCB and CDFG, will consist of: (1) off-site creation, (2) a combination of off-site creation and enhancement of wetlands of equal or higher habitat quality, or (3) purchase of wetlands mitigation credits in an approved mitigation bank. Because wetlands/waters on the Villages of San Jacinto project site are isolated, of low overall quality (contain large quantities of non-native species), and are surrounded by agricultural lands, they do not provide high quality habitat for riparian-dependant wildlife species, therefore mitigation onsite would not result in equal or greater wetland habitat value. Mitigation for on-site wetlands/waters impacts would be a biologically equivalent or superior alternative to avoidance of these impacts. The above not withstanding, wetlands areas created, enhanced, or preserved through the project's wetlands mitigation plan would be connected to other wetlands/riparian/riverine areas and would provide overall biological value to the peregrine falcon and other sensitive wildlife and plant species. Wetland

mitigation ratios are based on past experience developing appropriate mitigation for impacts to similar wetland and/or Waters of the US.

***Herbaceous Wetlands, Open Water, Freshwater Marsh and Intermittent Stream Channel***

Mitigation for impacts to 4.22 acres of open water, 0.23 acre of freshwater marsh, 0.21 acre of herbaceous wetlands, and 0.01 acre of intermittent unvegetated stream channel would be accomplished through the creation or purchase of wetlands mitigation credits from an approved mitigation bank at a 1:1 ratio (i.e., 4.67 acres total) (*see Table 5.4-5*, *Mitigation Requirements for Impacts to Sensitive Vegetation Communities on the Villages of San Jacinto Project Study Area*).

***Cismontane Alkali Marsh***

Mitigation for impacts to 0.01 acre of cismontane alkali marsh would be accomplished through the creation, or a combination of creation and enhancement, of wetlands of equal or higher habitat quality at a 3:1 ratio (i.e., 0.03 acre). Mitigation can also be accomplished through the purchase of wetlands mitigation credits in an approved mitigation bank.

***Southern Willow Woodland***

Mitigation for impacts to 0.07 acre of southern willow woodland would be required at a ratio of 4:1 (i.e., 0.28 acre) (see *Section 5.4 in the EIR)*. Mitigation can be accomplished through the creation, or a combination of creation and enhancement of wetlands of equal or higher habitat quality. Mitigation can also be accomplished through the purchase of wetland mitigation credits in an approved mitigation bank.

**Table 5.4-5**
**Mitigation Requirements for Impacts to Sensitive Vegetation Communities on the Villages of San Jacinto Project Study Area**

| Plant Community/Land Cover Type | Impact Acreage | Mitigation Ratio | Required Mitigation Acreage |
|---|---|---|---|
| Open Water | 4.22 | 1:1 | 4.22 |
| Freshwater Marsh | 0.23 | 1:1 | 0.23 |
| Herbaceous Wetlands | 0.03 | 1:1 | 0.03 |
| Disturbed Herbaceous Wetlands | 0.18 | 1:1 | 0.18 |
| Intermittent Unvegetated Stream Channel | 0.01 | 1:1 | 0.01 |
| Cismontane Alkali Marsh | 0.01 | 3:1 | 0.03 |
| Southern Willow Woodland | 0.07 | 4:1 | 0.28 |
| **Total** | **4.75** | | **4.98** |

**5.4-b** Per MSHCP, because of the site does not support long term conservation value for burrowing owls, mitigation for impacts to this pair of owls can include passive or active relocation of owls following accepted protocols per the burrowing owl Species Account in Volume II-B of the MSHCP. In addition, MSHCP requires that:

> Pre-construction presence/absence surveys for burrowing owl within the survey area where suitable habitat is present will be conducted for all Covered Activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one way doors and collapse of burrows) will occur when owls are present outside the nesting season.

Because impacts to other sensitive wildlife species are covered under the MSHCP, no additional mitigation is proposed for impacts to these species. However, if construction activity is to take place during the breeding season (i.e., January through October), a one-time biological survey for nesting bird species would be conducted within the proposed impact area no earlier than 72 hours prior to construction. This survey is necessary to assure avoidance of impacts to nesting native birds (per the federal Migratory Bird Treaty Act). If nesting birds are detected within vegetation which is to be impacted, the nest location(s) will be protected. A buffer of 25 to 300 feet (specific width to be determined by the project biologist according to species of bird) around the nest will be avoided until fledging.

**5.4-c** MSHCP requires that night lighting shall be directed away from the MSHCP conservation area. Shielding will be incorporated by the project to ensure that ambient lighting in the MSHCP conservation area is not increased; therefore impacts on potential adjacent MSHCP conservation area lands due to increased lighting would be avoided.

**5.4-d** Table 6.2 of the MSHCP lists landscape plant species that shall be avoided for all portions of developments that are located adjacent to (within 1,000 feet) the MSHCP conservation areas. These plant species will be avoided on the areas of the Villages of San Jacinto project site adjacent to Criteria Cells 2775 and 2878 to the west of the project site. This would be achieved by including language in the residential sale documents to ensure that future property owners understand the types of plants that are restricted. Sample language for inclusion in sale documents would be submitted to the Planning Department for approval prior to approval of a certificate of occupancy. Therefore no indirect effects due to invasive species are anticipated.

### 5.4.6 Residual Impacts/Level of Significance after Mitigation

The proposed project is consistent with the Western Riverside County MSHCP which, aside from Clean Water Act requirements, fully mitigates for impacts to biological resources within western Riverside County. Implementation of suggested mitigation measures will ensure that project impacts are mitigated to a level below significance.

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# 5.5 CULTURAL RESOURCES

## 5.5.1 Introduction/Methodology

The following discussion focuses on the project's relationship to existing cultural resources, potential impacts to these resources and mitigation measures required to reduce these impacts to a level below significance. A residual impact statement has been included in order to characterize the level of significance of impacts after mitigation measures have been applied.

Preparation of this section involved summarizing information contained in the December 2004 Cultural Resources Study for the project site, prepared by ASM Affiliates. This section summarizes existing condition information, and uses the City of San Jacinto CEQA Significance Thresholds, specifically the cultural resource thresholds, to determine if cultural resource impacts were considered significant under CEQA. Mitigation measures were developed by cultural resource consultants, ASM Affiliates.

For reference purposes, the March 2005 Cultural Resources Study for the project is included as *Appendix D* to this EIR. Methods used in the preparation of this December 2004 report are contained therein.

## 5.5.2 Existing Conditions

**Cultural History**

The project area is located in a region intermediate between the desert regions to the east and the coastal region to the west. As such, it is likely to have been affected by population movements from both the coastal and desert regions. There is a significant body of research that was developed during the Eastside Reservoir Project (now referred to as Diamond Valley Lake) planning and environmental study which has helped to provide a cultural resource chronology baseline for the western slopes of the Santa Rosa and San Jacinto Mountains. These sources can be applied for the purposes of a general cultural history, especially for the Late Prehistoric period, assuming that Native American mobility and resource use practices extended across the environmental zones from the deserts to the mountains, as evident from ethnohistoric sources. These sources can not provide clarification on patterns of social organization, settlement, territoriality and seasonality as they relate to the deep past. It is likely that these patterns changed over time with changing environmental conditions, resident tribal affiliation and demographics.

The prehistoric chronology is divided into three periods, each characterized by differing patterns of socio-political organization, technology, resource focus and land use. They include the Paleoindian, Archaic and Late Prehistoric periods.

### *Paleoindian Period*

The Paleoindian period is represented by several archaeological complexes, including what are referred to as the related Fluted-Point and Western Pluvial Lakes traditions in the Mojave Desert, and the Paleo-Coastal tradition on the Pacific coastal plane. Among the best known archaeological complexes of tool types and settlement distributions in the desert is the Lake Mojave complex. On the coastal plane and Imperial Valley is the San Dieguito complex.

Small, highly mobile bands of hunters and gatherers depended on various game animals and an extensive rather than intensive pattern of plant exploitation. Sites tend to occur along former pluvial lakes and desert pavements, or along major stream channels. Milling tools are absent in the desert and rare on the coast, suggesting minimal use of hard seeds. The stone tool kit included foliate points or knives, long-stemmed points, lanceolate bifaces, discoidals, burins, crescents, flake and core scrapers, choppers, hammerstones, cores, drills, gravers and casual flake tools.

### *Archiac Period (8000–1500 B.P.)*

Over the long duration of the Archaic period, there was a gradual shift from small, highly mobile hunters and gatherers practicing a forager pattern to larger groups with a diversity of settlement types involving residential bases, temporary camps, strategically located cache sites and specialized resource collecting localities. This pattern reflects increasing intensification and a shift from foragers to collectors who practiced logistical patterns of mobility to accommodate seasonally available resources. Coincident with these changes were the diversification of food resources and new specialized technologies with which to exploit them. Projectile points reflect the shift to the use of atlatl and dart. Milling tools become ubiquitous and reflect increased exploitation of seeds and nuts. Larger residential base sites tend to occur at reliable water sources such as springs or tanks, with temporary camps near seasonal stream channels, extinct rivers, playas, high terraces above sinks and rockshelters.

Some later Archaic sites are known, however, from the Colorado Desert that indicate occupations along the boundary between the low desert and Peninsular Ranges and at more favored habitats at springs and tanks. The most substantial Colorado Desert site is Indian Hill Rockshelter in Anza-Borrego Desert State Park where 1.5 m of Archaic period deposits were excavated below a Late Prehistoric component. Most significant were 11 rock-lined cache pits and numerous hearths indicative of either a residential base or a temporary camp in which food and tool storage was integral to the hunting and gathering settlement-subsistence strategy. Also recovered were numerous Elk-eared dart points, flaked and milling stone tools and three inhumations, one of which was radiocarbon dated to 4070 "100 B.P." Two similar rock-lined pits were excavated at a small rockshelter in Tahquitz Canyon near Palm Springs. The small quantity

of artifacts at that site suggested strategically stored food and seed processing equipment of small mobile groups.

### *Late Historic Period (1500–100 B.P.)*

The major archaeologically visible technological and cultural innovations of this period are the introduction of pottery making by the paddle-and-anvil technique, bow-and-arrow technology around 1200 B.P., a shift from inhumation to cremation burial and the introduction of floodplain agriculture on the Colorado River about the same time, although exact dating of early domesticates is lacking. This was also the period when obsidian trade relations shifted from the Coso sources in the Mohave Desert to the Obsidian Butte source in the Salton Trough, when Lake Cahuilla did not submerge it. Ceramics and cultigens were introduced from either Mexico or through the Hohokam culture of the Gila River.

The ancestral Cahuilla were certainly exposed to domesticates at an early time, although opinions differ on when they adopted horticulture as a substantial part of their economy. It may have been a secondary pursuit for the production of specialty foods and fibers or gourds in the prehistoric period, although that has not been established archaeologically, as yet. Agricultural intensification and ditch irrigation techniques may not have occurred until after exposure to the mission system in historic times.

Bow-and-arrow technology, seed-beaters and other sophisticated hunting and gathering technology may also be related to the spread of Numic and Takic peoples from the southern Great Basin. Late Holocene flooding of Lake Cahuilla may have accelerated contacts between people of the ancestral Yumans of the Colorado River and the ancestors of the Cahuilla in the Coachella Valley and Peninsular Ranges. Such contacts through ceremonial and economic exchange may have resulted in a cultural dynamic that formed the Patayan Pattern and the resulting cultures of the ethnohistoric period. Long-range travel to special resource collecting zones and ceremonial locales, trading expeditions, and possibly some warfare are reflected by the numerous trail systems throughout the Colorado Desert. Pot drops, trailside shrines and other evidence of transitory activities are associated with these trails. Many of the pictographic, petroglyphs, and bedrock grinding surfaces in the Colorado Desert have also been associated with the Patayan pattern, although direct dating and cultural affiliation of such features is often difficult.

### *Ethnohistoric Period*

Cahuilla and related Takic ("Shoshonean") speakers of the Uto-Aztecan linguistic stock such as the Luiseño, Serrano, and Gabrieleño, migrated from the southern Great Basin into California to displace the groups who had been occupying those territories. Those displaced groups are presumed to be the ancestors of the modern Hokan speakers who now occupy the areas to the

south (Kumeyaay) and the north (the Chumash). The specific time, duration, and process of this migration remains unclear. Some estimates based on glottochronology and distribution of archaeological assemblages put the transition somewhere between 1000 to 2000 B.P., mostly likely around 1500 B.P. but possibly as early as 2500 B.P.

The first documented description of Cahuilla Indians is provided by the chroniclers of the Anza Expeditions, whose mission was to bring colonists from Sonora to coastal California Their first trip brought them through Cahuilla territory in March 1774, the second in December 1775. Their first substantive encounter was at San Gregorio in the Borrego Valley, where they found Cahuilla ("Jecuiche") in apparent co-residence with Kumeyaay ("Cajuenches"). They continued to encounter Cahuilla through lower Collins Valley, Coyote Canyon, Cahuilla Valley, Tripp Flats, on the western side of the San Jacinto Mountains. Their observations were few but included references to the early spring agave harvests, seed gathering with beater and basket, rabbit sticks, agave fiber capes, and bows and arrows. Although possibly Serrano, a rockshelter composed of boulders and covered with brush is also described. The Spaniards describe the Cahuilla as weary of their presence, suggesting little or no previous contact, and apparently undergoing food stress, especially during the winter of 1775–1776 visit. This might be expected if stored foods in fall had been depleted and prior to the agave harvest.

The distance of Cahuilla territory from the California missions, first founded in 1769, meant they were not recruited in as great numbers, nor assimilated as rapidly as the coastal tribes. The first to enter Mission San Gabriel, possibly as early as 1783, were western Cahuilla of the kupakik lineage at Warner's Hot Springs. Next were Cahuilla wives of Serrano in the Cajon Pass area in the 1796. Members of western Cahuilla villages first appear in baptism records of 1797. In addition, runaway neophytes, especially Serrano, sought refuge among the desert tribes, exposing more isolated Cahuilla to mission ideology and material culture, not to mention diseases. It is not until after 1810, however, that Cahuilla individuals begin to appear in more substantial numbers in the registers of Mission San Gabriel, San Juan Capistrano, and San Luis Rey.

The impact of the Spanish mission system and colonization was generally much less immediate and profound to the isolated desert and mountain groups than coastal groups. More direct influence was not felt until after the establishment of the San Bernardino estancia in 1819 and, thereafter, a cattle ranch at San Gorgonio. When the Romero Expedition passed though the area in 1823–1824, it was clear that non-missionized Cahuilla were used to seeing vaqueros, employed by the rancho, driving cattle through the area. Certainly by 1823–1824, they were not only familiar with Hispanic ways but were comfortable in dealing with them, as evidenced by their reaction to the members of the Romero Expedition. The expedition also reported that the Cahuilla at Toro were engaged in agricultural pursuits (growing corn and melons) and were already familiar with the use of horses and cattle. While the Cahuilla may have already had some

experience in cultigens from their contact with the Colorado River tribes, agriculture probably became a more important supplement to their hunting and gathering economy after their exposure to ditch irrigation methods at the missions. Irrigation ditches were certainly being constructed by the Cahuilla in the Palm Springs area by the 1840s, and possibly several decades earlier.

Cahuilla political leadership with regard to external relations became more centralized in the Spanish and Mexican periods as high ranking or charismatic clan leaders were recognized by Europeans as representing entire tribal areas (Strong 1929:149). Emerging as central figures were Juan Antonio among the Mountain Cahuilla and Chief Cabazon in the desert. As early as 1844, Juan Antonio led several mountain clans to the San Gorgonio pass area to provide security for San Bernardino Rancho. His group played a significant role during the Mexican-American War, siding with the Mexicans against the Luiseño who supported the American invasion.

The 1848 Treaty of Hidalgo with Mexico obligated the Americans to preserve the liberty and property of the inhabitants of California, an obligation that obviously failed. The U.S. government in 1850 appointed three commissioners to conduct negotiations with tribal leaders across California to settle all land rights issues. One of the 18 treaties to be drafted covered the Cahuilla, Serrano, and Luiseño and was signed in Temecula on January 5, 1852. The tribal leaders were promised supplies, food, and technical training in return for accepting specified reservation lands. But as was so often repeated throughout the west, local Euro-Americans lobbied against the treaty and Congress never ratified it. The effect was to further alienate the traditional territorial base of the Cahuilla as whites flooded into the area to claim the best farming and grazing lands. Outside the reservations, Cahuilla men and women sought wage work on ranches in the San Jacinto and Santa Rosa mountains, and on farms, orchards, and urban households in the Riverside and San Bernardino valleys. This greatly accelerated the process of acculturation and Cahuilla participation in the regional socio-economic milieu.

European diseases were probably beginning to take their toll on the Cahuilla in the early 1800s but became particularly severe in the 1860s. The most dramatic was the great smallpox epidemic of 1863 that killed Juan Antonio as well as many bearers of tribal wisdom and culture. Survivors of previously autonomous clans assembled into the remaining villages or founded new settlements in an accelerated process of population aggregation and cultural reorganization. This process continued through the following decades. Isolated canyons now became places of refuge from disease and from contacts with Euro-Americans in general. Many previously occupied areas were abandoned in the 1860s and 1870s as residential bases but were still used for hunting and gathering into the twentieth century.

The Cahuilla land base was substantially reduced in the 1860s and 1870s as the federal government ceded every other section within ten miles of the new transcontinental railroad to the

railroad companies. Sections 16 and 36 of every township were also removed from federal control as a school tax base. Any de facto control of larger territorial bases was completely eliminated in 1876 when President Grant by Executive Order set aside small reservations for all groups classified as "Mission Indians." This included the sections or parcels in which they had aggregated in the previous decades and in which they had made improvements for farming, etc. The following year, another Executive Order by President Hayes set aside every even numbered section and certain other unsurveyed portions of townships for Indian reservations. The result was a checkerboard of Indian-controlled land, encompassing 48 sections, spread across the eastern edge of the Santa Rosa and San Jacinto mountains and the Coachella Valley. With various additions and withdrawals over time, this has remained the permanent home of the Cahuilla to the present.

As traditional lifeways became more difficult to pursue, the Cahuilla adapted to their new geographical and political environment by taking jobs in American ranches, towns, and cities. The 1860s through 1880s was a time of increased acculturation as new technologies, material goods, and practices were incorporated into the traditional lifeways of the reservation. Traditional ceremonial practices and beliefs continue along side Catholic and Protestant beliefs for many Cahuilla. Ceremonial houses still existed through the 1950s, 1960s, and early 1970s and many cultural traditions remain part of westernized lifestyles. The Cahuilla retain an acute interest in their cultural heritage and the cultural resources of their traditional territories.

**Record Search Results**

One historic resource was identified within the project area. The site is a bungalow style home located in the south-central portion of the project area adjacent to other existing buildings. The house was first recorded in 1982 by Laura Swift of the Riverside County Historical Commission.

In addition to onsite resources, five previously identified resources were identified within one mile of the site. Two of the resources are historic structures associated with farming in the area. One resource is the former location of historic structures and a Mission-era adobe rancho built around 1820. Another resource consists of the Colorado Aqueduct. The Aqueduct was built from 1933 to 1928 to transport water from the Colorado River to the Los Angeles Basin. One resource is the location of a historic event, the landing site of a record-setting trans-polar flight. This occurred on July 14, 1937, when a crew of three Russians landed their ANT-25 plane in agricultural fields after low fuel and fog forced them to abandon an attempted landing at San Diego. The 6,295-mile flight set a distance record and was only the second to cross the North Pole. The flight began in Moscow and lasted 62 hours, 2 minutes.

## Site Survey Results

The site survey resulted the discovery of two isolated prehistoric artifacts. One previously recorded historic structure also exists within the project area. These resources include:

### *Historic Structure*

The historic structure is a single-family home first recorded in 1981 by Laura Swift of the Riverside County Historical Commission. Swift estimated that it was built around 1926. However, a structure appears at the location on 1901 30-minute quadrangle maps. It is possible that the current home replaced an earlier structure. Evidence of such a replacement was not noted during the field survey.

The house is a front-gabled craftsman-style bungalow with a partial width front porch. The porch is also front gabled and both porch and house gable have triangular slatted vents under the gables. The front porch is enclosed by a low wall and rounded pilasters support the porch roof. The roof has widely overhanging eaves with exposed beams and triangular knee braces. The windows are all wood-framed double hung sashes with wooding casing.

The house has been abandoned since first recorded and is no longer maintained. It lies directly on an active fault (Casa Loma Fault) and the northeast corner has subsided 2-4 inches producing cracks on interior walls. All kitchen and bathroom cabinets, facilities and appliances were replaced, probably in the 1970s. Minor remodeling to interior spaces and partitions has also occurred. The north half of the attic was converted into a small bedroom loft with modern faux wood paneling. A small storage cellar is also located under the north half of the structure and is accessible by a stairwell in the kitchen. The unusual arrangement of windows on the north face of the house suggests other alterations may have occurred. Based on photos of the house taken during the original site survey (November 2004), the structure has further deteriorated with most of the windows being broken out and being marked with extensive graffiti.

One outbuilding which probably served as a tractor shed or garage was noted in the original field survey, but is no longer present at the site.

### *ISO-1 (Isolated Bifacial Mano)*

An isolated bifacial mano (hand-held milling stone) was found near the crest of a subtle escarpment formed by an active fault that crosses the San Jacinto Valley. The floodplain of the San Jacinto River lies north of the escarpment. Otherwise, the area would have been a featureless alluvial plain in prehistory. The mano measures 10×8.2×5.7 cm and is made of coarse-grained granite. Both ends have been battered either to shape the mano into a desirable form or by being used as a pestle.

*ISO-2 (Isolated Bifacial Mano)*

An isolated bifacial mano (hand-held milling stone) was discovered 36 m south of ISO-1. The mano measures 8.5 cm in diameter and is 5 cm thick. It is made of hard, semi-crystaline quartz. About 70% of the circumference has been battered, probably to shape the object.

Despite good ground visibility and extensive searching, no additional artifacts were found in the vicinity of the two manos.

## 5.5.3 Significance Thresholds

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on cultural resources if it would:

1. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 10564.5?
3. Disturb any human remains, including those interred outside of formal cemeteries?

NOTE: Due to the length of CEQA Section 15064.5, it is not repeated verbatim. Please refer to www.ceres.ca.gov for a description of CEQA Section 15064.5.

## 5.5.4 Impacts

The following discussion outlines potential impacts for the proposed project.

***Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?***

While the historic structure has many features of a Craftsman-style bungalow, it has been substantially altered. All cabinets and plumbing fixtures have been destroyed. Interior walls have been altered by graffiti and many parts of the walls and ceiling have been punctured with holes that are beyond repair. The original wooden siding has been replaced by unusual textured pink stucco. In addition, a corner picture window has been inserted at the rear of the house.

The importance of a historic structure is related to survival of characteristics that existed during the period of significance. Historical resources must retain enough of their character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association. The bungalow has been altered to the extent

that it has lost integrity of design, materials, workmanship and feeling. In fact, it is now barely identifiable as a Craftsman-style bungalow. It is unlikely that the bungalow retains sufficient integrity to be eligible for listing on the California Register of Historical Resources. Therefore, a less than significant impact to this formerly historic resource would occur.

***Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 10564.5?***

No significant archaeological resources were identified within the project by either a records search or survey. One previously recorded historic structure and two newly identified isolated prehistoric artifacts were identified by the survey. Five previously recorded sites are located within one mile of the project. Due to the presence of these resources and the fact that the project is located within an alluvial setting, potentially significant archaeological resources could be unearthed during site grading. In order to reduce this potentially significant impact from occurring, mitigation is provided (see *Section 5.5.5, Mitigation Measures, Mitigation Measure 5.5-a*).

***Would the project disturb any human remains, including those interred outside of formal cemeteries?***

There are no known human remains within the site or vicinity. Additionally, the Native American Heritage Commission (NAHC) conducted a search of their Sacred Lands File, but found that Native American cultural resources were not present within one-half mile of the project area (See Appendix B). However, in the unlikely event human remains are found during construction activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur in the immediate area until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC who will then contact the appropriate tribal representative. Should local Native American groups find that the site supports potential buried ancestral remains, the Soboba Consulting Services Agreement allows for Native American monitoring during construction. Consequently, the project's adherence with the State Health and Safety, Public Resources Codes and Soboba Consulting Services Agreement shall ensure any potential impacts would be less than significant.

## 5.5.5 Mitigation Measures

**5.5-a** In order to reduce the potential for disturbance or damage to unknown archaeological resources, monitoring of mass grading activities of the site by a qualified archaeologist is required. Should the monitor observe disturbance of resources that could be important

archaeological artifacts, the monitor shall have the power to stop grading in the immediate area of discovery in order to allow for a resource study and recovery/curation effort (if necessary) to occur.

## 5.5.6 Residual Impacts/Level of Significance after Mitigation

Due to the lack of significant historic resources present, significant impacts would not occur. In order to reduce potentially significant impacts to unknown archaeological resources, mitigation is provided and would reduce any potentially significant impacts to a level below significance.

# 5.6 GEOLOGY AND SOILS

## 5.6.1 Introduction/Methodology

This section consists of a summary of existing geological conditions, anticipated impacts related to these conditions and mitigation measures required to reduce these impacts to a level below significance. A residual impact statement has been included to characterize the level of significance after applied mitigation measures.

A fault investigation for the project was performed by Leighton and Associates and their preliminary findings are presented in their report dated March 31, 2004. In order to evaluate the potential for surface fault rupture in the existing onsite Earthquake Fault Hazard Zone, ten exploratory fault trenches were excavated over a period of seven months. Findings were coordinated and reviewed with the County of Riverside Geologist and previous investigations completed on adjacent sites were also reviewed. In response to questions and comments received from the County Geologist, Leighton also prepared three additional investigations (reports dated August 31, 2005, June 30, 2006, and October 31, 2006). These investigations are included in *Appendix E* of this EIR and summarized in this section. Leighton and Associates conducted a preliminary geotechnical investigation which is summarized in the February 28, 2005, Preliminary Geotechnical Investigation. This second report is included as *Appendix F* to this EIR.

## 5.6.2 Existing Conditions

**Subsurface Soil and Rock Conditions**

The earth materials encountered throughout the site consist of undocumented fill, topsoil and alluvium. These units are described in the following sections in order of increasing age.

***Undocumented Fill***

Undocumented fills are related to grading activities to construct onsite access roads, perimeter unimproved dirt roads, site agricultural leveling and exploratory excavations (fault trenches). Other undocumented fills exist associated with limited water retention berms to collect seasonal runoff and the livestock run-off retention basin. All undocumented fills are considered unsuitable for support of additional fill or structures or other planned improvements in their present condition.

***Topsoil***

The majority of the site is composed of topsoil that is located on the upper 10 to 24 inches of the ground surface. Uniform in composition and thickness, this material general consists of a light

yellow-brown to yellow brown, silty sand, silty clay to sandy clay with scattered gravel sized clasts.

### *Alluvium (Qal)*

Alluvial soil was encountered in all areas of the site and was deposited as part of a complex fluvial/channel dispositional environment. This alluvium consists of yellow-brown to medium gray, dry to damp, silty, very fine to fine sand, with interbedded lenses of silt. Channel deposits of homogeneous, friable, dry, medium to coarse sand with interbedded lenses and lamination of gray, loose to medium dense, dry to damp, very fine to fine sand were also observed. There are abundant in-filled animal burrows containing finer silt and sands.

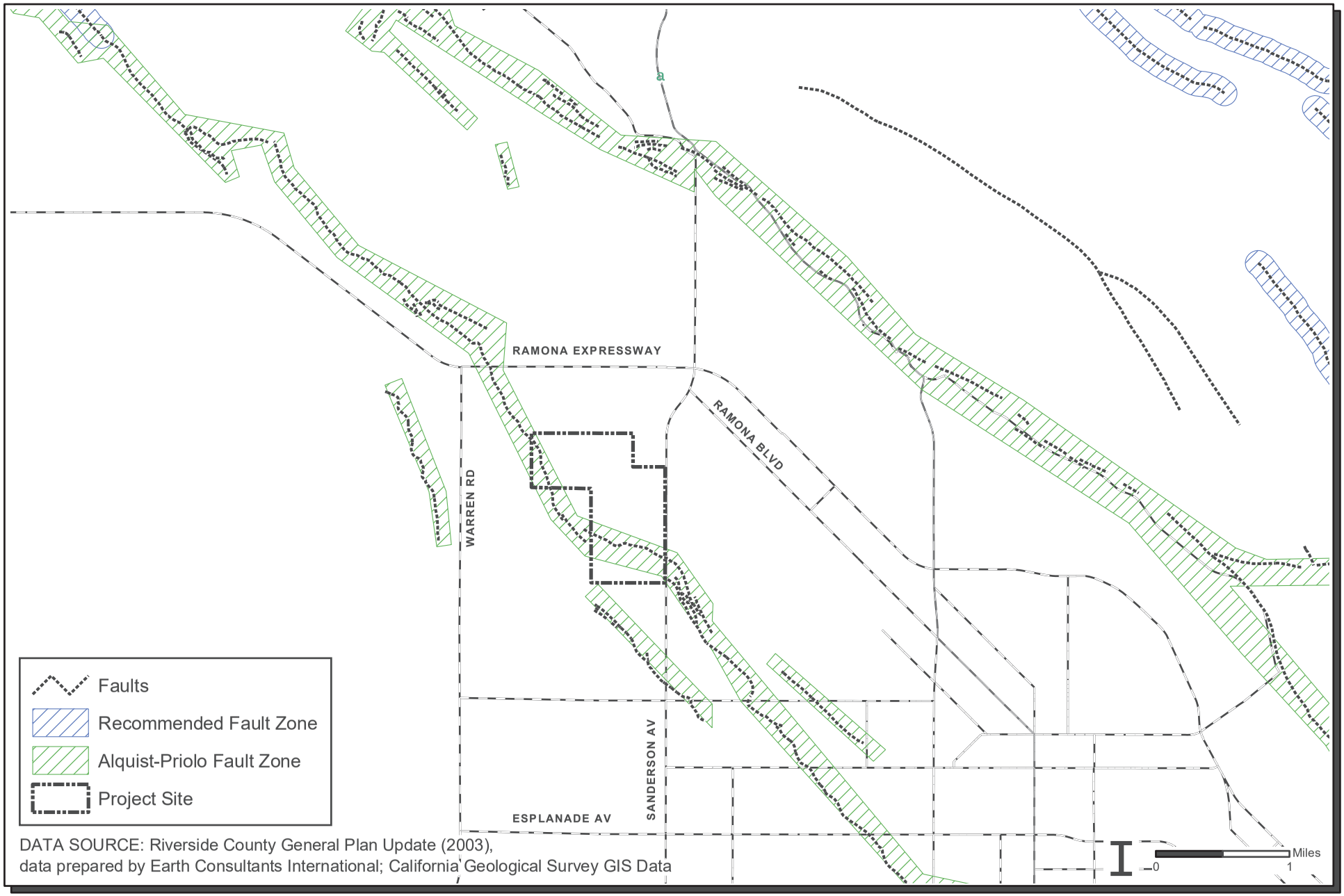
### Subsurface Water Conditions

Perched groundwater was encountered at multiple depths below the surface, as shallow as 5 feet and as deep as 22 feet. Regional groundwater is anticipated below 150 feet and likely, as much as 200 feet below grade. However, groundwater can be expected to fluctuate seasonally within the subject site and during periods of heavy regional rainfall, or groundwater withdrawal by the local residences, agricultural developments and water utility companies. During drought conditions, groundwater levels could temporarily deepen significantly.

### Faulting and Seismicity

Based on the commonly accepted definition provided by the California Geological Survey, an "active fault" is a fault that has had surface displacement within Holocene time (about the last 11,000 years) and a "potentially active fault" is a fault considered to have had surface displacement during Quaternary time (last 1,600,000 years). These definitions are used in delineating Earthquake Fault Zones as mandated by the Alquist-Priolo Geologic Hazards Zones Act (California Public Resources Code Sections 2621–2630). The intent of this act is to prohibit the location of structures on the traces of active faults, thereby mitigating potential damage due to fault surface rupture.

The project site is located within seismically active southern California. The subject site contains an Earthquake Fault Zone (as created by the Alquist-Priolo Earthquake Fault Zone Act). According to the Leighton & Associates Fault Investigation, the active San Jacinto-Casa Loma fault transverses the northwestern and southern portions of the project site. Fault lineaments are shown by geomorphic evidence, aerial photography, and in the San Jacinto 7.5 minute Quadrangle of the Alquist-Priolo Earthquake Fault Map (see *Figure 5.6-1*, *Faults and Fault Zones*).

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In addition to the on-site Casa Loma, several other active faults are located in the project area. The San Jacinto Valley Segment of the San Jacinto Fault is located approximately 0.8 mile northwest of the site, the San Jacinto-Anza Fault is located 7.2 miles to the southeast, and San Andres Fault lies 15.7 miles to the northeast. *Figure 5.6-1* summarizes regional faults within the area. The San Jacinto Fault Zone is estimated to accommodate a plate slip of approximately 12–20 millimeters per year. Since the mid-18th century, at least six major earthquakes have occurred along the San Jacinto Fault Zone, ranging from 6.2Mw to 7.2Mw. Of all the fault systems in California, the San Jacinto and San Andreas Fault complexes are among the most active. The U.S.G.S. measures hundreds of minor earthquakes annually within the San Jacinto Valley. Most of these earthquakes are in the bedrock underlying the alluvium unit at depths of 3 to 5 miles.

**Subsidence/Ground Rupture**

Ground rupture is generally considered most likely to occur along pre-existing active faults. As such, the potential for site ground rupture during a seismic event is considered moderate to high. Based on historic occurrence data, ground rupture is believed to occur at normal recurrence intervals which may not provide adequate time for erosion to conceal fault features. Subsidence/rupturing of a portion of the San Jacinto graben has occurred at an apparent average rate of between 0.125 and 0.5 inch per year for at least the past 15,000 to 40,000 years (see *Figure 5.6-2*, *Subsidence Hazard Areas*).

**Liquefaction**

Liquefaction occurs when strong seismic activity creates excess pore pressures in cohensionless soils. Research and historical data indicate that loose granular soils or soils of low plasticity below a near surface groundwater table are most susceptible to liquefaction. Liquefaction is characterized by a loss of shear strength in the affected soil layers, thereby causing the soil to flow as a viscous liquid. This effect may be manifested at the ground surface by settlement and/or sand boils. In order for the potential effects of liquefaction to be manifested at the ground surface, the soils generally have to be granular or of low plasticity, loose to medium dense, saturated relatively near the ground surface and must be subjected to a sufficient magnitude and duration of ground shaking. Increased soil mobility can lead to lateral spreading, consolidation and settlement of loose sediments, ground oscillation, flow failure, loss of bearing strength, ground fissuring and other damaging formations. As depicted on *Figure 5.6-3*, *Liquefaction Hazard Areas*, the proposed project is located in an area with moderate potential for liquefaction. Upon further analysis, the Leighton Associates Report identifies the northern one-third to one half of the project site as having a potentially high possibility for liquefaction to occur given current site conditions.

**Landslide, Mudflow or Other Erosion Hazards**

Landslides are anticipated when severe weather events weaken certain agglomerations of hillside soils. As a result, unstable soil slips downhill. The proposed site is relatively flat with site elevations varying from approximately 1,457 feet above mean sea level along the northwestern boundary to an elevation of approximately 1,493 feet near the southeast corner. No previous landslides were identified during the investigation (see *Figure 5.6-4*, *Landslide Hazard Areas*).

Similar to landslides, mudflows occur during severe weather events in or adjacent to mountainous terrain. Large boulders and sediment are mobilized as a result of a sudden onslaught of water. This hazard is prone to occur in areas affected by fire that are relatively void of vegetation. The project is located in the San Jacinto River Valley, away from mountainous terrain. This hazard is expected to be minimal at this project site.

Any exposed soil surface may be susceptible to wind or water erosion. There are no naturally occurring drainages on site, therefore the likelihood of water-based erosion is unlikely.

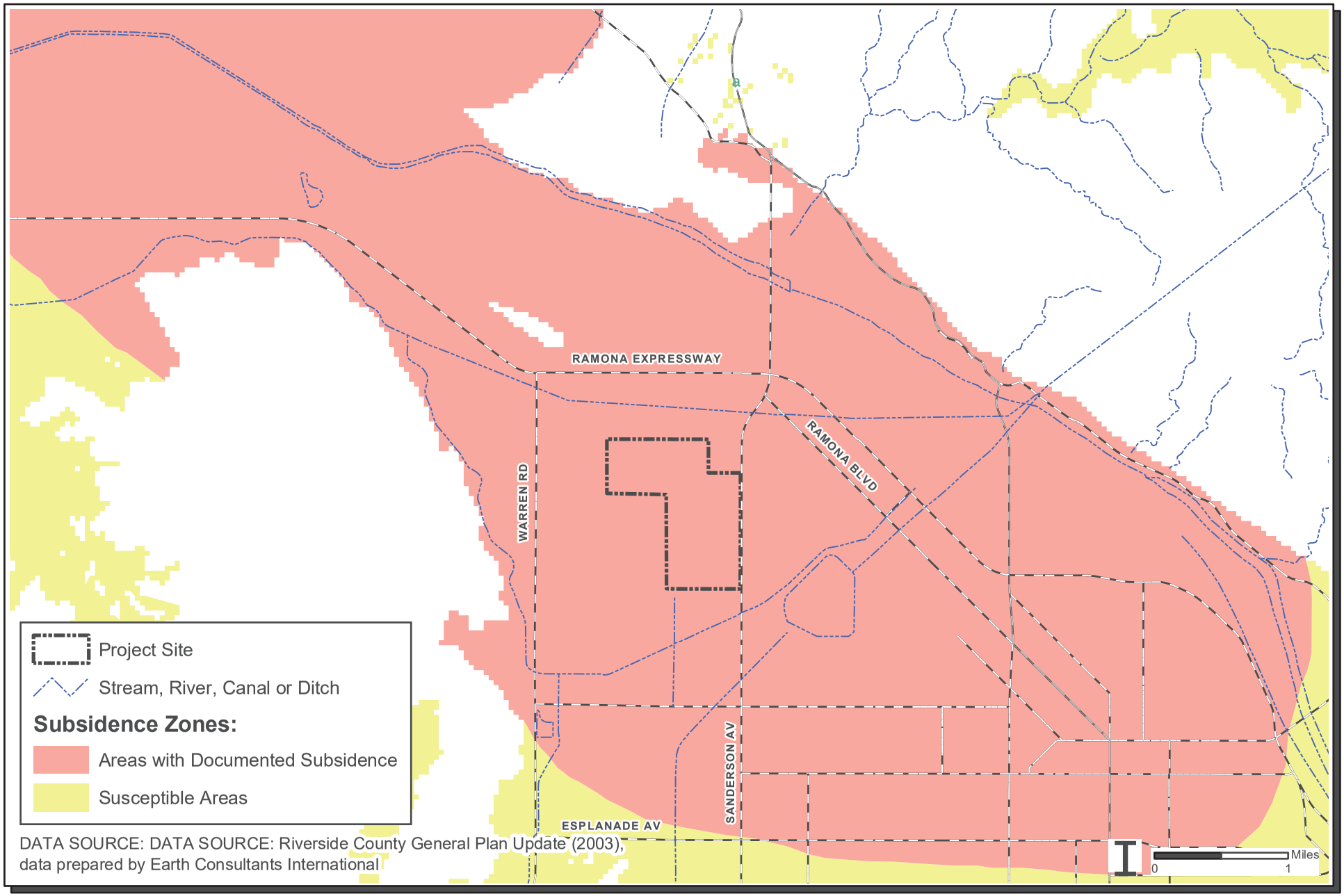
**Seiches and Tsunamis**

A tsunami is a sea wave generated by submarine earthquakes, landslides or volcanic activity, which displaces a relatively large volume of water in a very short period of time. Seiches are defined as oscillations in a semi-confined body of water due to seismic shaking. The proposed project site is not located near a significant body of water or the Pacific Ocean. Therefore, these hazards are not anticipated at the project site.

## 5.6.3 Significance Thresholds

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on geology and soils if it:

1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
    a. Rupture of a known earthquake fault, as delineated in the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault
    b. Strong seismic ground shaking
    c. Seismic-related ground failure, including liquefaction
    d. Landslides.

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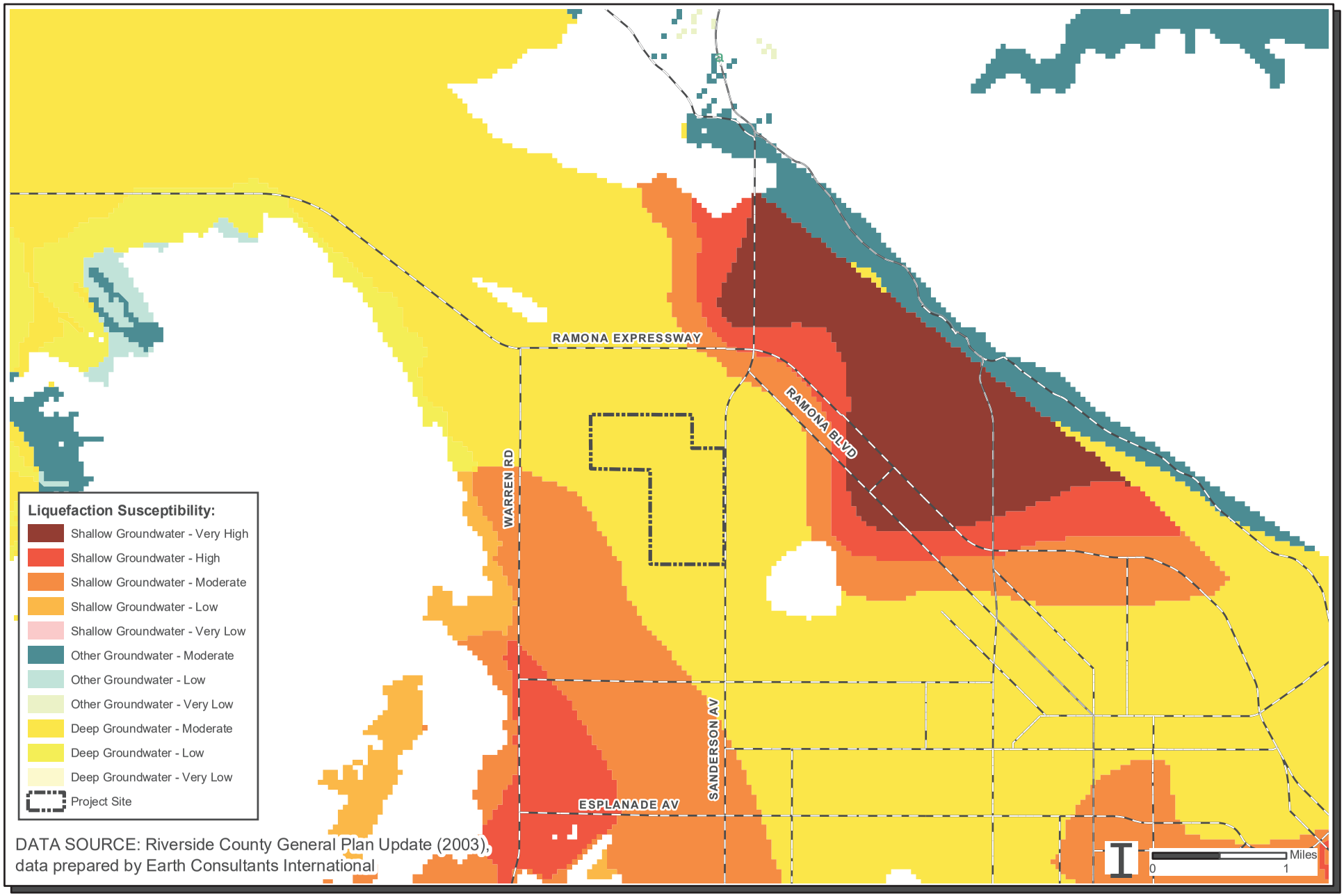


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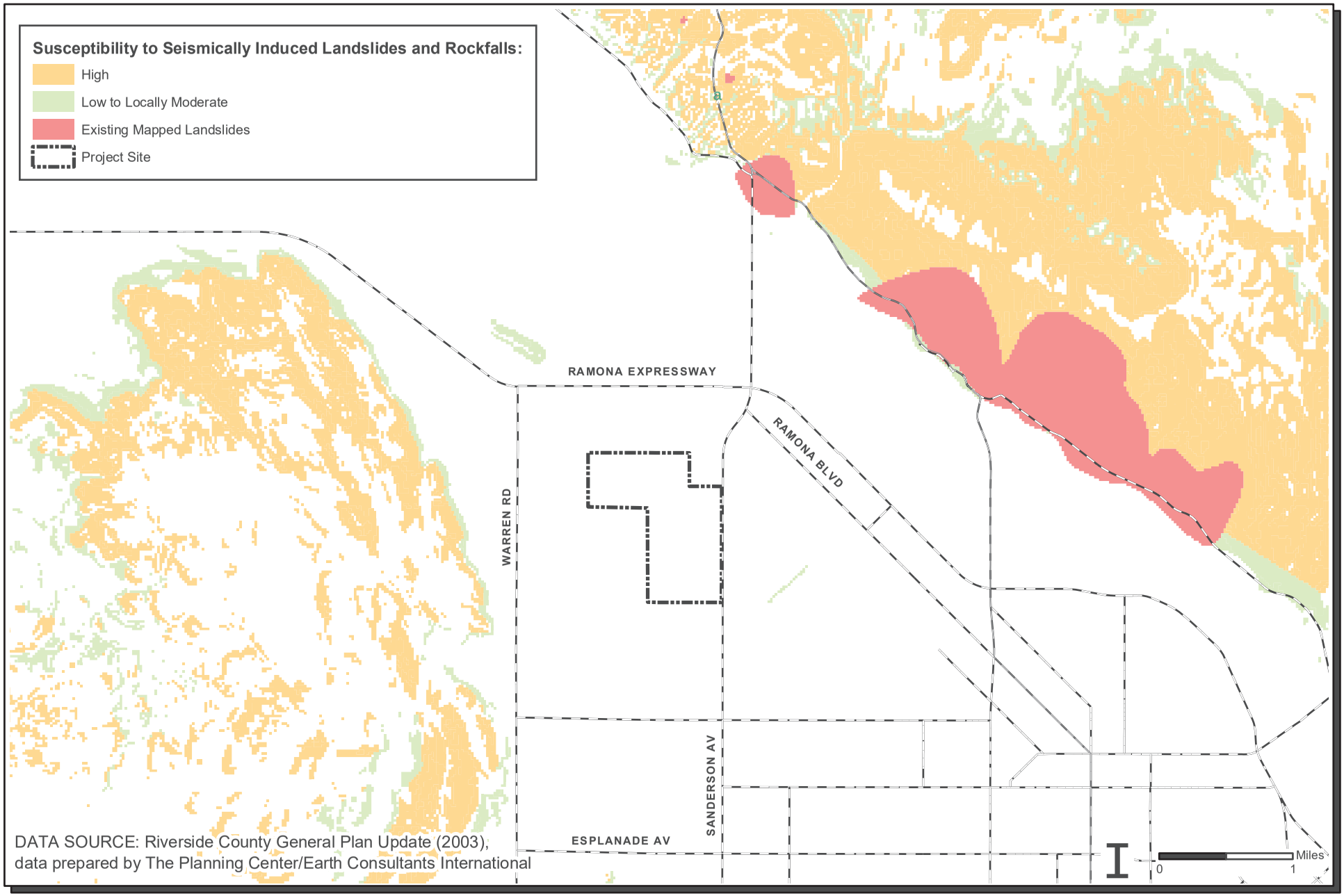


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2. Result in substantial soil erosion or the loss of topsoil.

3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

## 5.6.4 Impacts

***Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

Potential site ground rupture, as determined by the Leighton and Associates Fault Investigation, is considered moderate to high. Ground rupture due to onsite faults could potentially affect existing and future facilities (such as gas, electrical, water mains, etc.) that traverse fault zones on the site. In order to mitigate for potential impacts associated with seismic ground shaking, mitigation is provided (see *Section 5.6.5*, *Mitigation Measures*, *Mitigation Measure 5.6-c*).

***Strong seismic ground shaking?***

The project site is located in seismically active southern California with numerous fault systems in the region. Structures will be designed in accordance with the values and parameters given within the Universal Building Code (UBC) as required by state law. With the incorporation of UBC seismic design parameters in construction of structures on site, the impacts associated with exposure of people to geological hazards is less than significant. These measures are a standard part of the Building Permit process and additional mitigation measures are not required.

***Seismic-related ground failure, including liquefaction?***

Liquefaction potential analyses and earthquake-induced settlement calculations were performed utilizing the computer program LiquefyPro. Considering the potential ground motions resulting from the design basis ground motion (0.9g) and a maximum moment magnitude event for the

San Jacinto Fault (6.9Mw), the program follows the latest study procedures. Leighton used the boring data, CPT data and groundwater data (perched groundwater table ranging from 5 to 22 feet) as assumptions in the model.

Based on the above-described model, the relatively loose saturated alluvial deposits onsite are considered susceptible to liquefaction hazards. Liquefaction occurs when loose material becomes mobile during a seismic event. In order to compensate for hazards associated with liquefaction, mitigation is provided (see *Section 5.6.5*, *Mitigation Measures*, Mitigation Measures 5.6-b and 5.6-e). With implementation of these measures, liquefaction potential for the project will be less than significant.

***Landslides?***

Due to the flat nature of the site and the existing topsoil and Quaternary-aged alluvium, the subject site is not prone to landslide hazards. That said, manufactured slopes that are planned for construction on the site would be susceptible to slope stability hazards. In order to prevent any significant impacts from occurring, mitigation is provided (see *Section 5.6.5, Mitigation Measures*, Mitigation Measure 5.6-f).

Slopes adjacent to severe flow direction changes may be susceptible to increased scour erosion and slope stability. In order to reduce this potential impact to a level below significance, mitigation is provided (see *Section 5.6.5, Mitigation Measures*, Mitigation Measure 5.6-g).

***Would the project result in substantial soil erosion or the loss of topsoil?***

Short-term erosion effects during the construction phase of the project would be minimized through implementation of the City of San Jacinto construction Best Management Practices (see *Section 5.8.5, Mitigation Measures*, Mitigation Measure 5.8-d)

***Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?***

The volume change of excavated onsite materials upon recompaction is expected to vary with materials, density, moisture content, location and intended compaction effort. This variance in material could potentially result in shrinkage, which would result in potential subsidence risk. In order to reduce potential impacts to a level below significant, mitigation is provided (see *Section 5.6.5*, *Mitigation Measures*, Mitigation Measure 5.6-d and 5.6-e).

Many portions of the site are characterized as having unsuitable near surface compressible soils not suitable for structural support. Location of a structure on an unstable geological unit or soil

would be a significant impact; thus, mitigation is provided (see Se*ction 5.6.5 Mitigation Measures,* 5.6-a).

***Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?***

Expansive soils are those with a significant amount of clay particles that have the ability to shrink or swell depending on water content. The Geotechnical Report indicated that based on limited laboratory testing and visual classification, onsite earth materials generally possess a very low to medium expansion potential; however, high to very high expansive silt and clay materials may be encountered locally during rough grading. Compliance with recommendations for ground preparation as outlined in the February 28, 2005, Leighton and Associates Geotechnical Investigation will reduce risk hazards associated with expansive soils to a less than significant level.

***Would the project have soils incapable of adequately supporting the use of septic tanksor alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?***

No septic tanks or alternative wastewater disposal systems are proposed as part of the project. As a result, no impact would result.

## 5.6.5 Mitigation Measures

**5.6-a** The on-site soils are suitable for reuse as compacted fill, provided they are relatively free of organic materials, debris and oversize materials. The optimum lift thickness to produce a uniformly compacted fill will depend on the type and size of compaction equipment used. In general, fill will be placed in uniform lifts not exceeding 8 inches in thickness. Fill soils will be placed and compacted to a minimum 92 percent relative compaction at a minimum of 2 percent above the optimum moisture content.

Fill slopes shall be overbuilt a minimum of 2 feet and trimmed back to the compacted core or rolled with a weighted sheepsfoot compaction roller as the fill slope height increases in maximum 4-foot increments. Placement and compaction of fill shall be performed in accordance with City grading ordinances and minimum compacted standard under the observation and testing of a qualified geotechnical engineer.

All loosely packed exploration trench backfill shall be removed and recompacted in accordance with project geotechnical guidelines. An engineering geologist shall be present to observe all excavations to confirm limits of faulting. If exposures differ from

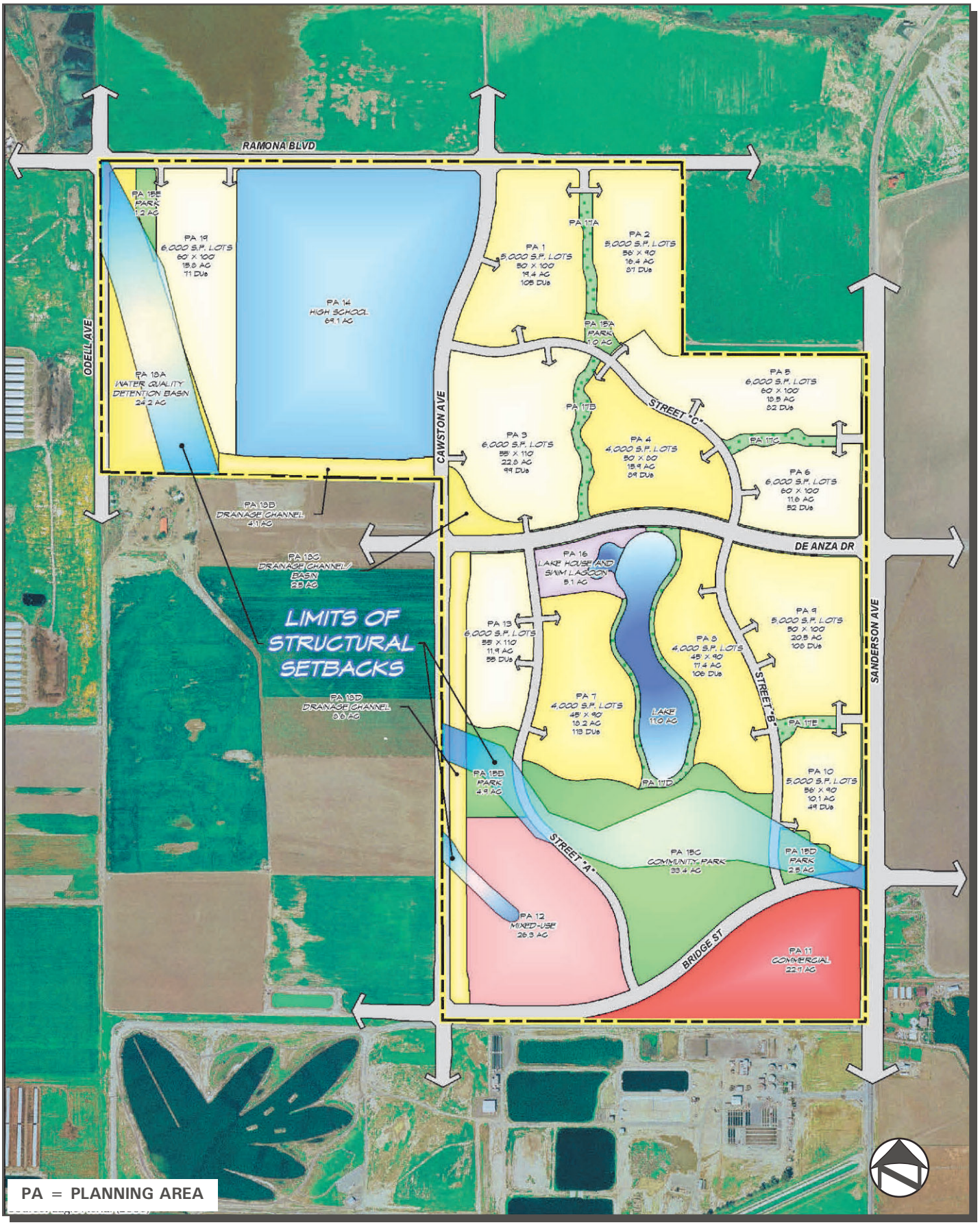
anticipated conditions, further investigations and/or additional structural setbacks can be required.

**5.6-b** To facilitate the grading operations, on-site irrigation water shall be reduced or ceased for a period of 3 to 6 months prior to the start of grading. Further, the contractor will pothole the upper 12 to 14 feet of soil prior to the start of grading operations to determine if shallow groundwater will affect the planned grading.

In localized areas where shallow groundwater conditions exist such that removals cannot be performed to the required depths or where deeper excavations (such as in the proposed "lake" areas) are proposed at or below the existing perched groundwater, methods of localized dewatering will be required including the use of well points and/or interceptor ditch methods. Alternative ground stabilization methods such as deep dynamic compaction shall be required. Deep dynamic compaction is a means of physically compacting the subsurface soils by repeatedly dropping a heavy weight (typically a large concrete block) to densify the underlying soils to a predetermined density. After proposed grading plans are developed, these areas shall be further reviewed by a qualified geotechnical engineer.

**5.6-c** A structural setback zone of 50 feet on either side of the encountered fault zone, and as much as 75 feet on the "down-block" side shall be observed for structures intended for human occupancy (2,000 hours/year). This preliminary setback zone will be refined as the grading concept is developed and possible additional site studies are performed. The Fault Location Map (Plate 2) within the Fault Investigation shows required preliminary structural setbacks. However, the final setback limits shall be determined during grading or future studies as the fault trace is exposed, identified and surveyed for lateral and vertical location. The setbacks shall be shown on all project plans.

To reduce the effects and magnitude of the earthquake-induced settlements, remedial grading shall occur. Following remedial grading, differential dynamic settlements are anticipated to be approximately 2 inches in a horizontal distance of 40 feet. Additional analysis will be performed by a qualified geotechnical specialist to further refine earthquake-induced settlement. Based on a review of the rough grading plans by a qualified geotechnical specialist, remedial grading requirements will be revised.




SPECIFIC MAP SOURCE: T&B PLANNING CONSULTANTS, May 2009

Villages of San Jacinto EIR

# Land Use Plan with Geotechnical Setback Recommendations

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To reduce the potential adverse secondary seismic effects, mitigation of compressible alluvial soils to support the planned development at areas such as free-face slopes ("green belt" detention basins, channels etc.), the project perimeter (where removals may be limited by property restraints) and planned lake areas will require additional geotechnical stability design by a qualified geotechnical engineer after project plans are developed.

**5.6-d** While it is difficult to determine the level of subsidence and shrinkage risk, site grading must include a balance area or ability to adjust import quantities to accommodate some variation. Relative compaction rates must be followed as they appear in the February 28, 2005, Leighton and Associates Technical Report. As stated in the February 28, 2005, Leighton Report, due to the agricultural discing of the surface soils, a subsidence value of 0.2 feet must be applied when evaluating earthwork volumes.

**5.6-e** To reduce the potential for liquefaction and earthquake-induced settlements at the site, the following guidelines will be implemented. For preliminary design purposes, a minimum removal and recompaction of 10 feet (as measured from finish grade) will be used in cut areas on that portion of the site designated as having a high potential for liquefaction (roughly the northern one third to one half of the site).

In cut areas outside the area designated as high potential for liquefaction, a minimum overexcavation of 5 feet below finish grade must be used. For areas designated as “fill” a minimum removal of 5 feet will be used, provided a minimum total thickness of 10 feet of properly compacted fill is maintained below the lowest adjacent finish grade (including lowest adjacent street elevation). The removal depths for the infrastructure roadways shall be a minimum 5 feet below pavement subgrade. These estimates are for preliminary design planning only and will be revised based on our review of rough grading plans. These preliminary estimates will be revised upon review of the proposed grading concept plan. These alluvial soils must be removed down to medium dense to dense, relatively non-porous alluvium material as determined by the geotechnical consultant. Undercuts will be made 1:1 next to existing roadways that will remain after grading. Cut slopes shall be replaced as properly compacted fill.

The excavated materials will be moisture conditioned or dried back, as appropriate, to achieve the required minimum relative compaction. Saturated soils may need to be dried back or mixed with drier on-site materials and shall be thoroughly mixed prior to fill placement. The resultant excavation will be filled and compacted in this lifts to a minimum 92 percent relative compaction at a minimum of 2 percent above the optimum moisture content. A minimum 90 percent relative compaction may be acceptable in the southern portion of the site. This will be determined during review of rough grading plans.

After completion of the required removal of unsuitable soils, the approved surface will be scarified, moisture conditioned as needed and compacted prior to placing fill. If subgrade conditions at the approved bottoms are wet and "pumping" near the required removal depth, the scarification and moisture conditioning will not be necessary. Stabilization measures where shallow groundwater conditions are expected at or near the required removal depth may include the use of a stabilization fabric and/or coarse gravel/graded rock and gravel. Where shallow groundwater conditions are present, alternative ground improvement guidelines shall be followed (see Mitigation Measure 5.5-b). Further evaluation of these specific areas will be necessary after draft grading plans are prepared.

**5.6-f** All slopes will be provided with appropriate surface drainage features and landscaped with drought-tolerant, slope-stabilizing vegetation as soon as possible after grading to reduce the potential for erosion. Berms will be provided at the top of fill slopes to direct water away from slope faces. Lot drainage shall be directed such that runoff on slope faces is minimized. Oversteepening of slopes must be avoided during fine grading and building construction. Although not anticipated, if seepage is encountered in slopes, special drainage features may be necessary.

**5.6-g** For slopes that are will be adjacent to ditches or other water conveyance features, proper protection including rip rap or other slope protection devices as designed by the project civil engineer would be required. Slope stability and the potential for scour shall be required in the design drainage alignment.

## 5.6.6 Residual Impacts/Level of Significance After Mitigation

The mitigation measures, which include further monitoring of onsite geotechnical risk as grading plans are finalized for a qualified geotechnical engineer, would reduce impacts related to geology and soils. All mitigating geotechnical features shall be designed/implemented pursuant to the Uniform Building Code and State of California seismic engineering standards. These mitigation measures will therefore reduce geotechnical hazards to less than significant levels.

# 5.7 PALEONTOLOGICAL RESOURCES

## 5.7.1 Introduction/Methodology

This section presents a discussion of paleontological resources that would be affected by the proposed project and alternative. Paleontological resources are the fossil or trace remains of past life forms, including both vertebrate and invertebrate species, as well as plants. Fossil remains such as bones, teeth, shells, leaves, etc. are found in the geologic deposits (formations) within which they were originally buried. The geologic composition of an area; therefore enables scientists to evaluate the potential for resources to occur, based on knowledge of resources that have been uncovered from similar geologic formations elsewhere.

Existing condition information is derived from the February 28, 2005, Leighton and Associates, Inc. Preliminary Geotechnical Investigation for the Villages of San Jacinto project. This report is included as *Appendix F* to this EIR. Methods utilized in the February 28, 2005, Leighton Report are contained therein. Paleontological sensitivity data was obtained from the 2003 Riverside County General Plan Update Multipurpose Open Space Element.

## 5.7.2 Existing Conditions

Sediments derived from the San Jacinto River have been deposited across the river valley. The sediment thickness is thought to be highly variable with a minimum thickness of 500+ feet in the southwest portion of the valley. Paleoeustuary silts and sands, Quaternary-aged terrace deposits and fanglomerates flank major abandoned drainage channels and the base of mountain slopes. Near the City of San Jacinto, a boring excavated northeast of the Casa-Loma Fault segment did not reach basement rocks to the depth explored of 1,430 feet. In general, seismic and gravity surveys indicate that approximately 6,500 feet to 7,900 feet of alluvial sediment overlie the basement bedrock in the valley.

As indicated on Figure OS-8 of the 2003 Riverside County General Plan Update Multipurpose Open Space Element, the project is located within an area characterized as having a high likelihood of supporting fossils (see *Figure 5.7-1, Paleontological Sensitivity*). The San Jacinto Valley is designated as "High B (Hb)" which means a resource's probability to occur is based on the occurrence of fossils at a specified depth below the surface. This category indicates that fossils are likely to be encountered at or below four feet of depth and may be impacted during excavation by construction activities (County of Riverside, 2003, pg. OS-36 to OS-37, Figure OS-8).

## 5.7.3 Significance Criteria

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on paleontological resources if it:

1. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

## 5.7.4 Impacts

***Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

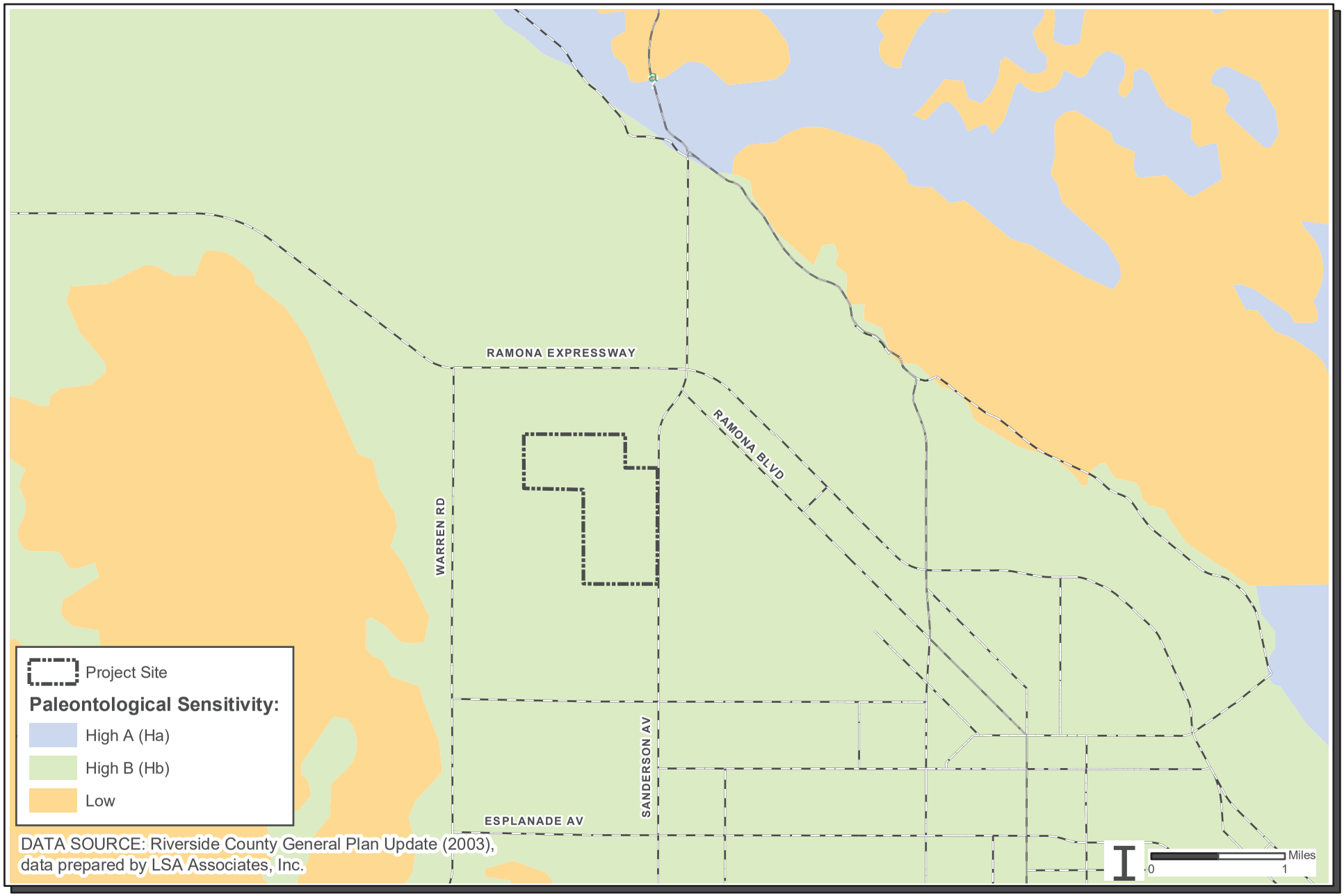
Since the proposed project lies within a geologic formation with high resource bearing potential and the project would necessitate recompaction of potential fossil bearing alluvium, impacts to paleontological resources are considered to be significant. Impacts to paleontological resources could occur during excavation and site development when geologic formations that have resource bearing potential are disturbed. Impacts would occur when fossils are physically destroyed by such activities. In order to reduce potential construction-related impacts to paleontological resources, mitigation is provided (see *Section 5.7.5, Mitigation Measures,* Mitigation Measure 5.7-a).

## 5.7.5 Mitigation Measures

**5.7-a** Prior to beginning any excavation work, the developer or its contractor shall demonstrate that a qualified paleontologist has been retained to carry out a paleontological resources mitigation program. A paleontological monitor shall be on site at all times during grading activities that disturb non-undocumented fill soils or formations. If fossils are discovered, the paleontologist or paleontological monitor shall have the authority to halt construction in the immediate area of discovery until such a time that a complete assessment of the resources can be conducted. If resources are found that are determined to be significant, the paleontological monitor shall direct activities to recover the resources. Prepared fossils, along with copies of all pertinent field notes, photos and maps shall be deposited in a scientific institution with paleontological collections, such as the San Bernardino County Museum.

## 5.7.6 Residual Impacts/Level of Significance after Mitigation

With the implementation of the construction monitoring program (outlined as Mitigation Measure 5.7-a, above), impacts to paleontological resources would not be significant.




Villages of San Jacinto EIR

Paleontological Sensitivity

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# 5.8 WATER QUALITY AND HYDROLOGY

## 5.8.1 Introduction/Methodology

This section consists of a summary of existing hydrologic conditions, anticipated impacts related to these conditions, and mitigation measures required to reduce these impacts to a level below significance. A residual impact statement has been included to characterize the level of significance after applied mitigation measures.

This analysis is based on information contained in the February 2009 *Villages of San Jacinto Specific Plan*, *Drainage Plan* by T&B Planning Consultants; the May 2006 *Preliminary Drainage Study for Tentative Tract Map 34081* by RBF Consulting; the August 2006 *Phase 1 and 2 Preliminary Drainage Study for Tentative Tract Map 34081* by RBF Consulting; the January 15, 2007, *Summary Preliminary Drainage Analysis for TTM 34081 Phases 1, 1A, 1B & 1C* by RBF (included as *Appendix G* to this EIR); and the February 23, 2009, *Preliminary Hydrology and Hydraulics Study for the Villages of San Jacinto* by JLC Engineering & Consulting Inc. Floodplain resource information was obtained through the September 7, 2006, letter from RBF to Riverside County Flood Control and Water Conservation District. Water quality management information was obtained from the February 23, 2009, *Preliminary Hydrology and Hydraulics Study* referenced above and the *Lake Preliminary Design Report* (Pacific Aquascape, Inc. March 2009). Additional hydrologic resource setting and existing conditions information was used from the February 28, 2005, Leighton and Associates Geotechnical Investigation for the proposed project (included in *Appendix F* to this EIR); discussions with Leighton and Associates geotechnical staff; and publications by the Santa Ana Regional Water Quality Control Board (RWQCB) (1995, 2003, 2004). Once existing condition information was summarized, the City of San Jacinto Significance Thresholds, specifically Hydrology and Water Quality Resource Thresholds, were used to determine if hydrologic impacts were considered significant from a CEQA perspective. Mitigation measures were developed in part by recommendations in the February 2009 Villages of San Jacinto Specific Plan, Drainage Plan Report by T&B Planning Consultants and experience with past projects of a similar size and character.

## 5.8.2 Existing Conditions

The San Jacinto and broader Inland Empire climate is mild. Winters are characterized as mild and sometimes cool, springs can be rainy, and the summer and fall hot and dry. The San Jacinto area climate is characterized by relatively low rainfall, with warm summers and mild winters. Annual precipitation averages about 13 inches, with over 70% of that falling between December and March. Average monthly temperatures range from a high of 98° Fahrenheit in August to a low of 37° Fahrenheit in December (City-Data.com, Accessed April 30, 2009).

The San Jacinto River is the dominant hydrologic feature of the central western Riverside County area. Rainwater and urban runoff drain through a series of reservoirs, canyons, and/or storm drain facilities into this drainage system. This hydrologic feature runs along the northern and eastern edge of the City (see *Figure 5.8-1, Existing Hydrologic Features*).

### 5.8.2.1 Surface Water

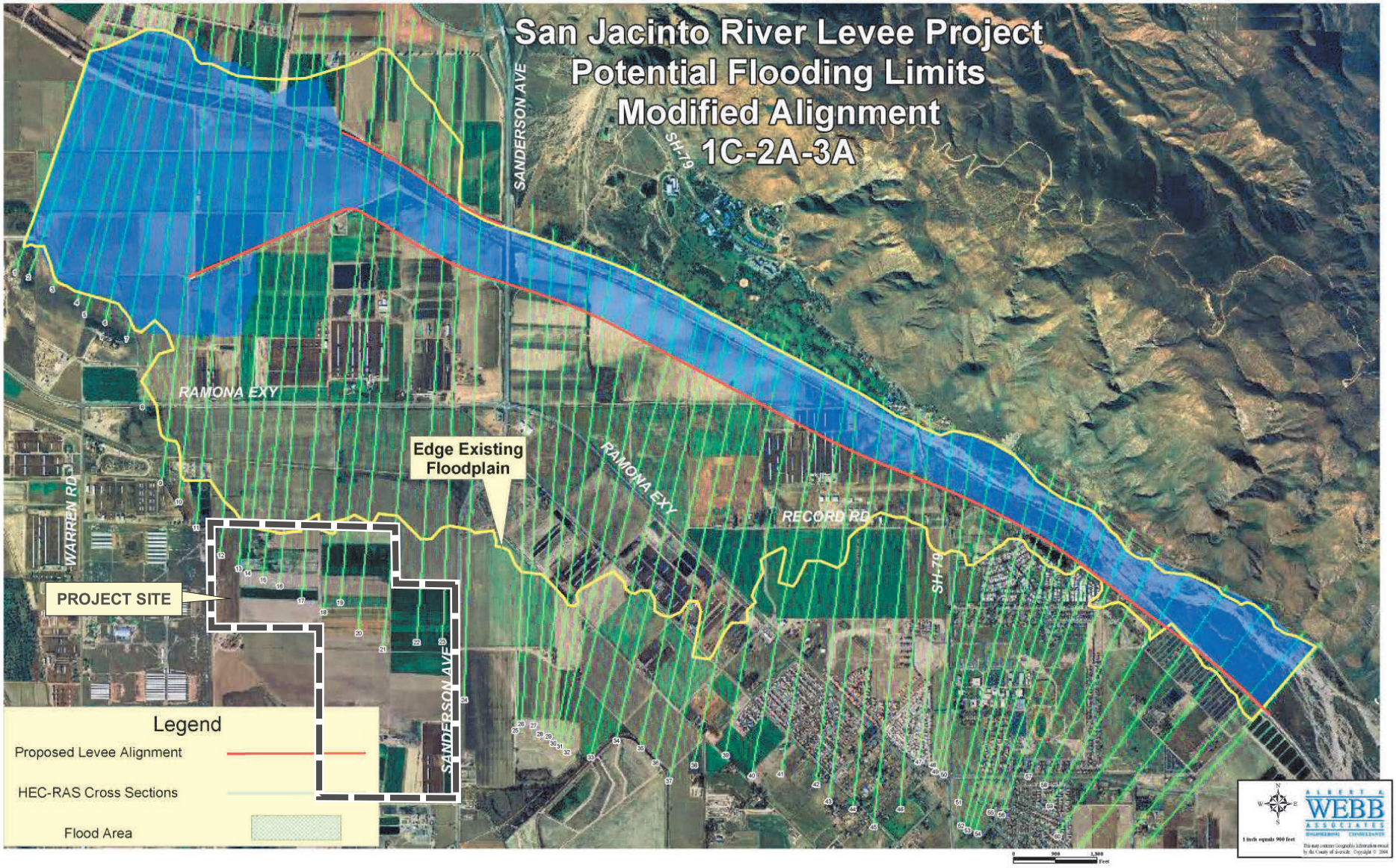
The main surface hydrologic feature of the San Jacinto Valley is the San Jacinto River. This waterway is a natural channel that has been disturbed by historical filling and farming activities. This river flows from east to west and serves as the main drainage point for precipitation runoff from higher elevations to the east and urban runoff throughout the watershed.

Within the river valley, various channels and ephemeral creeks feed the river system. This watercourse is located approximately 1 mile northeast of the project site. General off-site drainage occurs through a northern sheet-flow pattern off the project site toward the San Jacinto River. Surface water runoff often ponds on site and throughout the river plain to form an alkali playa hydrologic feature. Currently, on-site water drains in a sheet flow manner to the north toward the San Jacinto River. On-site irrigation channels also assist in drainage of the site.

### 5.8.2.2 Groundwater

Groundwater is defined as subsurface water that exists in soils and geologic formations that are fully saturated. The water table is considered to be the top of the saturated zone. Groundwater bearing formations sufficiently permeable to transmit and yield significant quantities of water are called aquifers. The principal groundwater basins in the San Jacinto Region are the Lakeview/Hemet-North, San Jacinto-Upper Pressure, and Hemet-South. The project site straddles the Lakeview/Hemet-North basin to the west and the San Jacinto-Upper Pressure basin to the east. The San Jacinto River had historically kept all the groundwater basins in that part of the region full. Now, there is essentially no surface flow beyond the mouth of the canyon, where it exits the mountains; the riverbed is typically dry (State of California 1995, p. 1-5).

Similar to most Riverside County rivers, the San Jacinto River is supported by a groundwater basin. Groundwater was locally encountered on the site at depths between 5 and 40 feet below existing ground surface elevations. It is suspected that groundwater may be as deep as 200 feet below ground surface on the project site. The groundwater table likely fluctuates seasonally in response to long periods of heavy rainfall or groundwater withdrawal (Leighton 2005, p. 7).




Villages of San Jacinto EIR

**Existing Hydrologic Features**

FIGURE 5.8-1

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### 5.8.2.3 Flooding

As depicted on *Figure 5.8-1, Existing Hydrologic Features*, the northwest corner of the project is located within Zone A of the San Jacinto River, as mapped by the Federal Emergency Management Agency (FEMA). Zone A is defined as the area of the 100-year floodplain with base flood elevations and flood hazard factors not determined.

The San Jacinto River Valley has a very unique flood flow regime. Flood flows every 5 or 10 years have contributed to the broad, shallow "Mystic Lake" in the riverbed north of the City. The shallow, periodic flooding of this river has contributed to the wildlife and alkali-playa-dependent plant species that characterize the area.

### 5.8.2.4 Water Quality

Water quality refers to the effect of natural and human activities on the composition of water. Water quality is expressed in terms of measurable physical and chemical qualities that can be related to planned water use. In general, stormwater can potentially contain a host of pollutants, such as trash and debris, bacteria and viruses, oil and grease, sediments, nutrients, metals, and toxic chemicals. These contaminants can adversely affect receiving and coastal waters, flora and fauna, and public health. Water quality issues are especially prevalent during rainy periods; however, due to the amount of urban runoff that is transferred to the storm drain and natural drainage system, pollution is a problem year-round.

**Regulatory Background**

Several important federal and state legislative actions have an impact on how water quality is measured, controlled, and addressed during the planning process. Important legislation and regulatory mechanisms are therefore outlined below.

***Federal Water Pollution Control Act (Clean Water Act)***

The basic federal law regulating surface water quality control is referred to as the Federal Water Pollution Control Act of 1972, commonly referred to as the Clean Water Act. The main objective of the Clean Water Act is to "restore and maintain the chemical, physical and biological integrity of the Nation's waters and to make all waters fishable and swimmable." The Clean Water Act established seven goals and guidelines for water quality, including the elimination of pollutants to navigable waters by 1985, provision of quality water to allow for propagation of fish and other marine life, prohibition of pollutants in toxic amounts, provision of financial assistance to waste treatment management plans, development of technology necessary to carry out goals, and development and implementation of programs for control of non-point source pollution. Clean

Water Act provisions have been written in conjunction with applicable plans and policies of the federal Endangered Species Act and the National Environmental Policy Act.

The Clean Water Act, in part, establishes requirements for state water quality planning, management, and implementation with regard to surface waters. These requirements call for the restoration and maintenance of chemical, physical, and biological integrity of state waters; attainment of a level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water; and consideration of water resources for state water supplies and other beneficial uses. The Clean Water Act requires that the goals and guidelines established by varying state agencies be reviewed on a triennial basis. This process involves public hearings at least once every 3 years for the purpose of review and/or revisions (State of California 1995, p. 1-2).

Other provisions of the Clean Water Act related to basin planning include Section 208, which authorizes the preparation of waste treatment management plans, and Section 319, which mandates specific actions for the control of pollution from non-point sources. 1987 amendments to the Clean Water Act identified the importance of non-point source pollutants and their impact on local water quality. As stated in the Water Quality Control Plan for the Santa Ana River Basin (State of California 1995), non-point source pollutants represent the greatest threat to water quality. Non-point source pollutants are often chemicals from lawns or gardens, automobile residues, urban runoff, or household cleaning agents or compounds. Most non-point source pollutants enter the water supply in large quantities and sudden surges, largely due to storm events. Control of this type of pollution source has proven to be difficult. Because the release of a non-point source pollutant is exempt from National Pollution Discharge Elimination System (NPDES) regulations, the RWQCB has more recently focused on non-point source pollution issues. The RWQCB has encouraged all community members to use best management practices (BMPs) to eliminate or reduce non-point source pollution.

### *National Pollution Discharge Elimination System (NPDES)*

NPDES, established under the Clean Water Act, regulates the discharge of pollutants from point sources into regional water resources. The NPDES permit regulates discharges of wastes for the purpose of limiting the quantity of pollutants and volume of waste discharged to surface waters. NPDES permits contain prerequisite conditions that must be met by dischargers to ensure protection of the receiving water. Any agency or private party proposing to discharge pollutants into surface waters must submit a report of waste discharge at least 180 days in advance of the planned date of release. Concurrence with pollution elimination levels and approval of the report of waste discharge would culminate in the granting of an NPDES permit. Responsibility of enforcement of NPDES guidelines and permits falls within jurisdiction of the RWQCB (Region 8 for the San Jacinto Basin), and is subject to review by the Environmental Protection

Agency (EPA) Regional Administrator (EPA Region IX, San Francisco Office) (State of California 1995, p. 5-2).

The EPA has published NPDES permit application requirements for municipal, industrial, and construction stormwater discharges under the urban runoff management strategy. The application requirements for municipalities were directed at municipalities that own and operate separate storm drain systems servicing populations of 100,000 or more or that contribute significant pollutants to waters of the United States and require such agencies to obtain coverage under municipal stormwater NPDES permits. Municipalities were required to develop and implement an urban runoff management program to address activities to reduce pollutants in urban runoff and stormwater discharges that were contributing a substantial pollutant load to their systems.

In order to control water quality, the State Water Resources Control Board has organized basin plans for all drainage systems within California. Goals and plans set forth in the Water Quality Control Plan for the Santa Ana River Basin (State of California 1995) are carried out through the use of the NPDES permitting and monitoring system.

### *303(d) Status Listing*

Under Section 303(d) of the 1972 Clean Water Act, states, territories, and authorized tribes are required to develop a list of water quality limited segments. These waters on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish priority rankings for water on the lists and develop action plans, called Total Maximum Daily Loads (TMDL), to improve water quality.

### *California Water Code*

The California Water Code is the principal policy that governs the use of water resources within the State of California. This code controls water rights, policies governing the construction and management of dams and reservoirs, flood control, conservation, development and utilization of state water resources, water quality protection, and management and management of water-oriented agencies (State of California 1995, pp. 1-1 to 1-2). The water quality provisions set forth in the California Water Code have been written to supplement certain provisions of the California Health and Safety Code, Public Resources Code, Fish and Game Code, Food and Agriculture Code, Government Code, Harbors and Navigation Code, California Environmental Quality Act, and the California Endangered Species Act.

### *Porter-Cologne Water Quality Control Act*

Division 7 of the California Water Code, commonly referred to as the Porter-Cologne Water Quality Control Act, is the principal mechanism for water quality control within California. This act establishes a regulatory program to protect water quality and beneficial uses of all state waters. The Porter-Cologne Act established the State Water Resources Control Board and RWQCB as principal state agencies responsible for water quality control. Water quality of the Santa Ana River Basin is controlled by Region 8 Regional Water Quality Control Board of the State Water Resources Control Board (State of California 1995, p. 1-1).

## Relevant Plans and Policies

### *Water Quality Control Plan for the Santa Ana River Basin (Region 8)*

The federal Clean Water Act, and, specifically the NPDES program as well as the California Water Code (specifically, the Porter-Cologne Water Quality Control Act) require that the Regional Water Quality Control Board adopt a water quality control plan to guide and coordinate the management of water quality in the Region. The Santa Ana River Basin Plan's purpose is to (1) designate beneficial uses of the Region's surface water and groundwater, (2) designate water quality objectives for the reasonable protection of those uses, and (3) establish an implementation plan to achieve the objectives. This basin plan was adopted in 1995 and has been subject to several amendments over the last 10 years. This plan outlines water quality planning guidelines for the Upper and Lower Santa Ana Region watersheds, the San Jacinto River watershed and several other small drainage areas in southwestern San Bernardino County, western Riverside County, and northwestern Orange County (State of California, Santa Ana RWQCB 1995).

The Villages of San Jacinto project is located approximately 1 mile southwest of the San Jacinto River. The Santa Ana River Basin Plan divides the County into "Hydrologic Units" (HU). Each HU has a "Hydrologic Area" (HA). Each HA can be divided into "Hydrologic Sub Areas" (HSAs). The project is located within the San Jacinto River Basin HU and the San Jacinto River HA. The project is located near Reach 4 - Nuevo Road to North–South Mid-Section Line (T4S/R1W-S8). Beneficial uses have been identified for each of the water bodies the project could potentially impact (State of California 1995, p. 3-21).

### *Inland Surface Waters*

San Jacinto River HA: Beneficial uses include Municipal and intermittent beneficial uses include Agricultural, Groundwater, Recreation (1), Recreation (2), Warm Freshwater Habitat and Wildlife Habitat (State of California 1995, p. 3-21).

The Basin Plan identifies Water Quality Objectives for each water body within the Santa Ana River Watershed. The project is located within an inland surface stream area, specifically Reach 4 of the San Jacinto River. Guidelines pertain to algae, un-ionized ammonia, acute (1-hour) ammonia-nitrogen, fecal coliform bacteria, boron, chemical oxygen demand, chloride, residual chlorine, color, total filterable dissolved solids, floatables, fluoride, hardness, inorganic nitrogen, metals, methylene blue-activated substances, nitrate, total inorganic nitrogen, oil and grease, total dissolved oxygen, pH, radioactivity, sodium, suspended and settleable solids, sulfate, sulfides, surfactants, taste and odor, temperature, toxic substances, and turbidity. The Basin Plan mandates that all waters of the region shall be maintained in accordance with each pollutant-specific objective and shall not be exceeded as a result of controllable water quality factors (State of California 1995, p. 4-34)

***Groundwater***

San Jacinto-Upper Pressure and Hemet-South: Beneficial uses include Municipal, Agricultural, Industrial, and Industrial Process Supply (State of California 1995, p. 3-27 and Figure 3-4).

The Basin Plan identifies Water Quality Objectives for each groundwater body within the Santa Ana River Watershed. The project is located within a groundwater area, specifically the San Jacinto – Upper Pressure basin. The Basin Plan quantifies limits or designates guidelines for discharge into the San Jacinto River. Guidelines pertain to arsenic, fecal coliform bacteria, boron, barium, chloride, color, cyanide, total dissolved solids, fluoride, hardness, metals, methylene blue-activated bustances, nitrate, oil and grease, pH, radioactivity, sodium, sulfate, taste and odor, total inorganic nitrogen, and toxic substances. The Basin Plan mandates that all waters of the region shall be maintained in accordance with each pollutant-specific objective and shall not be exceeded as a result of controllable water quality factors (State of California 1995, pp. 4-11 to 4-13, 4-34).

***Lake Elsinore and Canyon Lake Nutrient TMDL Allocation and Implementation Plan***

According to the California 2002 303(d) list (approved by the USEPA on July 2003) published by the Santa Ana RWQCB, the San Jacinto River is not listed as an impaired water body. That said, Lake Elsinore, which is located downstream of the project site and is fed by the San Jacinto River, is listed on the 303(d) list as an impaired water body. The pollutants of concern in Lake Elsinore include nutrients, organic enrichment/low dissolved oxygen, sedimentation/siltation, and other pollutants where toxicity is unknown. Watershed-wide waste discharge requirements for discharges of stormwater runoff associated with new developments have been adopted for the San Jacinto River Watershed. These discharge objectives include the following:

***NPDES Stormwater Discharge Construction Permit (Water Quality Order 99-08-DWQ)***

Section 402 of the Clean Water Act establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES program. This permit regulates stormwater runoff from construction sites where clearing; grading; or disturbances to the ground, such as stockpiling or excavation that results in soil disturbances of at least 1 acre of total land area, occurs.

## 5.8.3 Significance Criteria

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on water resources and water quality if it:

1. Violates any water quality standards or waste discharge requirements.
2. Substantially depletes groundwater supplies or interferes substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).
3. Substantially alters the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site.
4. Creates or contributes runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources or polluted runoff.
5. Places housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
6. Place within a 100-year flood hazard area structures which would impede or redirect flows.
7. Exposes people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.
8. Otherwise substantially degrades water quality.

## 5.8.4 Impacts

***Would the project violate any water quality standards or waste discharge requirements?***

Perched groundwater was encountered at multiple depths below the surface, as shallow as 5 feet and as deep as 22 feet. Regional groundwater is anticipated below 150 feet and is likely to occur

as much as 200 feet below grade. However, groundwater can be expected to fluctuate seasonally within the subject site and during periods of heavy regional rainfall or groundwater withdrawal by the local residences, agricultural developments, and water utility companies. During drought conditions, groundwater levels could temporarily deepen significantly.

The project would not impact regional groundwater (Leighton 2006). All lake and drainage features on site would be constructed so they are above the regional groundwater table so as to prevent intermixing of ground and surface waters. That said, it is possible that, during project construction, perched groundwater may be encountered. In order to avoid potential impacts to regional groundwater resources in the San Jacinto River Valley, mitigation is provided (see *Section 5.8.5, Mitigation Measures,* Mitigation Measure 5.8-b).

**Construction Impacts**

Development of the proposed project may result in an increase in pollutant load due to sedimentation. Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, or gravity. Sediment from erosion, primarily during construction, is quite often a major project pollutant of concern. A potentially significant impact could occur during construction related to sedimentation; therefore, mitigation is provided (see *Section 5.8.5, Mitigation Measures,* Mitigation Measures 5.8-d and 5.8-e).

As indicated above, groundwater may be encountered during construction. In order to prevent impacts to groundwater resources, mitigation is provided (see *Section 5.8.5, Mitigation Measures,* Mitigation Measure 5.8-b).

**Operational Impacts**

Based upon guidelines within the Riverside County Flood Control & Water Conservation District (RCFC&WCD) BMP Handbook and the Santa Ana RWQCB General Permit for Riverside County, the proposed development must treat potential contaminants produced and associated with the proposed land use types within the project site. As a result, a water quality extended detention basin is being proposed to provide water quality treatment for the runoff emanating from the project site. The volume calculations for the water quality basins are based upon the method included in the RCFC&WCD BMP Handbook. A water quality/extended detention basin is a permanent basin sized to detain and slowly release the design volume of stormwater, allowing particles and associated pollutants to settle out. An inlet forebay section and inlet energy dissipater will minimize erosion from entering flows, while erosion protection at the outlet prevents damage from existing flows. The bottom of the basin slopes toward the outlet and a low flow channel conveys incidental flows directly to the outlet end of the basin. The basin should utilize vegetated earth in order to allow some infiltration to occur, although highly pervious soils may require an impermeable liner to prevent groundwater contamination. Proper

turf management is also required to ensure that the vegetation does not contribute to water pollution through pesticides, herbicides, or fertilizers. The City of San Jacinto will maintain all aspects of the basin pertaining to water quality. RCFC&WCD will maintain all aspects of the basin that pertain to detention.

### *Lake Preliminary Design Report*

This report (Pacific Aquascape, Inc. 2009) discusses safety features for the proposed lake shoreline, water depth and temperature, and treatment of runoff and water quality management. The treatment process involves reduced concentration of dissolved pollutants, nutrients, and salts through flushing of the lake water volume by utilizing the lake as the irrigation supply source; reduction of nutrient concentrations from inflows, nitrogen, and phosphorous; prevention of algae blooms by using constructed gravel biofilter beds that utilizes "biological filtration"; and maintaining oxygen levels through aeration promoting oxygen exchange to prevent anaerobic conditions, which allows natural process to occur, such as denitrification for removal of nitrogen. The lake operation and maintenance program also includes routine debris removal, algae control, aquatic weed control, pump maintenance, and biofilter maintenance. These processes ensure continued aesthetic appeal and desirable water quality as well as control of vectors, such as mosquitoes and flies

### *Agricultural Operations*

The current and previous land uses on the project site generate nitrogen and phosphorous, which may have an impact on existing on-site and off-site water quality. Due to the elimination of agriculture, the project site will likely result in a beneficial impact due to a reduction in nitrogen and phosphorous.

### *Pollutants of Concern*

Due to the intensification of land uses on the site, in combination with an increase in impervious surfaces, the project may result in potentially significant impacts to water quality attributable to urban pollutants contained in stormwater runoff. The constituents described below commonly are found on similar developments as a result of urban runoff and could, therefore, affect the proposed project's water quality. The development of a final Water Quality Management Plan (WQMP) as specified in Mitigation Measure 5.8-f, ensures that overall reduction is achieved for all pollutants listed below. An extended detention basin and vegetated swale (vegetated channel) as proposed, has low to high removal effectiveness for all pollutants per the *Riverside County Stormwater Quality BMP Design Handbook* (RCFC&WCD, July 21, 2006). Other project specific measures are proposed which will ensure that the project will not violate any water quality standards or waste discharge requirements.

Nutrients

Nutrients are inorganic substances, such as nitrogen and phosphorus. The primary sources of nutrients in urban runoff are fertilizers and eroded soils. Due principally to the type of land use, the project is anticipated to result in the transport of fertilizers from landscape areas by stormwater or water from irrigated sprinklers and wash down activities, resulting in a potentially significant impact. In order to reduce this potential impact, mitigation is provided (see *Section 5.8.5, Mitigation Measures*, Mitigation Measure 5.8-f).

Heavy Metals

metals are raw material components in non-metal products, such as fuels, adhesives, paints, and other coatings. Under the proposed project, it is anticipated that heavy metals from vehicles on parking lots and streets may be transported to the storm drain system, resulting in a potentially significant impact (see *Section 5.8.5, Mitigation Measures,* Mitigation Measure 5.8-f).

Organic Compounds

Commercially available or naturally occurring carbon-based organic compounds are found in pesticides, solvents, and hydrocarbons. Landscaping associated with the proposed project may result in release of organic compounds, therefore mitigation is provided (see *Section 5.8.5, Mitigation Measures,* Mitigation Measure 5.8-f).

Trash and Debris

The introduction of a suburban population to the area will contribute to an increase in trash and debris pollution, which will result in a potentially significant impact. In order to reduce potentially significant impacts, mitigation is provided (see *Section 5.8.5, Mitigation Measures,* Mitigation Measure 5.8-f).

Oxygen-Demanding Substances

Biodegradable organic materials on site could react with dissolved oxygen in the water to form other compounds. It is anticipated that an increase in population in the area would result in a likely increase of oxygen-demanding substances in urban runoff, therefore creating a significant impact. In order to reduce this potential impact, mitigation is provided (see *Section 5.8.5, Mitigation Measures*, Mitigation Measure 5.8-f).

Oil and Grease

Oil and grease are characterized as high-molecular-weight organic compounds. The primary source of oil and grease of concern to the proposed project would be leaky cars. Because of their

respective increase in parking facilities, it is anticipated that the mixed-use, commercial, school, and public park uses would result in potentially significant impacts related to oil and grease. In order to reduce this potential impact, mitigation is provided (see *Section 5.8.5, Mitigation Measures*, Mitigation Measure 5.8-f).

Bacteria and Viruses

Pathogens such as bacteria and viruses are typically caused by the transport of animal or human fecal wastes from the watershed primarily through improper or non-disposal of pet wastes. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water. In order to compensate for this potentially significant impact, mitigation is provided (see *Section 5.8.5, Mitigation Measures*, Mitigation Measure 5.8-f).

Pesticides

Herbicides used for controlling nuisance plant growth are a potential source of pollutants. Because the project will introduce new landscaping to the project site, the introduction of herbicides into stormwater runoff is considered a potentially significant impact. In order to reduce this potentially significant impact, mitigation is provided (see *Section 5.8.5, Mitigation Measures*, Mitigation Measure 5.8-f).

***Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?***

The Water Supply Assessment Report prepared for the project (*Appendix K*) indicates that the total projected water demand for the proposed development would remain within the limits of the projected demand of the Eastern Municipal Water District's Urban Water Management Plan 2000 (refer to *Section 5.12.8* for a detailed discussion of domestic water supply).

The project would result in an increase in impervious surfaces due to the change from an existing agricultural operation (which supports natural percolation) to that of a suburban housing/commercial/retail development (which will support pavement and other impervious surfaces). Although the project would not result in the exact same local groundwater recharge characteristics, the project drainage plan would facilitate complete retention/detention of water onsite to mirror pre-development flows. Therefore, during weather events, water will be directed to the urban drainage system which will collect at the northwest of the site in a detention basin.

This basin will result in the percolation or evaporation of all onsite water which would in effect help mirror existing, pre-development groundwater recharge.

***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?***

A Drainage Plan has been incorporated into the Specific Plan for the project and is based on the findings in the February 2009 JLC Engineering Hydrology Study referenced above. Proposed drainage facilities are shown on *Figure 5.8-2, On-Site Drainage Plan*. The project site generally drains in a northwesterly direction toward the San Jacinto River, primarily in a sheet flow pattern. The northerly portion of the project site is within the 100-year floodplain. The Drainage Plan provides 100-year flood protection for the project site for the interim and ultimate conditions as described below.

**Interim Condition**

The interim condition assumes that the off-site area is undeveloped in the existing condition, and the on-site development of the Villages of San Jacinto and corresponding infrastructure is functional. These interim drainage facilities would be developed concurrently with phase I, and are required to control and convey the interim flow rates originating from the off-site area. Interim condition calculations were used to determine the points where flows enter the site and to size the corresponding facilities. Following is a summary of the interim drainage facilities:

- Culvert V, shown on *Figure 5.8-2,* is a proposed culvert south of the Bridge Street and Cawston Avenue intersection that will collect the runoff that overtops the Casa Loma Canal Siphon. The proposed culvert will discharge the runoff into the Line V Channel. The culvert will provide 100-year flood protection for Bridge Street. The ultimate flow rate will substantially decrease once the San Jacinto Master Drainage Plan (MDP) facilities Line D and Casa Loma Basin are constructed.
- Culvert E shown on *Figure 5.8-2* is a proposed culvert located north of the intersection of Sanderson Avenue and the Casa Loma Canal. Based on the current topography, the runoff emanating from the east side of Sanderson Avenue will overtop Sanderson Avenue and enter the project site. As a result, a culvert and earthen channel system have been proposed at the southeast corner of PA 11. These facilities will convey the 100-year flow rate to the Line E system. The San Jacinto MDP proposes drainage system Line E2 will ultimately collect the flows emanating east of Sanderson Avenue.
- The earthen roadway on the land east of Sanderson Avenue, north and south of the intersection of DeAnza Drive and Sanderson Avenue, is not a permitted structure and diverts substantial runoff to the project site, indicated as Off-site Flow 3 on *Figure 5.8-2*.

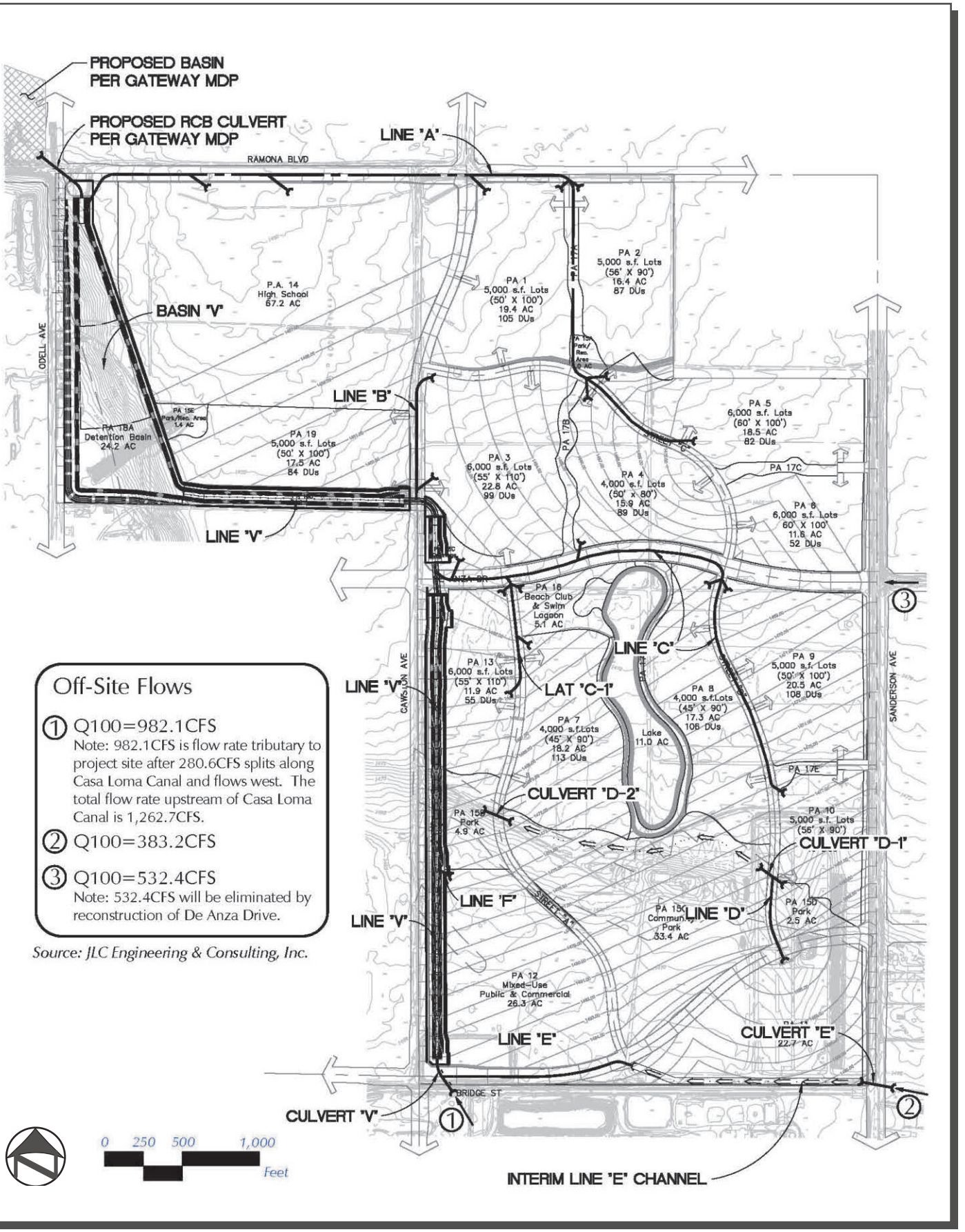
This diversion occurs because the height of the earthen roadway produces a ponding condition south of the earthen roadway, which forces flows to overtop Sanderson Avenue. The roadway will be reconstructed and lowered to an elevation that will eliminate the ponding condition and allow flows to overtop this roadway, thereby eliminating the overtopping condition on Sanderson Avenue.

**Ultimate Condition**

The ultimate condition assumes that the San Jacinto MDP systems are in place and functional. With these facilities in place, the off-site area that is tributary to the Villages of San Jacinto is reduced to the area between the Casa Loma Canal and Bridge Street.

*Figure 5.8-2* provides the locations where the existing off-site runoff enters the project site (1, 2, and 3) and the corresponding 100-year peak flow rate for the interim condition. However, the runoff entering the project site will eventually be eliminated with the implementation of the San Jacinto MDP.

The implementation of the San Jacinto MDP is based on the timing of the development of the surrounding area. As a result, the construction timeline for the proposed San Jacinto MDP drainage facilities is unknown. Consequently, the project incorporates a drainage plan that will not impact upstream and downstream property owners but will provide flood protection for the overall project site. The drainage plan will incorporate a vegetative channel and a detention/water quality basin, which are designated as Line V and Detention Basin V. These two facilities are the major backbone infrastructure that will collect the runoff that emanates from off-site and on-site areas. Line V and Detention Basin V have been designed to convey and control the interim flow rate and ultimate flow rate. As discussed previously, the interim flow rate results in a runoff rate that exceeds the ultimate condition flow rate. The Line V Channel will allow for the connection of several storm drain laterals. The limits of the storm drain laterals are based on the street design policy implemented by the City of San Jacinto and the County of Riverside. These storm drain laterals will provide 100-year flood protection for the on-site planning areas and ensure that downstream properties would not be impacted by increased flows released from the project site.




*Source: JLC Engineering & Consulting, Inc.*

SOURCE: T&B PLANNING CONSULTANTS, FEBRUARY 2009

Villages of San Jacinto EIR

**On-Site Drainage Plan**

FIGURE 5.8-2

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Because the San Jacinto MDP facilities would be designed to handle the increase in drainage from the project site once developed, impacts to surface water would not be significant. However, in accordance with San Jacinto requirements, the project shall be required to participate in the San Jacinto River levee financing project (see *Section 5.8.5, Mitigation Measures*, Mitigation Measure 5.8-a).

***Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources or polluted runoff?***

As discussed above, the project incorporates a drainage plan that will not impact upstream and downstream property owners but will provide flood protection for the overall project site. Implementation of the San Jacinto MDP is based on the timing of the development of the surrounding area and will further improve drainage systems in the project area.

***Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?***

The northern portion of the project site is located within Zone A (100-year floodplain as mapped by FEMA) of the San Jacinto River. Development within the floodplain may result in an impedence to flow and an increase in the base flood elevation. Because a portion of the proposed development is proposed to be constructed within the limits of the 100-year floodplain, development of the proposed project will result in potentially significant impacts relating to flood hazards. As discussed above, the project drainage plan will provide 100-year flood protection for the project site and will not adversely affect downstream properties. However, mitigation is required to have the project removed from the appropriate FEMA floodplain map. In order to avoid impacts, mitigation is provided (see *Section 5.8.5, Mitigation Measures,* Mitigation Measure 5.8-c).

It should be noted that the project site elevation will be raised during grading activities to ensure that future structures are outside of the 100-year floodplain.

***Would the project place within a 100-year flood hazard area structures which would impede or redirect flows?***

As discussed in preceding responses, the project drainage plan will ensure that adequate flood protection is provided and the placement of new structures would not impede or redirect 100-year flows or result in on-site or off-site flooding as a result of project implementation.

***Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?***

The project would not expose people or structures to a significant flood risk as discussed in the preceding responses. Adequate flood protection will be provided in the absence of the planned San Jacinto River levee project, which will provide additional protection from flooding in the project area.

***Would the project otherwise substantially degrade water quality***?

The project would not have a significant impact on water quality as discussed in detail in the first impact response above.

## 5.8.5 Mitigation Measures

**5.8-a** The project is located within the San Jacinto – Area Drainage Plan (SJ-ADP), which is a financing mechanism used to offset costs for construction of proposed Master Drainage Plan (MDP) facilities. The project will be charged a per-acre fee in order to pay a fair share of the price of area-wide drainage facilities.

**5.8-b** If dewatering becomes necessary during construction, all discharges shall be in accordance with Santa Ana Regional Water Quality Control Board requirements which mandate that dewatered groundwater be tanked and hauled to a legal disposal site for treatment. Dewatering shall not occur in on-site drainages or water features. In addition, if dewatering becomes necessary during construction, a National Pollution Discharge Elimination System dewatering permit shall be obtained from the Santa Ana Regional Water Quality Control Board.

**5.8-c** All buildings shall be located outside of the 100-year floodplain. The applicant shall process a Flood Insurance Rate Map (FIRM) map revision. Further, the applicant shall obtain a Conditional Letter of Map Revision (CLOMR) prior to issuance of building permits. The project applicant, or subsequent property owners, shall obtain flood insurance, to the extent required by law, to protect against any damage that might occur during a flood event. It must be noted that at the time of EIR publication, the applicant and City had initiated the CLOMR process with the Riverside County Flood Control and Water Conservation District.

**5.8-d** During construction, the project will incorporate all City of San Jacinto construction Best Management Practices (BMPs). These BMPs include the following:

- Erosion control BMPs, including temporary seeding and permanent seeding
- Soil stabilization BMPs
- Sediment control BMPs, including silt fence perimeter controls, surface roughening, tree or natural vegetation preservation and protection, temporary gravel construction entrance/exit, temporary diversions, permanent diversions, outlet stabilization, inlet protection, temporary sediment basins, and gravel bay barriers.
- Wind erosion BMPs
- Minimize contact with stormwater BMPs, including BMPs for construction vehicles and equipment maintenance, fueling, and washing; materials maintenance; and construction material loading, unloading, and access area controls.
- Non-stormwater BMPs.

**5.8-e** The project applicant will need to develop a Stormwater Pollution Prevention Plan (SWPPP) pursuant to NPDES Stormwater Discharge Associated with Construction Activity Guidelines (Water Quality Order 99-08-DWQ). The SWPPP will identify all BMPs that will prevent construction pollutants from contacting stormwater. Measures shall also be designed so as to prevent all products of erosion from moving off site into receiving waters. Provisions will also be included to ensure that BMPs are monitored and success recorded.

**5.8-f** Structural BMPs are required for new development to improve water quality of stormwater runoff. In order to meet NPDES regulations, the design volume or design flow to be treated must reduce pollutants to the Maximum Extent Practicable (MEP). This project will incorporate a water quality extended detention basin to provide water quality treatment for the runoff emanating from the project site, a volume-based BMP, and a flow-based BMP. Once the project is complete, maintenance will be the responsibility of the Villages of San Jacinto homeowners association.

In addition to sizing techniques, several quantity-control BMPs shall be implemented to control runoff:

- Rainfall shutoff devices shall be used to prevent irrigation during and after precipitation
- Irrigation systems shall utilize a dripping system to eliminate nuisance runoff
- Backflow preventer/pressure regulators shall be installed.

The project applicant will need to develop a Water Quality Management Plan pursuant to NPDES Permit No. CAS 618033, order No. R8-2002-001. The Water Quality Management Plan will identify all final site BMP requirements.

The following BMPs may be incorporated into final site designs:

- Construct community streets, sidewalks, and parking lot aisles to the minimum widths necessary
- Incorporate landscape treatment for parking lot runoff
- Use unit pavers or other equivalent porous material to construct walkways, alleys, and other low-traffic areas
- Utilize trees in landscaping plans to maximize canopy interception and water conservation
- Plant native trees and maximize canopy interception and water conservation
- Drain rooftops into adjacent landscaping prior to discharging to the storm drain
- Vegetate slopes with native or drought tolerant vegetation
- Install energy dissipaters at the outlets of new storm drains that enter the regional storm drain system that eventually feeds into the San Jacinto River.
- Utilize and install "high to medium efficiency" Post Construction BMP filtration system within the proposed water quality basin that would help reduce as many bacteria and viruses as possible from entering the downstream local stormwater collection system. This system must follow the specifications of the California Stormwater Handbook to ensure that the system provides maximum bacteria/viral capture.

## 5.8.6 Residual Impacts/Level of Significance after Mitigation

After application of the proposed mitigation measures, any potentially significant impacts relating to hydrology, groundwater, or water quality that are attributable to the development and operation of the proposed project would be reduced to a level below significant. Therefore, no significant unavoidable impacts are expected.

# 5.9 TRANSPORTATION, CIRCULATION, AND ACCESS

## 5.9.1 Introduction and Methodology

The following analysis of potential traffic, circulation and access impacts associated with project implementation is based on *the Villages of San Jacinto Traffic Impact Analysis* prepared by Urban Crossroads, April 24, 2009, included in *Appendix H* of this report. This latest report is an update of the May 23, 2005, Traffic Impact Analysis prepared by Urban Crossroads for the April 2006 DEIR. The original report was revised to reflect changes in project land uses, revised phasing plan, and revisions to the Mid-County Parkway southerly alignment within the project study area.

The traffic study analyzes the potential impacts of cumulative conditions representing the phased occupancy timing of the project, including Phase I, year 2015; Phase II, Year 2017; Phase III, Year 2023; and General Plan build-out conditions in Year 2035. The traffic impact analysis documents existing traffic conditions in the vicinity of the project site, Existing Plus Ambient Plus Project conditions for Phase I, Phase II and Phase III conditions; Existing Plus Ambient Plus Cumulative conditions (EAC 2015); Existing Plus Ambient Plus Cumulative plus Phase I conditions (EACP 2015); Existing Plus Ambient Plus Cumulative conditions (EAC 2017); Existing Plus Ambient Plus Cumulative Plus Phase I and Phase II conditions (EACP 2017); Existing Plus Ambient Plus Cumulative conditions (EAC 2023); Existing Plus Ambient Plus Cumulative Plus Phases I through III conditions (EACP 2023); evaluation of General Plan build-out (2035) with project conditions; and identifies on-site and off-site improvements and system management actions to achieve adequate level of service requirements as required by the City of San Jacinto.

The traffic analysis utilizes information obtained from City of San Jacinto staff to define the study area intersections and identify other development and area-wide growth calculations used in traffic counts. Due to the project's size and phased implementation plan, the traffic analysis was reflective of the phasing plan. Because the mitigation measures will be implemented as the project is constructed and traffic improvements become necessary, the phasing plan is reflected in the on-site mitigation measures. The City of San Jacinto and Riverside County General Plan Circulation Elements were used to identify the regional and City street network and roadway cross-sections in the study area. The traffic study has been prepared in conformance with the goals and requirements of the San Jacinto General Plan Circulation Element. Traffic operations and level of service conditions were evaluated pursuant to the 2000 Highway Capacity Manual (HCM).

As indicated in *Section 3.0*, *Project Description*, the proposed project would result in 1,016 low to medium density single-family dwelling units, a 2,000 student-high school, 247,000 square feet

of neighborhood retail commercial uses, 343,000 square feet of mixed-use development and approximately 43 acres of park land. However, in the event that the high school is not built, an additional 313 single-family housing units would be constructed, which would result in the potential for 1,329 units to be developed on site. While on the surface it may seem that the 1,329 unit count scenario would result in more traffic, traffic analyses are based on peak hour measurements, which for this project, would be more trip-intensive in the school scenario. Therefore, this traffic analysis reflects the 1,016 unit project with high school scenario, in order to provide the public with a "worst case scenario."

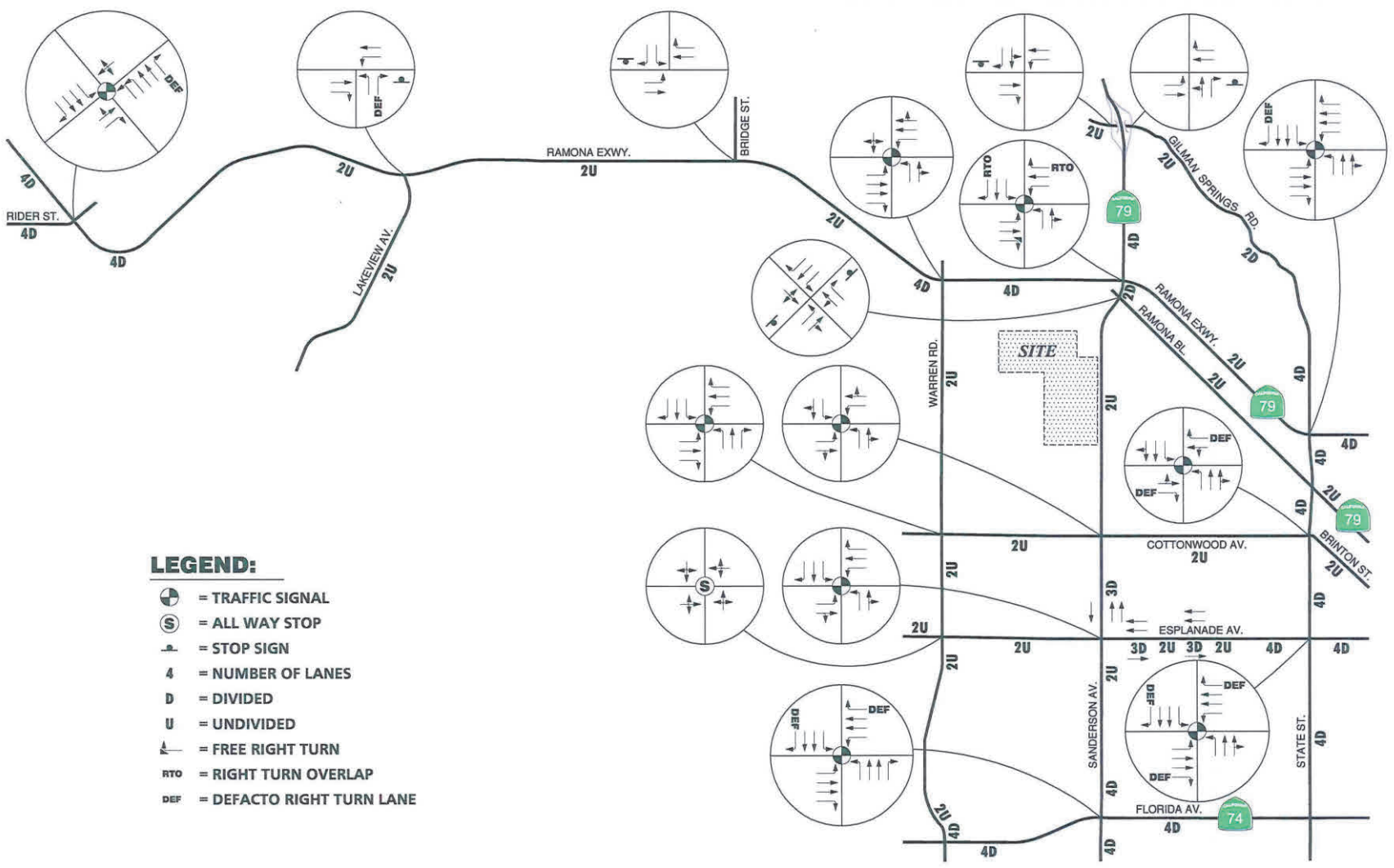
## 5.9.2 Existing Conditions

The project site is generally located south of Ramona Expressway and directly west of North Sanderson Avenue in the City of San Jacinto. North Sanderson Avenue is identified as an urban arterial roadway in the City of San Jacinto General Plan Circulation Element. *Figure 5.9-1*, *Existing Lane and Intersection Conditions*, illustrates the primary roadway components of the study area street network and identifies the number of traffic lanes for each roadway and existing intersection traffic controls.

**Intersection Conditions**

Traffic flow on arterial streets is most constrained at intersections; therefore, the traffic analysis focuses on the operating conditions of critical intersections during peak travel periods. The traffic report utilized information obtained from City of San Jacinto Transportation staff to identify the key intersections within the study area for analysis. The following intersections were analyzed in this study:

- Rider Street (NS) at:
  - Ramona Expressway (EW)
- Lakeview Avenue (NS) at:
  - Ramona Expressway (EW)
- Bridge Street (NS) at:
  - Ramona Expressway (EW)
- Warren Road (NS) at:
  - Ramona Expressway (EW)
  - Cottonwood Avenue (EW)
  - Esplanade Avenue (EW)




SOURCE: URBAN CROSSROADS, MARCH 2009

Villages of San Jacinto EIR

**Existing Lane and Intersection Conditions**

FIGURE 5.9-1

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- Sanderson Avenue (NS) at:
  - Gilman Springs Road SB Ramps (EW)
  - Gilman Springs Road NB Ramps (EW)
  - Ramona Expressway (EW)
  - Ramona Boulevard North (EW)
  - Cottonwood Avenue (EW)
  - Esplanade Avenue (EW)
  - Florida Avenue (SR-74) (EW)
- State Street (NS) at:
  - Ramona Expressway (EW)
  - Cottonwood Avenue (EW)
  - Esplanade Avenue (EW).

The existing conditions of each intersection listed above are characterized by Average Daily Trip (ADT) volumes and Level of Service (LOS) ratings. *Figure 5.9-2*, *Existing Traffic Volumes*, illustrates existing ADT volumes on arterial streets in the study area. *Figure 5.9-3*, *Existing AM Peak Hour Intersection Volumes*, and *Figure 5.9-4*, *Existing PM Peak Hour Intersection Volumes*, depict the distribution of existing ADT volumes on the study area roadway system. Existing ADT volumes are based on direct machine counts or factored from peak hour counts conducted for Urban Crossroads, Inc. in conjunction with the project traffic study.

In evaluating the existing intersection conditions, a "Level of Service (LOS)" rating, which consists of A through F, is used. LOS A indicates excellent conditions of uninterrupted free-flow traffic operations and LOS F indicates poor conditions of interrupted flow and congested operations (gridlock). Complete definitions of LOS categories are included in the Traffic Impact Analysis, included in *Appendix H* to this EIR. Different factors are considered in determining LOS for each intersection and are dependent on the type of intersection control used (i.e., signal, street stop, etc.). For signalized intersections, average total delay per vehicle for the overall intersection is used to determine level of service. For stop sign–controlled intersections, the calculation of LOS is dependent on the occurrence of gaps occurring in the traffic flow of the main street. For all way stop controlled intersections, the LOS criteria for this type of intersection analysis are also based on average total delay per vehicle for the overall intersection. The traffic analysis considers LOS D to be the minimum acceptable operating condition for intersections consistent with the adopted standards of the City of San Jacinto.

For the project area, traffic demands are highest at key intersections during the A.M. and P.M. peak hour periods. *Table 5.9-1*, *Existing Intersection Conditions* summarizes the results of evaluating existing peak hour traffic operations for intersections in the study area, and includes information relative to each intersection's geometrics, traffic control device and existing LOS.

**Table 5.9-1**
**Existing Intersection Conditions**

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] | | | | | | | | | | | | DELAY[2] (SECS.) | | LEVEL OF SERVICE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NORTH-BOUND | | | SOUTH-BOUND | | | EAST-BOUND | | | WEST-BOUND | | | | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| Rider Street (NS) at: | | | | | | | | | | | | | | | | | |
| * Ramona Expressway (EW) | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | 20.8 | 20.6 | C | C |
| Lakeview Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| * Ramona Expressway (EW) | CSS | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 38.3 | 30.3 | E | D |
| Bridge Street (NS) at: | | | | | | | | | | | | | | | | | |
| * Ramona Expressway (EW) | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 22.2 | 26.4 | C | D |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| * Ramona Expressway (EW) | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | 18.2 | 21.4 | B | C |
| * Cottonwood Ave. (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25.1 | 25.9 | C | C |
| * Esplanade Ave. (EW) | AWS | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 20.1 | 24.9 | C | C |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| * Gilman Springs Rd (EW) | CSS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 24.0 | 67.9 | C | F |
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| * Gilman Springs Rd (EW) | CSS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 32.4 | 32.6 | D | D |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| * Ramona Expressway (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1> | 1 | 1 | 1>> | 1 | 1 | 1> | 56.0 | 45.3 | E | D |
| * Ramona Blvd. (EW) | CSS | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1! | 0 | 0.5 | 0.5 | 1 | 25.1 | 35.8 | D | E |
| * Cottonwood Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 10.6 | 10.6 | B | B |
| * Esplanade Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 23.7 | 30.5 | C | C |
| * Florida Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 32.2 | 43.8 | C | D |
| State St. (NS) at: | | | | | | | | | | | | | | | | | |
| * Ramona Expressway (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 30.5 | 35.5 | C | D |
| * Cottonwood Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 36.5 | 34.6 | D | C |
| * Esplanade Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 30.2 | 31.6 | C | C |

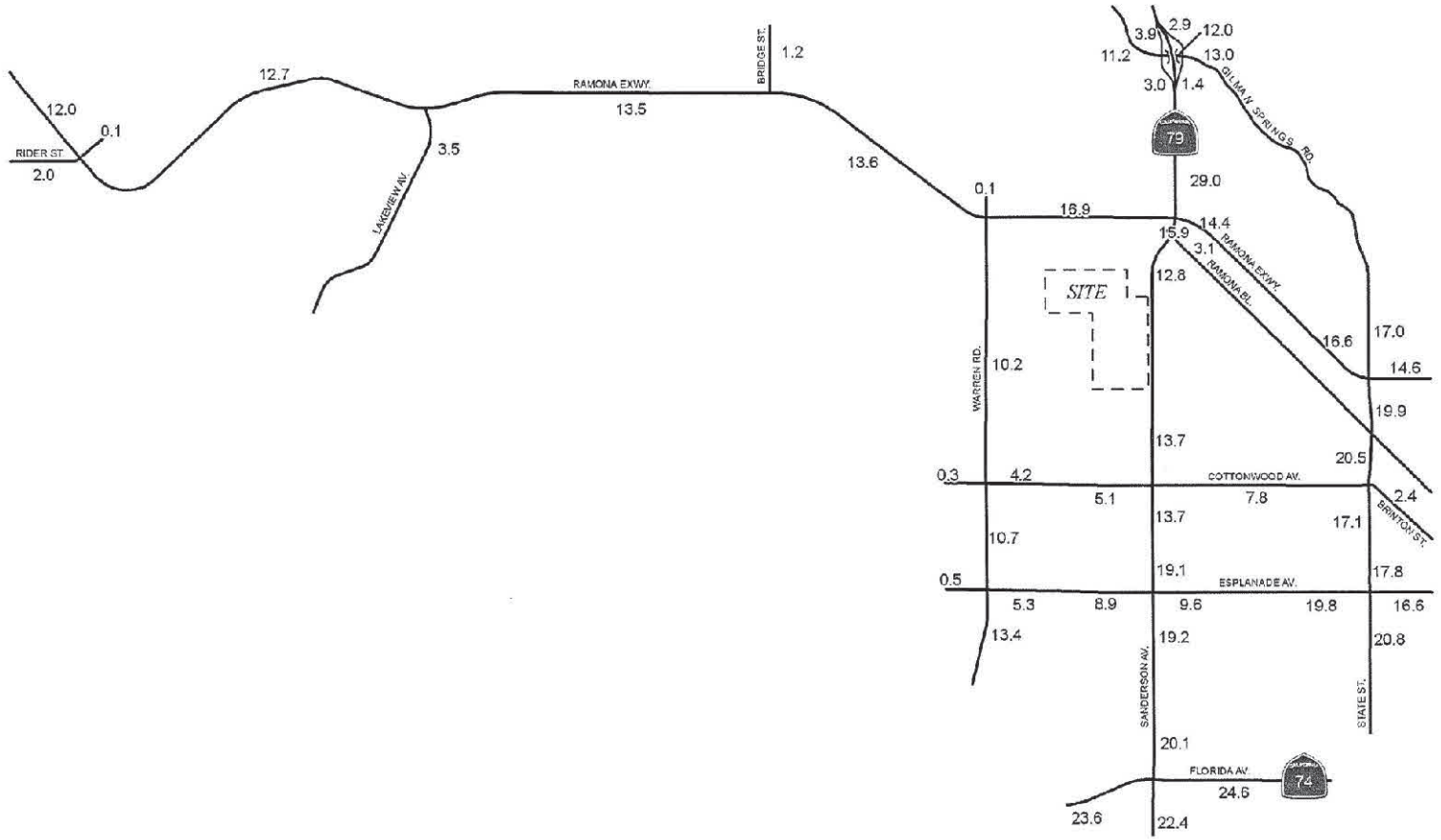
[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop

SOURCE: Table 3-1, Intersection Analysis for Existing Conditions, April 24, 2009 Urban Crossroads Traffic Report (see *Appendix H*)




SOURCE: URBAN CROSSROADS, MARCH 2009

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## Existing Traffic Volumes

FIGURE 5.9-2

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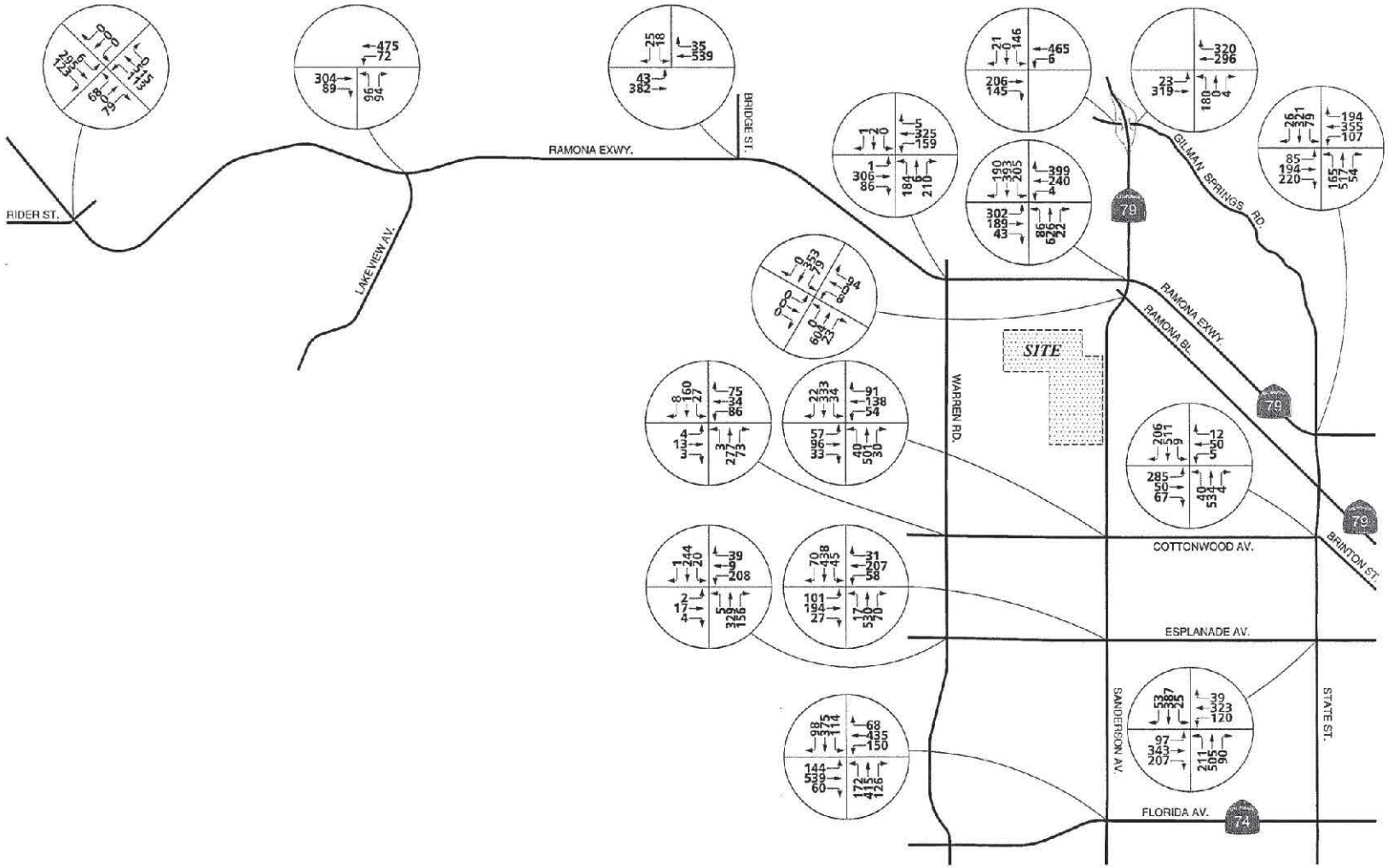


SOURCE: URBAN CROSSROADS, MARCH 2009

Villages of San Jacinto EIR

## Existing AM Peak Hour Intersection Volumes

FIGURE 5.9-3

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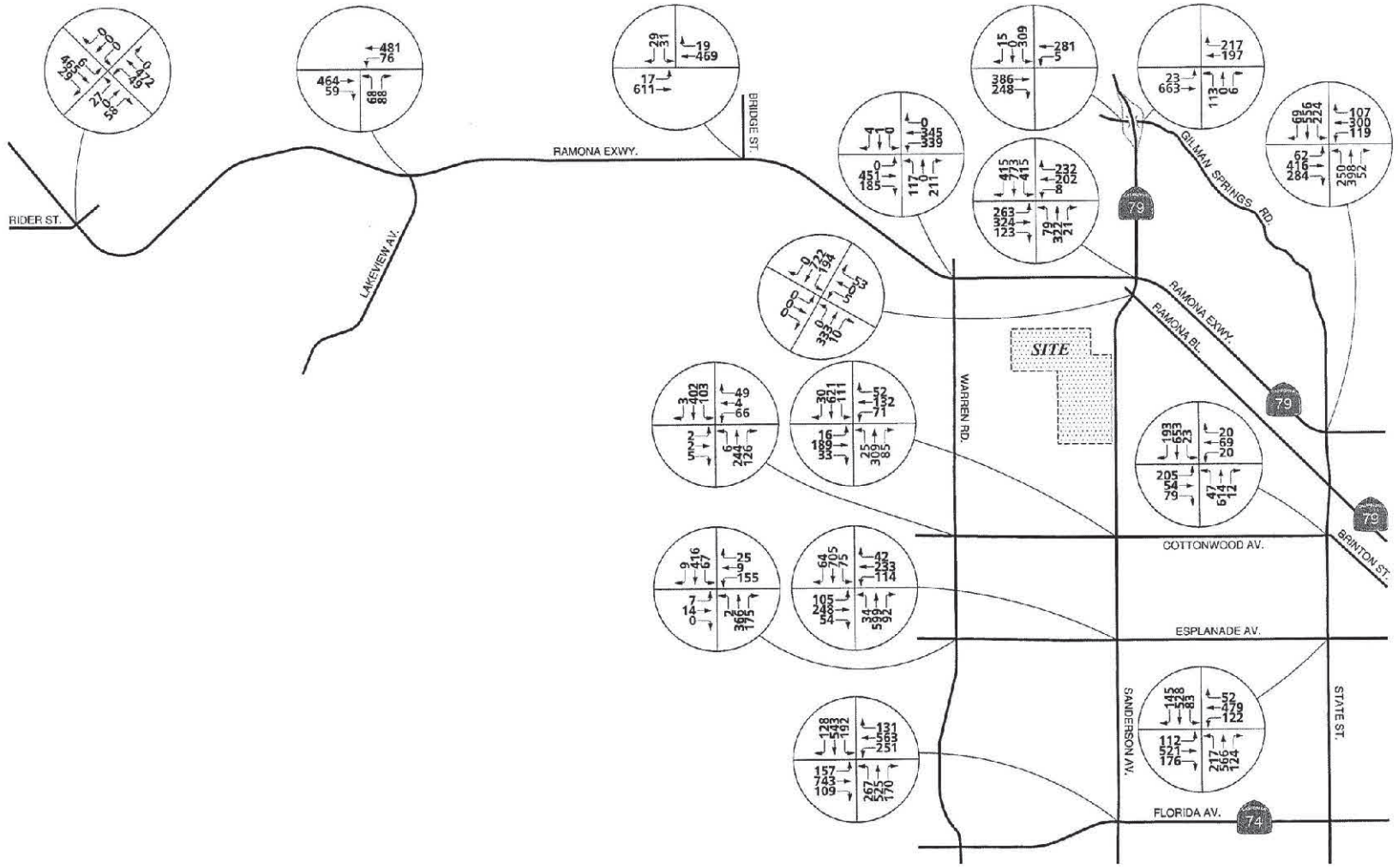


SOURCE: URBAN CROSSROADS, MARCH 2009

Villages of San Jacinto EIR

## Existing PM Peak Hour Intersection Volumes

FIGURE 5.9-4

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The data presented in *Table 5.9-1*, *Existing Intersection Conditions* indicates that the following intersections are currently operating at an unacceptable LOS (LOS E or lower):

- Lakeview Avenue (NS) at:
  - Ramona Expressway (EW)
- Sanderson Avenue (SR-79 SB Ramps) (NS) at:
  - Gilman Springs Road SB (EW)
- Sanderson Avenue (NS) at:
  - Ramona Expressway (EW)
  - Ramona Boulevard (EW).

The above outlined existing traffic conditions warrant traffic signals at the following study area intersections:

- Lakeview Avenue (NS) at:
  - Ramona Expressway (EW)
- Warren Road (NS) at:
  - Esplanade Avenue (EW)
- Sanderson Avenue (SR-79 SB Ramps) (NS) at:
  - Gilman Springs Road (EW)
- Sanderson Avenue (SR-79 NB Ramps) (NS) at:
  - Gilman Springs Road (EW).

**Alternative Transportation**

Public bus service in the project vicinity is provided by the Riverside Transit Agency. Three bus routes operate within the City of San Jacinto. However, there are currently no transit facilities or designated bikeways operating in the study area.

**Regulatory Framework**

The Western Riverside Council of Governments (WRCOG) is a council which is comprised of members representing 15 local jurisdictions in western Riverside County, including the City of San Jacinto. The WRCOG functions to facilitate collective assessment of regional issues, such as traffic, by the various representative jurisdictions. In June 2004 WRCOG adopted the

Transportation Uniform Mitigation Fee (TUMF) 10-Year Strategic Plan and Transportation Improvement Program Development Guidelines.

The purpose of the TUMF program is to establish a comprehensive funding source for infrastructure improvements to mitigate cumulative regional transportation impacts of new development on regional arterial highways (Parsons Brinckerhoff Quade & Douglas, Inc., June 2004). The TUMF program has 5 primary goals that are articulated as a basis for developing specific project priorities and selection criteria. These goals are summarized as follows:

- ***Sustain Mobility*** – Mitigate the transportation system impacts of new development
- ***System Continuity*** – Enhance the continuity of the regional arterial highway system
- ***Project Development*** – Encourage systematic project development and provide flexibility to advance TUMF projects promptly through completion
- ***Leverage Funds*** – Secure additional matching funds for TUMF system improvements
- ***Regional Benefit*** – Ensure TUMF program revenues are distributed to maximize mitigation of new development impacts.

The TUMF program is intended to address cumulative traffic impacts of new development to the region and therefore TUMF program funded improvements are focused primarily on regional arterial highways. New development in Western Riverside County places additional demand on the regional transportation system to provide safe and convenient access for new residents and employees. The additional demand on the transportation facilities reduces mobility absent adequately and timely funded infrastructure improvements implemented to meet growing demands. As such, WRCOG has developed and implemented the TUMF program which requires new development to contribute revenues to partially fund improvements that will mitigate the transportation impacts of new developments. TUMF investments are then focused on those regional facilities most impacted by new development. The TUMF program assigns impact fees on a per dwelling unit basis for residential development and a per square foot basis for non-residential uses (i.e., commercial, industrial, office).

The City of San Jacinto also implements a Development Impact Fee (DIF) which consists of a "Streets and Roads" component and a "Traffic Signals" Component. The DIF program assigns impact fees on a "per acre" basis for non-residential development and a per unit basis for residential development. Fee calculations for both the TUMF and DIF programs are shown in *Section 5.9.5*.

## 5.9.3 Significance Criteria

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on transportation, circulation and access if it:

1. Would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)
2. Would exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways
3. Would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks
4. Would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
5. Would result in inadequate emergency access
6. Would result in inadequate parking capacity
7. Would conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

## 5.9.4 Impacts

***Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?***

***Would the project exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways?***

**Project Traffic**

In order to characterize potential traffic impacts associated with the project, a characterization of the project's contribution to local traffic levels must occur. Site traffic is characterized by trip generation, trip distribution, modal split, and trip assignment.

As indicated in *Section 5.9.1*, the proposed project's "worst case" traffic impact scenario would be a land use scenario that includes construction of the planned high school, in effect a 1,016-unit development. Trip generation rates are based upon the proposed land use plan and data collected by the Institute of Traffic Engineers (ITE), *Trip Generation Manual, 7th Edition*. Trip generation rates for each proposed land use are shown in *Table 5.9-2*, *Project Trip*

*Generation Rates*, while daily and peak hour traffic generated by the proposed project is shown in *Table 5.9-3*, *Trip Generation Summary*.

**Table 5.9-2**
**Project Trip Generation Rates**

| LAND USE | ITE CODE | QUANTITY | UNITS[2] | PEAK HOUR TRIP RATES | | | | | | DAILY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AM | | | PM | | | |
| | | | | IN | OUT | TOTAL | IN | OUT | TOTAL | |
| Single-Family Detached | 210 | Varies | DU | 0.19 | 0.56 | 0.75 | 0.64 | 0.37 | 1.01 | 9.57 |
| Park | SANDAG[3] | Varies | AC | 3.25 | 3.25 | 6.50 | 2.25 | 2.25 | 4.50 | 50.00 |
| High School | 530 | 2,000 | STU | 0.28 | 0.13 | 0.41 | 0.07 | 0.07 | 0.14 | 1.71 |
| Commercial/Retail | 820 | 247.20 | TSF | 0.66 | 0.42 | 1.08 | 2.21 | 2.39 | 4.6 | 49.47 |
| PLANNING AREA 12 | | | | | | | | | | |
| Commercial/Retail (10% of PA12) | 820 | 34.37 | TSF | 1.46 | 0.94 | 2.4 | 4.32 | 4.68 | 9.00 | 98.69 |
| Government Office Complex (30% of PA12) | 733 | 103.11 | TSF | 1.97 | 0.24 | 2.21 | 0.88 | 1.97 | 2.85 | 27.92 |
| Professional Office (60% of PA12) | 710 | 206.21 | TSF | 1.43 | 0.19 | 1.62 | 0.26 | 1.25 | 1.51 | 11.29 |

[1] Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 7th Edition, 2003.

[2] DU = Dwelling Units
STU = Students
TSF = Thousand Square Feet
AC = Acres

[3] SANDAG = Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region. April 2002.

## Table 5.9-3
## Trip Generation Summary

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR AM IN | AM OUT | AM TOTAL | PM IN | PM OUT | PM TOTAL | DAILY |
|---|---|---|---|---|---|---|---|---|---|
| **YEAR 2015 - PHASE 1** | | | | | | | | | |
| Single-Family Detached | 431 | DU | 82 | 241 | 323 | 276 | 159 | 435 | 4,125 |
| Park | 45.9 | AC | 149 | 149 | 298 | 103 | 103 | 206 | 2,295 |
| **PHASE 1 Subtotal** | | | 231 | 390 | 621 | 379 | 262 | 641 | 6,420 |
| *- internal capture[2]* | | | *-19* | *-19* | *-38* | *-18* | *-18* | *-36* | *-496* |
| **PHASE 1 TOTAL** | | | **212** | **371** | **583** | **361** | **244** | **605** | **5,924** |
| **YEAR 2017 - PHASE 2** | | | | | | | | | |
| Single-Family Detached | 322 | DU | 61 | 180 | 241 | 206 | 119 | 325 | 3082 |
| **PHASE 2 Only Subtotal** | | | 61 | 180 | 241 | 206 | 119 | 325 | 3,082 |
| **PHASE 1 + 2 Subtotal (no internal capture)** | | | 292 | 570 | 862 | 585 | 381 | 966 | 9,502 |
| *- internal capture[2]* | | | *-34* | *-34* | *-68* | *-31* | *-31* | *-62* | *-552* |
| **PHASE 1 + 2 TOTAL** | | | **258** | **536** | **794** | **554** | **350** | **904** | **8,950** |
| **YEAR 2023 - PHASE 3 (AM & Daily = 263 DUs + HS; PM = 263 DUs + 322 DUs)** | | | | | | | | | |
| Single-Family Detached | 263 | DU | 50 | 147 | 197 | 168 | 97 | 266 | 2,517 |
| High School | 2,000 | STU | 560 | 260 | 820 | USE SFDU (313DUs) | | | 3,420 |
| Single-Family Detached | 313 | DU | USE HIGH SCHOOL | | | 200 | 116 | 316 | USE HS |
| **PHASE 3 Only Subtotal** | | | 610 | 407 | 1,017 | 368 | 213 | 582 | 5,937 |
| **PHASE 1 + 2 + 3 Subtotal (no internal capture)** | | | 902 | 977 | 1,879 | 953 | 594 | 1,548 | 15,439 |
| *- internal capture[2]* | | | *-111* | *-111* | *-222* | *-36* | *-36* | *-72* | *-896* |
| **PHASE 1 + 2 + 3 TOTAL** | | | **791** | **866** | **1,657** | **917** | **558** | **1,476** | **14,543** |
| **YEAR 2033 (GP Buildout) - PHASE 4** | | | | | | | | | |
| Commercial/Retail (PA11) | 247.20 | TSF | 163 | 104 | 267 | 546 | 591 | 1,137 | 12,229 |
| Commercial/Retail (10% of PA12) | 34.37 | TSF | 50 | 32 | 82 | 148 | 161 | 309 | 3,392 |
| Government Office Complex (30% of PA12) | 103.11 | TSF | 203 | 25 | 228 | 91 | 203 | 294 | 2,879 |
| Professional Office (60% of PA12) | 206.21 | TSF | 295 | 39 | 334 | 54 | 258 | 311 | 2,328 |
| **PHASE 4 Subtotal** | | | 711 | 200 | 911 | 839 | 1,213 | 2,051 | 20,828 |
| **PHASE 1 + 2 + 3 + 4 Subtotal (no internal capture)** | | | 1,613 | 1,177 | 2,790 | 1,792 | 1,807 | 3,599 | 36,267 |
| *- internal capture[2]* | | | *-113* | *-113* | *-226* | *-316* | *-316* | *-632* | *-5,916* |
| *- Phase 4 pass-by ( shopping center only ) (25%)[3]* | | | *-30* | *-30* | *-59* | *-143* | *-143* | *-285* | *-3,185* |
| **NET EXTERNAL TRIPS TOTAL** | | | **1,470** | **1,034** | **2,505** | **1,333** | **1,348** | **2,682** | **27,166** |

[1] DU = Dwelling Units
STU = Students
AC = Acres
TSF = Thousand Square Feet

[2] Internal Capture is the reduction of the overall traffic due to the compatability of land uses (proposed residential, high school, park, office, and shopping center) within the project site.

[3] "Pass-By" reduction rates have been used to account for traffic that will access the site as an intermediate stop on the way to a primary destination.

Due to the size and diversity of land uses of the proposed project a certain portion of the anticipated ADT will simply circulate internally rather than exit the development to travel to other destinations. This factor, deemed "internal capture," would include vehicle trips from the residential areas to school, residential areas to shopping center and residential areas to the mixed-use area. The number of internal capture trips was calculated for each building phase of the project. As shown in *Table 5.9-3*, the project is estimated to generate a total of 27,166 net external ADT for all four phases after accounting for internal trips and "pass-by" trips (i.e., traffic that will access the site on the way to another primary destination).

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is heavily influenced by the geographical location of the site, the location of employment, commercial and recreational opportunities and the proximity to the regional freeway system. Trip distribution for this project is based upon near-term conditions which include those roadway facilities which are either in place or are expected to be in place over the next several years. Roadway construction and improvements that are assumed to be in place in conjunction with each phase of the project are detailed in Section 4.2 of the Traffic Impact Analysis in *Appendix H.*

Due to the lack of anticipated public transit facilities within this portion of the City of San Jacinto, the traffic-reducing impact of public transportation facilities has not been considered for this project. Should transit facilities become a part of this area, they would in effect reduce traffic levels and reduce anticipated impacts described herein.

The assignment of traffic from the site to the adjoining roadway system has been based upon the site's trip generation, trip distribution, proposed arterial highway system and local street systems. Project generated traffic is then combined with background traffic and projected future traffic to estimate impacts on the study area roadways as described below.

**Cumulative Traffic**

In order to fully address traffic impacts, an impact analysis assuming the ultimate build out of other planned projects (cumulative projects), must be performed. These projects were based on information provided by the City of San Jacinto and County of Riverside and include projects that are under construction or are under review in the project area.

Several cumulative projects were identified for this analysis and have been divided into 28 traffic analysis zones (TAZ). *Table 5.9-4*, *2023 Cumulative Project Trip Generation*, provides a summary of the total anticipated units (if residential) or square footage (if commercial) and daily AM and PM peak hour trips assumed in each TAZ based on known project information. Daily and peak hour trips that would be generated by the additional development proposals in the study area were calculated and the projected generated traffic was distributed and assigned to the study area street system.

# Table 5.9-4
# 2023 Cumulative Project Trip Generation

| PROJECT | | | | | PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM | | | PM | | | |
| TAZ | NAME | LAND USE | QUANTITY | UNITS[1] | IN | OUT | TOTAL | IN | OUT | TOTAL | DAILY |
| 1 | SP 1-01 | | | | | | | | | | |
| | - TR 30033 | SFDR | 146 | DU | 28 | 82 | 110 | 93 | 54 | 147 | 1,397 |
| | - TR 30034 | SFDR | 50 | DU | 10 | 28 | 38 | 32 | 19 | 51 | 479 |
| | - TR 30035 | SFDR | 74 | DU | 14 | 41 | 55 | 47 | 27 | 74 | 708 |
| | - TR 30036 | SFDR | 104 | DU | 20 | 58 | 78 | 67 | 38 | 105 | 995 |
| | - TR 30084 | SFDR | 111 | DU | 21 | 62 | 83 | 71 | 41 | 112 | 1,062 |
| | - PM 30090 | SFDR | 5 | DU | 1 | 3 | 4 | 3 | 2 | 5 | 48 |
| Subtotal | | | | | 94 | 274 | 368 | 313 | 181 | 494 | 4,689 |
| 2 | TR 31037 | SFDR | 131 | DU | 25 | 73 | 98 | 84 | 48 | 132 | 1,254 |
| | TR 31282 | SFDR | 274 | DU | 52 | 153 | 205 | 175 | 101 | 276 | 2,622 |
| | TR 31154 | SFDR | 135 | DU | 26 | 76 | 102 | 86 | 50 | 136 | 1,292 |
| | TR 31900 | SFDR | 112 | DU | 21 | 63 | 84 | 72 | 41 | 113 | 1,072 |
| | TR 33072 | SFDR | 140 | DU | 27 | 78 | 105 | 90 | 52 | 142 | 1,340 |
| | TR 33138 | SFDR | 28 | DU | 5 | 16 | 21 | 18 | 10 | 28 | 268 |
| | VTR 31384 | SFDR | 48 | DU | 9 | 27 | 36 | 31 | 18 | 49 | 459 |
| | TR 33249 | SFDR | 25 | DU | 5 | 14 | 19 | 16 | 9 | 25 | 239 |
| | TR 34364 | SFDR | 8 | DU | 2 | 4 | 6 | 5 | 3 | 8 | 77 |
| Subtotal | | | | | 172 | 504 | 676 | 577 | 332 | 909 | 8,623 |
| 3 | TR 30814 | SFDR | 155 | DU | 29 | 87 | 116 | 99 | 57 | 156 | 1,483 |
| | TR 30481 | SFDR | 126 | DU | 24 | 71 | 95 | 81 | 47 | 128 | 1,206 |
| | TR 31555 | SFDR | 115 | DU | 22 | 64 | 86 | 74 | 43 | 117 | 1,101 |
| | TR 30813 (25% completed) | SFDR | 186 | DU | 35 | 104 | 139 | 119 | 69 | 188 | 1,780 |
| | TR 30335 | SFDR | 69 | DU | 13 | 39 | 52 | 44 | 26 | 70 | 660 |
| | TR 30944 | SFDR | 103 | DU | 20 | 58 | 78 | 66 | 38 | 104 | 986 |
| Subtotals | | | | | 143 | 423 | 566 | 483 | 280 | 763 | 7,216 |
| 4 | VTR 31097 | SFDR | 214 | DU | 41 | 120 | 161 | 137 | 79 | 216 | 2,048 |
| | TR 31293 | SFDR | 100 | DU | 19 | 56 | 75 | 64 | 37 | 101 | 957 |
| | TR 29384 (41% completed) | SFDR | 39 | DU | 7 | 22 | 29 | 25 | 14 | 39 | 373 |
| | TR 31246 | SFDR | 128 | DU | 24 | 72 | 96 | 82 | 47 | 129 | 1,225 |
| | TR 33106 | SFDR | 15 | DU | 3 | 8 | 11 | 10 | 6 | 16 | 144 |
| Subtotals | | | | | 94 | 278 | 372 | 318 | 183 | 501 | 4,747 |
| 5 | TR 30878 | SFDR | 170 | DU | 32 | 95 | 127 | 109 | 63 | 172 | 1,627 |
| Subtotal | | | | | 32 | 95 | 127 | 109 | 63 | 172 | 1,627 |
| 6 | TR 32250 | SFDR | 53 | DU | 10 | 30 | 40 | 34 | 20 | 54 | 507 |
| | TR 30559 (85% completed) | SFDR | 20 | DU | 4 | 11 | 15 | 13 | 7 | 20 | 191 |
| | TR 31929 | SFDR | 78 | DU | 15 | 44 | 59 | 50 | 29 | 79 | 746 |
| Subtotal | | | | | 29 | 85 | 114 | 97 | 56 | 153 | 1,444 |
| 7 | Holgate / Hopkins (VPM 31281) | Commercial | 500.0 | TSF | 250 | 160 | 410 | 870 | 940 | 1,810 | 19,330 |
| | | *- pass by (commercial) (25%)* [4] | | | *-63* | *-40* | *-103* | *-218* | *-235* | *-453* | *-4,833* |
| | | Industrial | 62.5 | TSF | 75 | 14 | 89 | 19 | 62 | 81 | 798 |
| | | **TOTAL (Holgate / Hopkins)** | | | **262** | **134** | **396** | **671** | **767** | **1,438** | **15,295** |
| | Scott Martin (PM 31522) | Commercial | 200.0 | TSF | 144 | 92 | 236 | 474 | 514 | 988 | 10,656 |
| | | - pass by (commercial) (25%) [4] | | | -36 | -23 | -59 | -119 | -129 | -248 | -2,664 |
| | | *Industrial* | *250.0* | *TSF* | *300* | *58* | *358* | *75* | *248* | *323* | *3,190* |
| | | **TOTAL (Scott Martin)** | | | **408** | **127** | **535** | **430** | **633** | **1,063** | **11,182** |
| | Bahan Hopkins / Real Estate Group | SFDR | 500 | DU | 95 | 280 | 375 | 320 | 185 | 505 | 4,785 |
| | | Commercial | 1,100.00 | TSF | 407 | 253 | 660 | 1463 | 1584 | 3,047 | 32,274 |
| | | *- internal capture* [3] | | | *-38* | *-38* | *-76* | *-197* | *-197* | *-394* | *-1,699* |
| | | *- pass by (commercial) (25%)* [4] | | | *-102* | *-63* | *-165* | *-366* | *-396* | *-762* | *-8,069* |
| | | **TOTAL (Bahan Hopkins)** | | | **362** | **432** | **794** | **1220** | **1176** | **2,396** | **27,291** |
| | SJ 106, LLC | SFDR | 321 | DU | 61 | 180 | 241 | 205 | 119 | 324 | 3,072 |
| | | Commercial | 250.0 | TSF | 165 | 105 | 270 | 550 | 595 | 1,145 | 12,320 |
| | | *- internal capture* [3] | | | *-15* | *-15* | *-30* | *-114* | *-114* | *-228* | *-1,061* |
| | | *- pass by (commercial) (25%)* [4] | | | *-41* | *-26* | *-67* | *-138* | *-149* | *-287* | *-3,080* |
| | | **TOTAL (SJ 106, LLC)** | | | **170** | **244** | **414** | **503** | **451** | **954** | **11,251** |
| | Target Center (100%) | Commercial | 771.00 | TSF | 324 | 208 | 532 | 1157 | 1257 | 2414 | 25,620 |
| | | *- pass by (commercial) (25%)* [4] | | | *-81* | *-52* | *-133* | *-289* | *-314* | *-603* | *-6,405* |
| | | **TOTAL (Target Center)** | | | **243** | **156** | **399** | **868** | **943** | **1811** | **19,215** |
| | McCleish Group (Record Family) | Commercial | 200.00 | TSF | 144 | 92 | 236 | 474 | 514 | 988 | 10,656 |
| | | *- pass by (commercial) (25%)* [4] | | | *-36* | *-23* | *-59* | *-119* | *-129* | *-248* | *-2,664* |
| | | **TOTAL (McCleish Group)** | | | **108** | **69** | **177** | **355** | **385** | **740** | **7,992** |
| TOTAL (TAZ 7) | | | | | 1,553 | 1,162 | 2,715 | 3,047 | 4,355 | 8,402 | 92,226 |
| 8 | TR 30803 | SFDR | 203 | DU | 39 | 114 | 153 | 130 | 75 | 205 | 1,943 |
| | TR 22665 | SFDR | 147 | DU | 28 | 82 | 110 | 94 | 54 | 148 | 1,407 |
| TOTAL (TAZ 8) | | | | | 67 | 196 | 263 | 224 | 129 | 353 | 3,350 |

## Table 5.9-4 (Continued)

| PROJECT | | | | | PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM | | | PM | | | |
| TAZ | NAME | LAND USE | QUANTITY | UNITS[1] | IN | OUT | TOTAL | IN | OUT | TOTAL | DAILY |
| 9 | TR 29917 | SFDR | 134 | DU | 25 | 75 | 100 | 86 | 50 | 136 | 1,282 |
| | TR 30639 | SFDR | 92 | DU | 17 | 52 | 69 | 59 | 34 | 93 | 880 |
| | TR 31794 | SFDR | 62 | DU | 12 | 35 | 47 | 40 | 23 | 63 | 593 |
| | TR 32518 | SFDR | 34 | DU | 6 | 19 | 25 | 22 | 13 | 35 | 325 |
| TOTAL (TAZ 9) | | | | | 60 | 181 | 241 | 207 | 120 | 327 | 3,080 |
| 10 | TR 29992 | SFDR | 30 | DU | 6 | 17 | 23 | 19 | 11 | 30 | 287 |
| | TR 30884 | SFDR | 14 | DU | 3 | 8 | 11 | 9 | 5 | 14 | 134 |
| | TR 33509 | SFDR | 37 | DU | 7 | 20 | 27 | 23 | 13 | 36 | 345 |
| TOTAL (TAZ 10) | | | | | 16 | 45 | 61 | 51 | 29 | 80 | 766 |
| 11 | VTR 30484 | SFDR | 117 | DU | 22 | 66 | 88 | 75 | 43 | 118 | 1,120 |
| | TR 31566 | SFDR | 61 | DU | 12 | 34 | 46 | 39 | 23 | 62 | 584 |
| TOTAL (TAZ 11) | | | | | 34 | 100 | 134 | 114 | 66 | 180 | 1,704 |
| 12 | TR 32053 | SFDR | 178 | DU | 34 | 100 | 134 | 114 | 66 | 180 | 1,703 |
| | TR 31036 (19% completed) | SFDR | 108 | DU | 21 | 60 | 81 | 69 | 40 | 109 | 1,034 |
| TOTAL (TAZ 12) | | | | | 55 | 160 | 215 | 183 | 106 | 289 | 2,737 |
| 13 | TR 30644 (55% completed) | SFDR | 66 | DU | 13 | 37 | 50 | 42 | 24 | 66 | 632 |
| | TR 31035 | SFDR | 77 | DU | 15 | 43 | 58 | 49 | 28 | 77 | 737 |
| | TR 32376 | SFDR | 337 | DU | 64 | 189 | 253 | 216 | 125 | 341 | 3,225 |
| TOTAL (TAZ 13) | | | | | 92 | 269 | 361 | 307 | 177 | 484 | 4,594 |
| 14 | Shea Homes (TR 31886) | SFDR | 321 | DU | 61 | 180 | 241 | 205 | 119 | 324 | 3,072 |
| | TR 32843 | SFDR | 143 | DU | 27 | 80 | 107 | 92 | 53 | 145 | 1,369 |
| | PM 30532 | SFDR | 2 | DU | 0 | 1 | 1 | 1 | 1 | 2 | 19 |
| | TR 32555 | SFDR | 12 | DU | 2 | 7 | 9 | 8 | 4 | 12 | 115 |
| TOTAL (TAZ 14) | | | | | 90 | 268 | 358 | 306 | 177 | 483 | 4,575 |
| 15 | SP 1-03 ( TR 30598 ) | SFDR | 580 | DU | 110 | 325 | 435 | 371 | 215 | 586 | 5,551 |
| | TR 32080 | SFDR | 53 | DU | 10 | 30 | 40 | 34 | 20 | 54 | 507 |
| | TR 29341 | SFDR | 251 | DU | 48 | 141 | 189 | 161 | 93 | 254 | 2,402 |
| TOTAL (TAZ 15) | | | | | 168 | 496 | 664 | 566 | 328 | 894 | 8,460 |
| 16 | TR 30597 | SFDR | 116 | DU | 22 | 65 | 87 | 74 | 43 | 117 | 1,110 |
| | TR 33420 | SFDR | 161 | DU | 31 | 90 | 121 | 103 | 60 | 163 | 1,541 |
| TOTAL (TAZ 16) | | | | | 53 | 155 | 208 | 177 | 103 | 280 | 2,651 |
| 17 | TR 30379 | SFDR | 126 | DU | 24 | 71 | 95 | 81 | 47 | 128 | 1,208 |
| | TR 30923 | SFDR | 192 | DU | 36 | 108 | 144 | 123 | 71 | 194 | 1,837 |
| | | SFDR | 147 | DU | 28 | 82 | 110 | 94 | 54 | 148 | 1,407 |
| | Kasbergen Hafliger Property | Commercial | 30.0 | TSF | 47 | 30 | 77 | 136 | 147 | 283 | 3,105 |
| | | *- internal capture* [3] | | | *-8* | *-8* | *-16* | *-30* | *-30* | *-60* | *-652* |
| | | TOTAL ( KASBERGEN ) | | | 67 | 104 | 171 | 200 | 171 | 371 | 3,860 |
| TOTAL (TAZ 17) | | | | | 127 | 283 | 410 | 404 | 289 | 693 | 6,903 |
| SP 1-02 ( TR 32955 ) | | SFDR | 613 | DU | 116 | 343 | 459 | 392 | 227 | 619 | 5,866 |
| | | *- Assume 100% of Full Buildout (613 DUs)* | | | *116* | *-343* | *459* | *392* | *227* | *619* | *5,866* |
| TR 30828 | | SFDR | 293 | DU | 56 | 164 | 220 | 188 | 108 | 296 | 2,804 |
| TR 31544 | | SFDR | 134 | DU | 25 | 75 | 100 | 86 | 50 | 136 | 1,282 |
| Vanderham - TTM 32155 | | SFDR | 253 | DU | 48 | 142 | 190 | 162 | 94 | 256 | 2,421 |
| Ashbrook PUD (TR 33408) | | SFDR | 210 | DU | 40 | 118 | 158 | 134 | 78 | 212 | 2,010 |
| 7th Street and Cawston Residential | | SFDR | 128 | DU | 24 | 72 | 96 | 82 | 47 | 129 | 1,225 |
| The Promenade | | Apartments | 600 | DU | 60 | 246 | 306 | 240 | 132 | 372 | 4,032 |
| | | *-internal capture (Residential)* [3] | | | *-11* | *-16* | *-27* | *-23* | *-15* | *-38* | *-380* |
| | | Office | 39 | TSF | 78 | 11 | 90 | 21 | 102 | 123 | 646 |
| | | *-internal capture (Office)* [3] | | | *-4* | *-4* | *-8* | *-5* | *-5* | *-10* | *-125* |
| | | Retail | 40 | TSF | 55 | 35 | 90 | 164 | 178 | 342 | 3,744 |
| | | *-internal capture (Retail)* [3] | | | *-18* | *-13* | *-31* | *-18* | *-26* | *-44* | *-493* |
| | | *-"Pass-By" Trips Retail (-15%)* [4] | | | *-* | *-* | *0* | *-22* | *-23* | *-45* | *-488* |
| | | Storage (Mini Warehouse) | 2.71 | AC | 4 | 4 | 8 | 5 | 5 | 10 | 105 |
| | | TOTAL ( The Promenade ) | | | 164 | 263 | 427 | 362 | 348 | 710 | 7,041 |
| TR 30943 | | SFDR | 210 | DU | 40 | 118 | 158 | 134 | 78 | 212 | 2,010 |
| San Jacinto Ranch (Phase I,II,III,IV) | | PHASE 1 - 2009 | | | | | | | | | |
| | | SFDR | 27 | DU | 5 | 15 | 20 | 17 | 10 | 27 | 258 |
| | | Townhouse / Condo | 471 | DU | 33 | 174 | 207 | 165 | 80 | 245 | 2,760 |
| | | Commercial | 261.569 | TSF | 170 | 110 | 280 | 568 | 615 | 1,183 | 12,687 |
| | | Office | 46.163 | TSF | 69 | 12 | 101 | 22 | 108 | 131 | 736 |
| | | SUBTOTAL (PHASE 1) | | | 297 | 311 | 608 | 772 | 813 | 1,585 | 16,441 |
| | | *-"Pass-By" Trips (25% - Commercial Only)* [4] | | | *-43* | *-28* | *-71* | *-142* | *-154* | *-296* | *-3,172* |
| | | *-Internal Trips (Residential)* [3] | | | *-8* | *-9* | *-17* | *-58* | *-48* | *-106* | *-1,076* |
| | | *-Internal Trips (Commercial)* [3] | | | *-11* | *-11* | *-22* | *-59* | *-63* | *-122* | *-1,205* |
| | | *-Internal Trips (Office)* [3] | | | *-3* | *-2* | *-5* | *-7* | *-13* | *-20* | *-143* |
| | | *TOTAL REDUCTION (Phase 1 only)* | | | *-65* | *-50* | *-115* | *-266* | *-278* | *-544* | *-5,596* |

## Table 5.9-4 (Continued)

| PROJECT | | | | | PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM | | | PM | | | |
| TAZ | NAME | LAND USE | QUANTITY | UNITS[1] | IN | OUT | TOTAL | IN | OUT | TOTAL | DAILY |
| | | TOTAL (SJR PHASES 1) | | | 232 | 261 | 493 | 506 | 535 | 1,041 | 10,845 |
| | | PHASE 2 - 2012 | | | | | | | | | |
| | | SFDR | 125 | DU | 24 | 70 | 94 | 80 | 46 | 126 | 1,196 |
| | | Townhouse / Condo | 700 | DU | 49 | 259 | 308 | 245 | 119 | 364 | 4,102 |
| | | Commercial | 388.774 | TSF | 214 | 136 | 350 | 735 | 797 | 1,532 | 16,414 |
| | | Office | 66.607 | TSF | 122 | 16 | 138 | 27 | 129 | 156 | 998 |
| | | SUBTOTAL (PHASE 2) | | | 409 | 481 | 890 | 1,087 | 1,091 | 2,178 | 22,710 |
| | | *-"Pass-By" Trips (25% - Commercial Only)[4]* | | | *-96* | *-62* | *-158* | *-326* | *-353* | *-679* | *-7,275* |
| | | *-Internal Trips (Residential)[3]* | | | *-17* | *-19* | *-36* | *-162* | *-117* | *-279* | *-2,699* |
| | | *-Internal Trips (Commercial)[3]* | | | *-25* | *-24* | *-49* | *-143* | *-172* | *-315* | *-3,003* |
| | | *-Internal Trips (Office)[3]* | | | *-7* | *-6* | *-13* | *-15* | *-31* | *-46* | *-338* |
| | | *TOTAL REDUCTION (Phases 1 and 2)* | | | *-145* | *-111* | *-256* | *-646* | *-673* | *-1,319* | *-13,315* |
| | | **TOTAL (SJR PHASES 1 and 2)** | | | **561** | **681** | **1,242** | **1,213** | **1,231** | **2,444** | **25,836** |
| | | PHASE 3 - 2015 | | | | | | | | | |
| | | SFDR | 226 | DU | 43 | 128 | 171 | 146 | 84 | 230 | 2,182 |
| | | Condo | 1008 | DU | 71 | 373 | 444 | 353 | 171 | 524 | 5,907 |
| | | Commercial | 173.837 | TSF | 134 | 85 | 219 | 433 | 469 | 902 | 9,728 |
| | | Office | 30.677 | TSF | 64 | 9 | 73 | 19 | 94 | 113 | 537 |
| | San Jacinto Ranch (Phase I,II,III,IV) | SUBTOTAL (PHASE 3) | | | 312 | 595 | 907 | 951 | 818 | 1,769 | 18,354 |
| | | *-"Pass-By" Trips (25% - Commercial Only)[4]* | | | *-130* | *-83* | *-213* | *-434* | *-470* | *-904* | *-9,707* |
| | | *-Internal Trips (Residential)[3]* | | | *-23* | *-26* | *-49* | *-233* | *-156* | *-389* | *-3,906* |
| | | *-Internal Trips (Commercial)[3]* | | | *-33* | *-33* | *-66* | *-232* | *-247* | *-479* | *-4,303* |
| | | *-Internal Trips (Office)[3]* | | | *-10* | *-7* | *-17* | *-21* | *-83* | *-104* | *-443* |
| | | *-TOTAL REDUCTION (Phases 1, 2 and 3)* | | | *-196* | *-149* | *-345* | *-920* | *-956* | *-1876* | *-18359* |
| | | **TOTAL (SJR RANCH PHASES 1, 2 and 3)** | | | **822** | **1,238** | **2,060** | **1,890** | **1,766** | **3,656** | **39,146** |
| | | PHASE 4 - 2018 | | | | | | | | | |
| | | SFDR | 612 | DU | 116 | 343 | 459 | 392 | 226 | 618 | 5,857 |
| | | Condo | 347 | DU | 24 | 128 | 152 | 121 | 59 | 180 | 2,033 |
| | | Commercial | 192.72 | TSF | 141 | 91 | 232 | 463 | 501 | 964 | 10,403 |
| | | Office | 34.009 | TSF | 70 | 10 | 80 | 20 | 97 | 117 | 582 |
| | | Elementary School | 600 | STU | 138 | 114 | 252 | 18 | 36 | 54 | 774 |
| | | SUBTOTAL (PHASE 4) | | | 489 | 686 | 1,175 | 1,014 | 919 | 1,933 | 19,649 |
| | | *-"Pass-By" Trips (25% - Commercial Only)[4]* | | | *-165* | *-106* | *-271* | *-550* | *-596* | *-1,146* | *-12,308* |
| | | *-Internal Trips (Residential)[3]* | | | *-53* | *-61* | *-114* | *-300* | *-201* | *-501* | *-4,952* |
| | | *-Internal Trips (Commercial)[3]* | | | *-42* | *-43* | *-85* | *-296* | *-313* | *-609* | *-5,451* |
| | | *-Internal Trips (Office)[3]* | | | *-13* | *-9* | *-22* | *-27* | *-107* | *-134* | *-557* |
| | | *-Internal Trips (Elementary School)[3]* | | | *-28* | *-23* | *-51* | *-3* | *-5* | *-8* | *-78* |
| | | *TOTAL REDUCTION (Phases 1,2,3 and 4)* | | | *-301* | *-242* | *-543* | *-1,176* | *-1,222* | *-2,398* | *-23,346* |
| | | **NET TOTAL (SJR PHASES 1, 2, 3 and 4)** | | | **1,205** | **1,831** | **3,037** | **2,648** | **2,419** | **5,067** | **53,608** |
| 18 | TR 34665 | SFDR | 20 | DU | 4 | 11 | 15 | 13 | 7 | 20 | 191 |
| TR 35447 | | SFDR | 10 | DU | 2 | 6 | 8 | 6 | 4 | 10 | 96 |
| TR 34814 | | SFDR | 63 | DU | 12 | 35 | 47 | 40 | 23 | 63 | 603 |
| 19 | CUP 03-03 | Commercial | 230 | TSF | 156 | 101 | 257 | 520 | 564 | 1084 | 11,670 |
| | | - pass by (commercial) (25%)[4] | | | -39 | -25 | -64 | -130 | -141 | -271 | -2,918 |
| | | **TOTAL ( CUP 03-03)** | | | 117 | 76 | 193 | 390 | 423 | 813 | 8,752 |
| | CUP 10-04 | Commercial | 21.24 | TSF | 38 | 24 | 62 | 108 | 117 | 225 | 2,481 |
| | | - pass by (commercial) (25%)[4] | | | -10 | -6 | -16 | -27 | -29 | -56 | -620 |
| | | **TOTAL ( CUP 10-04)** | | | 28 | 18 | 46 | 81 | 88 | 169 | 1,861 |
| | | **TOTAL (TAZ 19)** | | | 145 | 94 | 239 | 471 | 511 | 982 | 10,613 |
| PM 33196 | | Commercial | 118.2 | TSF | 105 | 67 | 172 | 336 | 364 | 700 | 7,571 |
| | | *- pass by (commercial) (25%)[4]* | | | *-26* | *-17* | *-43* | *-84* | *-91* | *-175* | *-1,893* |
| | | **TOTAL (PM 33196)** | | | 79 | 50 | 129 | 252 | 273 | 525 | 5,678 |
| 20 | CUP 17-04 | Fast Food Restaurant | 3.56 | TSF | 96 | 93 | 189 | 64 | 59 | 123 | 1,766 |
| | CUP 18-04 | Mini-Storage | 34.4 | TSF | 3 | 2 | 5 | 4 | 4 | 8 | 86 |
| | SR 13-04 | Commercial | 4.2 | TSF | 14 | 9 | 23 | 37 | 40 | 77 | 865 |
| | SR 14-04 | Commercial | 16.2 | TSF | 32 | 20 | 52 | 90 | 98 | 188 | 2,080 |
| | SR 03-05 | Commercial | 3.4 | TSF | 13 | 8 | 21 | 32 | 35 | 67 | 754 |
| | | *- internal capture (20%)[3]* | | | *-32* | *-26* | *-58* | *-45* | *-47* | *-92* | *-1,110* |
| | | Subtotal | | | 126 | 106 | 232 | 182 | 189 | 371 | 4,441 |
| | | *- pass by (commercial) (25%)[4]* | | | *-32* | *-27* | *-59* | *-46* | *-47* | *-93* | *-1,110* |
| | | **TOTAL (TAZ 18)** | | | 94 | 79 | 173 | 136 | 142 | 278 | 3,331 |
| 21 | SR 06-06 | Commercial | 5 | TSF | 16 | 10 | 26 | 42 | 45 | 87 | 969 |
| | | *- pass by (commercial) (25%)[4]* | | | *-4* | *-3* | *-7* | *-11* | *-11* | *-22* | *-242* |
| | | **TOTAL (SR 06-06)** | | | 12 | 7 | 19 | 31 | 34 | 65 | 727 |
| | SR 13-06 | Commercial | 11.5 | TSF | 26 | 17 | 43 | 72 | 78 | 150 | 1,665 |
| | | - pass by (commercial) (25%)[4] | | | -7 | -4 | -11 | -18 | -20 | -38 | -416 |
| | | **TOTAL (SR 13-06)** | | | 19 | 13 | 32 | 54 | 58 | 112 | 1,249 |
| 22 | SR 10-06 | Commercial | 8.2 | TSF | 21 | 14 | 35 | 58 | 62 | 120 | 1,336 |
| | | *- pass by (commercial) (25%)[4]* | | | *-5* | *-4* | *-9* | *-15* | *-16* | *-31* | *-334* |
| | | **TOTAL (SR 10-06)** | | | 16 | 10 | 26 | 43 | 46 | 89 | 1002 |
| | SR 04-07 | Commercial | 21.5 | TSF | 38 | 24 | 62 | 109 | 118 | 227 | 2,500 |
| | | *- pass by (commercial) (25%)[4]* | | | *-10* | *-6* | *-16* | *-27* | *-30* | *-57* | *-625* |
| | | **TOTAL (SR 04-07)** | | | 28 | 18 | 46 | 82 | 88 | 170 | 1,875 |

## Table 5.9-4 (Continued)

| PROJECT | | | | | PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM | | | PM | | | |
| TAZ | NAME | LAND USE | QUANTITY | UNITS[1] | IN | OUT | TOTAL | IN | OUT | TOTAL | DAILY |
| SR 16-06 | | Medical Office | 12.2 | TSF | 24 | 6 | 30 | 12 | 33 | 45 | 431 |
| SR 19-06 | | Medical Office | 74 | TSF | 145 | 38 | 183 | 74 | 201 | 275 | 2,674 |
| SR 20-06 | | General Office | 63.8 | TSF | 115 | 16 | 131 | 26 | 124 | 150 | 944 |
| 23 | SR 12-06 | Commercial | 105.3 | TSF | 99 | 63 | 162 | 311 | 337 | 648 | 7,022 |
| | | *- pass by (commercial) (25%)* [4] | | | *-25* | *-16* | *-41* | *-78* | *-84* | *-162* | *-1,756* |
| | | TOTAL (SR 12-06) | | | 74 | 47 | 121 | 233 | 253 | 486 | 5,266 |
| SR 19-06 Phase 3 | | Industrial Office | 45 | TSF | 31 | 7 | 38 | 8 | 31 | 39 | 313 |
| SR 03-07 | | Commercial | 13.3 | TSF | 28 | 18 | 46 | 79 | 86 | 165 | 1,830 |
| | | *- pass by (commercial) (25%)* [4] | | | *-7* | *-5* | *-12* | *-20* | *-22* | *-42* | *-458* |
| | | TOTAL (SR 03-07) | | | 21 | 13 | 34 | 59 | 64 | 123 | 1,372 |
| CUP 08-07 | | Commercial | 171.3 | TSF | 132 | 84 | 216 | 428 | 464 | 892 | 9,636 |
| | | *- pass by (commercial) (25%)* [4] | | | *-33* | *-21* | *-54* | *-107* | *-116* | *-223* | *-2,409* |
| | | TOTAL (SR 08-07) | | | 99 | 63 | 162 | 321 | 348 | 669 | 7,227 |
| CUP 1-08 | | Commercial | 141 | TSF | 117 | 75 | 192 | 376 | 409 | 785 | 8,491 |
| | | *- pass by (commercial) (25%)* [4] | | | *-29* | *-19* | *-48* | *-94* | *-102* | *-196* | *-2,123* |
| | | TOTAL (SR 1-08) | | | 88 | 56 | 144 | 282 | 307 | 589 | 6,368 |
| CUP 2-08 | | Commercial | 133.7 | TSF | 114 | 72 | 186 | 364 | 394 | 758 | 8,202 |
| | | *- pass by (commercial) (25%)* [4] | | | *-29* | *-18* | *-47* | *-91* | *-99* | *-190* | *-2,051* |
| | | TOTAL (SR 2-08) | | | 85 | 54 | 139 | 273 | 295 | 568 | 6,151 |
| 24 | TR 30915 | SFDR | 322 | DU | 61 | 180 | 241 | 206 | 119 | 325 | 3,082 |
| | TR 32165 | SFDR | 85 | DU | 16 | 48 | 64 | 54 | 31 | 85 | 813 |
| | TR 32764 | SFDR | 12 | DU | 2 | 7 | 9 | 8 | 4 | 12 | 115 |
| TOTAL (TAZ 24) | | | | | 79 | 235 | 344 | 268 | 154 | 422 | 4,010 |
| 25 | TR 33177 | SFDR | 12 | DU | 2 | 7 | 9 | 8 | 4 | 12 | 115 |
| | TR 33178 | SFDR | 11 | DU | 2 | 6 | 8 | 7 | 4 | 11 | 105 |
| TOTAL (TAZ 25) | | | | | 4 | 13 | 17 | 15 | 8 | 23 | 220 |
| 26 | TR 33180 | SFDR | 8 | DU | 2 | 4 | 6 | 5 | 3 | 8 | 77 |
| TOTAL (TAZ 26) | | | | | 2 | 4 | 6 | 5 | 3 | 8 | 77 |
| 27 | TR29315 | SFDR | 327 | DU | 62 | 183 | 245 | 209 | 121 | 330 | 3,129 |
| TOTAL (TAZ 27) | | | | | 62 | 183 | 245 | 209 | 121 | 330 | 3,129 |
| 28 | TR 31583 | SFDR | 171 | DU | 32 | 96 | 128 | 109 | 63 | 172 | 1,636 |
| TOTAL (TAZ 28) | | | | | 32 | 96 | 128 | 109 | 63 | 172 | 1,636 |
| TOTAL CUMULATIVE TRIP GENERATION FOR 2023 ( ALL ) | | | | | 5,870 | 9,254 | 15,124 | 15,693 | 13,614 | 29,307 | 303,052 |

[1] DU = Dwelling Units
TSF = Thousand Square Feet
STU = Students
AC = Acres

[2] SFDR = Single-Family Detached Residential

[3] Internal Capture is the reduction of the overall traffic due to the compatability of land uses (proposed residential), elementary within a cumulative project site.

[4] "Pass-By" reduction rates have been used to account for traffic that will access the site as an intermediate stop on the way to a primary destination.

In addition to project-generated traffic and anticipated traffic generation from additional approved or pending development in the study area, area wide growth (ambient growth) has been considered in the traffic analysis. Based on information obtained by City staff, future traffic volumes have been calculated by using an anticipated 3% annual growth rate for the years 2008–2015 and a 1% growth rate for the years 2015–2023, which has been added to project-related and other development-related daily and peak hour traffic volumes (see Exhibit 4-K through 4-T in *Appendix H* for graphical depictions of each cumulative project's location and anticipated trip distribution).

### Intersection Impacts for Existing Plus Ambient Plus Project Conditions

In order to identify direct project impacts, interim year analyses were performed for three Existing Plus Ambient Plus Project (EAP) scenarios. These scenarios don't include the cumulative projects that were identified above, but do include ambient traffic growth rates for each study year which corresponds to the project phasing. The following three sets of traffic volume conditions have been forecasted:

- 2015 EAP with Project Phase I
- 2017 EAP with Project Phases I + II
- 2023 EAP with Project Phases I + II + III.

The intersection levels of service for each of the scenarios are shown in *Table 5.9-5* through *Table 5.9-7*. Those intersections shown as "Does Not Exist" would not have been built at the timing for the scenario being analyzed. The intersection turning movement volumes for each scenario are shown on Exhibits 5-A through 5-F in *Appendix H*.

# Table 5.9-5
# Intersection Analysis for 2015 Existing + Ambient Growth + Project (EAP) Phase I Conditions

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rider Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | 21.8 | 20.9 | C | C |
| Lakeview Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | 95.5 | F | F |
| -With Improvements | **TS** | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 13.9 | 13.2 | B | B |
| Bridge Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 38.8 | 56.7 | E | F |
| -With Improvements | **TS** | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 11.0 | 11.4 | B | B |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | 19.9 | 24.9 | B | C |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27.8 | 28.0 | C | C |
| • Esplanade Ave. (EW) | AWS | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | 39.2 | 33.6 | D | C |
| Odell St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 1 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 2 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 3 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Cawston Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Street "C"/Driveway 4 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • De Anza Dr. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 10 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 5 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 6 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | CSS | 0 | 0 | **1** | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 9.3 | 9.3 | A | A |
| Street "A" (NS) at: | | | | | | | | | | | | | | | | | |
| • Driveway 8 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Driveway 9 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 11 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | CSS | 0 | 0 | 0 | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9.5 | 9.3 | A | A |
| Driveway 12 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "B"/"C"/Driveway 7 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | CSS | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 9.0 | 8.7 | A | A |
| Street "B"/Driveway 13 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | CSS | 0 | 0 | 0 | 0 | 1! | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 10.4 | 10.1 | B | B |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 54.9 | --[4] | F | F |
| -With Improvements | **TS** | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 15.8 | 23.8 | B | C |

## Table 5.9-5 (Continued)

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | --[4] | 96.5 | F | F |
| -With Improvements | **TS** | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 17.5 | 15.9 | B | B |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1> | 1 | 1 | 1>> | 1 | 1 | 1> | --[4] | --[4] | F | F |
| -With Improvements | TS | 1 | **2** | 0 | 1 | **2** | 1> | **2** | 1 | 1>> | 1 | 1 | 1> | 38.5 | 40.8 | D | D |
| • Ramona Blvd. (EW) (Realigned) | **CSS** | 0 | **1** | 0 | **1** | **1** | 0 | 0 | 0 | 0 | **1** | 0 | **1** | 73.4 | --[4] | F | F |
| -With Improvements | **TS** | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 18.0 | 36.3 | B | D |
| • Driveway 14 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • De Anza Dr. (EW) | **TS** | **1** | **1** | 0 | 0 | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 39.5 | 51.7 | D | D |
| • Driveway 15 (EW) | **CSS** | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.2 | 18.2 | B | B |
| • Bridge St. (EW) | **TS** | **1** | **1** | 0 | 0 | **1** | 0 | 0 | **1!** | 0 | 0 | 0 | 0 | 15.6 | 21.2 | B | C |
| • Driveway 16 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 12.7 | 13.9 | B | B |
| • Esplanade Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 35.1 | 45.0 | D | D |
| • Florida Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 38.0 | --[4] | D | F |
| -With Improvements | TS | **2** | 2 | 1 | 1 | 2 | 1 | 1 | **2** | 1 | 1 | **2** | 1 | 32.9 | 51.3 | C | D |
| State St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 28.2 | 33.2 | C | C |
| • Cottonwood Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 33.2 | 32.6 | C | C |
| • Esplanade Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 28.1 | 29.1 | C | C |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; **1** = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop

* Those intersections shown as "Does Not Exist" would not have been built at the timing for the scenario being analyzed.

As shown in *Table 5.9-5*, the following intersections are projected to operate at unacceptable LOS (i.e., LOS E or worse) during peak hours without improvements for the 2015 EAP, Phase I scenario:

- Bridge Street (NS) at:
  - Ramona Expressway (EW)
- Warren Road (NS) at:
  - Esplanade Avenue (EW)
- Sanderson Avenue (SR-79 NB Ramps) (NS) at:
  - Gilman Springs Road (EW)
- Sanderson Avenue (NS) at:
  - Ramona Boulevard (EW) Realigned
  - Florida Avenue (SR-74) (EW).

With improvements, all of the study area intersections are projected to operate at acceptable LOS during the peak hours.

**Table 5.9-6**
**Intersection Analysis for Existing +**
**Ambient Growth + Project Phases I and II (2017) Conditions**

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rider Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | 22.1 | 21.1 | C | C |
| Lakeview Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 16.3 | 15.0 | B | B |
| Bridge Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 44.9 | 72.7 | E | F |
| -With Improvements | **TS** | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 11.5 | 13.9 | B | B |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | 20.5 | 25.6 | C | C |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27.9 | 28.1 | C | C |
| • Esplanade Ave. (EW) | AWS | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | 42.1 | 35.6 | D | D |
| Odell St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 1 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 2 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 3 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Cawston Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Street "C"/Driveway 4 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • De Anza Dr. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 10 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 5 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 6 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | **CSS** | 0 | **1!** | 0 | 0 | **1!** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 9.7 | 10.4 | A | B |
| Street "A" (NS) at: | | | | | | | | | | | | | | | | | |
| • Driveway 8 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Driveway 9 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 11 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | **CSS** | 0 | 0 | 0 | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | 9.4 | 9.3 | A | A |
| Driveway 12 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "B"/"C"/Driveway 7 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | **CSS** | 0 | **1!** | 0 | 0 | **1!** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 12.2 | 14.3 | B | B |
| Street "B"/Driveway 13 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | **CSS** | 0 | 0 | 0 | 0 | **1!** | 0 | 0 | **1** | 0 | 0 | **1** | 0 | 10.3 | 10.0 | B | A |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 66.4 | --[4] | F | F |
| -With Improvements | **TS** | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 16.4 | 24.7 | B | C |

## Table 5.9-6 (Continued)

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 18.8 | 19.4 | B | B |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1> | 1 | 1 | 1>> | 1 | 1 | 1> | --[4] | --[4] | F | F |
| -With Improvements | TS | 1 | **2** | 0 | 1 | **2** | 1> | **2** | 1 | 1>> | 1 | 1 | 1> | 41.9 | 43.7 | D | D |
| • Ramona Blvd. (EW) (Realigned) | **CSS** | 0 | **1** | 0 | **1** | **1** | 0 | 0 | 0 | 0 | **1** | 0 | **1** | --[4] | --[4] | F | F |
| -With Improvements | **TS** | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 21.3 | 51.9 | C | D |
| • Driveway 14 (EW) | **CSS** | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.6 | 23.6 | B | C |
| • De Anza Dr. (EW) | **TS** | **1** | **1** | 0 | **1** | **2** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 37.0 | 25.5 | D | C |
| • Driveway 15 (EW) | **CSS** | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.9 | 19.4 | B | C |
| • Bridge St. (EW) | **TS** | **1** | **1** | 0 | 0 | **1** | 0 | 0 | **1!** | 0 | 0 | 0 | 0 | 14.8 | 20.5 | B | C |
| • Driveway 16 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 13.0 | 14.8 | B | B |
| • Esplanade Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 37.8 | 52.0 | D | D |
| • Florida Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 38.8 | --[4] | D | F |
| -With Improvements | TS | **2** | 2 | 1 | 1 | 2 | 1 | 1 | **2** | 1 | 1 | **2** | 1 | 34.3 | 54.7 | C | D |
| State St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 28.3 | 33.4 | C | C |
| • Cottonwood Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 33.5 | 32.8 | C | C |
| • Esplanade Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 28.5 | 30.0 | C | C |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; **1** = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop

As shown in *Table 5.9-6*, the same intersections as in the EAP 2015 scenario are projected to operate at unacceptable LOS (i.e., LOS E or worse) during peak hours without improvements for the 2017 EAP, Phases I and II scenario. However, with improvements, all of the study area intersections are projected to operate at acceptable LOS during the peak hours.

## Table 5.9-7
## Intersection Analysis for Existing + Ambient Growth + Project Phases I, II and II (2023) Conditions

| | | INTERSECTION APPROACH LANES[1] | | | | | | | | | | | | DELAY[2] (SECS.) | | LEVEL OF SERVICE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TRAFFIC | NORTH-BOUND | | | SOUTH-BOUND | | | EAST-BOUND | | | WEST-BOUND | | | | | | |
| INTERSECTION | CONTROL[3] | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| Rider Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | 22.7 | 21.6 | C | C |
| Lakeview Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 19.7 | 17.4 | B | B |
| Bridge Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 67.4 | --[4] | F | F |
| -With Improvements | **TS** | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 10.6 | 27.9 | B | C |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | 22.1 | 29.4 | C | C |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 30.1 | 30.0 | C | C |
| • Esplanade Ave. (EW) | AWS | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | 54.5 | 41.7 | D | D |
| Odell St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | **CSS** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 9.3 | 9.4 | A | A |
| Driveway 1 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | **CSS** | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 8.7 | 8.9 | A | A |
| Driveway 2 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | **CSS** | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 8.7 | 8.9 | A | A |
| Driveway 3 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | **CSS** | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 12.1 | 9.1 | B | A |
| Cawston Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | **CSS** | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **2** | 0 | **1** | **1** | 0 | 22.6 | 11.1 | C | B |
| • Street "C"/Driveway 4 (EW) | **CSS** | ***1*** | **1** | 0 | **1** | **1** | 0 | 0 | ***1!*** | 0 | 0 | **1!** | 0 | 10.8 | 10.4 | B | B |
| • De Anza Dr. (EW) | **CSS** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 12.0 | 9.6 | B | A |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 10 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 5 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | CSS | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 9.8 | 10.8 | A | B |
| Street "A"/Driveway 6 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | **CSS** | 0 | **1!** | 0 | 0 | **1!** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 16.7 | 11.4 | C | B |
| Street "A" (NS) at: | | | | | | | | | | | | | | | | | |
| • Driveway 8 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Driveway 9 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 11 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | **CSS** | 0 | 0 | 0 | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | 9.4 | 9.3 | A | A |
| Driveway 12 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "B"/"C"/Driveway 7 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | **CSS** | 0 | **1!** | 0 | 0 | **1!** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 32.5 | 17.5 | D | C |
| Street "B"/Driveway 13 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | **CSS** | 0 | 0 | 0 | 0 | **1!** | 0 | 0 | **1** | 0 | 0 | **1** | 0 | 10.2 | 9.9 | B | A |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 17.7 | 27.9 | B | C |

## Table 5.9-7 (Continued)

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 20.5 | 22.1 | C | C |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1> | 1 | 1 | 1>> | 1 | 1 | 1> | --[4] | --[4] | F | F |
| -With Improvements | TS | 1 | **2** | 0 | 1 | **2** | 1> | **2** | 1 | 1>> | 1 | 1 | 1> | 50.0 | 49.2 | D | D |
| • Ramona Blvd. (EW) (Realigned) | **CSS** | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | 1 | **2** | 0 | 1 | **2** | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 28.3 | 30.4 | C | C |
| • Driveway 14 (EW) | **CSS** | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.9 | 27.6 | B | D |
| • De Anza Dr. (EW) | **TS** | **1** | 1 | 0 | **1** | **2** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 43.4 | 35.6 | D | D |
| • Driveway 15 (EW) | **CSS** | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 15.6 | 22.8 | C | C |
| • Bridge St. (EW) | **TS** | **1** | **2** | 0 | 0 | **1** | 0 | 0 | **1!** | 0 | 0 | 0 | 0 | 15.8 | 29.2 | C | C |
| • Driveway 16 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | --[4] | 23.3 | F | C |
| -With Improvements | TS | 1 | **2** | 0 | 1 | **2** | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 54.6 | 38.7 | D | D |
| • Esplanade Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements | TS | 1 | **2** | 0 | 1 | **2** | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 31.3 | 39.9 | C | D |
| • Florida Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 41.4 | --[4] | F | F |
| -With Improvements | TS | **2** | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | **2** | 2 | 1 | 35.7 | 51.8 | D | D |
| State St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 29.1 | 34.6 | C | C |
| • Cottonwood Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 35.0 | 34.7 | C | C |
| • Esplanade Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 29.4 | 31.2 | C | C |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; **1** = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop
*Italicized* = Lane to be constructed only with the +313 DU Project Alternative

As shown in *Table 5.9-7*, the following intersections are projected to operate at unacceptable LOS (i.e., LOS E or worse) during peak hours without improvements for the 2023 EAP, Phases I, II and III scenario in addition to those that are deficient under 2017 EAP conditions:

- Sanderson Avenue (NS) at:
  - Cottonwood Avenue (EW)
  - Esplanade Avenue (EW).

*Table 5.9-8* summarizes the improvements needed for each of the EAP scenarios in order to achieve acceptable LOS.

## Table 5.9-8
## Existing + Ambient + Project (EAP) Intersection Conditions with Improvements

| | | INTERSECTION APPROACH LANES[1] | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TRAFFIC | NORTH-BOUND | | | SOUTH-BOUND | | | EAST-BOUND | | | WEST-BOUND | | | DELAY[2] (SECS.) | | LEVEL OF SERVICE | |
| INTERSECTION | CONTROL[3] | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| Rider Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | | | | | | | | | | | | | | | | | |
| -Existing | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | 20.8 | 20.6 | C | C |
| -EAP Phase 1 | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | 21.8 | 20.9 | C | C |
| -EAP Phase 2 | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | 22.1 | 21.1 | C | C |
| -EAP Phase 3 | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | 22.7 | 21.6 | C | C |
| Lakeview Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | | | | | | | | | | | | | | | | | |
| -Existing | CSS | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 38.3 | 30.3 | E | D |
| -EAP Phase 1 | **TS** | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 13.9 | 13.2 | B | B |
| -EAP Phase 2 | **TS** | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 16.3 | 15.0 | B | B |
| -EAP Phase 3 | **TS** | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 19.7 | 17.4 | B | B |
| Bridge Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | | | | | | | | | | | | | | | | | |
| -Existing | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 22.2 | 26.4 | C | D |
| -EAP Phase 1 | **TS** | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 11.0 | 11.4 | B | B |
| -EAP Phase 2 | **TS** | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 11.5 | 13.9 | B | B |
| -EAP Phase 3 | **TS** | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 10.6 | 27.9 | B | C |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | | | | | | | | | | | | | | | | | |
| -Existing | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | 18.2 | 21.4 | B | C |
| -EAP Phase 1 | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | 19.9 | 24.9 | B | C |
| -EAP Phase 2 | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | 20.5 | 25.6 | C | C |
| -EAP Phase 3 | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | 22.1 | 29.4 | C | C |
| • Cottonwood Ave. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25.1 | 25.9 | C | C |
| -EAP Phase 1 | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27.8 | 28.0 | C | C |
| -EAP Phase 2 | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27.9 | 28.1 | C | C |
| -EAP Phase 3 | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 30.1 | 30.0 | C | C |
| • Esplanade Ave. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | AWS | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 20.1 | 24.9 | C | C |
| -EAP Phase 1 | **TS** | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | 39.2 | 33.6 | D | C |
| -EAP Phase 2 | **TS** | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | 42.1 | 35.6 | D | D |
| -EAP Phase 3 | **TS** | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | **1** | 1 | 0 | 54.5 | 41.7 | D | D |
| Odell St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 3 | **CSS** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 9.3 | 9.4 | A | A |
| Driveway 1 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 3 | **CSS** | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 8.7 | 8.9 | A | A |

## Table 5.9-8 (Continued)

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Driveway 2 (NS) at: | | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 3 | CSS | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 8.7 | 8.9 | A | A | |
| Driveway 3 (NS) at: | | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 3 | CSS | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 12.4 | 9.4 | B | A | |
| Cawston Ave. (NS) at: | | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 3 | CSS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 22.6 | 11.1 | C | B | |
| • Street "C"/Driveway 4 (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 3 | CSS | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 10.8 | 10.4 | B | B | |
| • De Anza Dr. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 3 | CSS | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12.0 | 9.6 | B | A | |
| • Bridge St. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 3 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| Driveway 10 (NS) at: | | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 3 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| Driveway 5 (NS) at: | | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- | |
| -EAP Phase 3 | CSS | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 9.8 | 10.8 | A | B | |

## Table 5.9-8 (Continued)

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Street "A"/Driveway 6 (NS) at: | | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | CSS | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 9.3 | 9.3 | A | A |
| -EAP Phase 2 | CSS | 0 | 1! | 0 | 0 | 1! | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 9.7 | 10.4 | A | B |
| -EAP Phase 3 | CSS | 0 | 1! | 0 | 0 | 1! | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 16.7 | 11.4 | C | B |
| Street "A" (NS) at: | | | | | | | | | | | | | | | | | | |
| • Driveway 8 (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 3 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Driveway 9 (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 3 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 11 (NS) at: | | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | CSS | 0 | 0 | 0 | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9.5 | 9.3 | A | A |
| -EAP Phase 2 | CSS | 0 | 0 | 0 | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9.4 | 9.3 | A | A |
| -EAP Phase 3 | CSS | 0 | 0 | 0 | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9.4 | 9.3 | A | A |
| Driveway 12 (NS) at: | | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 3 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "B"/"C"/Driveway 7 (NS) at: | | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | CSS | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 9.0 | 8.7 | A | A |
| -EAP Phase 2 | CSS | 0 | 1! | 0 | 0 | 1! | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 12.2 | 14.3 | B | B |
| -EAP Phase 3 | CSS | 0 | 1! | 0 | 0 | 1! | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 32.5 | 17.5 | D | C |
| Street "B"/Driveway 13 (NS) at: | | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | CSS | 0 | 0 | 0 | 0 | 1! | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 10.4 | 10.1 | B | B |
| -EAP Phase 2 | CSS | 0 | 0 | 0 | 0 | 1! | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 10.3 | 10.0 | B | A |
| -EAP Phase 3 | CSS | 0 | 0 | 0 | 0 | 1! | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 10.2 | 9.9 | B | A |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | | | | | | | | | | | | | | | | | | |
| -Existing | CSS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 24.0 | 67.9 | C | F |
| -EAP Phase 1 | TS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 15.8 | 23.8 | B | C |
| -EAP Phase 2 | TS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 16.4 | 24.7 | B | C |
| -EAP Phase 3 | TS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 17.7 | 27.9 | B | C |

## Table 5.9-8 (Continued)

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | | | | | | | | | | | | | | | | | |
| -Existing | CSS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 32.4 | 32.6 | D | D |
| -EAP Phase 1 | **TS** | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 17.5 | 15.9 | B | B |
| -EAP Phase 2 | **TS** | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 18.8 | 19.4 | B | B |
| -EAP Phase 3 | **TS** | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 20.5 | 22.1 | C | C |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | | | | | | | | | | | | | | | | | |
| -Existing | TS | 1 | 1 | 0 | 1 | 1 | 1> | 1 | 1 | 1>> | 1 | 1 | 1> | 56.0 | 45.3 | E | D |
| -EAP Phase 1 | TS | 1 | **2** | 0 | 1 | **2** | 1> | **2** | 1 | 1>> | 1 | 1 | 1> | 38.5 | 40.8 | D | D |
| -EAP Phase 2 | TS | 1 | **2** | 0 | 1 | **2** | 1> | **2** | 1 | 1>> | 1 | 1 | 1> | 41.9 | 43.7 | D | D |
| -EAP Phase 3 | TS | 1 | **2** | 0 | 1 | **2** | 1> | **2** | 1 | 1>> | 1 | 1 | 1> | 50.0 | 49.2 | D | D |
| • Ramona Blvd. (EW) (Realigned for Future Conditions) | | | | | | | | | | | | | | | | | |
| -Existing | CSS | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1! | 0 | 0.5 | 0.5 | 1 | 25.1 | 35.8 | D | E |
| -EAP Phase 1 | **TS** | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | 18.0 | 36.3 | B | D |
| -EAP Phase 2 | **TS** | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | 21.3 | 51.9 | C | D |
| -EAP Phase 3 | **TS** | **1** | **2** | 0 | 1 | **2** | 0 | **1** | 1 | 0 | **1** | **1** | 0 | 28.3 | 30.4 | C | C |
| • Driveway 14 (EW) | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 2 | **CSS** | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.6 | 23.6 | B | C |
| -EAP Phase 3 | **CSS** | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.9 | 27.6 | B | D |
| • De Anza Dr. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | **TS** | **1** | **1** | 0 | 0 | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 39.5 | 51.7 | D | D |
| -EAP Phase 2 | **TS** | **1** | **1** | 0 | **1** | **2** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 37.0 | 25.5 | D | C |
| -EAP Phase 3 | **TS** | **1** | **1** | 0 | **1** | **2** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 43.4 | 35.6 | D | D |
| • Driveway 15 (EW) | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | **CSS** | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.2 | 18.2 | B | B |
| -EAP Phase 2 | **CSS** | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.9 | 19.4 | B | C |
| -EAP Phase 3 | **CSS** | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 15.6 | 22.8 | C | C |
| • Bridge St. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | **TS** | **1** | **1** | 0 | 0 | **1** | 0 | 0 | **1!** | 0 | 0 | 0 | 0 | 15.6 | 21.2 | B | C |
| -EAP Phase 2 | **TS** | **1** | **1** | 0 | 0 | **1** | 0 | 0 | **1!** | 0 | 0 | 0 | 0 | 14.8 | 20.5 | B | C |
| -EAP Phase 3 | **TS** | **1** | **2** | 0 | 0 | **1** | 0 | 0 | **1!** | 0 | 0 | 0 | 0 | 15.8 | 29.2 | C | C |
| • Driveway 16 (EW) | | | | | | | | | | | | | | | | | |
| -Existing | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 1 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 2 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| -EAP Phase 3 | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Cottonwood Ave. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 10.6 | 10.6 | B | B |
| -EAP Phase 1 | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 12.7 | 13.9 | B | B |
| -EAP Phase 2 | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 13.0 | 14.8 | B | B |
| -EAP Phase 3 | TS | 1 | **2** | 0 | 1 | **2** | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 54.6 | 38.7 | D | D |

## Table 5.9-8 (Continued)

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| • Esplanade Ave. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 23.7 | 30.5 | C | C |
| -EAP Phase 1 | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 35.1 | 45.0 | D | D |
| -EAP Phase 2 | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 37.8 | 52.0 | D | D |
| -EAP Phase 3 | TS | 1 | **2** | 0 | 1 | **2** | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 31.3 | 39.9 | C | D |
| • Florida Ave. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 32.2 | 43.8 | C | D |
| -EAP Phase 1 | TS | **2** | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 32.9 | 51.3 | C | D |
| -EAP Phase 2 | TS | **2** | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 34.3 | 54.7 | C | D |
| -EAP Phase 3 | TS | **2** | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | **2** | 2 | 1 | 35.7 | 51.8 | D | D |
| State St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | | | | | | | | | | | | | | | | | |
| -Existing | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 30.5 | 35.5 | C | D |
| -EAP Phase 1 | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 28.2 | 33.2 | C | C |
| -EAP Phase 2 | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 28.3 | 33.4 | C | C |
| -EAP Phase 3 | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 29.1 | 34.6 | C | C |
| • Cottonwood Ave. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 36.5 | 34.6 | D | C |
| -EAP Phase 1 | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 33.2 | 32.6 | C | C |
| -EAP Phase 2 | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 33.5 | 32.8 | C | C |
| -EAP Phase 3 | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 35.0 | 34.7 | C | C |
| • Esplanade Ave. (EW) | | | | | | | | | | | | | | | | | |
| -Existing | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 30.2 | 31.6 | C | C |
| -EAP Phase 1 | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 28.1 | 29.1 | C | C |
| -EAP Phase 2 | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 28.5 | 30.0 | C | C |
| -EAP Phase 3 | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 29.4 | 31.2 | C | C |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; **1** = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop
*Italicized* = Lane to be constructed only with the +313 DU Project Alternative

**Intersection Analysis for Cumulative Conditions with Project**

In order to identify the improvements required to achieve acceptable levels of service for each Interim Year with cumulative development (as described in *Table 5.9-4*) with project conditions, the following EACP (existing + ambient + cumulative + project) traffic forecast scenarios have been provided:

- 2015 EACP with Project Phase I
- 2023EACP with Project Phases I + II
- 2023 EACP with Project Phases I + II + III.

For EACP 2015 traffic conditions, all of the study area intersections are projected to operate at unacceptable LOS E or F during the peak hours without improvements. As shown in *Table 5.9-9*, some of the improvements required to achieve acceptable LOS exceed the General Plan typical roadway cross sections and are therefore not feasible due to the uncertainty of obtaining adequate right-of-way for such measures. These instances include the triple left turn lanes required at Warren Road at Ramona Expressway, the extensive improvements required along Sanderson Avenue (which don't provide acceptable LOS for the PM peak hour), and the three through lanes along Esplanade Avenue. The improvements which go beyond General Plan standards are due to the lack of alternative routes which would be provided upon completion of the Mid-County Parkway and SR-79 improvements which are not included in the EACP 2015 analysis. In order to minimize required improvements, a further analysis was done which includes completion of the Mid-County Parkway and SR-79 improvements for those intersections affected by these projects. The analysis also included required improvements for General Plan build-out conditions. As shown on *Table 5.9-10*, the improvements in excess of the ultimate planned roadway cross-sections at the study intersections would not be required to achieve acceptable LOS for the EACP 2015 scenario (with completion of the Mid-County Parkway and SR-79 improvements). Further, insuring that adequate right-of-way exists would entail an amendment to the Circulation Element. Because such an amendment can't be accommodated for only a portion of the City, it would result in a Circulation Element amendment that is City-wide which is not appropriate. However, it should be noted that completion of these regional improvements can't be guaranteed by the City. As such, the project would contribute to a significant unmitigable impact for EACP 2015 traffic conditions if these improvements are not in place.

## Table 5.9-9
## 2015 Existing + Ambient + Project + Project (EACP) Phase I Intersection Conditions with and without Improvements

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rider Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | **3** | 0 | 2 | **3** | 0 | 16.2 | 27.1 | B | C |
| Lakeview Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | **TS** | **2** | 0 | **1** | 0 | 0 | 0 | 0 | **4** | 1 | 1 | **3** | 0 | 21.5 | 30.7 | C | C |
| Bridge Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | **TS** | 0 | 0 | 0 | 1 | 0 | 1 | 1 | **3** | 0 | 0 | **3** | 1 | 17.5 | 35.2 | B | D |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **2** | 1 | **1>>** | **1** | 1 | 0 | 1 | **4** | **1>>** | **3** | **3** | 0 | 31.9 | 53.5 | C | D |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 63.7 | --[4] | E | F |
| -With Improvements | TS | 1 | **2** | 1 | **2** | **2** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 38.1 | 52.1 | D | D |
| • Esplanade Ave. (EW) | AWS | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | **1** | **3** | 0 | **1** | **2** | 0 | **1** | 1 | 0 | **2** | **1** | 0 | 35.6 | 46.7 | D | D |
| Odell St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 1 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 2 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 3 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Cawston Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Street "C"/Driveway 4 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • De Anza Dr. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 10 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 5 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 6 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | **CSS** | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 9.3 | 9.3 | A | A |
| Street "A" (NS) at: | | | | | | | | | | | | | | | | | |
| • Driveway 8 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Driveway 9 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 11 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | CSS | 0 | 0 | 0 | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9.5 | 9.3 | A | A |
| Driveway 12 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "B"/"C"/Driveway 7 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | **CSS** | 0 | **1!** | 0 | 0 | **1!** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 9.0 | 8.7 | A | A |
| Street "B"/Driveway 13 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | **CSS** | 0 | 0 | 0 | 0 | **1!** | 0 | 0 | **1** | 0 | 0 | **1** | 0 | 10.4 | 10.1 | B | B |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | **1>>** | 1 | **2** | 0 | 14.7 | 29.8 | B | C |

## Table 5.9-9 (Continued)

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | **1.5** | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 23.2 | 39.0 | C | D |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1> | 1 | 1 | 1>> | 1 | 1 | 1> | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **3** | **5** | **1>>** | **3** | **5** | **1>>** | **3** | **5** | **1>>** | **3** | **5** | **1>>** | 29.7 | --[4] | C | F |
| • Ramona Blvd. (EW) (Realigned) | **CSS** | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | **TS** | 1 | **4** | 0 | **2** | **4** | 0 | 1 | 1 | **1** | 1 | 1 | **1** | 21.0 | 31.3 | C | C |
| • Driveway 14 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • De Anza Dr. (EW) | **TS** | **1** | **3** | 0 | **1** | **3** | 0 | **1** | **1** | **1** | **1** | **1** | **1** | 21.2 | 48.7 | C | D |
| • Driveway 15 (EW) | **CSS** | 0 | **1** | 0 | 0 | **3** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.5 | 23.4 | B | C |
| • Bridge St. (EW) | **TS** | **1** | **2** | 0 | 0 | **3** | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 46.5 | 30.5 | D | C |
| • Driveway 16 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **2** | **4** | **1>** | **2** | **4** | 0 | 1 | **3** | **1** | **2** | **2** | **1>** | 29.4 | 52.7 | C | D |
| • Esplanade Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | 1 | **4** | 0 | **2** | **3** | 1 | **2** | **3** | 1 | **2** | **3** | **1>>** | 28.0 | 46.5 | C | D |
| • Florida Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **2** | **4** | 0 | **2** | **3** | 1 | **2** | **4** | 0 | **2** | **3** | **1>>** | 34.0 | 53.7 | C | D |
| State St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 59.3 | --[4] | E | F |
| -With Improvements | TS | **2** | 2 | 0 | 1 | 2 | 1 | 1 | **3** | **1>>** | **2** | **3** | 1 | 31.3 | 50.3 | C | D |
| • Cottonwood Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 96.1 | --[4] | F | F |
| -With Improvements | TS | **2** | 2 | 0 | 1 | 2 | **1>** | **2** | **1** | 0 | **1** | **1** | 0 | 33.4 | 51.1 | C | D |
| • Esplanade Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 43.3 | --[4] | D | F |
| -With Improvements | TS | **2** | 2 | **1** | **2** | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 29.4 | 49.9 | C | D |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; **1** = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop

[4] Geometrics shown illustrate the need for the MCP and SR-79 improvements and are not intended for construction.

## Table 5.9-10
## EACP 2015 with Mid-County Parkway and SR-79 Improvements

| | | INTERSECTION APPROACH LANES[1] | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NORTH-BOUND | | | SOUTH-BOUND | | | EAST-BOUND | | | WEST-BOUND | | | DELAY[2] (SECS.) | | LEVEL OF SERVICE | |
| INTERSECTION | TRAFFIC CONTROL[3] | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| * MCP Freeway WB Ramps (EW) | TS | 0 | 2 | 1>> | 0 | 2 | 1>> | 0 | 0 | 0 | 1 | 0 | 1>> | 11.7 | 10.0 | B | B |
| * MCP Freeway EB Ramps (EW) | TS | 0 | 2 | 1 | 1 | 2 | 0 | 2 | 0 | 1>> | 0 | 0 | 0 | 12.5 | 18.3 | B | B |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| * Ramona Expressway (EW) | TS | 2 | 3 | 1> | 2 | 3 | 1 | 1 | 3 | 1> | 2 | 3 | 1 | 20.8 | 28.6 | C | C |
| * Street C (EW) | TS | 2 | 3 | 1> | 2 | 3 | 1> | 2 | 4 | 1>> | 2 | 4 | 1>> | 20.8 | 26.0 | C | C |
| * Ramona Blvd. (EW) (Realigned) | TS | 2 | 3 | 0 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1> | 14.3 | 15.8 | B | B |
| * Cottonwood Ave. (EW) | TS | 2 | 4 | 1 | 2 | 4 | 1 | 2 | 2 | 1 | 2 | 2 | 1> | 29.1 | 46.4 | C | D |
| * Esplanade Ave. (EW) | TS | 1 | 4 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 2 | 1>> | 26.5 | 32.4 | C | C |
| * Florida Ave. (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1> | 2 | 3 | 1> | 2 | 3 | 1>> | 26.6 | 36.8 | C | D |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| * Street C (EW) | TS | 0 | 0 | 0 | 1.5 | 0.5 | 1>> | 0 | 3 | 1 | 2 | 3 | 0 | 11.3 | 17.3 | B | B |
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| * Street C (EW) | TS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 0 | 3 | 1>> | 0 | 3 | 1 | 4.6 | 11.4 | A | B |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; 1 = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal

As shown on *Table 5.9-11*, for 2017 EACP conditions all of the study intersections are projected to operate at unacceptable LOS E or F during the peak hours without improvements. As in the 2015 EACP scenario, some required improvements would exceed the General Plan typical roadway cross sections and are therefore not feasible due to the uncertainty of obtaining adequate right-of-way for such measures. As shown on *Table 5.9-12*, the improvements in excess of the ultimate planned roadway cross-sections at the study intersections would not be required to achieve acceptable LOS for the EACP 2015 scenario with completion of the Mid-County Parkway and SR-79 improvements. However, it should be noted that completion of these regional improvements can't be guaranteed by the City. As such, the project would contribute to a significant unmitigable impact for EACP 2017 traffic conditions if these improvements are not in place.

## Table 5.9-11
## 2017 Existing + Ambient + Project + Project (EACP) Phases I + II
## Intersection Conditions with and without Improvements

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rider Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | **3** | 0 | 2 | **3** | 0 | 16.8 | 30.0 | B | C |
| Lakeview Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | **TS** | **2** | 0 | 1 | 0 | 0 | 0 | 0 | **4** | 1 | 1 | **3** | 0 | 29.9 | 34.5 | C | C |
| Bridge Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | **TS** | 0 | 0 | 0 | **2** | 0 | 1 | 1 | **3** | 0 | 0 | **3** | 1 | 18.0 | 46.9 | B | D |
| -With 4 EB Through Lanes[4] | **TS** | 0 | 0 | 0 | 1 | 0 | 1 | 1 | **4** | 0 | 0 | 3 | 1 | 17.8 | 28.4 | B | C |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **2** | 1 | **1>>** | **1** | 1 | 0 | 1 | **5** | **1>>** | **3** | **3** | 0 | 32.6 | 39.1 | C | D |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 65.9 | --[4] | E | F |
| -With Improvements | TS | 1 | **2** | 1 | **2** | **2** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 38.8 | 52.9 | D | D |
| • Esplanade Ave. (EW) | AWS | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | **1** | **3** | 0 | **1** | **2** | 0 | **1** | 1 | 0 | **2** | **1** | 0 | 37.0 | 51.4 | D | D |
| Odell St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 1 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 2 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 3 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Cawston Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Street "C"/Driveway 4 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • De Anza Dr. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 10 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 5 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 6 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | **CSS** | 0 | **1!** | 0 | 0 | **1!** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 9.7 | 10.4 | A | B |
| Street "A" (NS) at: | | | | | | | | | | | | | | | | | |
| • Driveway 8 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Driveway 9 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 11 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | **CSS** | 0 | 0 | 0 | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9.4 | 9.3 | A | A |
| Driveway 12 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "B"/"C"/Driveway 7 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | **CSS** | 0 | **1!** | 0 | 0 | **1!** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 12.2 | 14.3 | B | B |
| Street "B"/Driveway 13 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | **CSS** | 0 | 0 | 0 | 0 | **1!** | 0 | 0 | **1** | 0 | 0 | **1** | 0 | 10.3 | 10.0 | B | A |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | **1>>** | 1 | **2** | 0 | 20.5 | 30.1 | C | C |

## Table 5.9-11 (Continued)

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | NORTH-BOUND T | NORTH-BOUND R | SOUTH-BOUND L | SOUTH-BOUND T | SOUTH-BOUND R | EAST-BOUND L | EAST-BOUND T | EAST-BOUND R | WEST-BOUND L | WEST-BOUND T | WEST-BOUND R | DELAY[2] (SECS.) AM | DELAY[2] (SECS.) PM | LEVEL OF SERVICE AM | LEVEL OF SERVICE PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | **1.5** | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 27.5 | 40.5 | C | D |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1> | 1 | 1 | 1>> | 1 | 1 | 1> | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **3** | **5** | **1>>** | **3** | **5** | **1>>** | **3** | **5** | **1>>** | **3** | **5** | **1>>** | 30.4 | --[4] | C | F |
| • Ramona Blvd. (EW) (Realigned) | **CSS** | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | **TS** | 1 | **4** | 0 | **2** | **4** | 0 | 1 | 1 | **1** | 1 | 1 | **1** | 21.3 | 32.6 | C | C |
| • Driveway 14 (EW) | **CSS** | 0 | **1** | 0 | 0 | **3** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.4 | 28.5 | B | D |
| • De Anza Dr. (EW) | **TS** | **1** | **3** | 0 | **1** | **3** | 0 | **1** | **1** | **1** | **1** | **1** | **1** | 23.1 | 54.7 | C | D |
| • Driveway 15 (EW) | **CSS** | 0 | **1** | 0 | 0 | **3** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 12.8 | 24.1 | B | C |
| • Bridge St. (EW) | **TS** | **1** | **2** | 0 | 0 | **3** | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 50.1 | 32.5 | D | C |
| • Driveway 16 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **2** | **4** | **1>** | **2** | **4** | 0 | 1 | **3** | **1** | **2** | **2** | **1>** | 39.5 | 54.0 | D | D |
| • Esplanade Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | 1 | **4** | 0 | **2** | **3** | 1 | **2** | **3** | 1 | **2** | **3** | **1>>** | 33.7 | 48.8 | C | D |
| • Florida Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **2** | **4** | 0 | **2** | **3** | 1 | **2** | **4** | 0 | **2** | **3** | **1>>** | 36.8 | 54.6 | D | D |
| State St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 60.0 | --[4] | E | F |
| -With Improvements | TS | **2** | 2 | 0 | 1 | 2 | 1 | 1 | **3** | **1>>** | **2** | **3** | 1 | 39.1 | 49.5 | D | D |
| • Cottonwood Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 98.4 | --[4] | F | F |
| -With Improvements | TS | **2** | 2 | 0 | 1 | 2 | **1>** | **2** | **1** | 0 | **1** | **1** | 0 | 32.9 | 51.7 | C | D |
| • Esplanade Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 43.9 | --[4] | D | F |
| -With Improvements | TS | **2** | 2 | **1** | **2** | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 36.8 | 51.1 | D | D |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; **1** = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop

[4] Geometrics shown illustrate the need for the MCP and SR-79 improvements and are not intended for construction.

**Table 5.9-12**
**EACP 2017 with Mid-County Parkway and SR-79 Improvements**

| | | INTERSECTION APPROACH LANES[1] | | | | | | | | | | | | DELAY[2] (SECS.) | | LEVEL OF SERVICE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NORTH-BOUND | | | SOUTH-BOUND | | | EAST-BOUND | | | WEST-BOUND | | | | | | |
| INTERSECTION | TRAFFIC CONTROL[3] | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| * MCP Freeway WB Ramps (EW) | TS | 0 | 2 | 1>> | 0 | 2 | 1>> | 0 | 0 | 0 | 1 | 0 | 1>> | 11.7 | 10.2 | B | B |
| * MCP Freeway EB Ramps (EW) | TS | 0 | 2 | 1 | 1 | 2 | 0 | 2 | 0 | 1>> | 0 | 0 | 0 | 12.5 | 18.4 | B | B |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| * Ramona Expressway (EW) | TS | 2 | 3 | 1> | 2 | 3 | 1 | 1 | 3 | 1> | 2 | 3 | 1 | 20.9 | 29.7 | C | C |
| * Street C (EW) | TS | 2 | 3 | 1> | 2 | 3 | 1> | 2 | 4 | 1>> | 2 | 4 | 1>> | 20.8 | 26.8 | C | C |
| * Ramona Blvd. (EW) (Realigned) | TS | 2 | 3 | 0 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1> | 14.6 | 16.0 | B | B |
| * Cottonwood Ave. (EW) | TS | 2 | 4 | 1 | 2 | 4 | 1 | 2 | 2 | 1 | 2 | 2 | 1> | 29.1 | 46.4 | C | D |
| * Esplanade Ave. (EW) | TS | 1 | 4 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 2 | 1>> | 26.8 | 33.3 | C | C |
| * Florida Ave. (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1> | 2 | 3 | 1> | 2 | 3 | 1>> | 26.8 | 35.9 | C | D |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| * Street C (EW) | TS | 0 | 0 | 0 | 1.5 | 0.5 | 1>> | 0 | 3 | 1 | 2 | 3 | 0 | 11.3 | 17.5 | B | B |
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| * Street C (EW) | TS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 0 | 3 | 1>> | 0 | 3 | 1 | 4.9 | 11.8 | A | B |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1l = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; 1 = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal

As shown in *Table 5.9-12*, for 2023 EACP conditions all of the study intersections are projected to operate at unacceptable LOS E or F during the peak hours without improvements. As in the 2017 EACP scenario, some required improvements would exceed the General Plan typical roadway cross sections and are therefore not feasible due to the uncertainty of obtaining adequate right-of-way for such measures. As shown on *Table 5.9-13*, the improvements in excess of the ultimate planned roadway cross-sections at the study intersections would not be required to achieve acceptable LOS for the EACP 2023 scenario with completion of the Mid-County Parkway and SR-79 projects. However, it should be noted that completion of these regional improvements cannot be guaranteed by the City. As such, the project would contribute to a significant unmitigable impact for EACP 2023 traffic conditions if these improvements are not in place.

## Table 5.9-13
## 2023 Existing + Ambient + Project + Project (EACP) Phases I + II + III
## Intersection Conditions with and without Improvements

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rider Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | 2 | 1 | 2 | 2 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | 0.5 | 0.5 | 1 | 0 | 1! | 0 | 1 | **3** | 0 | 2 | **3** | 0 | 20.8 | 43.2 | C | D |
| Lakeview Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | **TS** | **2** | 0 | **1>** | 0 | 0 | 0 | 0 | **4** | 1 | 1 | **3** | 0 | 28.6 | 41.3 | C | D |
| Bridge Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | **TS** | 0 | 0 | 0 | 1 | 0 | 1 | 1 | **4** | 0 | 0 | **3** | 1 | 13.4 | 35.3 | B | D |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 0 | 1! | 0 | 1 | 2 | 1 | 1 | 2 | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **2** | 1 | **1>>** | **1** | 1 | 0 | 1 | **5** | **1>>** | **3** | **3** | 0 | 35.9 | 50.6 | D | D |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements | TS | 1 | **2** | 1 | **2** | **2** | 1 | 1 | 1 | 1 | **1** | 1 | 1 | 38.6 | 51.7 | D | D |
| • Esplanade Ave. (EW) | AWS | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | **1** | **3** | 0 | **1** | **2** | 0 | **1** | 1 | 0 | **2** | **2** | 0 | 33.8 | 48.4 | C | D |
| Odell St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | **CSS** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 10.4 | 11.8 | B | B |
| Driveway 1 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | **CSS** | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 9.7 | 11.0 | A | B |
| Driveway 2 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | **CSS** | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 9.7 | 11.1 | A | B |
| Driveway 3 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | **CSS** | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 17.3 | 12.5 | C | B |
| Cawston Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | **TS** | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 35.3 | 21.0 | D | C |
| • Street "C"/Driveway 4 (EW) | **CSS** | ***1*** | **1** | 0 | **1** | **1** | 0 | 0 | ***1!*** | 0 | 0 | **1!** | 0 | 10.8 | 10.4 | B | B |
| • De Anza Dr. (EW) | **CSS** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 12.0 | 9.6 | B | A |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 10 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Driveway 5 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | CSS | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | **1** | 0 | 12.9 | 20.0 | B | C |
| Street "A"/Driveway 6 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | **CSS** | 0 | **1!** | 0 | 0 | **1!** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 16.7 | 11.4 | C | B |
| Street "A" (NS) at: | | | | | | | | | | | | | | | | | |
| • Driveway 8 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Driveway 9 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "A"/Driveway 11 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | **CSS** | 0 | 0 | 0 | 0 | **1!** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | 9.4 | 9.3 | A | A |
| Driveway 12 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| Street "B"/"C"/Driveway 7 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | **CSS** | 0 | **1!** | 0 | 0 | **1!** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | 32.5 | 17.5 | D | C |
| Street "B"/Driveway 13 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | **CSS** | 0 | 0 | 0 | 0 | **1!** | 0 | 0 | **1** | 0 | 0 | **1** | 0 | 10.2 | 9.9 | B | A |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | **1>>** | 1 | **2** | 0 | 16.5 | 30.3 | B | C |

## Table 5.9-13 (Continued)

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements | **TS** | **1.5** | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 30.9 | 51.4 | C | D |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1> | 1 | 1 | 1>> | 1 | 1 | 1> | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **3** | **5** | **1>>** | **3** | **5** | **1>>** | **3** | **5** | **1>>** | **3** | **5** | **1>>** | 40.5 | --[4] | D | F |
| • Ramona Blvd. (EW) (Realigned) | **CSS** | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **1** | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | **TS** | **2** | **4** | 0 | **2** | **4** | **1** | 1 | 1 | **1>** | 1 | 1 | **1** | 30.7 | 52.5 | C | D |
| • Driveway 14 (EW) | **CSS** | 0 | **1** | 0 | 0 | **3** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 13.3 | 33.8 | B | D |
| • De Anza Dr. (EW) | **TS** | **2** | **3** | 0 | **1** | **3** | 1 | **1** | **1** | **1** | **1** | **1** | **1** | 23.2 | 28.5 | C | C |
| • Driveway 15 (EW) | **CSS** | 0 | **1** | 0 | 0 | **3** | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 14.6 | 28.6 | B | D |
| • Bridge St. (EW) | **TS** | **1** | **3** | 0 | 0 | **3** | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 13.8 | 45.6 | B | D |
| • Driveway 16 (EW) | -- | DOES NOT EXIST | | | | | | | | | | | | -- | -- | -- | -- |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **2** | **4** | **1>** | **2** | **4** | 0 | **2** | **4** | **1>** | **2** | **3** | **1>** | 43.3 | 53.0 | D | D |
| • Esplanade Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | 1 | **5** | 0 | **2** | **3** | 1 | **2** | **3** | 1 | **2** | **3** | **1>>** | 31.8 | 54.2 | C | D |
| • Florida Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | --[4] | --[4] | F | F |
| -With Improvements[4] | TS | **2** | **4** | 1 | **2** | **3** | 1 | **2** | **4** | 1 | **2** | **3** | **1>>** | 39.1 | 52.8 | D | D |
| State St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | --[4] | --[4] | F | F |
| -With Improvements | TS | **2** | **2** | 0 | 1 | **3** | 1 | 1 | **3** | **1>>** | **2** | **3** | 1 | 38.5 | 51.2 | D | D |
| • Cottonwood Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | --[4] | --[4] | F | F |
| -With Improvements | TS | **2** | 2 | 0 | 1 | 2 | **1>** | **2** | **1** | 1 | **1** | **1** | 0 | 35.8 | 54.3 | D | D |
| • Esplanade Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 45.9 | --[4] | F | F |
| -With Improvements | TS | **2** | 2 | **1** | **2** | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 35.9 | 48.9 | D | D |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; **1** = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop
*Italicized* = Lane to be constructed only with the +313 DU Project Alternative

[4] Geometrics shown illustrate the need for the MCP and SR-79 improvements and are not intended for construction.

## Table 5.9-14
## EACP 2023 with Mid-County Parkway and SR-79 Improvements

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| * MCP Freeway WB Ramps (EW) | TS | 0 | 2 | 1>> | 0 | 2 | 1>> | 0 | 0 | 0 | 1 | 0 | 1>> | 11.5 | 10.7 | B | B |
| * MCP Freeway EB Ramps (EW) | TS | 0 | 2 | 1 | 1 | 2 | 0 | 2 | 0 | 1>> | 0 | 0 | 0 | 13.4 | 22.4 | B | C |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| * Ramona Expressway (EW) | TS | 2 | 3 | 1> | 2 | 3 | 1 | 1 | 3 | 1> | 2 | 3 | 1 | 21.1 | 36.4 | C | D |
| * Street C (EW) | TS | 2 | 3 | 1> | 2 | 3 | 1> | 2 | 4 | 1>> | 2 | 4 | 1>> | 21.6 | 33.7 | C | C |
| * Ramona Blvd. (EW) (Realigned) | TS | 2 | 3 | 0 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1> | 20.5 | 40.2 | C | D |
| * Cottonwood Ave. (EW) | TS | 2 | 4 | 1 | 2 | 4 | 1 | 2 | 2 | 1 | 2 | 2 | 1> | 29.8 | 47.7 | C | D |
| * Esplanade Ave. (EW) | TS | 1 | 4 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 2 | 1>> | 28.3 | 39.8 | C | D |
| * Florida Ave. (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1> | 2 | 3 | 1> | 2 | 3 | 1>> | 28.1 | 42.3 | C | D |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| * Street C (EW) | TS | 0 | 0 | 0 | 1.5 | 0.5 | 1>> | 0 | 3 | 1 | 2 | 3 | 0 | 11.0 | 18.5 | B | B |
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| * Street C (EW) | TS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 0 | 3 | 1>> | 0 | 3 | 1 | 5.7 | 14.5 | A | B |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; 1 = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal

### Intersection Analysis for General Plan Build-Out with Project Phases I + II + III + IV (2035) Conditions

General Plan Build-out with Project Phases I + II + III + IV (2035) Conditions intersection LOS are shown in *Table 5.9-14*. As shown, the following intersections are projected to operate at unacceptable LOS E or F during the peak hours without improvements:

- Warren Road (NS) at:
  - Cottonwood Avenue (EW)
  - Esplanade Avenue (EW)
- Sanderson Avenue (NS) at:
  - Cottonwood Avenue (EW)
  - Esplanade Avenue (EW)

  - Florida Avenue (SR-74) (EW)
- Sanderson Avenue (SR-79 SB Ramps) (NS) at:
  - Gilman Springs Road (EW)
- Sanderson Avenue (SR-79 NB Ramps) (NS) at:
  - Gilman Springs Road (EW)
- State Street (NS) at:
  - Cottonwood Avenue (EW)
  - Ramona Expressway
  - Esplanade Avenue.

As shown in *Table 5.9-14*, for General Plan build-out with project Phases I + II + III + IV (2035) Conditions, study area intersections are projected to operate at LOS D or better with the intersection improvements.

# Table 5.9-15
# General Plan Build-Out Intersection Analysis

| | | INTERSECTION APPROACH LANES[1] | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NORTH-BOUND | | | SOUTH-BOUND | | | EAST-BOUND | | | WEST-BOUND | | | DELAY[2] (SECS.) | | LEVEL OF SERVICE | |
| INTERSECTION | TRAFFIC CONTROL[3] | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| Rider Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | DOES NOT EXIST FOR GENERAL PLAN BUILDOUT ROADWAY NETWORK[5] | | | | | | | | | | | | | | | | |
| Lakeview Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | DOES NOT EXIST FOR GENERAL PLAN BUILDOUT ROADWAY NETWORK[5] | | | | | | | | | | | | | | | | |
| Bridge Street (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | DOES NOT EXIST FOR GENERAL PLAN BUILDOUT ROADWAY NETWORK[5] | | | | | | | | | | | | | | | | |
| Warren Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Exwy (EW) | TS | 0 | 2 | 1> | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 9.3 | 27.5 | A | C |
| • MCP Freeway WB Ramps (EW) | TS | 0 | 2 | 1>> | 0 | 2 | 1>> | 0 | 0 | 0 | 1 | 0 | 1>> | 11.3 | 11.2 | B | B |
| • MCP Freeway EB Ramps (EW) | TS | 0 | 2 | 1 | 1 | 2 | 0 | 2 | 0 | 1>> | 0 | 0 | 0 | 14.4 | 37.1 | B | D |
| • Ramona Blvd. (EW) | TS | 0 | 2 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1> | 22.5 | 26.2 | C | C |
| • De Anza Dr. (EW) | TS | 2 | 2 | 0 | 1 | 2 | 1 | 1 | 1 | 1>> | 1 | 1 | 0 | 16.6 | 36.2 | B | D |
| • Bridge St. (EW) | TS | 0 | 2 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 12.4 | 15.3 | B | B |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | --[4] | --[4] | F | F |
| - With Improvements | TS | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 36.9 | 47.8 | C | D |
| • Esplanade Ave. (EW) | AWS | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 0 | 1! | 0 | --[4] | --[4] | F | F |
| -With Improvements | TS | 1 | 2 | 0 | 2 | 2 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 38.9 | 53.5 | D | D |
| Odell St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | TS | 1 | 2 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 27.9 | 40.9 | C | D |
| • De Anza Dr. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 22.2 | 32.0 | C | C |
| • Bridge St. (EW) | TS | 0 | 0 | 0 | 0 | 1! | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 16.0 | 27.7 | B | C |
| Driveway 1 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | CSS | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 12.6 | 23.1 | B | C |
| Driveway 2 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | CSS | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 12.2 | 19.3 | B | C |
| Driveway 3 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) (With High School) | TS | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 20.5 | -- | C | -- |
| • *Ramona Blvd. (EW) (With 313 Dus)* | *CSS* | *0* | *1!* | *0* | *0* | *0* | *0* | *0* | *2* | *0* | *1* | *1* | *0* | -- | *21.5* | -- | *C* |
| Cawston Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | TS | 1 | 2 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 33.7 | 44.0 | C | D |
| • Street "C"/Driveway 4 (EW) | CSS | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 1! | 0 | 0 | 1! | 0 | 9.3 | 20.6 | A | C |
| • De Anza Dr. (EW) | CSS | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 23.7 | 27.2 | C | C |
| • Bridge St. (EW) | TS | 0 | 0 | 0 | 0 | 1! | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 14.1 | 16.7 | B | B |
| Driveway 10 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | CSS | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 9.0 | 10.1 | A | B |
| Driveway 5 (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Blvd. (EW) | CSS | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 0 | 16.4 | 38.7 | C | E |
| -With Improvements[4] | TS | 0 | 1! | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 10.9 | 12.8 | B | B |
| -With No Left Turns Out | CSS | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 10.5 | 11.4 | B | B |
| Street "A"/Driveway 6 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | CSS | 0 | 1! | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 16.8 | 30.8 | C | D |
| Street "A" (NS) at: | | | | | | | | | | | | | | | | | |
| • Driveway 8 (EW) | CSS | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1! | 0 | 0 | 0 | 0 | 10.1 | 10.4 | B | B |
| • Driveway 9 (EW) | CSS | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1! | 0 | 0 | 0 | 0 | 9.3 | 12.0 | A | B |
| Street "A"/Driveway 11 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 28.9 | 32.9 | C | C |
| Driveway 12 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | CSS | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 9.1 | 11.6 | A | B |
| Street "B"/"C"/Driveway 7 (NS) at: | | | | | | | | | | | | | | | | | |
| • De Anza Dr. (EW) | CSS | 0 | 1! | 0 | 0 | 1! | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 19.4 | 32.7 | C | D |
| Street "B"/Driveway 13 (NS) at: | | | | | | | | | | | | | | | | | |
| • Bridge St. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 26.0 | 33.9 | C | C |
| Sanderson Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 2 | 3 | 1> | 2 | 3 | 1 | 1 | 3 | 1> | 2 | 3 | 1 | 30.3 | 52.8 | C | D |
| • Street C (EW) | TS | 2 | 3 | 1> | 2 | 3 | 1> | 2 | 4 | 1>> | 2 | 4 | 1>> | 37.6 | 54.0 | C | D |

**Table 5.9-15 (Continued)**

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] NORTH-BOUND L | T | R | SOUTH-BOUND L | T | R | EAST-BOUND L | T | R | WEST-BOUND L | T | R | DELAY[2] (SECS.) AM | PM | LEVEL OF SERVICE AM | PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| • Ramona Blvd. (EW) (Realigned) | TS | 2 | 3 | 0 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1> | 36.8 | 52.3 | D | D |
| • Driveway 14 (EW) | CSS | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 13.0 | 17.1 | B | C |
| • De Anza Dr. (EW) | TS | 2 | 3 | 0 | 2 | 3 | 0 | 1 | 1 | 1> | 1 | 1 | 1 | 32.1 | 52.1 | D | D |
| • Driveway 15 (EW) | CSS | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 13.4 | 17.2 | B | C |
| • Bridge St. (EW) | TS | 2 | 3 | 0 | 1 | 3 | 1 | 1 | 1 | 1> | 2 | 1 | 0 | 33.6 | 54.1 | C | D |
| • Driveway 16 (EW) | CSS | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 14.9 | 33.8 | B | D |
| • SR-79 SB Ramps (EW) | TS | 0 | 3 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 1> | 16.8 | 41.8 | B | D |
| • SR-79 NB Ramps (EW) | TS | 0 | 3 | 1 | 0 | 3 | 1 | 2 | 0 | 1>> | 0 | 0 | 0 | 6.2 | 12.7 | A | F |
| • Cottonwood Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | --[4] | --[4] | F | D |
| -With Improvements | TS | 2 | 4 | 1 | 2 | 4 | 1 | 2 | 2 | 1 | 2 | 2 | 1> | 26.4 | 46.6 | C | D |
| • Esplanade Ave. (EW) | TS | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements | TS | 1 | 4 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 2 | 1>> | 32.8 | 47.8 | C | D |
| • Florida Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | --[4] | --[4] | F | F |
| -With Improvements | TS | 2 | 3 | 1 | 2 | 3 | 1> | 2 | 3 | 1> | 2 | 3 | 1>> | 53.9 | 54.2 | D | D |
| Sanderson Ave. / SR-79 SB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | --[4] | --[4] | F | F |
| -With Improvements | TS | 0 | 0 | 0 | 1.5 | 0.5 | 1 | 0 | 1 | 1>> | 1 | 2 | 0 | 14.3 | 13.7 | B | B |
| • Street C (EW) | TS | 0 | 0 | 0 | 1.5 | 0.5 | 1>> | 0 | 3 | 1 | 2 | 3 | 0 | 16.4 | 35.4 | B | D |
| Sanderson Ave. / SR-79 NB Ramps (NS) at: | | | | | | | | | | | | | | | | | |
| • Gilman Springs Rd (EW) | CSS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | --[4] | --[4] | F | F |
| -With Improvements | TS | 1.5 | 0.5 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 1>> | 13.7 | 14.8 | B | B |
| • Street C (EW) | TS | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 0 | 3 | 1>> | 0 | 3 | 1 | 9.1 | 21.2 | A | C |
| State St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Ramona Expressway (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | --[4] | --[4] | F | F |
| -With Improvements | TS | 2 | 3 | 1>> | 3 | 3 | 1> | 2 | 4 | 1> | 2 | 3 | 1> | 38.3 | 52.8 | D | D |
| • Cottonwood Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | --[4] | --[4] | F | F |
| -With Improvements | TS | 2 | 2 | 0 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 0 | 37.4 | 54.1 | D | D |
| • Esplanade Ave. (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | --[4] | --[4] | F | F |
| -With Improvements | TS | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 2 | 1> | 1 | 2 | 1 | 36.0 | 53.6 | D | D |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Left-Thru-Right Lane; 1> = Right Turn Overlap; 1>> = Free-Right Turn Lane; 1 _ = IMPROVEMENT

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R4 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop

[4] A traffic signal is not warranted at this location. An alternative to provide acceptable LOS would be to prohibit left turns out.

## Construction Related Traffic Impacts

Construction-related traffic would involve approximately 20 to 40 workers per day at the project site during each construction phase. Construction-related traffic would use Sanderson Avenue as the primary north/south access to and from the project site while various east/west routes may be used as appropriate during each phase of the project. Mass grading for the entire site would start in December 2011 and would be completed 7 months after. The grading plans anticipate that cut and fill will be balanced; no export or import of soil is planned. Phase I would be completed in December 2015. Fine grading for Phase II would start immediately after the completion of Phase

I in January 2016. Phase II would be completed in December 2017. Phase III would commence immediately after the completion of Phase II in December 2017. Phase III would include the construction of single-family residences and a high school. In July 2018, six months into the development phase, construction of the high school would start. Phase III, including the high school, would be completed in December 2023. Construction of the remaining nonresidential land uses in Phase IV would start in January 2024 and would be completed by December 2033.

The project would involve multiple construction subphases: 1) mass grading, 2) fine site grading of individual phases, 3) utilities/infrastructure (trenching), 4) building construction, 5) paving, and 6) architectural coating. Phases I, II, III, and IV would involve separate construction subphases with the exception of mass grading, which will cover the entire project site and occur during Phase I only. The proposed project would commence in 2011 and would be completed by 2033, for a total construction duration of 22 years. *Table 5.9-16* presents the heavy construction equipment assumptions for each construction stage.

**Table 5.9-16**
**Construction Equipment**

| Construction Phase | Equipment | Number |
|---|---|---|
| Mass Grading | Grader | 1 |
| | Rubber Tired Dozers | 1 |
| | Tracker/Loader/Backhoe | 1 |
| | Water Trucks | 1 |
| Fine Grading | Graders | 1 |
| | Rubber Tired Dozers | 1 |
| | Tracker/Loader/Backhoe | 1 |
| | Water Trucks | 1 |
| Trenching | Excavators | 2 |
| | Tracker/Loader/Backhoe | 1 |
| | Other General Industrial Equipment | 1 |
| | Tractor/Loaders/Backhoe | 1 |
| Building Construction (Residential) | Cranes | 1 |
| | Generator Sets | 1 |
| | Forklifts | 3 |
| | Tractors/Loaders/Backhoe s | 3 |
| | Welders | 1 |
| Paving (Residential) | Paver | 1 |
| | Paving Equipment | 2 |
| | Rollers | 2 |
| Paving (Commercial/Mixed Use) | Cement and Mortar Mixers | 4 |
| | Pavers | 1 |
| | Paving Equipment | 2 |

**Table 5.9-16 (Continued)**

| Construction Phase | Equipment | Number |
|---|---|---|
| | Rollers | 1 |
| | Tractors/Loaders/Backhoes | 1 |
| Building Construction (Commercial/Mixed Use | Cranes | 1 |
| | Generator Sets | 1 |
| | Forklifts | 3 |
| | Tractors/Loaders/Backhoe s | 3 |
| | Welders | 1 |

The additional worker and construction-related truck trips to and from the project site would potentially affect traffic operations at project area intersections during peak hours. Potential constructed-related traffic impacts are considered adverse, but less than significant because the increased traffic generation during peak hours would be temporary and intermittent during the construction periods. However, in order to avoid hazards or short-term delay, mitigation is provided for short-term construction traffic impacts (see *Section 5.9.5*, *Mitigation Measures*, *Mitigation Measure 5.9-f*). This measure requires a traffic control plan for each phase of the project which will serve to eliminate any potential hazards to surrounding roadways due to abnormally high traffic into or out of the site for a concentrated period of time.

***Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

The proposed residential and commercial/retail structures would not impede existing air traffic navigational patterns or cause a change in the location of existing airport facilities in the region. Therefore, no impacts related to air traffic patterns would occur.

***Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

Site access for the proposed development would be provided via a total of 17 driveways including seven full access driveways taking access from Odell Avenue, Cawston Avenue, Sanderson Avenue, Ramona Boulevard South, Bridge Street and De Anza Drive. The location of all driveways and traffic signal installations are shown below on *Figures 5.9-5* through *5.9-8*.

The proposed project provides appropriate access points and interior circulation patterns to ensure that adequate access and circulation is provided to and throughout the development. Site distance at each project access point would be reviewed to ensure standard Caltrans and City of San Jacinto sight distance requirements are provided by the project to avoid potential dangerous intersections. In addition, stop sign, stop bar, and stop legends would be provided at all project

driveways that intersect with public roadways (those not meeting traffic signal warrants), and on-site traffic signing and striping would be implemented in conjunction with detailed construction plans for the project site to ensure that the project provides adequate and safe site access and circulation, which meets minimum design standards applicable to the proposed development.

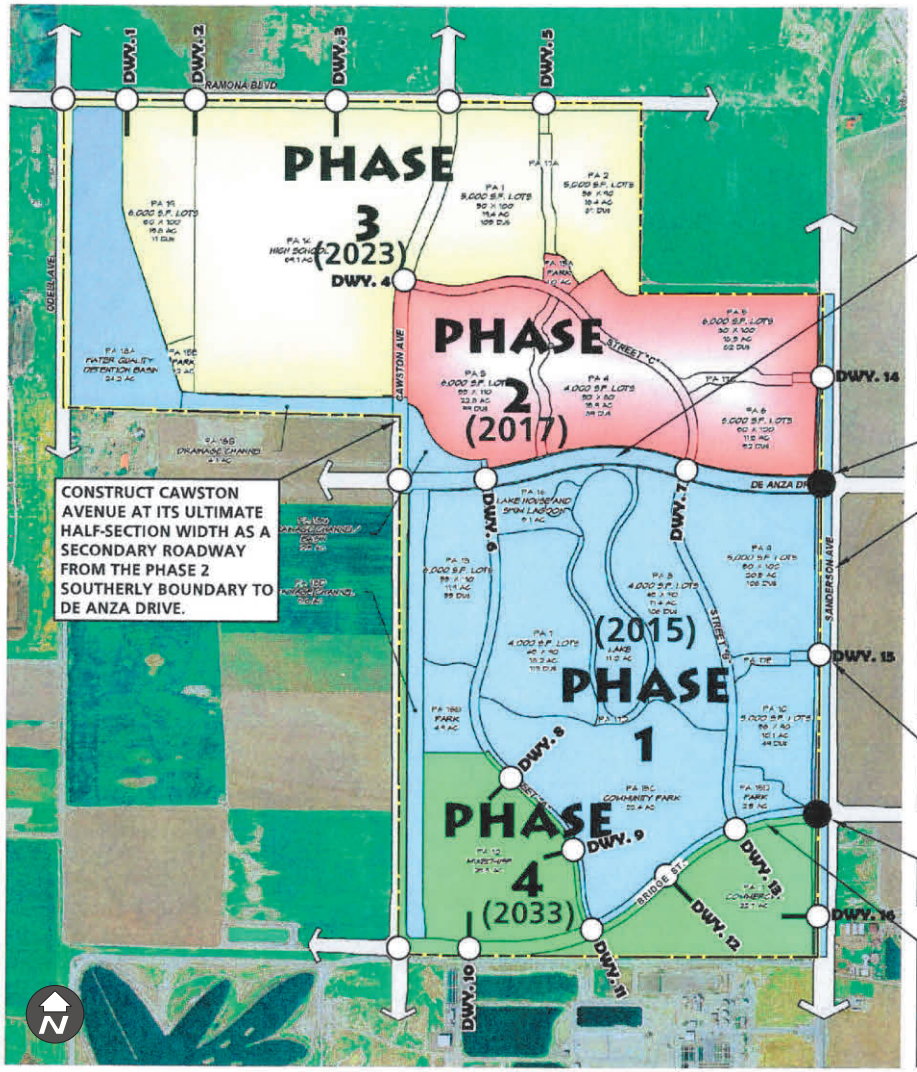
Mitigation measures that address project-related and cumulative traffic volume impacts to the surrounding street network will ensure that site access from the adjacent street system is maintained at acceptable levels to ensure that adequate and safe access and circulation is provided to the site (see *Section 5.9.5*, *Mitigation Measures*, *Mitigation Measures 5.9-a* through *5.9-f*).

***Would the project result in inadequate emergency access?***

As discussed above, the project will provide a total of 17 driveways including seven full access driveways and provides interior circulation patterns to ensure that adequate access and circulation is provided to and throughout the development. Therefore, no significant impacts related to emergency access would occur.

***Would the project result in inadequate parking capacity?***

The project is designed to have adequate parking for the proposed commercial, recreational and residential facilities. Parking requirements are set forth in the Villages of San Jacinto Specific Plan for each Planning Area within the development. Adherence to the project development standards will ensure that there is adequate parking for each proposed land use. The school facility, if built, is subject to the standards for parking adopted by the San Jacinto Unified School District.




SOURCE: URBAN CROSSROADS
APRIL 24, 2009

Villages of San Jacinto EIR

## Phase 1 Circulation Recommendations

FIGURE 5.9-5

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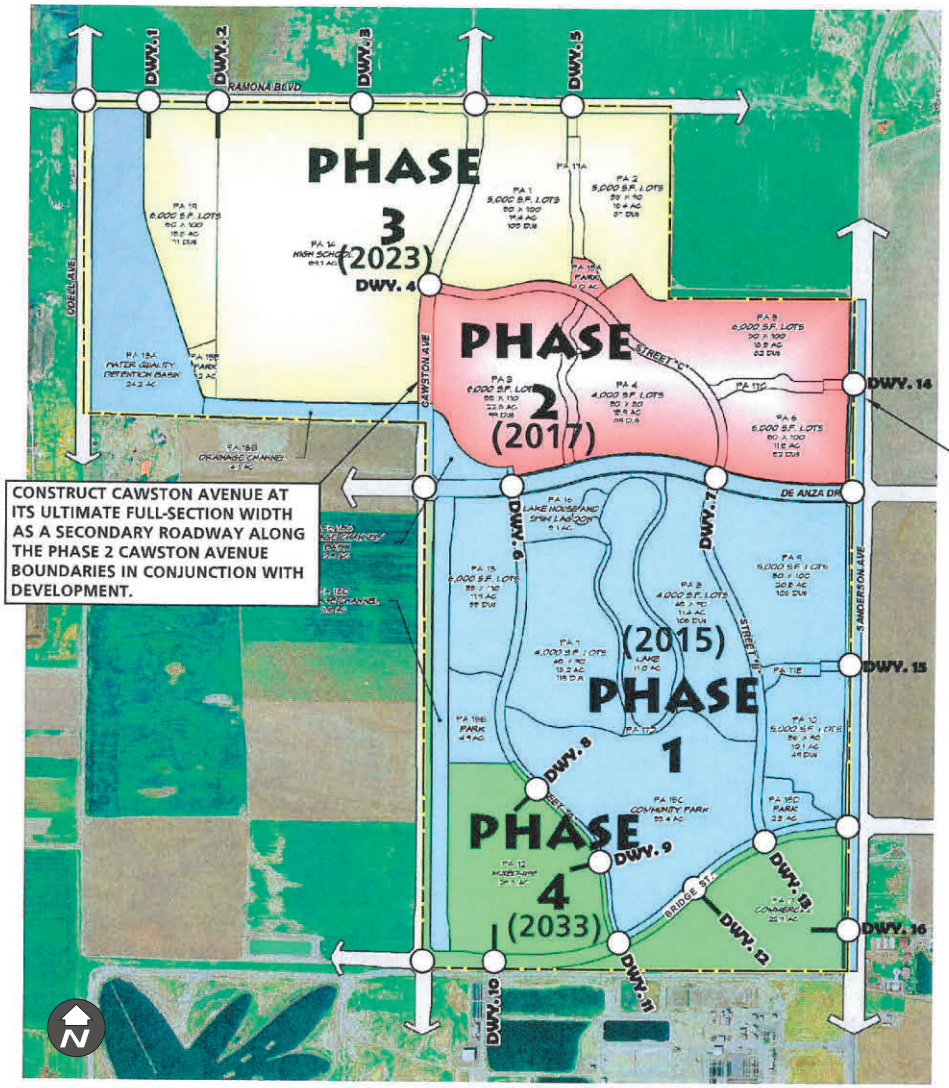


SOURCE: URBAN CROSSROADS
APRIL 24, 2009

Villages of San Jacinto EIR

## Phase 2 Circulation Recommendations

FIGURE 5.9-6

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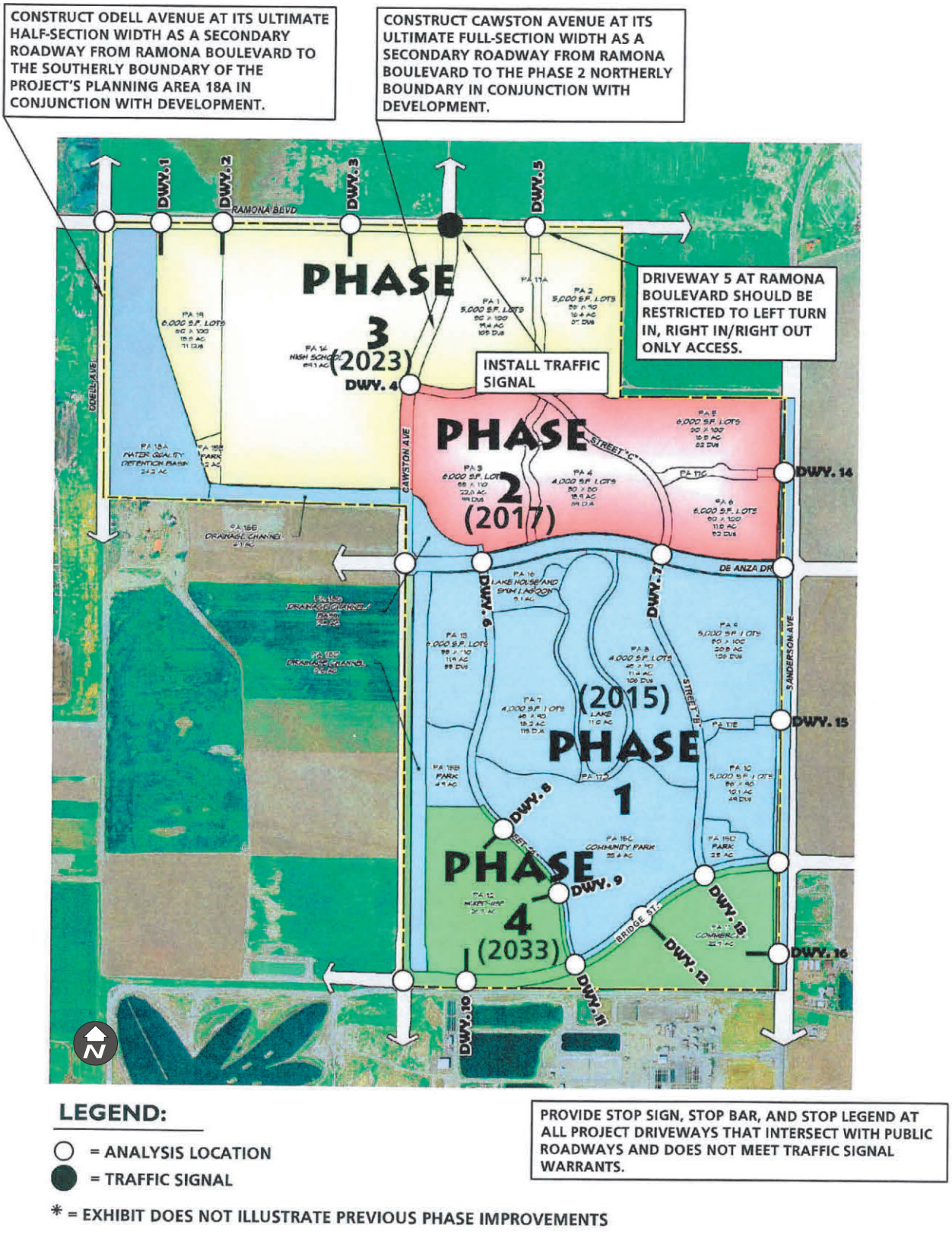


SOURCE: URBAN CROSSROADS, APRIL 24, 2009

Villages of San Jacinto EIR

**Phase 3 Circulation Recommendations**

FIGURE 5.9-7

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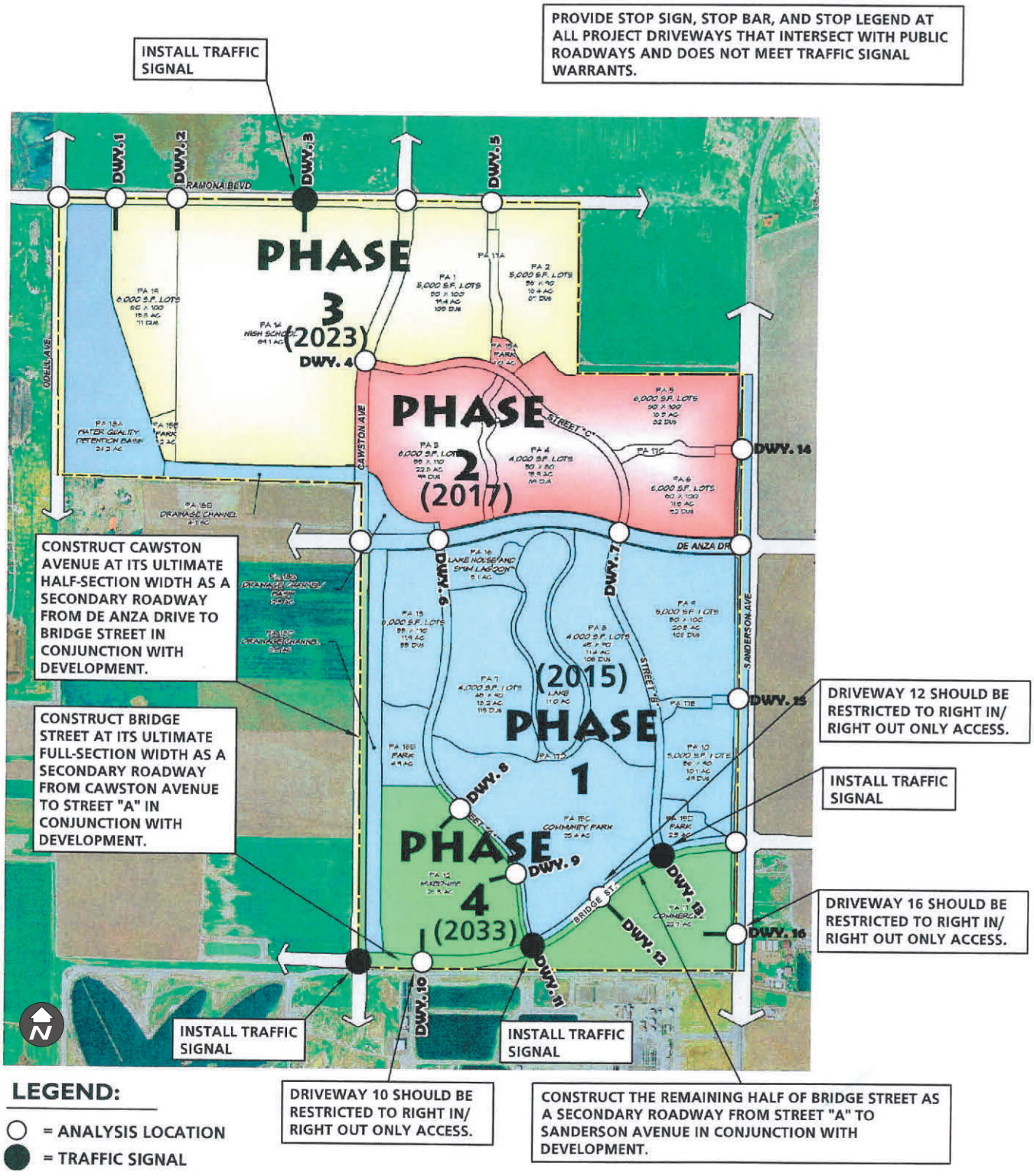


SOURCE: URBAN CROSSROADS, APRIL 24, 2009

Villages of San Jacinto EIR

**Phase 4 Circulation Recommendations**

FIGURE 5.9-8

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***Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?***

There is currently no bus routes located on or near the project site. Local transit service is provided by the Riverside Transit Agency (RTA) with the nearest route (Route 31) traveling north-south through the City on State Street approximately two miles east of the site. Bus stops and or turnouts could be provided in the future, should RTA decide to locate a route adjacent to the site. One of the goals of the project is to develop a circulation system that meets projected traffic volumes and accommodates a variety of transportation modes and encourages alternatives to automobile use within the community. Design features include a series of landscaped paseos that will serve as pedestrian linkages between land uses. Pedestrian friendly design is encouraged for the mixed use and commercial portions of the project as well. Therefore, the project will not conflict with any adopted policies supporting alternative transportation.

## 5.9.5 Mitigation Measures

The following measures are site specific circulation and access requirements for each phase of the proposed project.

**Phase I**

**5.9-a** The following measures shall be implemented prior to issuance of the first residential and commercial building permits and as depicted on *Figure 5.9-5*:

- Construct Sanderson Avenue at its ultimate half-section width as an Urban Arterial roadway from the project's northerly boundary to the project's southerly boundary in conjunction with development.
- Construct De Anza Drive at its ultimate full-section width as a secondary roadway from Cawston Avenue to Sanderson Avenue in conjunction with development.
- Construct Bridge Street at its ultimate half-section width as a secondary roadway from Street "A" to Sanderson Avenue.
- Construct Cawston Avenue at its ultimate half-section width as a secondary roadway from the Phase II southerly boundary to De Anza Drive.
- Participate in fair share fees to construct a traffic signal at the following intersection in conjunction with Phase I of the development:
    - Sanderson Avenue (NS) at:
        - De Anza Drive (EW).

- Construct a traffic signal at the following intersection in conjunction with Phase I of the development:
  - Sanderson Avenue (NS) at:
    - Bridge Street (EW).
- Provide stop sign, stop bar, and stop legend at all project driveways that intersect with public roadways and do not meet traffic signal warrants.
- Driveway 15 shall be restricted to right in/right out only access.
- Sight distance at each project access shall be reviewed with respect to standard Caltrans and City of San Jacinto sight distance standards at the time of preparation of final grading landscape and street improvement plans.
- On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site.

**Phase II**

**5.9-b** The following measures shall be implemented prior to issuance of the 432nd residential permit, any additional commercial building permits and as depicted on *Figure 5.9-6*:

- Construct Cawston Avenue at its ultimate full-section width as a secondary roadway along the Phase II Cawston Avenue boundaries in conjunction with Phase II of the development.
- Driveway 14 shall be restricted to right in/right out only access.
- Provide stop sign, stop bar, and stop legend at all project driveways that intersect with public roadways and do not meet traffic signal warrants.
- Sight distance at each project access shall be reviewed with respect to standard Caltrans and City of San Jacinto sight distance standards at the time of preparation of final grading landscape and street improvement plans.
- On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site.

**Phase III**

**5.9-c** The following measures shall be implemented prior to issuance of the 754th residential permit, the high school, any additional commercial building permits and as depicted on *Figure 5.9-7*:

- Construct Odell Avenue at its ultimate half-section width as a secondary roadway from Ramona Boulevard to the project's southerly boundary in conjunction with Phase III development.
- Construct Cawston Avenue at its ultimate full-section width as a secondary roadway from Ramona Boulevard to the Phase II northerly boundary in conjunction with Phase III development.
- Construct Ramona Boulevard at its ultimate half-section width as a secondary roadway from Odell Avenue to Sanderson Avenue in conjunction with Phase III development.
- Driveway 5 at Ramona Boulevard shall be restricted to right in/right out only access.
- Participate in fair share fees to construct a traffic signal at the following intersection in conjunction with Phase III of the development:
    - Cawston Avenue (NS) at:
        - Ramona Boulevard (EW).
- Provide stop sign, stop bar, and stop legend at all project driveways that intersect with public roadways and do not meet traffic signal warrants.
- Sight distance at each project access shall be reviewed with respect to standard Caltrans and City of San Jacinto sight distance standards at the time of preparation of final grading landscape and street improvement plans.
- On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site.
- Construct secondary access for PA 19 as approved by the City Engineer.

**Phase IV**

**5.9-d** The following measures shall be implemented prior to issuance of the final remaining commercial building permits and as depicted on *Figure 5.9-8*:

- Construct Cawston Avenue at its ultimate half-section width as a secondary roadway from Bridge Street to De Anza Drive in conjunction with Phase IV development.
- Construct Bridge Street at its ultimate full-section width as a secondary roadway from Cawston Avenue to Street "A" in conjunction with Phase IV development.
- Construct the remaining half of Bridge Street as a secondary roadway from Street "A" to Sanderson Avenue in conjunction with Phase IV development.
- Driveway 10 at Bridge Street shall be restricted to right in/right out only access.

- Driveway 12 at Bridge Street shall be restricted to right in/right out only access.
- Driveway 16 at Sanderson Avenue shall be restricted to right in/right out only access.
- Construct traffic signals at the following intersections in conjunction with Phase IV of the development:
  - Driveway 3 (NS) at:
    - Ramona Boulevard (EW) (Only if High School is constructed)
  - Street "A"/Driveway 11 (NS) at:
    - Bridge Street (EW)
  - Street "B"/Driveway 13 (NS) at:
    - Bridge Street (EW).
- Participate in fair share fees to construct a traffic signal at the following intersection in conjunction with Phase IV of the development:
  - Cawston Avenue (NS) at:
    - Bridge Street (EW).
- Provide stop sign, stop bar, and stop legend at all project driveways that intersect with public roadways and do not meet traffic signal warrants.
- Sight distance at each project access shall be reviewed with respect to standard Caltrans and City of San Jacinto sight distance standards at the time of preparation of final grading landscape and street improvement plans.
- On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site.

**5.9-e** Because the project, along with many others in the area, is contributing to the city-wide need for street improvements, the project will need to contribute to the Riverside County TUMF and City of San Jacinto DIF programs. As discussed in *Section 5.9.2*, these fees are collected as part of a funding mechanism aimed at ensuring that local and regional highway capacity keeps pace with projected growth throughout the area. Eligible facilities for funding by the City's DIF program are identified on the City's Facility Needs List, which currently extends through the year 2020. *Table 5.9-17*, *Estimated TUMF and DIF Fee Calculations*, includes estimated fee calculations for the proposed project based on current fee rates.

# Table 5.9-17
# Estimated TUMF and DIF Fee Calculations

| FEE REFERENCE | SINGLE FAMILY RESIDENTIAL ($ PER DU) | MULTI-FAMILY ($ PER DU) | COMMERCIAL ($ PER SQ FT) | OFFICE / SERVICE ($ PER SQ FT) | INDUSTRIAL ($ PER SQ FT) |
|---|---|---|---|---|---|
| San Jacinto Development Impact Fee: Streets and Roads Component (DIF)[1] | $1,468 | $1,239 | $0.17 | $0.17 | $0.14 |
| San Jacinto Development Impact Fee: Traffic Signals (DIF)[1] | $256 | $216 | $0.03 | $0.03 | $0.02 |
| Transportation Uniform Mitigation Fee (TUMF) | $9,812 | $7,054 | $9.99 | $5.71 | $1.84 |

[1] Non-residential uses under DIF have been converted to square footage for comparison purposes. Actual fee based upon acreage as follows:

| Fee Type | Commercial | Office | Industrial |
|---|---|---|---|
| Streets and roads: | $7,226 | $7,226 | $6,102 |
| Signals: | $1,260 | $1,260 | $1,064 |

***Project With School Site***

| Program | Category | Unit Cost | Units | Total Cost | Program Totals |
|---|---|---|---|---|---|
| DIF - Streets and Roads | SFR | $1,468 | 1,016 | $1,491,488 | |
| DIF - Streets and Roads | Commercial | $0.17 | 281,572 | $46,709 | |
| DIF - Streets and Roads | Office | $0.17 | 309,320 | $51,312 | |
| DIF - Streets and Roads Total | | | | | $1,589,509 |
| DIF - Traffic Signals | SFR | $1,468 | 1,016 | $1,491,488 | |
| DIF - Traffic Signals | Commercial | $0.03 | 281,572 | $8,145 | |
| DIF - Traffic Signals | Office | $0.03 | 309,320 | $8,947 | |
| DIF - Traffic Signals Totals | | | | | $1,508,580 |
| TUMF | SFR | $9,812 | 1,016 | $9,968,992 | |
| TUMF | Commercial | $9.99 | 281,572 | $2,812,904 | |
| TUMF | Office | $5.71 | 309,320 | $1,766,217 | |
| TUMF Totals | | | | | $14,548,113 |
| **Totals** | | | | | **$17,646,202.19** |

***Project Without School Site***

| Program | Category | Unit Cost | Units | Total Cost | Program Totals |
|---|---|---|---|---|---|
| DIF - Streets and Roads | SFR | $1,468 | 1,329 | $1,950,972 | |
| DIF - Streets and Roads | Commercial | $0.17 | 281,572 | $46,709 | |
| DIF - Streets and Roads | Office | $0.17 | 309,320 | $51,312 | |
| DIF - Streets and Roads Total | | | | | $2,048,993 |
| DIF - Traffic Signals | SFR | $256 | 1,329 | $340,224 | |
| DIF - Traffic Signals | Commercial | $0.03 | 281,572 | $8,145 | |
| DIF - Traffic Signals | Office | $0.03 | 309,320 | $8,947 | |
| DIF - Traffic Signals Totals | | | | | $357,316 |
| TUMF | SFR | $9,812 | 1,329 | $13,040,148 | |
| TUMF | Commercial | $9.99 | 281,572 | $2,812,904 | |
| TUMF | Office | $5.71 | 309,320 | $1,766,217 | |
| TUMF Totals | | | | | $17,619,269 |
| **Totals** | | | | | **$20,025,578.19** |

***Notes:***
A Floor Area Ratio (FAR) conversion rate of 25% was used for PA11 and 30% for PA12 for fee calculation purposes
Government Office is included in "Office" category for worse case scenario. Most fee programs do not charge a fee for actual government uses.

Many off-site circulation improvements required as a result of project impacts would be mitigated through participation in the TUMF fee program. Many of the off-site improvements that are needed will be planned, designed and constructed by the City, Riverside County Transportation Department, Riverside County Transportation Commission, other cities or a combination of the above.

In order to ensure that all off-site traffic improvements are constructed by the City (or the County/RCTC), prior to construction of specific project phases, the City shall ensure that the improvements are made to compensate for the project's contribution to off-site circulation issues. The project applicant's payment of TUMF and DIF fees will allow the financing mechanism to conduct such improvements.

**5.9-f** The contractor for each phase of the project shall be required to prepare and implement a traffic control plan (TCP) in order to monitor construction equipment, deliveries and construction worker traffic to eliminate any potential hazards to surrounding roadways due to abnormally high traffic into or out of the site for a concentrated period of time. Each traffic control plan shall outline when flagging operations may be necessary (during large construction equipment arrival or deportation, etc.).

## 5.9.6 Residual Impacts/Level of Significance after Mitigation

**Access and On-Site Circulation**

With implementation of the mitigation measures included in *Section 5.9.5*, *Mitigation Measures*, to ensure that adequate and safe site access and circulation design is provided for the proposed development, potential impacts relative to site access and circulation, and emergency access, would be less than significant.

**Cumulative Traffic Impacts/ Regional Mitigation Programs**

Implementation of the mitigation measures included in *Section 5.9.5*, *Mitigation Measures*, would ensure that regional traffic conditions do not dip below an acceptable LOS (LOS D) for existing plus project conditions. However, without completion of the Mid-County Parkway and SR-79 projects, the project would contribute to a cumulative significant impact. There is no feasible mitigation for this significant cumulative impact due to exceedance of General Plan roadway criteria (e.g., triple left turn lanes) and due to the uncertainty of obtaining adequate right-of-way for such measures. Therefore, because the City can not guarantee that regional improvements would be implemented prior to completion of the project, a significant unmitigable cumulative traffic impact would occur. That said, it should be noted that the unacceptable LOS conditions would occur with or without the project under cumulative conditions in the absence of the Mid-County Parkway and SR-79 improvements.

# 5.10 AIR QUALITY

## 5.10.1 Introduction and Methodology

This section evaluates short-term (construction) and long-term (operational) impacts to air quality that would potentially occur as a result of implementation of the proposed project. Impacts are evaluated for their significance based on the South Coast Air Quality Management District's (SCAQMD) enumerated environmental thresholds. Mitigation measures required to reduce impacts are recommended as appropriate. However, impacts associated with construction and operation would remain significant after mitigation. Technical information related to the analysis below is contained in *Appendix I* to this EIR.

## 5.10.2 Existing Conditions

**Regional Air Quality and Climate/Meteorology**

The project site is located in western Riverside County within the City of San Jacinto, which lies at an elevation of approximately 1,567 feet. The natural topography of the project area can best be described as lying in valley lowland, intersected with rolling hills and surrounded by the Santa Ana Mountains to the west and the San Jacinto Mountains to the east. This project site is located within the South Coast Air Basin (SCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. Air quality conditions in the SCAB are under the jurisdiction of the SCAQMD. The SCAQMD regulates stationary sources of pollution throughout its jurisdictional area. Direct emissions from motor vehicles are regulated by the California Air Resources Board (CARB).

**Climate/Meteorology**

Air quality in the planning area is not only affected by various emission sources (e.g., mobile, industry), but is also affected by atmospheric conditions such as wind speed, wind direction, temperature, and rainfall, etc. The SCAB's combination of topography, low mean mixing height, abundant sunshine, and emissions from one of the largest urban areas in the United States have historically resulted in some of the worst air pollution in the nation.

Although the SCAB has a semi-arid climate, air near the surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. The dominant daily wind pattern is an onshore 8 to 12 miles per hour daytime breeze and an offshore 3 to 5 miles per hour nighttime breeze. The typical wind flow pattern fluctuates only with occasional winter storms, or strong northeasterly Santa Ana winds from the mountains and deserts northeast of the SCAB. Summer

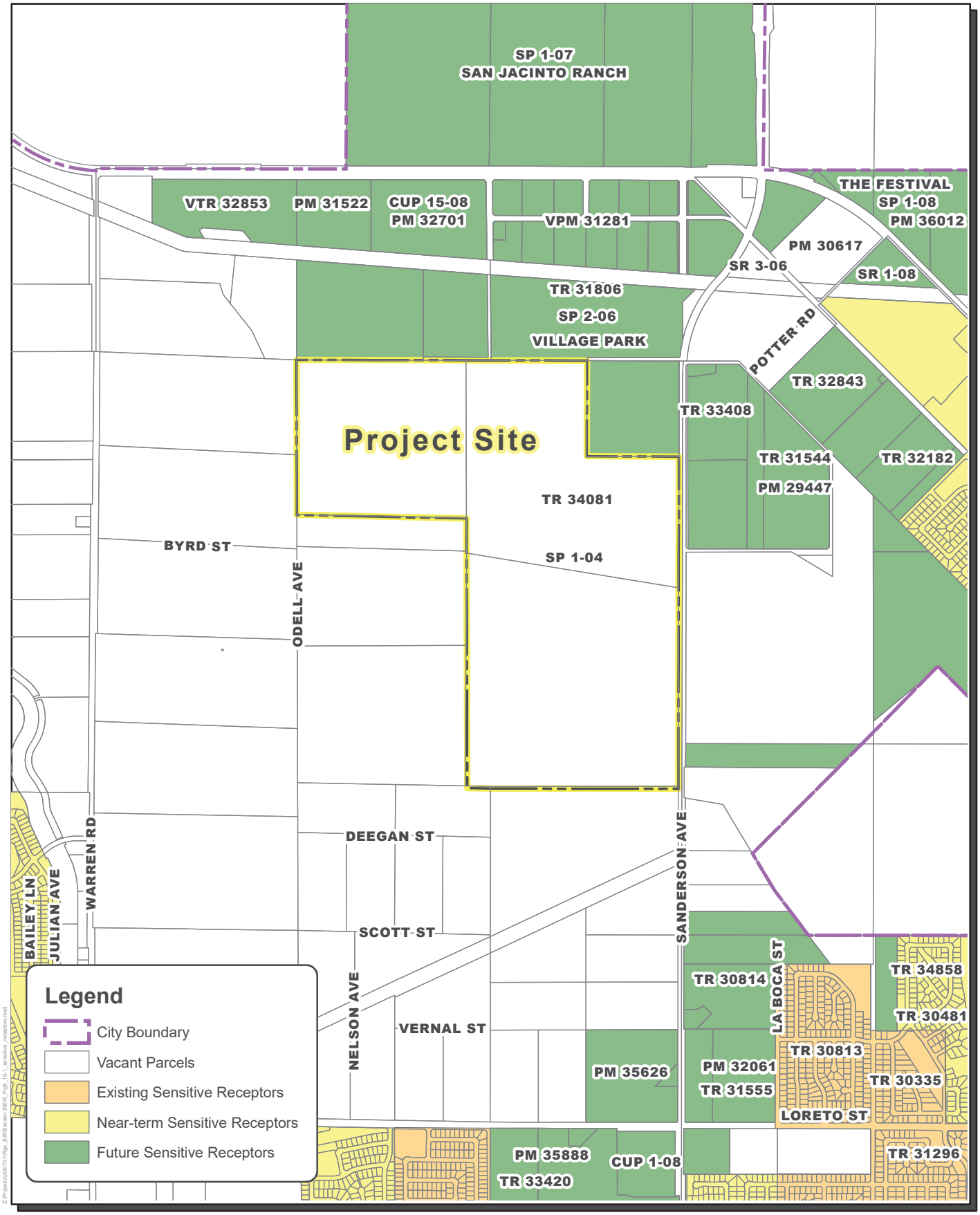
wind flow patterns represent worst-case conditions, as this is the period of higher temperatures and more sunlight, which results in ozone formation.

The San Jacinto area climate is characterized by relatively low rainfall, with warm summers and mild winters. Annual precipitation averages about 13 inches, with over 70% of that falling between December and March. Average monthly temperatures range from a high of 98 degrees Fahrenheit in August to a low of 37 degrees Fahrenheit in December (City-Data.com, Accessed June 6, 2005).

During spring and early summer, pollution produced during any one day is typically blown out of the SCAB through mountain passes or lifted by warm, vertical currents adjacent to mountain slopes. The vertical dispersion of air pollutants in the SCAB is limited by temperature inversions in the atmosphere close to the earth's surface. The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino counties. In the winter, the greatest pollution problems are carbon monoxide and nitrogen dioxide because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and oxides of nitrogen to form photochemical smog.

**Air Quality Characteristics**

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed sensitive receptors are the most serious hazards of existing air quality conditions in the area. Sensitive receptors are those persons under 5 years of age, or older than 65, and/or persons with health problems; consequently sensitive receptors include hospitals, convalescent homes, schools, and retirement facilities. There are no sensitive receptors currently located adjacent to the proposed project site. However, some existing residential development is located south and southeast of the project site, and some residential developments are currently under construction to the southwest, southeast, south, and east of the proposed project site. Lastly, several parcels adjacent to the proposed project site to the north and northeast may include future residential development during the construction and operational phases of the proposed project. The existing, near-term (under construction) and potential future sensitive receptors in the vicinity of the proposed project are shown in *Figure 5.10-1*.




SOURCE: City of San Jacinto (2009), Riverside TLA (2008)

Villages of San Jacinto EIR

**Sensitive Receptors**

FIGURE 5.10-1

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Additional discussion of sensitive receptors in the vicinity of the project site is provided in the Localized Significance Thresholds Analysis in *Appendix I*.

Primary criteria pollutants are emitted directly from a source (e.g., an automobile) into the atmosphere and include volatile organic compounds (VOCs), oxides of nitrogen ($NO_x$), carbon monoxide (CO), sulfur oxides ($SO_x$) and particulate matter. Particulate matter is generally comprised of inert particles that become airborne, such as dust or ash. Particulate matter less than 10 microns in diameter is referred to as $PM_{10}$; particulate matter less than 2.5 microns in diameter is referred to as $PM_{2.5}$. VOCs are also a primary pollutant, but are not a "criteria" pollutant (see discussion below). Secondary pollutants are created by atmospheric chemical and photochemical reactions. Secondary pollutants include oxidants, ozone ($O_3$), particulate matter, and sulfate particulates.

## Global Climate Change

The Earth's climate has undergone many changes during its history, ranging from ice ages to long periods of warmth. Natural factors such as volcanic eruptions, changes in the Earth's orbit, and the amount of energy from the sun have affected global temperatures and thus the Earth's climate. Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer) (EPA 2008a). The term climate change is often used interchangeably with the term global warming; however, the phrase "climate change" is preferred as it helps convey that there are other changes in addition to rising temperatures (NAS 2008).

### *Environmental Setting*

The Greenhouse Effect and Greenhouse Gases (GHGs)

Heat retention within the atmosphere is an essential process to sustain life on Earth. The natural process through which heat is retained in the troposphere[1] is called the "greenhouse effect." The greenhouse effect traps heat in the troposphere through a three-fold process as follows: short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and greenhouse gases (GHGs) in the upper atmosphere absorb this long-wave radiation and emit this long-wave radiation into space and toward the Earth. This "trapping" of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect. This natural process contributes to regulating the earth's temperature without which the temperature of the Earth would be about

[1] The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface to 10 to 12 kilometers).

zero degrees Fahrenheit (-18 degrees Celsius) instead of its present 57 degrees Fahrenheit (14 degrees Celsius) (NCDC 2008).

Gases that trap heat in the atmosphere are often called GHGs. Principal GHGs include carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), ozone ($O_3$), and water vapor ($H_2O$). Some GHGs, such as $CO_2$, $CH_4$, and $N_2O$, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, $CO_2$ and $CH_4$ are emitted in the greatest quantities from human activities. Man-made GHGs, which have a much greater heat-absorption potential than $CO_2$, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride ($SF_6$), which are byproducts of certain industrial processes. The major GHGs emitted by human activities remain in the atmosphere for periods ranging from decades to centuries; therefore, it is virtually certain that atmospheric concentrations of GHGs will continue to rise over the next few decades (EPA 2007).

It is generally agreed that human activity has been increasing the concentration of GHGs in the atmosphere (mostly carbon dioxide from combustion of coal, oil, and gas, and a few other trace gases) (NCDC 2008). The global atmospheric concentration of carbon dioxide has increased from a pre-industrial value of about 280 ppm to 379 ppm in 2005 (IPCC WGI 2007). Based on current rates of increase, carbon dioxide concentrations could reach between 490 to 1260 ppm by the end of the 21st century, 75 to 350% above the pre-industrial concentration (IPCC 2001).

A warming trend of approximately 1.0 to 1.7 degrees Fahrenheit occurred during the 20th century; warming occurred in both the northern and southern hemispheres, and over the oceans (IPCC WGI 2007). Most of the warming in recent decades is very likely the result of human activities (IPCC WGI 2007). There is much uncertainty, however, concerning the magnitude and rate of the warming. Specifically, the EPA notes that "important scientific questions remain about how much warming will occur, how fast it will occur, and how the warming will affect the rest of the climate system, including precipitation patterns and storms" (EPA 2007).

The effect each GHG has on climate change is measured as a combination of the volume or mass of its emissions, and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP), and is expressed as a function of how much warming would be caused by the same mass of $CO_2$. Thus, GHG gas emissions are typically measured in terms of pounds or tons of "carbon dioxide equivalent" ($CO_2E$).

### *Contributions to Greenhouse Gas Emissions*

Global

Anthropogenic GHG emissions worldwide in 2005 totaled approximately 41,100 $CO_2$ equivalent million metric tons ($MMTCO_2E$)[2] (CAIT 2009). Six countries—China, United States, Russian Federation, India, Japan, Brazil—and the European Community accounted for approximately 60% of the total global emissions, approximately 25,000 $MMTCO_2E$ (CAIT 2009).

United States

The United States was the second highest producer of GHG emissions in 2005. The primary GHG emitted by human activities in the United States was $CO_2$, representing approximately 84% of total GHG emissions. Carbon dioxide from fossil fuel combustion, the largest source of United States GHG emissions, accounted for approximately 80% of United States GHG emissions (EPA 2008b).

State of California

According to the 2004 GHG inventory data compiled by CARB for the California 1990 GHG emissions inventory, California emitted emissions of 484 $MMTCO_2E$, including emission resulting from out-of-state electrical generation (CARB 2007b). The primary contributors to GHG emissions in California are transportation, electric power production from both in-state and out-of-state sources, industry, agriculture and forestry, and other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions in 2004 are presented in *Table 5.10-1, GHG Sources in California*.

[2] The $CO_2$ equivalent emissions on a global or national scale are commonly expressed as "million metric tons of carbon dioxide equivalent ($MMTCO_2E$)" The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated GWP, such that $MMTCO_2E$ = (million metric tons of a GHG) x (GWP of the GHG). For example, the GWP for methane is 21. This means that emissions of one million metric tons of methane are equivalent to emissions of 21 million metric tons of $CO_2$.

**Table 5.10-1**
**GHG Sources in California [1]**

| Source Category | Annual GHG Emissions ($MMTCO_2E$) [a] | Percent of Total | Annual GHG Emissions ($MMTCO_2E$) [b] | Percent of Total |
|---|---|---|---|---|
| Agriculture | 27.9 | 5.8% | 27.9 | 6.6% |
| Commercial Uses | 12.8 | 2.6% | 12.8 | 3.0% |
| Electricity Generation | 119.8 | 24.7% | 58.5 | 13.8% |
| Forestry (excluding sinks) | 0.2 | 0.0% | 0.2 | 0.0% |
| Industrial Uses | 96.2 | 19.9% | 96.2 | 22.7% |
| Residential Uses | 29.1 | 6.0% | 29.1 | 6.9% |
| Transportation | 182.4 | 37.7% | 182.4 | 43.1% |
| Other [c] | 16.0 | 3.3% | 16.0 | 3.8% |
| **Totals** | **484.4** | **100.0%** | **423.1** | **100.0%** |

[1] SOURCES: CARB 2007
[a] Includes emissions associated with imported electricity, which account for 61.3 $MMTCO_2E$ annually
[b] Excludes emissions associated with imported electricity
[c] Unspecified combustion and use of ozone-depleting substances

### *Potential Effects of Human Activity on Climate Change*

Globally, climate change has the potential to impact numerous environmental resources though uncertain impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of about 0.2 degrees Celsius (0.36 degrees Fahrenheit) per decade is projected, and there are identifiable signs that global warming could be taking place, including substantial ice loss in the Arctic (IPCC WGI 2007).

However, the scientific understanding of the effect of GHG emissions, particulate matter, and aerosols on global climate trends remains uncertain. In addition to uncertainties about the extent to which human activity rather than solar or volcanic activity is responsible for increasing warming, there is also evidence that some human activity has cooling rather than warming effects (IPCC 2001).

Below is a summary of some of the potential effects reported by an array of studies that could be experienced in California as a result of global warming and climate change.

Air Quality

Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. For other pollutants, the effects of climate

change and/or weather are less well studied, and even less well understood. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (CCCC 2006).

Water Supply

Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, "considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change" (Kiparsky and Gleck 2003). Even assuming that climate change leads to long-term increases in precipitation, analysis of the impact of climate change is further complicated by the fact that no studies have identified or quantified the runoff impacts such an increase in precipitation would have in particular watersheds (CCCC 2006). Also, little is known about how groundwater recharge and water quality will be affected. Higher rainfall could lead to greater groundwater recharge, although reductions in spring runoff and higher evapotranspiration could reduce the amount of water available for recharge (CCCC 2006).

The California Department of Water Resources report on climate change and effects on the State Water Project, the Central Valley Project, and the Sacramento-San Joaquin Delta concludes that "climate change will likely have a significant effect on California's future water resources [and] future water demand," yet it also reports that much uncertainty about future water demand remains (DWR 2006). Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows (Kiparsky and Gleck 2003).

Hydrology

As discussed above, climate changes could potentially affect: the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has a $30 billion agricultural industry that produces half the country's fruits and vegetables. Higher $CO_2$ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater ozone pollution could render plants more susceptible to pest and disease outbreaks (CCCC 2006).

Ecosystems and Wildlife

Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Soil moisture is likely to decline in many regions, intense rainstorms are likely to become more frequent, and sea level could rise as much as two feet along most of the United States coast. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes such as carbon cycling and storage (Parmesan and Galbraith 2004).

## Regulatory Setting

### *Federal*

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, which include National Ambient Air Quality Standards (NAAQS) for major air pollutants, hazardous air pollutant standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions. NAAQS are established for "criteria pollutants" under the Clean Air Act, which are $O_3$, CO, nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), $PM_{10}$, $PM_{2.5}$, and lead (Pb).

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation; these NAAQS may not be exceeded more than once a year, except annual standards, which may never be exceeded. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan that demonstrates how those areas will attain the standards within mandated time frames.

### *State*

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

CARB has established California Ambient Air Quality Standards (CAAQS), which are more restrictive than the NAAQS, consistent with the Clean Air Act, which requires state regulations to be at least as restrictive as the federal requirements. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered in "attainment" if pollutant levels are continuously below the standards and violate the standards no more than once each year. The NAAQS and CAAQS are presented in *Table 5.10-2, California and National Ambient Air Quality Standards*.

**Table 5.10-2**
**California and National Ambient Air Quality Standards**

| Pollutant | Averaging Time | California Standards [a,c] | National Standards [b] | |
|---|---|---|---|---|
| | | | Primary [c,d] | Secondary [c,e] |
| Ozone ($O_3$) | 1-hour | 0.09 ppm (180 µg/m$^3$) | — | Same as primary |
| | 8-hour | 0.070 ppm (137 µg/m$^3$) | 0.075 ppm (147 µg/m$^3$) | Same as primary |
| Carbon monoxide (CO) | 8-hour | 9.0 ppm (10 mg/m$^3$) | 9 ppm (10 mg/m$^3$) | — |
| | 1-hour | 20 ppm (23 mg/m$^3$) | 35 ppm (40 mg/m$^3$) | — |
| Nitrogen dioxide ($NO_2$) | Annual | 0.030 ppm (57 µg/m$^3$) | 0.053 ppm (100 µg/m$^3$) | Same as primary |
| | 1-hour | 0.18 ppm (339 µg/m$^3$) | — | — |
| Sulfur dioxide ($SO_2$) | Annual | — | 0.030 ppm (80 µg/m$^3$) | — |
| | 24-hour | 0.04 ppm (105 µg/m$^3$) | 0.14 ppm (365 µg/m$^3$) | — |
| | 3-hour | — | — | 0.5 ppm (1,300 µg/m$^3$) |
| | 1-hour | 0.25 ppm (655 µg/m$^3$) | — | — |
| Respirable Particulate Matter ($PM_{10}$) | Annual | 20 µg/m$^3$ * | — | Same as primary |
| | 24-hour | 50 µg/m$^3$ | 150 µg/m$^3$ | Same as primary |
| Fine Particulate Matter ($PM_{2.5}$) | Annual | 12 µg/m$^3$ ** | 15.0 µg/m$^3$ | Same as primary |
| | 24-hour | — | 35 µg/m$^3$ | Same as primary |

**Table 5.10-2 (Continued)**

| Pollutant | Averaging Time | California Standards [a,c] | National Standards [b] | |
|---|---|---|---|---|
| | | | Primary [c,d] | Secondary [c,e] |
| Lead | 30-day | 1.5 µg/m$^3$ | — | — |
| | Quarterly | — | 1.5 µg/m$^3$ | Same as primary |
| Hydrogen sulfide | 1-hour | 0.03 ppm (42 µg/m$^3$) | — | — |
| Vinyl chloride | 24-Hour | 0.01 ppm (26 µg/m$^3$) | — | — |
| Sulfates | 24-hour | 25 µg/m$^3$ | — | — |
| Visibility reducing particles [f] | 8-hour (10:00 a.m. to 6:00 p.m. PST) | In sufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%. | — | — |

SOURCE: CARB 2008

a. California standards for $O_3$, CO, $SO_2$ (1 hour), $NO_2$, $PM_{10}$, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. The standards for $SO_2$ (24-hour), sulfates, lead, hydrogen sulfide, and vinyl chloride standards are not to be equaled or exceeded.

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

c. Concentration expressed first in units in which it was promulgated. Equivalent units given in parenthesis are based on a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibars). All measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

e. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

f This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range when relative humidity is less than 70%.

* Measured as an arithmetic mean. New standard promulgated by the ARB on June 20, 2002

** New standard promulgated by the ARB on June 20, 2002

### *Local*

While CARB is responsible for the regulation of mobile emission sources within the state, local AQMDs and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SCAB, where the proposed project is located. The SCAQMD operates monitoring stations in the SCAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The SCAQMD's Air Quality Management Plans (AQMP) include control measures and strategies to be implemented to attain state and federal ambient air quality standards in the SCAB. The SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

The South Coast Air Quality Management District Governing Board adopted the 2003 AQMP on August 1, 2003. The 2003 AQMP updates the attainment demonstration for the federal standards for $O_3$ and $PM_{10}$; replaces the 1997 attainment demonstration for the federal CO standard,

provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal $NO_2$ standard that the SCAB has met since 1992. The South Coast Air Quality Management District Governing Board adopted the 2007 AQMP on June 1, 2007. The 2007 AQMP includes the same updates as the 2003 AQMP and also incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. As part of the 2007 AQMP, the SCAQMD request that EPA "bump up" the $O_3$ nonattainment status from severe to extreme to allow additional time for the SCAB to achieve attainment with the federal standard. The additional time would provide for implementation of state and federal measures that apply to sources over which the SCAQMD does not have control. The 2007 AQMP has been approved by CARB but is undergoing review by EPA.

Emissions that would result from mobile, stationary, and areas sources during construction and operation of the proposed project are subject to the rules and regulations of the SCAQMD. The SCAQMD rules applicable to the proposed project may include the following.

Rule 403 (Fugitive Dust)

This rule requires fugitive dust sources to implement Best Available Control Measures for all sources and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce $PM_{10}$ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust (see also Rule 1186).

Rule 431.2 (Sulfur Content of Liquid Fuels)

The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of both reducing the formation of $SO_x$ and particulates during combustion and to enable the use of add-on control devices for diesel fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary source applications in the District. The rule also affects diesel fuel supplied for mobile source applications.

Rule 445 (Wood Burning Devices)

This rule prohibits the installation of permanently installed wood-burning devices into any new development and restricts the installation of wood-burning devices into existing development to specific devices, primarily those certified by EPA.

Rule 1113 (Architectural Coatings)

This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Rule 1121 (Control of Nitrogen Oxides from Residential Type, Natural Gas-Fired Water Heaters)

This rule prescribes NOx emission limits for natural gas-fired water heaters with heat input rates less than 75,000 BTU per hour. It applies to manufacturers, distributors, retailers, and installers of natural gas-fired water heaters.

Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters)

This rule requires manufacturers, distributors, retailers, refurbishers, installers and operators of new and existing units to reduce NOx emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.

Rule 1186 (PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations)

This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the clean-up of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

***Greenhouse Gas Regulatory Programs***

International Activities

*Kyoto Protocol*

The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change (UNFCCC) since it was signed on March 21, 1994. The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. The original Kyoto Protocol was negotiated in December 1997 and came into force on February 16, 2005. As of January 2009, 183 countries and the European Economic Community (EEC) have ratified the agreement (UNFCCC 2009). The goal of the protocol is to achieve overall emissions reduction targets for six GHGs by the period 2008 to 2012.

Federal Activities

*Massachusetts vs. EPA*

To date, the EPA has not regulated GHGs under the Clean Air Act based on the assertion that "(1) the Act does not authorize it to issue mandatory regulations to address global climate change, and (2) even if it had the authority to set GHG emission standards, it would have been unwise to do so at that time because a causal link between GHGs and the increase in global surface air temperatures was not unequivocally established."[3] In *Massachusetts v. EPA*, however, the Supreme Court held that EPA has the statutory authority under Section 202 of the Clean Air Act to regulate GHGs from new motor vehicles because GHGs meet the Clean Air Act definition of an air pollutant.[4] The court did not hold that the EPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs from motor vehicles cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. Upon the final decision, President Bush signed Executive Order 13432 on May 14, 2007, directing the EPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision.

In *Massachusetts v. EPA*, the Supreme Court directed the Administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the Administrator is required to follow the language of Section 202(a) of the Clean Air Act. On April 17, 2009, the Administrator signed a proposal with two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- The Administrator is proposing to find that the current and projected concentrations of the mix of 6 key greenhouse gases—$CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, and $SF_6$—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the endangerment finding.

- The Administrator is further proposing to find that the combined emissions of $CO_2$, $CH_4$, $N_2O$, and HFCs from new motor vehicles and motor vehicle engines contribute to the atmospheric concentrations of these key greenhouse gases and hence to the threat of climate change. This is referred to as the cause or contribute finding.

[3] *Massachusetts et al. v. Environmental Protection Agency et al*., 549 U.S. 497 (2007).
[4] Ibid.

*Energy Independence and Security Act*

On December 19, 2007, President Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the Act would do the following, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022
2. Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by Model Year 2020, directs National Highway Traffic Safety Administration to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

State of California

*AB 1493*

In a response to the transportation sector accounting for more than half of California's $CO_2$ emissions, Assembly Bill 1493 (AB 1493, Pavley) was enacted on July 22, 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set the GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%.

In December 2004, these regulations were challenged in federal court by the Alliance of Automobile Manufacturers, which claimed that the law regulated vehicle fuel economy, a duty assigned to the federal government. Upon the U.S. Supreme Court's decision in *Massachusetts v. EPA*, the U.S. District Court for the Eastern District dismissed the case by the Alliance of Automobile Manufacturers in December 2007. However, before these regulations may go into effect, the EPA must grant California a waiver under the federal Clean Air Act, which ordinarily preempts state regulation of motor vehicle emission standards. On December 19, 2007, Stephen Johnson, the EPA Administrator, denied the waiver citing the need for a national approach to

reducing GHG emissions, the lack of a "need to meet compelling and extraordinary conditions," and the benefits to be achieved through the Energy Independence and Security Act of 2007 (Johnson 2007). The California Attorney General subsequently filed suit in January 2008 to overturn the administrator's decision. The Obama Administration has reevaluated the waiver, and the waiver was granted by Lisa Jackson, the EPA Administrator, on June 30, 2009.

*SB 1078*

Approved by Governor Davis in September 2002, Senate Bill 1078 (SB 1078, Sher) established the Renewal Portfolio Standard program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (see SB 107). (See also Executive Order S-14-08.)

*Executive Order S-3-05*

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80% below 1990 levels by 2050. The Secretary of CalEPA is required to coordinate efforts of various agencies in order to collectively and efficiently reduce GHGs. Representatives from several state agencies comprise the Climate Action Team. The Climate Action Team is responsible for implementing global warming emissions reduction programs. The Climate Action Team fulfilled its report requirements through the March 2006 Climate Action Team Report to Governor Schwarzenegger and the legislature (CAT 2006). A second biennial report was released in April 2009.

The 2009 Draft Climate Action Team Report expands on the policy oriented in the 2006 assessment. The 2009 report provides new information and scientific findings regarding the development of new climate and sea-level projections using new information and tools that have recently become available and evaluates climate change within the context of broader soil changes, such as land use changes and demographics. The 2009 report also identifies the need for additional research in several different aspects that affect climate change in order to support effective climate change strategies. The aspects of climate change that were discussed that need future research include vehicle and fuel technologies, land use and smart growth, electricity and natural gas, energy efficiency, renewable energy and reduced carbon energy sources, low GHG technologies for other sectors, carbon sequestration, terrestrial sequestration, geologic sequestration, economic impacts and considerations, social science, and environmental justice.

*SB 107*

Approved by Governor Schwarzenegger on September 26, 2006, Senate Bill 107 (SB 107, Simitian) requires investor-owned utilities such as Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric, to generate 20% of their electricity from renewable sources by 2010. Previously, state law required that this target be achieved by 2017 (see SB 1078).

*AB 32*

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted Assembly Bill 32 (AB 32, Nuñez and Pavley), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. The GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020.

CARB was been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the adoption of a report listing early action GHG emission reduction measures on June 21, 2007. The early actions include three specific GHG control rules. On October 25, 2007, CARB approved an additional six early action GHG reduction measures under AB 32. The original three adopted early action regulations meeting the narrow legal definition of "discrete early action GHG reduction measures" include:

- A low-carbon fuel standard to reduce the "carbon intensity" of California fuels
- Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of "do-it-yourself" automotive refrigerants
- Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The additional six early action regulations, which were also considered "discrete early action GHG reduction measures," include:

1. Reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology
2. Reduction of auxiliary engine emissions of docked ships by requiring port electrification
3. Reduction of perfluorocarbons from the semiconductor industry
4. Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products)
5. Require that all tune-up, smog check and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency
6. Restriction on the use of sulfur hexafluoride ($SF_6$) from non-electricity sectors if viable alternatives are available.

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 MMT $CO_2E$. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for large facilities that account for 94% of GHG emissions from industrial and commercial stationary sources in California. About 800 separate sources that fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and other industrial sources that emit carbon dioxide in excess of specified thresholds.

On December 11, 2008, CARB approved the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. Additional development of these measures and adoption of the appropriate regulations will occur over the next 2 years, becoming effective by January 1, 2012. The key elements of the Scoping Plan include (CARB 2008):

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33%;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions;

- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State of California's long term commitment to AB 32 implementation.

*SB 1368*

In September 2006, Governor Schwarzenegger signed SB 1368, which requires the CEC to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local publicly-owned utilities. These standards must be consistent with the standards adopted by the Public Utilities Commission. This effort will help to protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low or lower than new combined-cycle natural gas plants, by requiring imported electricity to meet GHG performance standards in California and requiring that the standards be developed and adopted in a public process.

*Executive Order S-1-07*

Issued on January 18, 2007, Executive Order S-1-07 sets a declining Low Carbon Fuel Standard (LCFS) for GHG emissions measured in $CO_2$-equivalent gram per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources such as algae, wood, and agricultural waste. In addition, the LCFS would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The LCFS is anticipated to replace 20% of the fuel used in motor vehicles with alternative fuels by 2020.

*SB 97*

In August 2007, the legislature enacted SB 97 (Dutton), which directs the Governor's Office of Planning and Research (OPR) to develop guidelines under CEQA for the mitigation of GHG emissions. OPR is to develop proposed guidelines by July 1, 2009, and the Natural Resources

Agency is directed to adopt guidelines by January 1, 2010. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines. This bill also protects projects funded by the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, or the Disaster Preparedness and Flood Protection Bond Act of 2006 from claims of inadequate analysis of GHG as a legitimate cause of action. This latter provision will be repealed on January 1, 2010.

On June 19, 2008, OPR issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents (OPR 2008). The advisory indicated that a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities, should be identified and estimated. The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures that are necessary to reduce GHG emissions to a less-than-significant level.

On April 13, 2009, OPR submitted to the Natural Resources Agency its proposed amendments to the state CEQA Guidelines relating to greenhouse gas emissions. On July 3, 2009, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting the proposed amendments, starting the public comment period. The Natural Resources Agency is directed to adopt guidelines by January 1, 2010.

*SB 375*

In August 2008, the legislature passed and on September 30, 2008, Governor Schwarzenegger signed SB 375 (Steinberg), which addresses GHG emissions associated with the transportation section through regional transportation and sustainability plans. By September 30, 2010, CARB will assign regional GHG reduction targets for the automobile and light truck sector for 2020 and 2035. The targets are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see Executive Order S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy within the Regional Transportation Plan. The goal of the Sustainable Communities Strategy is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If a Sustainable Communities Strategy is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the

growth-inducing impacts of those projects when the projects are consistent with the Sustainable Communities Strategy or Alternative Planning Strategy.

*Executive Order S-13-08*

Governor Schwarzenegger issued Executive Order S-13-08 on November 14, 2008. The Executive Order is intended to hasten California's response to the impacts of global climate change, particularly sea level rise. It directs state agencies to take specified actions to assess and plan for such impacts. It directs the Resource Agency, in cooperation with the California Department of Water Resources, CEC, California's coastal management agencies, and the Ocean Protection Council to request the National Academy of Sciences to prepare a Sea Level Rise Assessment Report by December 1, 2010. The Ocean Protection Council, California Department of Water Resources, and CEC, in cooperation with other state agencies are required to conduct a public workshop to gather information relevant to the Sea Level Rise Assessment Report. The Business, Transportation, and Housing Agency was ordered to assess the vulnerability of the state's transportation systems to sea level rise within 90 days of the order. The Office of Planning and Research and the Resources Agency are required to provide land use planning guidance related to sea level rise and other climate change impacts. The order also requires the other state agencies to develop adaptation strategies by June 9, 2009, to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years.

*Executive Order S-14-08*

On November 17, 2008, Governor Schwarzenegger issued Executive Order S-14-08. This Executive Order focuses on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. The governor's order requires that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. Furthermore, the order directs state agencies to take appropriate actions to facilitate reaching this target. The Resources Agency, through collaboration with the CEC and Department of Fish and Game, is directed to lead this effort. Pursuant to a Memorandum of Understanding between the CEC and Department of Fish and Game creating the Renewable Energy Action Team, these agencies will create a "one-stop" process for permitting renewable energy power plants.

**Pollution Constituents and Attainment Status**

The significance of a pollutant concentration is determined by comparing it to state and/or federal ambient air quality standards, which represent the maximum allowable atmospheric concentrations of various pollutants which may occur and still protect public health and welfare, with a reasonable margin of safety. The EPA and CARB designate areas of California as having air quality better than (attainment) or worse than (nonattainment) the NAAQS/CAAQS.

The criteria pollutants of primary concern that are considered in this air quality assessment include $O_3$, CO, $NO_2$, $PM_{10}$, and $PM_{2.5}$. Although there are no ambient standards for VOCs or $NO_x$, they are important as precursors to $O_3$.

The criteria for nonattainment designation varies by pollutant. A system of monitoring stations which measure ambient air quality has been established to assist in the enforcement of the above-referenced standards. The following section describes the six criteria air pollutants and their attainment status according to both state and federal standards. *Table 5.10-3, South Coast Air Basin Attainment Classification*, shows the SCAB attainment designation/classification under the NAAQS and CAAQS.

### *Ozone*

Ozone ($O_3$) is a secondary pollutant formed in the atmosphere by photochemical reactions of previously emitted pollutants, or precursors. These precursors are mainly $NO_x$ and VOCs (also referred to as reactive organic compounds or gases [ROC or ROG]). The maximum effects of precursor emissions on $O_3$ concentrations usually occur several hours after they are emitted and many miles from the source. Ozone concentrations are highest during the warmer months and coincide with the seasons of maximum solar radiation. Ozone is a pungent, colorless gas typical of Southern California smog. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. Ozone levels peak during summer and early fall.

The entire SCAB is designated as a nonattainment area for both federal and state ozone standards. The EPA has classified the SCAB as a "severe" nonattainment area and has mandated that the SCAB achieve attainment by no later than 2021

**Table 5.10-3**
**South Coast Air Basin Attainment Classification**

| Pollutant | Averaging Time | Designation/Classification |
|---|---|---|
| **National** | | |
| Ozone ($O_3$) | 8 hour | Nonattainment/severe |
| Nitrogen dioxide ($NO_2$) | Annual arithmetic mean | Attainment |
| Carbon monoxide (CO) | 1 hour, 8 hour | Attainment |
| Sulfur dioxide ($SO_2$) | 24 hour, annual arithmetic mean | Unclassifiable |
| Respirable particulate matter ($PM_{10}$) | 24 hour | Nonattainment/serious |
| Fine particulate matter ($PM_{2.5}$) | 24 hour, annual arithmetic mean | Nonattainment |
| Lead (Pb) | Calendar quarter | Attainment |
| **State** [b] | | |
| Ozone ($O_3$) | 1 hour, 8 hour | Nonattainment[1] |
| Nitrogen dioxide ($NO_2$) | 1 hour, Annual | Attainment[2] |
| Carbon monoxide (CO) | 1 hour, 8 hour | Attainment |

**Table 5.10-3 (Continued)**

| Pollutant | Averaging Time | Designation/Classification |
|---|---|---|
| Sulfur dioxide ($SO_2$) | 1 hour, 24 hour | Attainment |
| Respirable particulate matter ($PM_{10}$) | 24 hour, annual arithmetic mean | Nonattainment |
| Fine particulate matter ($PM_{2.5}$) | Annual arithmetic mean | Nonattainment |
| Lead (Pb)[3] | 30 day average | Attainment |
| Sulfates ($SO_4$) | 24 hour | Attainment |
| Hydrogen sulfide ($H_2S$) | 1 hour | Unclassified |
| Vinyl chloride[3] | 24 hour | Unclassified |
| Visibility-reducing particles | 8 hour (10:00 a.m.–6:00 p.m.) | Unclassified |

SOURCES: [a] EPA 2008, [b] CARB 2009.

1 CARB has not issued area classification based on the new state 8-hour standard. The previous classification for the 1-hour O3 standard was Extreme.

2 CARB has not issued area classification based on the new state 1-hour and annual standards.

3 CARB has identified Pb, vinyl chloride, and Toxic Air Contaminants with no threshold level of exposure for adverse health effects determined.

### *Carbon Monoxide*

Carbon monoxide (CO) is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions.

The SCAB is designated as an attainment area for federal CO standards. Although western portions of the SCAB are considered "unclassifiable" under state CO standards, Riverside County has been designated by CARB to be an attainment area.

### *Nitrogen Oxides*

Nitrogen dioxide ($NO_2$), a reddish brown gas, and nitric oxide (NO), a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to as oxides of nitrogen, or $NO_x$. $NO_x$ is a primary component of the photochemical smog reaction. It also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. $NO_2$ decreases lung function and may reduce resistance to infection.

The entire SCAB has not exceeded either federal or state standards for nitrogen dioxide in the past 5 years based published monitoring data. It is designated as an attainment area under the federal and state standards. The state $NO_2$ standard was revised in 2008, but new designations have not been adopted.

### *Sulfur Dioxide*

Sulfur dioxide ($SO_2$) is a colorless irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous $SO_2$ levels. $SO_2$ irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

The entire SCAB is in attainment with both federal and state sulfur dioxide standards.

### *Lead*

Lead (Pb) is found in old paints and coatings, plumbing and a variety of other materials. Once in the blood stream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead.

The entire SCAB is in attainment for the federal and state standards for lead.

### *Particulate Matter*

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse or respirable particles (all particles less than or equal to 10 micrometers in diameter, or $PM_{10}$) come from a variety of sources, including windblown dust and grinding operations. Fine particles (less than 2.5 micrometers, or $PM_{2.5}$) often come from fuel combustion, power plants, and diesel buses and trucks. Fine particles can also be formed in the atmosphere through chemical reactions. $PM_{10}$ can accumulate in the respiratory system and aggravate health problems such as asthma. EPA's scientific review concluded that fine particles ($PM_{2.5}$), which penetrate deeply into the lungs, are more likely than coarse particles to contribute to adverse health effects.

The SCAB is designated as a "serious" nonattainment area for federal $PM_{10}$ standards and as a nonattainment area for state $PM_{10}$ standards. In regards to $PM_{2.5}$ attainment status, the SCAB is designated as a nonattainment area by CARB and by the EPA.

## Existing Local Air Quality

The SCAQMD maintains ambient air quality monitoring stations throughout the SCAB. The closest ambient air quality monitoring station to the project site is the Perris Valley monitoring station, which measures $O_3$ and $PM_{10}$. For CO, $NO_2$, $PM_{2.5}$, and $SO_2$, values from the monitoring station closest to the project site that measures that specific pollutant were used in this analysis, as presented in *Table 5.10-4, Ambient Air Quality Data*. The most recent background ambient air quality data from 2006 through 2008 are presented in *Table 5.10-4* below.

## Table 5.10-4
## Ambient Air Quality Data

| Pollutant | Monitoring Station | 2006 | 2007 | 2008* |
|---|---|---|---|---|
| **$O_3$** | | | | |
| Maximum 1-hour concentration (ppm) | Perris Valley | 0.17 | 0.139 | 0.142 |
| # of days of state exceedances (>0.08 ppm) | Perris Valley | 76 | 66 | 65 |
| Maximum 8-hour average concentration (ppm) | Perris Valley | 0.122 | 0.116 | 0.115 |
| # of days of state exceedances (>0.070 ppm) | Perris Valley | 54 | 88 | 94 |
| # of days of fed. exceedances (>0.08 ppm for 2006–07, >0.075 ppm for 2008) | Perris Valley | 53 | 37 | 77 |
| **CO** | | | | |
| Max. Concentration 1 hour (ppm) | Lake Elsinore | 1 | 2 | 1.1** |
| # of days of state exceedances (>20 ppm) | Lake Elsinore | 0 | 0 | 0** |
| Max. Concentration 8 hours (ppm) | Lake Elsinore | 1.01 | 1.40 | 0.84 |
| # of days of state exceedances (>9.0 ppm) | Lake Elsinore | 0 | 0 | 0 |
| **$NO_2$** | | | | |
| Max. Concentration 1-hour (ppm) | Lake Elsinore | 0.07 | 0.06 | 0.055 |
| # of days of state exceedances (>0.25 ppm for 2006-07, >0.18 ppm for 2008) | Lake Elsinore | 0 | 0 | 0 |
| Annual arithmetic mean | Lake Elsinore | 0.015 | 0.017 | 0.013 |
| **$PM_{10}$** | | | | |
| Max. concentration 24-hour (µg/m$^3$) | Perris Valley | 125 | 120 | 87 |
| # of state exceedances (>50 µg/m$^3$) | Perris Valley | 19 | 32 | 8 |
| # of fed. exceedances (>150 µg/m$^3$) | Perris Valley | 0 | 0 | 0 |
| Annual arithmetic mean (state standard = 20 µg/m$^3$) | Perris Valley | 45.0 | 54.8 | 29.6 |
| **$PM_{2.5}$** | | | | |
| Max. concentration (µg/m$^3$) | Metro RC2 | 55.3 | 68.6 | 47.9 |
| # of fed. exceedances (>35 µg/m$^3$) | Metro RC2 | 9 | 8 | 5 |
| Annual arithmetic mean (15.0 µg/m$^3$) | Metro RC2 | 17.0 | 18.1 | 14.25 |
| **$SO_2$** | | | | |
| Maximum 1-hour concentration (ppm) | Metro RC1 | 0.01 | 0.02 | 0.011 |
| # of days of state exceedances (>0.25 ppm) | Metro RC1 | -- | -- | -- |
| Maximum 24-hour average concentration (ppm) | Metro RC1 | 0.004 | 0.002 | 0.003 |
| # of days of state exceedances (>0.04 ppm) | Metro RC1 | -- | -- | -- |
| # of days of fed. exceedances (>0.14 ppm) | Metro RC1 | -- | -- | -- |
| Annual arithmetic mean (0.30 ppm) | Metro RC1 | 0.0013 | 0.0017 | 0.001 |

SOURCE: South Coast Air Quality Management District (2009)
Metro RC1 = Metropolitan Riverside County 1 (5888 Mission Blvd., Rubidoux)
Metro RC2 = Metropolitan Riverside County 2 (7002 Magnolia Ave., Riverside)
* 2008 data were taken from CARB Air Quality Data Statistics (2009) http://www.arb.ca.gov/adam/welcome.html,
** Data were taken from EPA AirData (2009) http://www.epa.gov/air/data/index.html

As the table above demonstrates, air quality within the project region is in compliance with both CAAQS and NAAQS for CO, $NO_2$, and $SO_2$. Federal and state 1-hour and 8-hour $O_3$ standards were, however, exceeded during each of the last 3 years. The $PM_{10}$ level monitored at the air monitoring stations exceeded the state standard every year of the past 3 years; the federal standard was not exceeded once during this period. The federal standard, however, for $PM_{2.5}$ was exceeded several times during each of the past 3 years.

## 5.10.3 Significance Criteria

In accordance with Appendix G of the CEQA Guidelines, the proposed project would have a significant impact to air quality if it:

- Conflicts with or obstruction of implementation of the applicable air quality plan.
- Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
- Results in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under applicable federal or state ambient air quality standards (including releasing emissions that exceed quantitative thresholds for ozone precursors).
- Exposes sensitive receptors to substantial pollutant concentrations.
- Creates objectionable odors affecting a substantial number of people.

In addition, Appendix G of the CEQA Guidelines indicates that where available, the significance criteria established by the applicable air quality management or pollution control district may be relied upon to determine if the proposed project would have a significant impact on air quality. The SCAQMD CEQA Air Quality Handbook (SCAQMD 1993) sets forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in *Table 5.10-5, SCAQMD Air Quality Significance Threshold*s, are exceeded. To evaluate whether a project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for ozone (see *Table 5.10-2*), which is a nonattainment pollutant, the SCAQMD considers a project to have a significant impact if the project's construction or operational emissions would exceed the VOC or NOx thresholds shown in *Table 5.10-5*. These emission-based thresholds for ozone precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse ozone impacts to occur) because ozone itself is not emitted directly (see discussion of ozone and its sources above) and the effects of an individual project's emissions of ozone precursors (VOC and NOx) on ozone levels in ambient air cannot be determined through air quality models or other quantitative methods.

## Table 5.10-5
## SCAQMD Air Quality Significance Thresholds

| Pollutant | Construction | Operation |
|---|---|---|
| **Criteria Pollutants Mass Daily Thresholds** | | |
| VOC | 75 lbs/day | 55 lbs/day |
| $NO_x$ | 100 lbs/day | 55 lbs/day |
| CO | 550 lbs/day | 550 lbs/day |
| $SO_x$ | 150 lbs/day | 150 lbs/day |
| $PM_{10}$ | 150 lbs/day | 150 lbs/day |
| $PM_{2.5}$ | 55 lbs/day | 55 lbs/day |
| Lead [a] | 3 lbs/day | 3 lbs/day |
| **Toxic Air Contaminants and Odor Thresholds** | | |
| (including carcinogens and non-carcinogens) | Maximum Incremental Cancer Risk ≥ 10 in 1 million<br>Hazard Index ≥ 1.0 (project increment) | |
| Odor | Project creates an odor nuisance pursuant to SCAQMD Rule 402 | |
| **Ambient Air Quality for Criteria Pollutants [b]** | | |
| $NO_2$ 1-hour average | SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:<br>0.18 ppm (state) | |
| $NO_2$ annual average | 0.030 ppm (state) | |
| CO 1-hour average | SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:<br>20 ppm (state) | |
| CO 8-hour average | 9.0 ppm (state/federal) | |
| $PM_{10}$ 24-hour average | 10.4 μg/m³ (construction)[c]<br>2.5 μg/m³ (operation) | |
| $PM_{10}$ annual arithmetic mean | 20.0 μg/m³ | |
| $PM_{2.5}$ 24-hour average | 10.4 μg/m³ (construction)[c]<br>2.5 μg/m³ (operation) | |

SOURCE: SCAQMD, 1993
lbs/day = pounds per day
ppm = parts per million
μg/m³ = microgram per cubic meter
≥ = greater than or equal to

[a] The phasing-out of leaded gasoline started in 1976. As gasoline no longer contains lead, the proposed project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

[b] Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

[c] Ambient air quality threshold based on SCAQMD Rule 403.

The SCAQMD CEQA Air Quality Handbook also sets forth additional indicators of potential air quality impacts which should be used as screening criteria indicating the need for further analysis. The additional indicators are as follows:

- Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.
- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year.
- Project would have the potential to create or be subjected to an objectionable odor over 10 dilutions to thresholds (D/T) that could impact sensitive receptors.
- Project would have hazardous materials on site and could result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.
- Project could emit an air toxic contaminant regulated by District rules or that is on a federal or state air toxic list.
- Project could involve burning of hazardous, medical, or municipal waste as waste-to-energy facility.
- Project could be occupied by sensitive receptors within a quarter mile of an existing facility that emits air toxics identified in District Rule 1401 or near CO hot spots.
- Project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of 10 in 1 million.

In addition to the above listed emission-based thresholds, the SCAQMD also recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the project as a result of construction activities. For project sites greater than 5 acres, potential impacts on local sensitive receptors are determined using an air quality dispersion model. Those impacts are then compared to the localized significance thresholds (LSTs). The LSTs for $NO_2$ and CO represent the allowable increase in concentrations above background levels in the vicinity of a project that would not cause or contribute to an exceedance of the relevant ambient air quality standards. The threshold for $PM_{10}$ represents compliance with Rule 403 (Fugitive Dust). The significance threshold for $PM_{2.5}$ is intended to ensure that construction emissions do not contribute substantially to existing exceedances of the $PM_{2.5}$ ambient air quality standards. The LSTs for $NO_2$ and CO were derived from the ambient air quality data for the 3 previous years as shown in *Table 5.10-3*. For construction, the LSTs for $PM_{10}$ and $PM_{2.5}$ are both 10.4 $\mu g/m^3$ (SCAQMD 2008). The LSTs applicable to construction of the proposed project, along with the relevant ambient air quality standards, are shown in *Table 5.10-6, Localized Significance Thresholds*.

**Table 5.10-6**
**Localized Significance Thresholds**

| Pollutant | Averaging Period | CAAQS/NAAQS | | Peak Conc. in ppm | LST Criteria* | |
|---|---|---|---|---|---|---|
| | | µg/m³ | ppm | | | |
| Nitrogen Dioxide (NO2) | 1 hour | 339 | 0.18 | 0.07 | 207 | 0.11 |
| Carbon Monoxide (CO) | 1 hour | 23,000 | 20 | 2 | 20,598 | 18 |
| Carbon Monoxide (CO) | 8 hours | 10,000 | 9.0 | 1.4 | 8,697 | 7.6 |
| Respirable Particulate Matter (PM10) | 24 hours | 50 | — | NA | 10.4 | — |
| Fine Particulate Matter (PM2.5)** | 24 hours | 35 | — | NA | 10.4 | — |

SOURCE: SCAQMD 2008.

* LST Criteria for NO2 and CO are the differences between CAAQS and the Peak Concentration.

** California has not adopted a 24-hour AAQS for $PM_{2.5}$. The 24-hour $PM_{2.5}$ AAQS shown is the national standard.

To date, no local or state air quality agency has adopted significance criteria for GHG emissions for residential and commercial projects. Nonetheless, this Draft EIR provides a discussion of the impacts of the project with respect to global climate change in the absence of an established significance threshold. To assess the impact of the proposed project with respect to global climate change, the potential contribution of the project to this cumulative impact is evaluated under the following criterion:

- The project could impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32.

This analysis conforms closely to the methodologies recommended in the California Air Pollution Control Officers Association *CEQA and Climate Change* discussion (CAPCOA 2008). Calculations of carbon dioxide, methane, and nitrous oxide associated with the proposed project are provided for full disclosure of the magnitude of potential impacts. While a project may result in emission of GHGs, the significance of the impacts of a single project on the global climate cannot be quantified. The full disclosure of project GHG emissions is intended to provide information, which may be useful for regional agencies in the context of eventually developing regional or statewide emission projections.

## 5.10.4 Impacts

This section evaluates the air quality impacts associated with 1,016 single-family detached residential dwelling units, a high school with 2,000 students, 45.9 acres of park use, 281,570 square feet of general commercial/retail use, and 309,320 square feet of office type uses (general office and government complex such as a post office). If the 2,000-student high school site is not chosen by the School District, an additional 322 single-family detached residential dwelling units will be developed alternatively in Phase III. For purposes of air quality impact analysis, based on

the Institute of Transportation Engineers traffic rates (please refer to Traffic section), the development of the 2,000-student high school (as opposed to the alternative development of 322 residential units) would be the reasonable worst-case project, and is therefore, evaluated herein.

***Would the project conflict with or obstruction of implementation of the applicable air quality plan?***

While striving to achieve the NAAQS for ozone and $PM_{2.5}$ through a variety of air quality control measures, the 2007 AQMP also accommodates planned growth in the SCAB. Projects are considered to be consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors (e.g., population, employment) are consistent with the underlying regional plans used to develop the AQMP. As indicated in Chapter 3 of the 2007 AQMP, demographic growth forecasts for various socioeconomic categories, developed by SCAG for their interim 2007 Regional Transportation Plan (RTP), were used in the modified 2004 RTP to estimate future emissions in the 2007 AQMP (SCAQMD 2007). Key growth forecasts for the City of San Jacinto from the modified 2004 RTP (SCAG 2004) include:

- Population: 31,256 (2010), 40,025 (2025), 42,738 (2030)
- Employment: 8,587 (2010), 10,834 (2025), 11,620 (2030).

According to the California Department of Finance, the population of the City of San Jacinto as of January 1, 2009, was 36,477 (Department of Finance 2009). The estimated population of the proposed project, assuming that 322 single-family residences are built instead of the potential high school is 4,054, which would be achieved by 2023 according to the prescribed phasing of the project. When added to the current population, the total population (40,531) would exceed the forecasted population of the City of San Jacinto in 2025 but not 2030. However, the population growth projections for the neighboring City of Hemet are substantially higher than the current population. The SCAG RTP 2010 and 2025 population projections for the City of Hemet are 105,100 and 154,392, respectively, whereas the current Department of Finance 2009 population is 74,361 (Department of Finance 2009), more than 30,000 persons less than the 2010 projection. (This shift between the two cities is reflected in the population forecasts for the 2008 RTP, which shows higher growth for the City of San Jacinto and lower growth for the City of Hemet [SCAG 2008]). Accordingly, the proposed project would be accommodated in the subregional population forecasts used to prepare the 2007 AQMP.

The most recent employment estimate (May 2009) from the California Employment Development Department indicates 10,000 employees in the City of San Jacinto (California Employment Development Department 2009). The proposed project would create an estimated 675 jobs at full buildout in 2033. Thus, the total employment (10,675) would be within the

SCAG modified 2004 RTP forecast for 2030. Accordingly, the proposed project's employment would be accommodated in the forecasts used to prepare the 2007 AQMP.

As described in *Section 3.0*, *Project Description*, implementation of the proposed project would require a General Plan Amendment. The current General Plan includes residential, open space, and commercial land use designations for the project site. *Table 5.1-1*, *General Plan and Specific Plan Comparison*, in *Section 5.1 Land*, *Use, Planning, and Zoning*, compares the General Plan and Specific Plan levels of development. As shown in this table, the Specific Plan would provide for up to 1,329 residential units (assuming the potential high school is not built) and 49 acres of commercial and mixed use development. These values are less than the 3,077 residential units and 54.4 acres of commercial development that would be allowed under the current General Plan land used designations for the site. As indicated in *Section 5.1*, the Specific Plan's potential inconsistency with the existing General Plan Land Use Map is considered less than significant from a Land Use Plan Map perspective. *Section 5.1* also provides a detailed analysis of the Specific Plan's consistency with General Plan goals and policies.

Based on the preceding assessment, the proposed project would not conflict with or obstruct implementation of the AQMP, and this impact would be less than significant.

***Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under applicable federal or state ambient air quality standards (including releasing emissions that exceed quantitative thresholds for ozone precursors).***

**Construction Activity Impacts**

Construction activities, including soil disturbance dust emissions and combustion pollutants from on-site construction equipment and from off-site trucks hauling dirt, cement or building materials would create a temporary addition of pollutants to the local airshed. These emissions are variable in time and space and differ considerably among various construction projects. Such emission levels can, therefore, only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

Emissions from the construction phase of the project were estimated through the use of emission factors from the URBEMIS 2007, Version 9.2.4, land use and air emissions model and the SCAQMD's CEQA Air Quality Handbook (SCAQMD 1993).

Construction phasing and other URBEMIS modeling assumptions are based on the project phasing in the project's Traffic Impact Study (refer to *Section 5.9, Transportation, Circulation, and Access*) and the project description provided in the Specific Plan. For purposes of this assessment, the following assumptions were made regarding the project phases and construction

subsphases. Mass grading for the entire site would start in December 2011 and would be completed 7 months after. The grading plans anticipate that cut and fill will be balanced; no export or import of soil is planned. Phase I would be completed in December 2015. Fine grading for Phase II would start immediately after the completion of Phase I in January 2016. Phase II would be completed in December 2017. Phase III would commence immediately after the completion of Phase II in December 2017. Phase III would include the construction of single-family residences and a high school. In July 2018, six months into the development phase, construction of the high school would start. Phase III, including the high school, would be completed in December 2023. Construction of the remaining nonresidential land uses in Phase IV would start in January 2024 and would be completed by December 2033.

Additional details of the construction schedule are included in *Appendix I.*

The project would involve multiple construction subphases: 1) mass grading, 2) fine site grading of individual phases, 3) utilities/infrastructure (trenching), 4) building construction, 5) paving, and 6) architectural coating. Phases I, II, III, and IV would involve separate construction subphases with the exception of mass grading, which will cover the entire project site and occur during Phase I only. The proposed project would commence in 2011 and would be completed by 2033, for a total construction duration of 22 years. Within the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, six days per week (26 days a month), during project construction.

URBEMIS 2007 model defaults were utilized where detailed project data is unknown at this time (refer to *Appendix I*). For example, the specific construction equipment and specifications may change over time and cannot be identified with certainty during the planning phase. To account for dust control measures in the calculations, it was assumed that the active sites would be watered at least three times daily, resulting in a approximately 61% reduction, to comply with Rule 403. *Table 5.10-7, Heavy Construction Equipment,* presents the heavy construction equipment assumptions for each construction stage, as applied in the model. The assumptions identified above and the number of equipment units presented in the table below represent a reasonably conservative estimate of construction activity.

**Table 5.10-7**
**Heavy Construction Equipment**

| Construction Phase | Equipment | Number |
|---|---|---|
| Mass Grading | Grader | 1 |
| | Rubber Tired Dozers | 1 |
| | Tracker/Loader/Backhoe | 1 |
| | Water Trucks | 1 |
| Fine Grading | Graders | 1 |

**Table 5.10-7 (Continued)**

| Construction Phase | Equipment | Number |
|---|---|---|
| | Rubber Tired Dozers | 1 |
| | Tracker/Loader/Backhoe | 1 |
| | Water Trucks | 1 |
| Trenching | Excavators | 2 |
| | Tracker/Loader/Backhoe | 1 |
| | Other General Industrial Equipment | 1 |
| | Tractor/Loaders/Backhoe | 1 |
| Building Construction (Residential) | Cranes | 1 |
| | Generator Sets | 1 |
| | Forklifts | 3 |
| | Tractors/Loaders/Backhoe s | 3 |
| | Welders | 1 |
| Paving (Residential) | Paver | 1 |
| | Paving Equipment | 2 |
| | Rollers | 2 |
| Paving (Commercial/Mixed Use) | Cement and Mortar Mixers | 4 |
| | Pavers | 1 |
| | Paving Equipment | 2 |
| | Rollers | 1 |
| | Tractors/Loaders/Backhoes | 1 |
| Building Construction (Commercial/Mixed Use | Cranes | 1 |
| | Generator Sets | 1 |
| | Forklifts | 3 |
| | Tractors/Loaders/Backhoe s | 3 |
| | Welders | 1 |

SOURCE: URBEMIS 2007 V 9.2.4 Phase Assumptions (see *Appendix I*).

In addition to the heavy construction equipment identified above, construction material delivery truck and worker trips and architectural coatings were calculated for all relevant construction phases based on URBEMIS 2007 defaults. *Table 5.10-8, Estimated Maximum Daily Construction Emissions*, provides a summary of the emission estimates for the construction phase of the proposed project. Refer to *Appendix I* for detailed emission calculations.

**Table 5.10-8**
**Estimated Maximum Daily Construction Emissions (lbs/day)**

| | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| **Year 2011** | | | | | | |
| 2011 Daily Maximum | 2.86 | 23.49 | 12.93 | 0.00 | 36.58 | 8.48 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |

## Table 5.10-8 (Continued)

| | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2012** | | | | | | |
| 2012 Daily Maximum | 2.72 | 22.00 | 12.42 | 0.00 | 36.48 | 8.38 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2013** | | | | | | |
| 2013 Daily Maximum | 12.54 | 29.79 | 72.64 | 0.10 | 2.23 | 1.79 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2014** | | | | | | |
| 2014 Daily Maximum | 12.07 | 27.22 | 68.23 | 0.10 | 2.05 | 1.62 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2015** | | | | | | |
| 2015 Daily Maximum | 11.65 | 24.66 | 64.10 | 0.10 | 1.93 | 1.51 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2016** | | | | | | |
| 2016 Daily Maximum | 715.50 | 20.52 | 48.58 | 0.08 | 14.92 | 3.66 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2017** | | | | | | |
| 2017 Daily Maximum | 15.17 | 18.74 | 45.98 | 0.08 | 1.42 | 1.10 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2018** | | | | | | |
| 2018 Daily Maximum | 7.37 | 29.81 | 57.75 | 0.08 | 21.85 | 4.99 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2019** | | | | | | |
| 2019 Daily Maximum | **79.98** | 27.26 | 55.73 | 0.08 | 1.80 | 1.35 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | **YES** | No | No | No | No | No |
| **Year 2020** | | | | | | |
| 2020 Daily Maximum | 4.61 | 13.62 | 34.06 | 0.06 | 0.99 | 0.75 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2021** | | | | | | |
| 2021 Daily Maximum | 4.38 | 12.67 | 28.00 | 0.06 | 0.97 | 0.73 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |

## Table 5.10-8 (Continued)

| | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2022** | | | | | | |
| 2022 Daily Maximum | 4.38 | 12.67 | 28.00 | 0.06 | 0.97 | 0.73 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2023** | | | | | | |
| 2023 Daily Maximum | 4.38 | 12.67 | 28.00 | 0.06 | 0.97 | 0.73 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2024** | | | | | | |
| 2024 Daily Maximum | 6.30 | 11.17 | 16.31 | 0.03 | 11.11 | 2.67 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2025** | | | | | | |
| 2025 Daily Maximum | 6.30 | 9.36 | 16.31 | 0.03 | 0.62 | 0.49 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2026** | | | | | | |
| 2026 Daily Maximum | 6.24 | 9.17 | 14.75 | 0.03 | 0.61 | 0.49 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2027** | | | | | | |
| 2027 Daily Maximum | 6.24 | 9.17 | 14.75 | 0.03 | 0.61 | 0.49 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2028** | | | | | | |
| 2028 Daily Maximum | 6.24 | 9.17 | 14.75 | 0.03 | 0.61 | 0.49 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2029** | | | | | | |
| 2029 Daily Maximum | 5.91 | 9.26 | 15.42 | 0.03 | 0.64 | 0.50 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2030** | | | | | | |
| 2030 Daily Maximum | 5.91 | 9.26 | 15.42 | 0.03 | 0.64 | 0.50 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2031** | | | | | | |
| 2031 Daily Maximum | 5.88 | 9.16 | 14.38 | 0.03 | 0.63 | 0.50 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |

**Table 5.10-8 (Continued)**

| | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2032** | | | | | | |
| 2032 Daily Maximum | 5.88 | 9.16 | 14.38 | 0.03 | 0.63 | 0.50 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |
| **Year 2033** | | | | | | |
| 2033 Daily Maximum | 5.88 | 9.16 | 14.38 | 0.03 | 0.63 | 0.50 |
| Significance Criteria | 75 | 100 | 550 | 150 | 150 | 55 |
| Potentially Significant? | No | No | No | No | No | No |

SOURCE: URBEMIS 2007 Version 9.2.4 Appendix I for calculations.
NOTES: These estimates reflect control of fugitive dust required by Rule 403. Emissions in bold represent the maximum pollutant emissions that would occur over any day during the construction for the specific year and that would exceed the significance thresholds

Ground disturbances and equipment operation during construction activities would produce potentially significant short-term $PM_{10}$ and $PM_{2.5}$ emissions. Implementation of the proposed project would generate construction-related air pollutant emissions from two general activity categories, entrained dust and vehicle emissions. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in $PM_{10}$ and $PM_{2.5}$ emissions. Vehicle exhaust results from internal combustion engines used by construction equipment and vehicle which results in emissions of $NO_x$, VOCs, CO, $PM_{10}$, and $PM_{2.5}$.

As shown in the preceding table, maximum construction-generated $PM_{10}$ emissions of 36.58 pounds per day would be below the SCAQMD's quantitative significance threshold of 150 pounds per day. $PM_{2.5}$ maximum daily emissions of 8.48 lbs/day would also be below the established threshold of 55 pounds per day. Although such fugitive dust would be short term and would only last during the duration of grading activity, such $PM_{10}$ and $PM_{2.5}$ emissions could be considered problematic since they could cause a public nuisance or further exacerbate the existing $PM_{10}$ nonattainment situation in the SCAB. During construction, the project would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites (as well as other fugitive dust sources) in the SCAQMD, but does not require a permit for construction activities. The general requirement prohibits a person from causing or allowing emissions of fugitive dust from construction (or other fugitive dust source) such that the presence of such dust remains visible in the atmosphere beyond the property line of the emissions source. SCAQMD Rule 403 also prohibits a construction site from causing an incremental $PM_{10}$ concentration impact at the property line of more than 50 micrograms per cubic meter as determined through $PM_{10}$ high-volume sampling, but the concentration standard and associated $PM_{10}$ sampling do not apply if specific measures identified in the rule are implemented and appropriately documented. In order to reduce potential $PM_{10}$ impacts and fugitive dust emissions, mitigation is recommended (see *Section 5.10.5, Mitigation*

*Measures,* Mitigation Measure 5.10-a). Without mitigation, however, air quality impacts related to anticipated $PM_{10}$ emission levels during construction would be considered less than significant.

The application of architectural coatings (exterior/interior paint and other finishings) would produce VOC emissions that would exceed the SCAQMD's established quantitative significance threshold. As indicated above in *Table 5.10-8*, maximum construction-generated VOC emissions in 2019 would exceed the 75 lbs/day significance threshold. In order to reduce these potential impacts, mitigation is provided (see *Section 5.10.5, Mitigation Measures,* Mitigation Measure 5.10-c). Although mitigation is provided, these impacts would not be reduced to a level below significance; therefore, the construction phase of the project would result in significant, unmitigable air quality impacts due to anticipated VOC emission levels.

**Operational Impacts**

Operations of the project would produce VOC, $NO_x$, CO, $SO_x$, $PM_{10}$ and $PM_{2.5}$ emissions from all combined proposed residential and nonresidential project land uses, including vehicular traffic, space heating and cooling, water heating, and consumer products.

Specifically, the proposed project would impact air quality through the vehicular traffic generated by project residents, visitors, customers and employees. According to the project's traffic analysis (see *Section 5.9, Transportation, Circulation, and Access*), total project-generated daily traffic is estimated to be 27,166 trip-ends per day. The URBEMIS 2007 model was utilized to estimate daily emissions from proposed vehicular sources (refer to *Appendix I*, which includes the data and assumptions used to generate emissions information summarized within this section for both the summer and winter seasons). URBEMIS 2007 default data, including temperature, trip characteristics, variable start information, emission factors, and trip distances, were conservatively used for the model inputs. Project-related traffic (identified above) was assumed to be comprised of a mixture of vehicles in accordance with the model outputs for traffic. This assumption includes light-duty autos and light-duty trucks (i.e., small trucks, SUVs, and vans) as well as medium- and heavy-duty vehicles that may be traveling within the project area to make deliveries or as business customers with larger vehicles. Emission factors representing the vehicle mix and emissions for the year 2017 and 2020 were used to estimate emissions. The year 2017 would be an intermediate year of development, and 2020 was assumed to be the year of full occupancy/operation. It is expected that project emissions would decrease on an annual basis from 2020 onward due to phase-out of higher polluting vehicles and implementation of more stringent emission standards.

In addition to estimating mobile source emissions, the URBEMIS 2007 model was also used to estimate emissions from the project area sources, which include natural gas appliances, natural-

gas burning fireplaces, gas-powered landscape maintenance equipment, architectural coatings, and consumer products. It should be noted that as specific operational characteristics of the proposed business park and retail uses are presently unknown, associated process activity emissions for any specific uses cannot be estimated at this time. However, if these emissions were substantial, they may require further CEQA analysis and would fall under the jurisdiction of the SCAQMD air permit process which would require the application of standard mitigation measures and permit conditions and/or emission offsets to ensure that any proposed stationary emissions remain less than significant. The present estimation of proposed operational emissions is based upon typical business park and commercial uses for this type of project, and the analysis is considered a reliable estimate of the project's likely emissions.

*Table 5.10-9, Summary of Estimated Phase I + Phase II + Phase III Operational Air Pollutant Emissions*, presents the maximum daily emissions associated with partial build-out of the proposed project during the year 2023. Details of the emission calculations are provided in *Appendix I*.

**Table 5.10-9**
**Summary of Estimated Phase I + Phase II + Phase III Operational Air Pollutant Emissions (lbs/day)**

| | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| **Summer 2023** | | | | | | |
| Area Source Emissions | 66.72 | 18.88 | 59.98 | 0.00 | 0.16 | 0.16 |
| Vehicular Emissions | 66.40 | 63.97 | 632.97 | 1.27 | 207.40 | 40.36 |
| **Total** | **133.12** | **82.85** | **689.95** | **1.27** | **204.56** | **40.52** |
| Significance Criteria | 55 | 55 | 550 | 150 | 150 | 55 |
| Significant? | **YES** | **YES** | **YES** | NO | **YES** | NO |
| **Winter 2023** | | | | | | |
| Area Source Emissions | 58.70 | 25.49 | 11.59 | 0.05 | 0.61 | 0.60 |
| Vehicular Emissions | 66.22 | 75.82 | 599.76 | 1.06 | 207.40 | 40.36 |
| **Total** | **124.92** | **102.31** | **611.35** | **1.11** | **208.01** | **40.96** |
| Significance Criteria | 55 | 55 | 550 | 150 | 150 | 55 |
| Significant? | **YES** | **YES** | **YES** | NO | **YES** | NO |

Source: URBEMIS 2007 V 9.2.4
The URBEMIS2007 year options for operational emissions modeling are in five-year increments, starting in 2020. As such, the year 2020 was utilized in the model to represent year 2023, which is a conservative approach.

As shown in *Table 5.10-9*, operation of Phase I, Phase II, and Phase III of the proposed project would exceed SCAQMD established thresholds for VOC, $NO_x$, CO, and $PM_{10}$.

The peak daily emissions predicted for the both the summer and winter season in the project's full buildout of operation (2033) are summarized in *Table 5.10-10, Summary of Estimated Full*

*Buildout Operational Air Pollutant Emissions*, along with a comparison with the SCAQMD's significance criteria. Details of the emission calculations are provided in *Appendix I*.

**Table 5.10-10**
**Summary of Estimated Full Buildout Operational Air Pollutant Emissions (lbs/day)**

| | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| **Summer 2033** | | | | | | |
| Area Source Emissions | 71.01 | 23.75 | 67.19 | 0.00 | 0.19 | 0.19 |
| Vehicular Emissions | 81.80 | 66.55 | 739.26 | 2.20 | 355.79 | 69.09 |
| **Total** | **152.81** | **90.30** | **806.45** | **2.20** | **355.98** | **69.28** |
| Significance Criteria | 55 | 55 | 550 | 150 | 150 | 55 |
| Significant? | **YES** | **YES** | **YES** | NO | **YES** | **YES** |
| **Winter 2033** | | | | | | |
| Area Source Emissions | 62.50 | 30.27 | 15.61 | 0.05 | 0.62 | 0.61 |
| Vehicular Emissions | 86.63 | 79.94 | 703.95 | 1.81 | 355.79 | 69.09 |
| **Total** | **149.13** | **110.21** | **719.56** | **1.86** | **356.41** | **69.70** |
| Significance Criteria | 55 | 55 | 550 | 150 | 150 | 55 |
| Significant? | **YES** | **YES** | **YES** | NO | **YES** | **YES** |

SOURCE: URBEMIS 2007 V 9.2.4
The URBEMIS2007 year options for operational emissions modeling are in five-year increments, starting in 2020. As such, the year 2030 was utilized in the model to represent year 2033, which is a conservative approach.

As shown in the preceding table, the projected operational emissions from both area source and vehicular emissions are substantially above the SCAQMD significance criteria for all pollutants except $SO_x$. This would represent a significant impact with regard to operation of the project, and therefore, mitigation would be required (see *Section 5.10.5, Mitigation Measures,* Mitigation Measure 5.10-d). Even with implementation of Mitigation Measure 5.10-d, long-term operational air quality impacts would be considered significant and unmitigable.

Mobile source impacts occur basically on two scales of motion. Regionally, project-related travel will add to regional trip generation and increase the vehicle miles traveled (VMT) within the local airshed. Locally, project traffic will be added to the San Jacinto roadway system near the project area. If such traffic occurs during periods of poor atmospheric ventilation, is comprised of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-project traffic, there is a potential for the formation of micro-scale air pollution CO "hot spots" in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, regional air pollution "hot spot" potential is steadily decreasing.

Projects involving adverse traffic impacts may result in the formation of CO hot spots. To verify that the project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hot spots was conducted. The project's Traffic Impact Study (refer to *Section 5.9, Transportation, Circulation, and Access*) evaluated whether or not there would be a decrease in the level of service at the intersections affected by the project. The potential for CO hot spots was evaluated based on the results of the traffic study. The Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol (Caltrans 1998) was followed.

In accordance with the Protocol, CO hot spots are typically evaluated when: 1) the level of service (LOS) of an intersection or roadway decreases to a LOS E or worse; 2) signalization and/or channelization is added to an intersection; and 3) sensitive receptors such as residences, commercial developments, schools, and hospitals are located in the vicinity of the affected intersection or roadway segment.

The project traffic study evaluated 16 intersections in the project vicinity to evaluate project build-out/General Plan build-out LOS (2033). The traffic study assumed the implementation of a number of traffic improvements which reduce and/ or maintain traffic levels of services at 11 out of the 16 identified study intersections at LOS D or above under the General Plan build-out scenario (refer to *Section 5.9, Transportation, Circulation, and Access* for specific data).

Although the remaining 5 intersections would operate at unacceptable level of service under the project build-out/General Plan build-out condition, the County of Riverside and Riverside County Transportation Commission (RCTC) have yet to define the future design configurations for these regional intersections under General Plan Buildout conditions. Although it may be reasonable to assume that RCTC will complete the design and implementation of these regional interchange improvements prior to project/General Plan build-out, which the applicant will fund in part through payment of appropriate mitigation fees [Western Riverside County Transportation Uniform Mitigation Fee (TUMF) and City of San Jacinto Traffic Fees], and that these regional improvements would operate at an LOS D or above; until such time as these improvements are planned and funded, CO hotspot impacts must be assumed to occur at these intersections. This would represent a significant impact with regard to cumulative operation of the project and therefore, mitigation would be required (see *Section 5.10.5, Mitigation Measures,* Mitigation Measure 5.10-e). Even with implementation of Mitigation Measure 5.10-e, long-term operational air quality impacts would be considered significant and unmitigable.

**Health Impacts of Criteria Air Pollutants Emissions**

The construction of the proposed project would result in VOC emissions that exceed the SCAQMD mass-emission thresholds; all other criteria pollutants were found to be less than significant. Specific VOCs may be toxic air contaminants; however, the specific VOCs

associated with project construction are unknown. Some VOC would be associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which would result in the exceedances of the SCAQMD threshold as shown in *Table 5.10-8*. Generally, the VOCs in architectural coatings are of relatively low toxicity. In addition, VOCs are a precursor to ozone, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. Thus, existing ozone levels in the SCAB are at unhealthy levels during certain periods. The health effects associated with ozone, as discussed in *Section 5.10.2*, are generally associated with reduced lung function. The contribution of VOCs to regional ambient ozone concentrations is the result of complex photochemistry. The increase in ozone concentrations in the SCAB due to ozone precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive ozone concentrations also would depend on the time of year that the VOC emissions would occur because exceedances of the ozone AAQS tend to occur between April and October when solar radiation is highest. The effect of a single project's emissions of ozone precursor is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC emissions associated with project construction could contribute to regional ozone concentrations and the associated health impacts.

According to the LST analysis, the construction of the proposed project could contribute substantially to exceedances of the NAAQS and CAAQS for $PM_{10}$ and $PM_{2.5}$. As described in *Section 5.10.2*, $PM_{10}$ and $PM_{2.5}$ can accumulate in the respiratory system and aggravate health problems such as asthma. For the proposed project, the possibility of impacting nearby receptors depends on the presence of receptors at neighboring parcels and their proximity to active construction areas. Currently, the project site is surrounded by agricultural uses rather than existing neighborhoods. An existing residence is located approximately 500 feet southeast of the southeast corner of the project site. Furthermore, the primary source of $PM_{10}$ and $PM_{2.5}$ emissions would be mass grading of the project site, followed by fine grading of the residential and commercial/mixed-use phases. These operations are relatively short-term and would be well controlled to comply with SCAQMD Rule 403 (e.g., no visible dust may leave the construction site). Accordingly, it is expect that any potential increases in health impacts associated with $PM_{10}$ and $PM_{2.5}$ would be minor and temporary.

During operation of the proposed project, the emissions of VOC, $NO_x$, CO, $PM_{10}$, and $PM_{2.5}$ would exceed the SCAQMD mass-emission thresholds. The VOC and $NO_x$ emissions, as described above, would contribute to regional ozone concentrations and the associated health effects. In addition to ozone, $NO_x$ contributes to potential exceedances of the NAAQS and CAAQS for $NO_2$. As shown in *Table 5.10-4*, the existing $NO_2$ concentrations are well below the NAAQS and CAAQS. Thus, it is not expected the project's $NO_x$ emissions would result in exceedances of the $NO_2$ standards or contribute to the associated health effects. CO tends to be a localized impact associated with congested intersections. The associated CO "hot spots" were

discussed previously as a significant and unavoidable impact after mitigation. Thus, the project's CO emissions may contribute to the health effects associated with this pollutant, which include impairments to central nervous system functions. The $PM_{10}$ and $PM_{2.5}$ emissions during operation would result primarily from fugitive road dust and, to a lesser extent, motor vehicle exhaust. Thus, the emissions would be dispersed throughout the project area and not confined to specific locations that would result in localized impacts to receptors. The $PM_{10}$ and $PM_{2.5}$ would contribute to the regional exceedances of the NAAQS and CAAQS and the associated health effects for these pollutants.

***Would the project violate any air quality standard or contributes substantially to an existing or projected air quality violation?***

As indicated in the discussion of the thresholds of significance, the SCAQMD also recommends the evaluation of localized $NO_2$, CO, $PM_{10}$, and $PM_{2.5}$ impacts as a result of construction activities to sensitive receptors in the immediate vicinity of the project site. The impacts were analysis using methods consistent with those in the SCAQMD's *Final Localized Significance Threshold Methodology* (SCAQMD 2008). The Industrial Source Complex – Short Term, Version 3 (ISCST3) air quality dispersion model was used for the analysis. ISCST3 is approved for use by the SCAQMD for the purposes of performing an LST analysis. Details of the LST analysis are described in *Appendix I*.

*Table 5.10-11, LST Modeling Results*, shows the maximum $NO_2$, CO, $PM_{10}$, and $PM_{2.5}$ concentrations associated with the proposed project at sensitive receptors in the vicinity of the project site. The values shown in these tables are the maximum results associated with the construction phase and activity producing the highest impacts.

**Table 5.10-11**
**LST Modeling Results**

| Pollutant | Averaging Period | Modeling Results | | LST Criteria | | Exceeds Threshold? |
|---|---|---|---|---|---|---|
| | | µg/m³ | ppm | µg/m³ | ppm | |
| Nitrogen Dioxide ($NO_2$) | 1 hour | 12.2 | 0.01 | 244 | 0.13 | NO |
| Carbon Monoxide (CO) | 1 hour | 115 | 0.10 | 17,165 | 15 | NO |
| Carbon Monoxide (CO) | 8 hours | 48 | 0.04 | 6,065 | 5.3 | NO |
| Respirable Particulate Matter ($PM_{10}$) | 24 hours | 70.4 | NA | 10.4 | NA | **YES** |
| Fine Particulate Matter ($PM_{2.5}$) | 24 hours | 15.7 | NA | 10.4 | NA | **YES** |

As shown in *Table 5.10-11*, the project impacts on $NO_2$ and CO concentrations would not cause or contribute to exceedances of the CAAQS. The maximum 24-hour $PM_{10}$ and $PM_{2.5}$ concentrations are anticipated to exceed the LST at the maximally impacted sensitive receptor in

the vicinity of the project site. Thus, construction of the proposed project would result in significant air quality impacts during the construction phase.

***Would the project create objectionable odors affecting a substantial number of people?***

Odors are a form of air pollution that is most obvious to the general public. Odors can present significant problems for both the source and surrounding community. Although offensive odors seldom cause physical harm, they can be annoying and cause concern. During the construction period, the potential odors associated with the proposed project would result from the application of asphalt, from diesel and gas fumes, and from the application of paint. Due to the temporary nature of construction and the relatively sparse population surrounding the project site (i.e., mostly agricultural fields), temporary odors associated with project construction would be considered less than significant.

During the operational phase of the proposed project, anticipated odors would be generated from cooking facilities and landscape/building maintenance. In general, these odors are not considered to create a significant nuisance and it is not likely that these odors would cause a significant impact to surrounding receptors. Nevertheless, if specific businesses within the proposed commercial component of the project are identified and specific permits are requested for uses that could cause a significant impact, the City of San Jacinto may further evaluate odor emissions from such uses to determine if additional environmental review is warranted at that time. In addition to these potential odor sources, the proposed project would incorporate a detention basin that will collect the runoff that emanates from offsite and onsite areas and will serve as a regional water quality facility for the project. Proper maintenance of the detention basin including periodic cleaning and maintaining aerobic conditions should alleviate the potential for the collected water to generate objectionable odors. At this time, however, long-term operational impacts associated with project-generated odors would be considered less than significant.

The project site is bordered by undeveloped agricultural land to the north (and future westward extension of Ramona Boulevard), Sanderson Avenue to the east, Odell Avenue to the west, and undeveloped agricultural land and a municipal wastewater treatment plant to the south (see *Figure 3.3, Project Location Map*). Land uses in the project area consist of agricultural operations including sod farms, dry farming, animal grazing pastures and dairies. Although several parcels within the project vicinity are in the process of being developed with residential subdivisions and/or commercial centers, project residents, employees, and/or customers may be subjected to noticeable odors associated with standard agricultural operations (fertilizers, pesticides, etc.) and/or odors associated with the wastewater treatment plant (WWTP) operations to the south. The odors associated with agriculture are often characterized as having a heavy, pungent nitrogen smell, while the odors associated with the WWTP can at times (particularly in hotter conditions) smell rotten and sulfuric in character. Odors would likely be most pronounced

on days when hot temperatures are experienced and/or gusts of winds occur. Given the proximity of the project to off-site odor sources, the project could result in odor nuisance complaints. As a part of the proposed project specific plan, the applicant has agreed to incorporate setbacks, fencing, and vegetative screening to protect and/or screen sensitive project receptors. Potential off-site odor impacts would, therefore, be considered less than significant.

***Would the project expose sensitive receptors to substantial pollutant concentrations?***

Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. Although not anticipated at this time, if a business/commercial use is subsequently proposed that would involve potential TACs that require air permits, such permits would be subject to SCAQMD health risk assessment and public notification requirements. The SCAQMD permit requires the application of appropriate safeguards to ensure the public safety. If specific permits are requested for uses that could create TACs, the City of San Jacinto may further evaluate the project to determine if additional environmental review is warranted at that time. At this time, however, long-term operational impacts associated with toxic air contaminants are considered less than significant.

CARB has published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005), which identifies certain types of facilities or sources that may emit substantial quantities of TACs and therefore could conflict with sensitive land uses, such as "schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities." The *Air Quality and Land Use Handbook* is a guide for siting of new sensitive land uses, but it does not mandate specific separation distances to avoid potential health impacts. The enumerated facilities or sources include:

- High traffic freeways and roads
- Distribution centers
- Rail yards
- Ports
- Refineries
- Chrome plating facilities
- Dry cleaners
- Large gas dispensing facilities

CARB recommends that sensitive receptors not be located downwind or in proximity to such sources to avoid potential health hazards.

With the possible exception of dry cleaners, the proposed project would not include these types of TAC sources on site. (New dry cleaners in the SCAQMD are prohibited from using perchloroethylene, a TAC; thus, siting of a dry cleaner within the proposed project would not result in TAC emissions). Moreover, the proposed project's residential uses, parks, or the potential high school would not be located in proximity to any of these listed sources off site. Accordingly, the proposed project would not generate substantial TAC emissions that would conflict with surrounding sensitive receptors nor expose the project's inhabitants to TAC emissions from these sources.

***Would the project could impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32?***

***Quantification of GHG Emissions***

In January 2008, the California Air Pollution Control Officers Association (CAPCOA) published *CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. This white paper is "intended as a resource, not a guidance document. It is not intended, and should not be interpreted, to dictate the manner in which an air district or lead agency chooses to address greenhouse gas emissions in the context of its review of projects under CEQA" (CAPCOA 2008). This document describes analytical methodologies for estimating direct (mobile and area sources) and indirect (electrical and water/wastewater utilities) GHG emissions associated with a development project. For the most part, the calculation methods described below are consistent with this guidance as well as the OPR technical advisory (OPR 2008).

***Construction GHG Emissions***

Emissions from Construction Equipment and Vehicles

Construction of the proposed project would result in GHG emissions, which are primarily associated with use of off-road construction equipment and vehicles and on-road construction and worker vehicles. The URBEMIS 2007 model was used to calculate the annual $CO_2$ emissions based on the construction scenario described in *Section 5.10.4*. The model results were adjusted to estimate methane ($CH_4$) and nitrous oxide ($N_2O$) emissions in addition to $CO_2$. The $CO_2$ emissions from off-road equipment and vehicles and delivery trucks, which are assumed by URBEMIS 2007 to be diesel fueled, were adjusted by a factor derived from the relative $CO_2$, $CH_4$, and $N_2O$ for diesel fuel as reported in the California Climate Action Registry's (CCAR) *General Reporting Protocol* (CCAR 2009) for transportation fuels and the GWP for each GHG. The $CO_2$ emissions associated with construction worker trips were multiplied by a factor based on the assumption that $CO_2$ represents 95% of the $CO_2E$ emissions associated with passenger vehicles (EPA 2005). The results were then converted from annual tons per year to metric tons

per year. As shown in *Table 5.10-12, Estimated Annual Construction Emissions of Greenhouse Gases*, the maximum GHG emissions during construction would range from 29 metric tons of emissions per year (expressed as $CO_2$ equivalent) to 1,771 metric tons per years, peaking in 2014 and 2015. Additional detail regarding these calculations is found in *Appendix I*.

**Table 5.10-12**
**Estimated Annual Construction Emissions of Greenhouse Gases**

| Construction Year | Metric Tons $CO_2E$/Year |
|---|---|
| 2011 | 29 |
| 2012 | 335 |
| 2013 | 1,644 |
| 2014 | 1,771 |
| 2015 | 1,771 |
| 2016 | 859 |
| 2017 | 1,406 |
| 2018 | 953 |
| 2019 | 1,707 |
| 2020 | 1,208 |
| 2021 | 1,204 |
| 2022 | 1,204 |
| 2023 | 1,201 |
| 2024 | 483 |
| 2025 | 647 |
| 2026 | 647 |
| 2027 | 647 |
| 2028 | 647 |
| 2029 | 693 |
| 2030 | 693 |
| 2031 | 693 |
| 2032 | 695 |
| 2033 | 693 |

Emissions from Release of Methane from Disturbed Soil During Construction

The project site included a former 20-acre cattle operation. If manure from this operation remained on the site and were buried where it could undergo anaerobic decomposition and generate methane (a GHG), methane could be released to the atmosphere during subsurface operations such as excavation. Surface or near surface deposits of manure would undergo aerobic decomposition, which does not generate methane. However, according to the Phase I environmental site assessment (*Appendix L*), the manure was removed from the site for use as fertilizer. Mitigation Measure 5.13-a in *Section 5.13*, *Hazards*, addresses the potential for

methane releases from the former cattle operation. Methane investigations would take place and in the event that methane is detected in this area, installation of mitigation mechanisms to collect methane would occur in accordance with the most recent Riverside County Department of Environmental Health's preliminary methane investigation protocols.

***Operational GHG Emissions***

Development of the proposed project would result in the generation of GHGs, primarily $CO_2$. The project includes features that would reduce the generation of GHG relative to a project developed without these features. The latter scenario is described as "business-as-usual" in the following discussion. The following sections discuss the calculations of GHG emissions resulting from the primary sources of GHGs associated with the operation of the proposed project at full buildout in 2033.

Emissions from Motor Vehicles

Annual $CO_2$ emissions from motor vehicle trips for full project buildout in 2033 were quantified using the URBEMIS 2007 model. As described above for construction worker vehicles, $CH_4$ and $N_2O$ emissions were accounted for by multiplying the URBEMIS 2007 $CO_2$ emissions by a factor based on the assumption that $CO_2$ represents 95% of the $CO_2E$ emissions associated with passenger vehicles (EPA 2005). The business-as-usual scenario assumes that the project would be developed with single-family residential only. The commercial and mixed-use development was assumed to be developed at a different, noncontiguous location. Accordingly, the adjustment of the trip generation for "internal capture" (also referred to as "double counting") would not occur. To generate the business-as-usual emissions associated with motor vehicles, the URBEMIS 2007 model was run without an adjustment for double counting. The estimated GHG emissions from motor vehicles under the business-as-usual scenario are shown in *Table 5.10-13, Estimated Business-As-Usual Operational Emissions of Greenhouse Gases*. The estimated GHG emissions from motor vehicles under the proposed project scenario are shown in *Table 5.10-14, Estimated Proposed Project Operational Emissions of Greenhouse Gases* Additional details regarding these calculations are found in *Appendix I.*

Emissions from Natural Gas Combustion and Landscape Maintenance

Annual $CO_2$ emissions from natural gas combustion for space and water heating and gas fireplaces (new wood-burning devices are prohibited in the SCAB) were estimated using URBEMIS 2007. The $CO_2$ emissions were adjusted by a factor derived from the relative $CO_2$, $CH_4$, and $N_2O$ for natural gas as reported in the CCAR's *General Reporting Protocol* (CCAR 2009) for stationary combustion fuels and their GWPs. Implementation of the Specific Plan's Energy Efficiency Guidelines would likely result in a reduction in the GHG emissions from natural gas usage. However, those emission reductions cannot be quantified because the

Guidelines do not provide sufficient detail to compute the reduction in natural gas usage. The estimated GHG emissions from natural gas combustion are shown in *Tables 5.10-13* and *5.10-14* under the business-as-usual and proposed project scenarios, respectively. Additional details regarding these calculations are found in *Appendix I.*

URBEMIS 2007 estimates the $CO_2$ emissions associated with use of landscape maintenance equipment. The contribution from this source category is very small; thus, it was assumed that the $CO_2$ emissions account for all of the GHG emissions.

Emissions from Electricity Use

Annual electricity use was based upon the SCAQMD's estimated generation rates for the land uses of the proposed project (SCAQMD 1993). Development of the proposed project at buildout would consume approximately 16,323,400 kilowatt-hours per year (see *Appendix I* for calculations). The generation of electricity through combustion of fossil fuels typically results in emissions of $CO_2$ and to a smaller extent $CH_4$ and $N_2O$. Annual electricity emissions were estimated using the reported $CO_2$ emissions per kilowatt-hour for Southern California Edison, which would provide electricity for the project (CCAR 2009).[5] The contributions of $CH_4$ and $N_2O$ for powerplants in California were obtained from the CCAR's *General Reporting Protocol*, which were adjusted for their GWPs. Implementation of the Specific Plan's Energy Efficiency Guidelines would likely result in a reduction in the GHG emissions associated with electrical use and generation. However, those emission reductions cannot be quantified because the Guidelines do not provide sufficient detail to compute the reduction in electrical usage. *Tables 5.10-13* and *5.10-14* show the estimated emissions of GHGs associated with electrical use under the business-as-usual and proposed project scenarios, respectively. Additional details regarding these calculations are found in *Appendix I.*

Emissions from Water Supply and Wastewater Treatment

Water supplied to the proposed project is a large user of electricity. Accordingly, the supply, conveyance, treatment, and distribution of water would indirectly result in GHG emissions. The GHG emissions associated with water supply were based on the estimated water usage by the proposed project (RBF 2005), the estimated electrical usage associated with supply, conveyance, treatment, and distribution of water (CEC 2006), and the same methodology as that for the project's electrical use. The business-as-usual scenario assumes that all of the project water would be provided as potable water from EMWD, while the proposed project would use reclaimed water from EMWD's San Jacinto wastewater treatment plant. *Tables 5.10-13 and*

[5] The GHG emission factor for Southern California Edison will be substantially lower in 2033 due to compliance with SB 107, SB 1368, and measures adopted under AB 32 to increase the renewable energy portfolio for utilities.

*5.10-14* show the estimated GHG emissions associated with water provided to the project users under the business-as-usual and proposed project scenarios, respectively.

Similarly, wastewater treatment requires electricity and would generate its own GHG emissions. According to the *Local Governmental Operations Protocol* (CARB et al. 2008), $CH_4$ emissions are associated with unburned digester gas (which contains $CH_4$) and $N_2O$ is associated with some types of wastewater treatment and discharged to aquatic environments. The electrical usage associated with wastewater treatment was estimated using the same references as those for water supply (RBF 2005 and CEC 2006). The population-based estimates from the *Local Governmental Operations Protocol* were used to estimate $CH_4$ and $N_2O$ emissions from wastewater treatment processes.

*Tables 5.10-13* and *5.10-14* show the estimated emissions of GHGs associated with water supply and wastewater treatment under the business-as-usual and proposed project scenarios, respectively. Additional details regarding these calculations are found in *Appendix I*.

*Table 5.10-13* lists the operational emission sources of GHGs for the proposed project. The project is estimated to result in GHG emissions of approximately 49,650 metric tons $CO_2E$. While the proposed project would result in emissions of GHGs, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally the case that an individual project is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). Accordingly, further discussion of the project's GHG emissions and their impact on global climate are addressed in *Section 6*.

**Table 5.10-13**
**Estimated Business-As-Usual Operational Emissions of Greenhouse Gases**

| Source | Metric Tons $CO_2E$/Year | Percent of Total |
|---|---|---|
| Motor Vehicles | 43,181 | 75.13 |
| Area Sources | | |
| Natural Gas Combustion | 4,814 | 8.29 |
| Hearth Combustion | 19 | 0.03 |
| Electrical Generation | 4,694 | 8.17 |
| Water Supply | 4,340 | 7.55 |
| Wastewater Treatment | 429 | 0.75 |
| **Year 2033 Totals** | **57,478** | **100.00%** |

**Table 5.10-14**
**Estimated Proposed Project Operational Emissions of Greenhouse Gases**

| Source | Metric Tons $CO_2E$/Year | Percent of Total |
|---|---|---|
| Motor Vehicles | 36,488 | 73.49 |
| Area Sources | | |
| Natural Gas Combustion | 4,814 | 9.70 |
| Hearth Combustion | 19 | 0.04 |
| Electrical Generation | 4,694 | 9.46 |
| Water Supply | 3,056 | 6.16 |
| Recycled Water Supply | 147 | 0.30 |
| Wastewater Treatment | 429 | 0.86 |
| **Year 2033 Totals** | **49,648** | **100.00%** |

Comparing the results in *Tables 5.10-3* and *5.10-14*, the proposed project would result in a GHG emission reduction of 7,830 metric tons $CO_2E$ per year (14%) relative to the business-as-usual scenario. Implementation of the Specific Plan's Energy Efficiency Guidelines would provide additional benefits in terms of reduced natural gas and electrical usage and the associated GHG emissions. However, those emission reductions cannot be quantified because the Guidelines do not provide sufficient detail to compute the reduction in energy usage.

## 5.10.5 Mitigation Measures

### Construction

**5.10-a** Consistent with SCAQMD Rule 403, it is required that fugitive dust generated by grading and construction activities be kept to a minimum with a goal of retaining dust on the site, by following the dust control measures listed below:

a) During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems shall be used to prevent dust from leaving the site and to create a crust after each day's activities cease.

b) During construction, water truck or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas later in the morning and after work is completed for the day and whenever winds exceed 15 miles per hour.

c) Soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation.

d) Reduce speeds on unpaved roads to less than 15 miles per hour.

e) Halt all grading and excavation operations when wind speeds exceed 25 miles per hour.

f) Dirt and debris spilled onto paved surfaces at the project site and on the adjacent roadways shall be swept, vacuumed, and/ or washed at the end of each workday.

g) Should minor import/export of soil materials be required, all trucks hauling dirt, sand, soil, or other loose material to and from the construction site shall be tarped and maintain a minimum two feet of freeboard.

h) At a minimum, at each vehicle egress from the project site to a paved public road, install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long (or as otherwise directed by SCAQMD).

i) Review and comply with any additional requirements of SCAQMD Rule 403.

**5.10-b** The following shall be adhered to during project grading and construction to reduce VOC, NOx, and CO from construction equipment:

a) Heavy-duty diesel-powered construction equipment manufactured after 1996 (with federally mandated "clean" diesel engines) shall be utilized.

b) The engine size of construction equipment shall be the minimum size.

c) The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest number is operating at any on time.

d) Construction equipment shall be maintained in tune per the manufacturer's specifications.

e) Catalytic converters shall be installed on gasoline-powered equipment.

f) Diesel catalytic converters shall be installed.

g) Diesel powered equipment shall be utilized in lieu of electric equipment.

**5.10-c** The project developer shall use zero-Volatile Organic Compounds (VOC)-content architectural coatings during project construction/ application of paints and other architectural coatings to reduce ozone precursors. If zero-VOC paint cannot be utilized, developer shall avoid application of architectural coatings during the peak smog season: July, August, and September. Developer shall procure architectural coatings from a supplier in compliance with the requirements of SCAQMD's Rule 1113 (Architectural Coatings).

The following websites provide information/ lists of manufacturers related to zero-VOC content coatings:

http://www.aqmd.gov/prdas/brochures/paintguide.html

http://www.delta-institute.org/publications/paints.pdf

http://www.cleanaircounts.org/factsheets/FS%20PDF/Low%20VOC%20Paint.pdf

**Operational**

Substantial reductions in emissions from proposed land use-related sources would be difficult, as these sources would mainly be low-emitting, natural gas-fired units. Nonetheless, optimization of energy conservation techniques in proposed building design would minimize emissions resulting from lighting and space heating demands and help reduce the overall project significant impact of ROG and $NO_x$ emissions. To help mitigate for operational impacts, the following shall occur.

**5.10-d** The applicant shall incorporate the following energy conservation measures into project building plans:

- Install low $NO_x$ water heaters and space heaters
- Install heat transfer modules in furnaces
- Use light-colored, water-based paint and light-colored roofing materials to the satisfaction of the City.
- Install solar panels for water heating systems and other facilities and/or use water heaters that heat water only on demand.
- Use passive solar cooling/heating.
- Maximize the use of natural lighting.
- Install energy efficient appliances and lighting.
- Use landscaping to shade buildings and parking lots.

In addition to the above area source mitigations/required site design features, the following mitigation measures are required in order to minimize long-term vehicular impacts:

- Provide preferential parking spaces for employee carpools and vanpools in the commercial and business park land uses.
- Install covered bus stops to encourage use of mass transportation.
- Coordinate with the local transit agency to provide public transit to the project site.

- Develop, in coordination with the City of San Jacinto, public outreach programs to promote alternative methods of transportation.

**5.10-e** To mitigate the traffic conditions that could result in potential CO "hotspots", the project applicant shall participate in funding off-site traffic improvements which are needed to serve cumulative future traffic conditions through payment of appropriate traffic mitigation fees (Riverside County TUMF and City of San Jacinto DIF fees). TUMF provides a key funding source for General Plan improvements within the project area, including the required improvements related to the Ramona Expressway. (It should be noted that this mitigation measure also appears as Mitigation Measure 5.9-e.)

## 5.10.6 Residual Impacts/ Level of Significance after Mitigation

Implementation of the above mitigation measures would help reduce construction impacts; however, significant unmitigable impacts would remain. Operational impacts related to on-site and off-site odors and toxic air contaminants would remain or be mitigated to less-than-significant levels with mitigation. The combined contribution of the project's area source and vehicular emissions would remain significant and unmitigable despite identified mitigation measures.

# 5.11 NOISE

## 5.11.1 Introduction and Methodology

The following evaluation and discussion of potential noise impacts associated with the Villages of San Jacinto project implementation has been prepared as a complete technical noise study by Dudek.

This technical noise section evaluates noise effects of the project, including potential impacts from current and future ambient noise levels upon proposed land uses as well as noise generation potential from proposed land uses and activities within the Villages of San Jacinto Specific Plan area. Noise generation sources from future implementation of the Specific Plan include traffic, school-related playground and sports activity, and mechanical equipment and exterior activities from commercial uses.

**Terminology Used to Describe Sound**

Please refer to *Appendix J* for detailed definitions of technical terms used in the description and evaluation of noise. The following descriptions are provided for direct reference in reviewing the information in this section.

Sound is defined as any pressure variation detected by the human ear. The preferred unit for measuring sound is the decibel (dB). The dB expresses the logarithmic ratio of the amount of energy radiating from a source in the form of an acoustic wave. Zero dB corresponds approximately to the threshold of healthy human hearing, while 120 to 140 dB correspond to an average person's threshold of pain.

The human ear is not equally responsive to all frequencies of the audible sound spectrum. An electronic filter is normally used when taking noise measurements that de-emphasizes certain frequencies in a manner that mimics the human ear's response to sound; this method is referred to as A-weighting. Sound levels expressed under the A-weighted system are sometimes designated dB(A). All sound levels discussed in this report are A-weighted.

The equivalent continuous sound level ($L_{eq}$) is a single noise level that, if held constant during the specified time period, would represent the same total energy as a fluctuating noise. $L_{eq}$ values are commonly expressed for periods of 1 hour, but longer or shorter time periods may be specified.

The noise descriptor Community Noise Equivalent Level (CNEL) is typically used when describing community noise. CNEL averages the varying sound levels occurring over a 24-hour period and gives a 10 dB penalty to noises occurring between the hours of 10:00 p.m. and

7:00 a.m. and a 5 dB penalty for noise between the hours of 7:00 p.m. to 10:00 p.m., to take into account noise sensitivity during nighttime and evening hours, respectively.

**Noise Criteria**

***General Plan Noise Element Criteria:***

The City of San Jacinto has an adopted Noise Element in the City's General Plan (City of San Jacinto 2006). The City's Noise Element identifies the limits for "normally acceptable" exterior ambient noise levels at residential land uses to be 65 dB CNEL. Also, the Noise Element stipulates that the interior noise level not exceed 45 dB CNEL within the habitable rooms of residences.

The Noise Element also identifies 65 dB CNEL and 45 dB CNEL as the maximum exterior and interior noise levels (respectively) for commercial land uses such as office, retail, reception, and restaurant. For parks and recreation facilities, the exterior limit is also proposed to be 65 dB CNEL, but the interior noise level is proposed to be 50 dB CNEL for this land use category.

Noise sources that are not directly related to transportation, such as construction, manufacturing or business operations; agricultural operations; and property maintenance activities should be controlled to minimize exposure to excessive noise levels and reduce the impacts of noise-producing land uses and activities on noise-sensitive land uses.

***Municipal Code Noise Ordinance Criteria:***

The City's noise ordinance (City of San Jacinto 2008) provides controls for excessive and annoying noise from stationary sources, such as air conditioning and refrigeration units, industrial development, and commercial activities. The ordinance also regulates construction activities within the City. Certain noise sources are prohibited, and the ordinance establishes an enforcement process.

Relative to construction noise, it is unlawful to create and emit noise from equipment operated during construction activities, whether on private property or within the public right of way between the hours of 7:00 p.m. of one day and 7:00 a.m. of the following day, and at any time on Sunday. Such equipment includes, but is not limited to, trucks, road graders, tractors, power saws, power drills, and generators.

## 5.11.2 Existing Conditions

### Project Setting

The project site is generally located south of Ramona Expressway and adjacent to the west side of North Sanderson Avenue in the City of San Jacinto. The primary existing noise source at the site is vehicular traffic along North Sanderson Avenue. The current average daily traffic (ADT) volumes on North Sanderson Avenue are provided in *Table 5.11-1, Existing Average Daily Traffic Volumes near Villages of San Jacinto.*

**Table 5.11-1**
**Existing Average Daily Traffic Volumes near Villages of San Jacinto**

| Location | Existing ADT |
|---|---|
| Sanderson Avenue (north of Cottonwood Avenue) | 13,700 |
| Sanderson Avenue (south of Ramona Boulevard) | 12,800 |

SOURCE: Urban Crossroads 2009

### Ambient Noise Monitoring

Since the primary existing noise source affecting the property is North Sanderson Avenue, an original noise measurement was conducted within the subject property boundaries and adjacent to Sanderson Avenue to determine the existing noise level associated with Sanderson Avenue, and for use in calibrating the noise model. The measurement was made using a calibrated Larson-Davis Laboratories Model 700 (S.N. 2132) integrating sound level meter equipped with a Type 2551 one-half-inch pre-polarized condenser microphone with pre-amplifier. When equipped with this microphone, the sound level meter meets the current American National Standards Institute standard for a Type 1 precision sound level meter. The sound level meter was positioned at a height of approximately 5 feet above the ground.

The original noise measurement location is depicted as Site 1 on *Figure 5.11-1*, *Noise Measurement Locations.* Site 1 is approximately 62 feet from the center line of Sanderson Avenue and is at approximately the same elevation as the roadway surface. The measured average noise level was 67 dB at Site 1. *Table 5.11-2, Measured Average Sound Level at Villages of San Jacinto Site,* shows the measured noise level and concurrent traffic volumes.

To more fully characterize existing noise conditions on the project site, a series of additional noise measurements were conducted. These supplemental noise measurement locations are depicted as Sites A to D on *Figure 5.11-1*, *Noise Measurement Locations.* The measured average noise levels at Sites A to D are illustrated in *Table 5.11-2, Measured Average Sound Level at Villages of San Jacinto Site.* Traffic counts were not conducted during the supplemental noise

measurements, because the locations were at distances beyond the area influenced by existing traffic noise sources.

**Table 5.11-2**
**Measured Average Sound Level at Villages of San Jacinto Site**

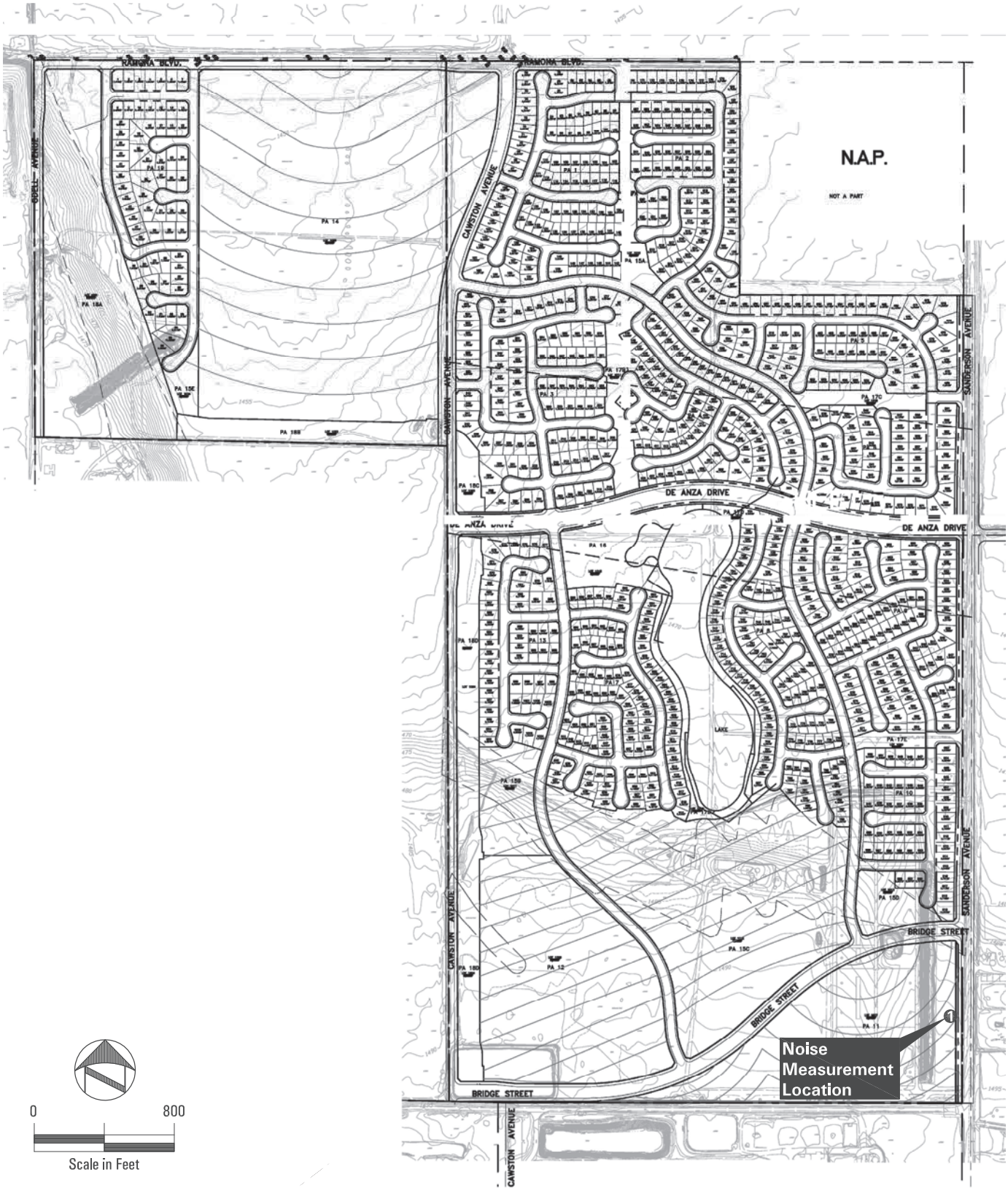
| Site | Description | Date/Time | $L_{eq}$ [1] | Cars | MT [2] | HT [3] |
|---|---|---|---|---|---|---|
| 1 | Approximately 62 feet to center line of Sanderson Avenue | 11/01/2004 1:00 p.m. to 1:20 p.m. | 67 dB | 208 | 10 | 13 |
| A | At property boundary for parcel to the northwest | 7/8/2009 11:30 a.m. to 11:45 a.m. | 39 dB | N.A. | N.A. | N.A. |
| B | At future Cawston Avenue alignment, just north of future De Anza Drive | 7/8/2009 11:55 a.m. to 12:10 p.m. | 41 dB | N.A. | N.A. | N.A. |
| C | Along Ramona Avenue, at northwest corner of property | 7/8/2009 12:20 p.m. to 12:35 p.m. | 40 dB | N.A. | N.A. | N.A. |
| D | Along future Bridge Street, at midpoint of southeast property line | 7/8/2009 12:55 p.m. to 1:10 p.m. | 42 dB | N.A. | N.A. | N.A. |

NOTES: Temperature 70°, clear sky, 2 miles-per-hour northerly wind (November 1, 2004)
Temperature 88°, clear sky, 5 miles-per-hour southwest wind (July 8, 2009)
[1] Equivalent continuous sound level (time-average sound level)
[2] Medium trucks
[3] Heavy trucks

## Traffic Noise Modeling – Current Conditions

The existing CNEL along North Sanderson Avenue was determined based on the ambient noise measurement and using the current daily traffic volume for the road (with normalized medium and heavy truck percentages as provided by the County of Riverside) in the Federal Highway Administration's Highway Traffic Noise Prediction Model (FHWA 2004). For the current condition, the modeled CNEL at Site 1 is 72 dB (Dudek and Associates 2006). It should be noted that this noise level is in terms of the CNEL and not the $L_{eq}$ as shown in *Table 5.11-2*.

The existing 65 dB CNEL contour from Sanderson Avenue within the Villages at San Jacinto project site is approximately 180 feet from the current center line of North Sanderson Avenue. The noise measurements conducted at interior portions of the site verify that most of the property is not directly affected by this traffic noise source, with average measured noise levels in the 39 – 42 dB range.




Source: C & V Consulting, Inc. Feb. 2009

Villages of San Jacinto EIR

# Noise Measurement Location

FIGURE 5.11-1

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## 5.11.3 Significance Criteria

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on noise if it would result in:

1. The exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
2. The exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

## 5.11.4 Impacts

The project site would be exposed to existing and future traffic noise. Noise associated with the project would most likely result from project-generated traffic noise and noise from on-site commercial, school, and construction activities.

***Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

**Traffic Noise Exposure**

While only North Sanderson Avenue currently exists along the eastern boundary of the project site, the project site would eventually be served by three principal roadways oriented north/south and three principal roadways oriented east/west. The north/south roadways include Odell Avenue (western boundary), Cawston Avenue (central), and Sanderson Avenue (eastern boundary). The east/west roads include Ramona Boulevard South (northern boundary), De Anza Drive (central) and Bridge Street (southern boundary*). Figure 5.11-2*, *Noise Contours Associated with Future Roadways*, provides a graphical depiction of future roadway locations. These roadways are either on the boundary of the site or traverse the interior of the site and provide vehicular access from the site to the regional roadway network.

The public roadway system that abuts or traverses the site would carry project and regional traffic. To determine the future noise impact, City of San Jacinto General Plan build-out with project traffic volumes were used in the noise modeling (Urban Crossroads 2009). North Sanderson Avenue would have a future community build-out traffic volume ranging from 43,000

to 44,600 ADT adjacent to the project site. The other roadways would have future ADT volumes ranging up to 16,900 ADT along Ramona Boulevard; 6,800 ADT along Odell Avenue; 9,000 ADT along Cawston Avenue; 9,000 ADT along De Anza Drive and 7,000 ADT along Bridge Street. It should be noted that two new freeways, State Route 79 (SR 79) and Mid County Parkway (MCP) are currently in various planning stages. Detailed design drawings are not available for these two freeways. However, it is anticipated that the alignments of both freeways would be located at least 1,000 or more feet from the project site. As the area develops, there would be buildings and other structures that would most likely provide shielding between the freeways and the project site that would substantially attenuate the traffic noise. However, for the purposes of this study, it is conservatively assumed that the potential noise contribution from future SR 79 and MCP freeways would be 60 dB CNEL at the north and east boundaries of the project site.

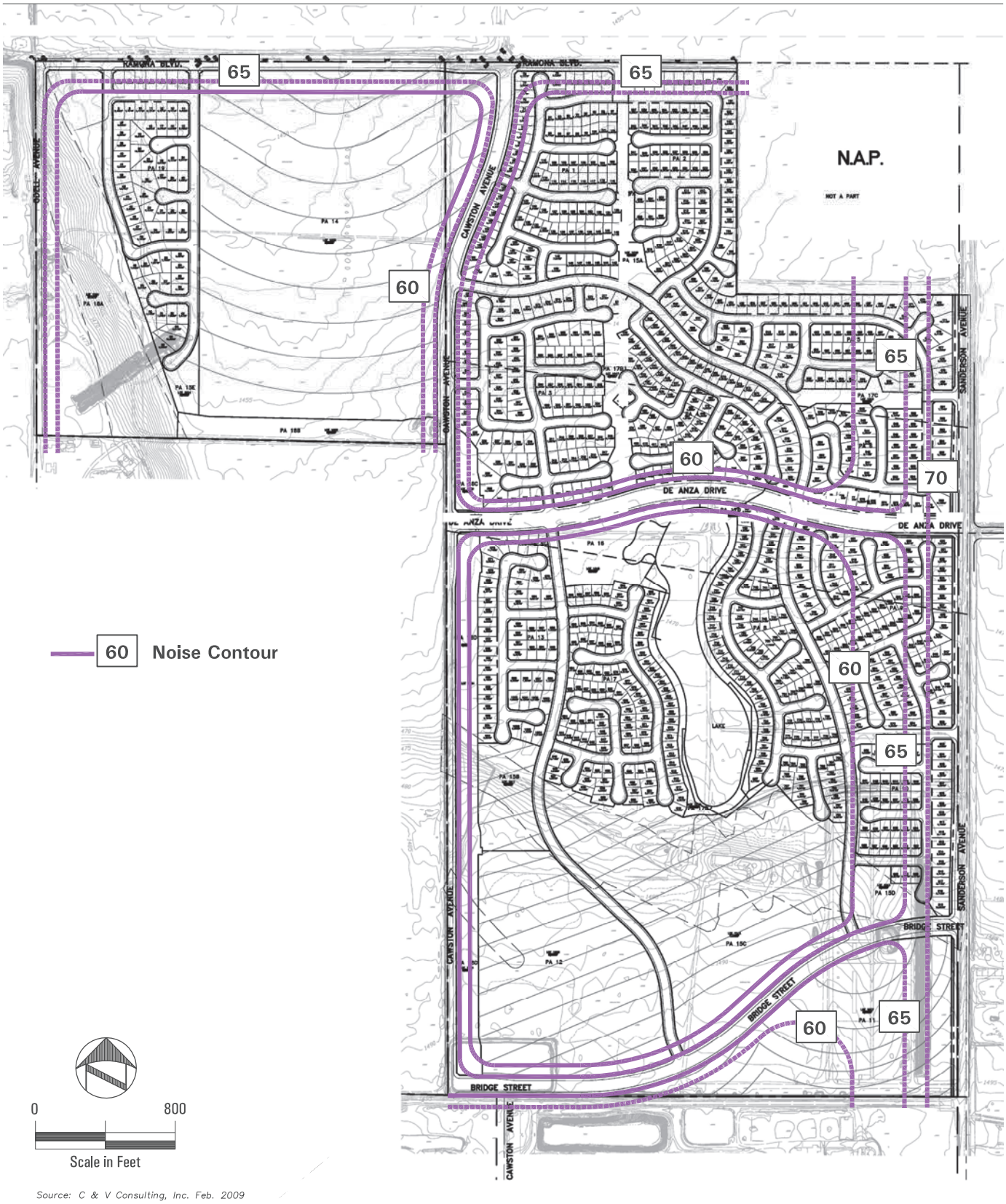
Utilizing the planned roadway sections and identified future traffic volumes (from project development and full build-out of the General Plan), traffic noise along each of the project-related roadways was modeled. The results of the noise modeling for roadway traffic noise are presented in *Table 5.11-3*, *Modeled Future Sound Level along Project Roadways*.

**Table 5.11-3**
**Modeled Future Sound Level along Project Roadways**

| Roadway | Distances from Center Line to CNEL Contours (feet) | | |
|---|---|---|---|
| | 70 db | 65 db | 60 db |
| Sanderson Avenue | 220 | 350 | 650 |
| Ramona Boulevard South | R/W [1] | 110 | 170 |
| Odell Avenue | R/W [1] | 50 | 120 |
| Cawston Avenue | | | |
| North of Bridge Street | R/W [1] | 70 | 130 |
| South of Bridge Street | R/W [1] | R/W [1] | 90 |
| De Anza Drive | R/W [1] | 70 | 130 |
| Bridge Street | R/W [1] | 55 | 120 |

[1] Within right-of-way

*Appendix J* contains a summary of the noise roadway configuration, vehicle mix, and speed limit information used for each noise model run.




Source: C & V Consulting, Inc. Feb. 2009

Villages of San Jacinto EIR

# Noise Contours Associated with Future Roadways

FIGURE 5.11-2

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Residential, commercial, school, and park land uses are proposed to be located immediately adjacent to the right-of-way for each of these roadway facilities with the exception of Odell Avenue. Therefore, with the exception of Odell Avenue, the potential exists for significant noise impacts to occur from exterior noise exposure above 65 dB CNEL for residential, commercial, school, and park uses located adjacent to the planned right-of-way for these roadway facilities. In order to reduce these potential impacts, mitigation is provided (see *Section 5.11.5*, *Mitigation Measures*, Mitigation Measures 5.11-a and 5.11-f).

**Off-Site Noise Impacts Associated With Project Traffic**

Traffic-related noise impacts, especially in the context of a Specific Plan analysis, must primarily evaluate the future noise environment resulting from long-range community build-out. This is performed by using the traffic volumes anticipated from General Plan build-out, as assessed by the assigned project transportation engineer. Future project traffic volumes within the development are largely derived from the project itself, and are addressed by noise barriers and other measures (see *Section 5.11.5*, *Mitigation Measures,* and *Figure 5.11-3*, *Noise Barrier Heights and Locations*). With distribution of project-generated trips onto the area roadway network off site, the noise attributable to project-contributed trips versus regional traffic becomes largely indistinguishable. An extensive level of cumulative development is anticipated to occur within the San Jacinto region. Sanderson Avenue is the primary off-site roadway that exists today and is that which will bear the majority of immediate project-related traffic. The noise level associated with the existing traffic volumes on Sanderson Avenue is compared against the noise levels resulting from existing-plus-project traffic (Phase I), and from traffic volumes for build-out of the General Plan (including the project volumes for Phases I–IV). The results are presented in *Table 5.11-*, *Project Contribution to Off-Site Traffic Noise (Off-Site Traffic Noise Level Increase)*.

**Table 5.11-4**
**Project Contribution to Off-Site Traffic Noise (Off-Site Traffic Noise Level Increase)**

| Street (Segment) | Existing ADT | Existing + Project (Year 2015) ADT | CNEL Increase[1] (dB) | Existing + General Plan Build-Out ADT | Existing + Project + General Plan Build-Out ADT | CNEL Increase[2] (dB) |
|---|---|---|---|---|---|---|
| Sanderson Avenue | | | | | | |
| South of Ramona Blvd. | 12,800 | 16,100 | 1 | 41,600 | 43,000 | 5 |
| Cottonwood Ave. to future SR 79 | 13,700 | 15,900 | 1 | 53,200 | 61,600 | 7 |

[1] Existing vs. existing-plus-project noise increase
[2] Existing vs. General Plan build-out, including project

In the near term (year 2015), the project would increase the existing ambient noise level by 1 dB CNEL. This noise level increase is less than significant.

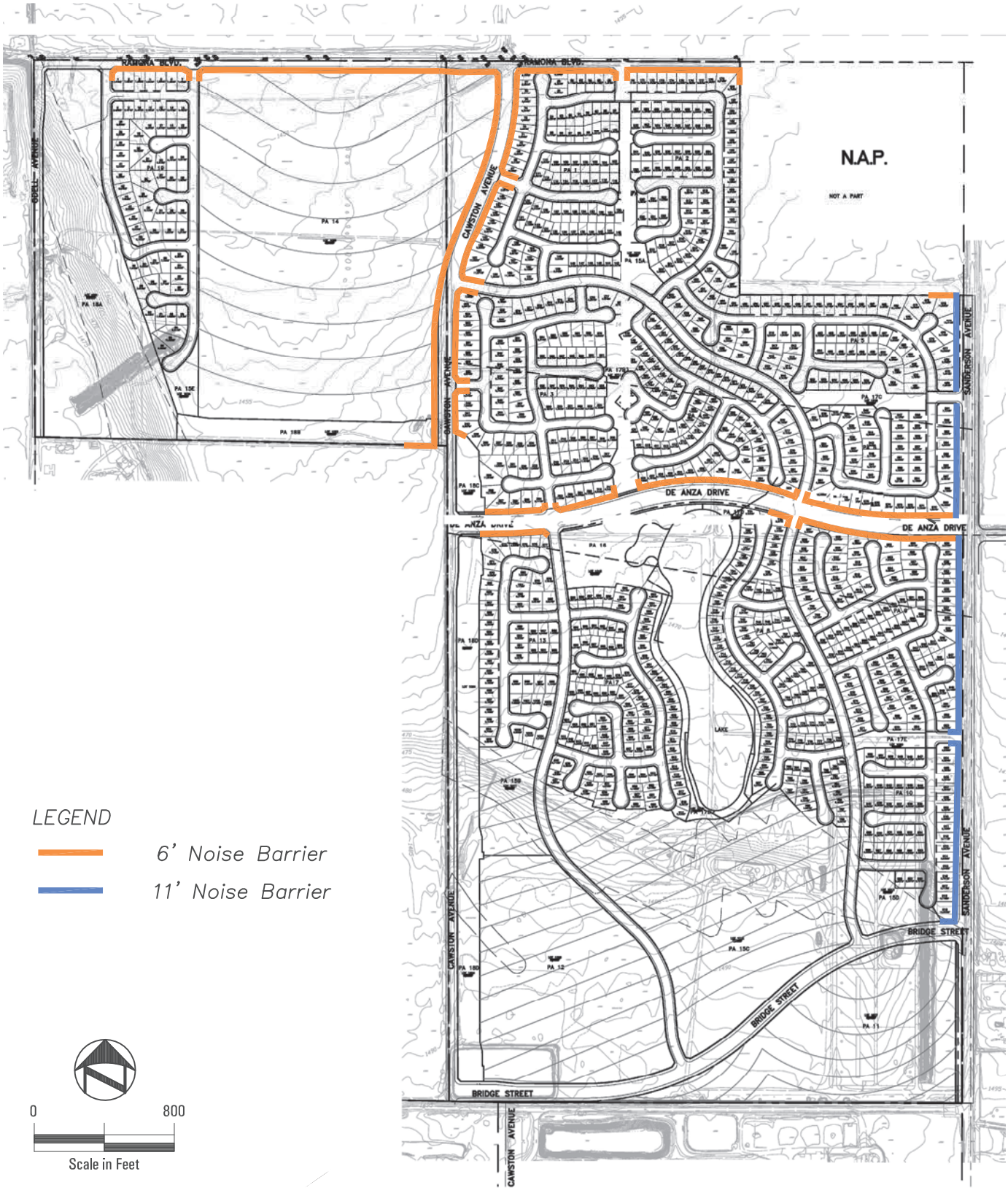
In the long term, the increase in traffic noise from the proposed project and cumulative developments (i.e., General Plan build-out) is calculated to range from 5 to 7 dB, which is a noticeable change in the noise environment. The noise increase associated with traffic from cumulative developments is therefore considered potentially significant. However, the project's contribution to cumulatively significant traffic noise impacts is less than significant (1 dB or less increase, which by itself is not a discernible increase). Consequently, mitigation is not required for the project's contribution to off-site noise impacts associated with General Plan build-out traffic volumes but is required for the cumulatively significant impact (see *Section 5.11.5*, *Mitigation Measures*, Mitigation Measure 5.11-a).

**Noise Generation Associated with Commercial Land Uses**

A retail commercial area and mixed-use area are proposed at the southern end of the subject property. The land uses at the commercial site could include neighborhood retail uses, such as a grocery store, drug store, cleaners, restaurants, fast food, and specialty stores. The mixed-use area could provide a broad range of land uses, including a library, police and fire facilities, dental and medical offices, real estate offices, banks, coffee shop, printers, and postal/shipping outlets. The commercial and mixed-use areas are generally buffered from on-site residential land uses by a park. The proposed commercial areas are located immediately adjacent to an existing off-site municipal wastewater treatment plant that would not be a noise-sensitive receptor. Residential land uses exist east of the proposed commercial area, across Sanderson Avenue; these residential land uses are currently protected by a sound-wall along Sanderson Avenue.

Sources of commercial and mixed-use noise typically include activities at loading/unloading docks and parking lots, heating/ventilation and air conditioning equipment (HVAC), maintenance activities, and additional truck traffic along adjacent roads.

Noise levels associated with the commercial and mixed-use activities would vary depending on the number of delivery trucks, loading dock areas, and customer traffic generated by the commercial site. Similarly, HVAC equipment noise would vary depending on the number and types of equipment selected. Typical roof-top HVAC packaged units generate noise levels of approximately 70 dB at 10 feet from the source. In order to avoid any potential impacts related to commercial use noise, mitigation is provided (see *Section 5.11.5*, *Mitigation Measures*, Mitigation Measure 5.11-b).




Source: C & V Consulting, Inc. Feb. 2009

Villages of San Jacinto EIR

# Noise Barrier Heights & Locations

FIGURE 5.11-3

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### School-Related Noise Concerns

A high school is designated as part of the proposed specific plan project. Schools are both noise-sensitive and noise generating. The high school would be located at the southwest corner of Ramona Boulevard and Cawston Avenue. The future exterior traffic noise at the high school site would exceed a CNEL of 65 dB as previously depicted in *Figure 5.11-2*. Traffic-related noise exposure levels within exterior use areas for the school (i.e., sports fields, athletic courts, etc.) could exceed acceptable noise standards, thereby resulting in potentially significant noise impacts. In order to avoid potentially significant noise impacts, mitigation is provided (see *Section 5.11.5*, *Mitigation Measures*, Mitigation Measures 5.11-c).

Future school buildings that are located in areas exposed to a noise level greater than 60 dB CNEL could exceed an interior noise level of 45 dB CNEL. In order to avoid these potentially significant impacts, mitigation is provided (see *Section 5.11.5*, *Mitigation Measures*, Mitigation Measure 5.11-c, 5.11-d and 5.11-e).

The proposed high school would be located adjacent to future residences along the west side of the site and also east of Cawston Avenue. Noise associated with schools generally consists of traffic noise and outdoor activities. Noise created by and emanating during the conduct of any authorized school activity upon school grounds is specifically excluded from the restrictions of the City's noise ordinance. However, some residents living adjacent to the high school may find the noise emanating from the school to be annoying. Therefore, a mitigation measure is provided to notify neighbors of the potential for this nuisance noise (see *Section 5.11.5*, *Mitigation Measures*, Mitigation Measure 5.11- d).

### Short-Term Noise Impacts (Construction-Related Noise)

The applicant has indicated that build-out of the project would occur in four major phases, with construction beginning in 2011. Please refer to *Section 3.0*, *Project Description*, for a detailed discussion of the project phasing schedule and construction phasing exhibit. Because the development of the project would occur in distinct phases, portions of the development will be completed and occupied during the construction of subsequent project phases; the occupied project phases have the potential to be impacted by noise from ongoing construction activities.

Development activities for each phase of project construction would involve a four-step sequence: (1) demolition, (2) site preparation, (3) building construction, and (4) paving. Mass grading for the entire site would occur during Phase I. Specific project construction details and equipment fleet specifications are not available at this time; however, for the air quality analysis, a worst-case equipment fleet was derived. Please refer to *Table 5.11-3*, *Heavy Construction Equipment*, for an estimate of assumed heavy construction equipment requirements for project construction. The equipment information in *Table 5.11-3* is meant to represent a reasonable

worst-case estimate of construction equipment employment. As a summary, the derived equipment list for construction includes the following types of construction equipment:

- Tractor/Backhoe
- Bulldozer
- Loader
- Scraper
- Grader
- Off-Highway Water Truck
- Roller
- Crane
- Forklift
- Trencher
- Paving Equipment
- Paver
- Surfacing Equipment.

As demonstrated by the summary above, construction equipment anticipated for project development includes only standard equipment that would be employed for any routine construction project of this scale; construction equipment with substantially higher noise generation characteristics (such as pile drivers, rock drills, or blasting equipment) would not be needed for development of the proposed project. Based upon the standard construction equipment anticipated to be employed for project development, short-term noise associated with the grading and construction could result in maximum noise levels of up to approximately 90 dB measured 50 feet from the noise source (FTA 2006). Noise attenuation for a point source occurs over distance at a rate of approximately 6 dB every time the distance from the source is doubled. Therefore, at a distance of 900 feet from the source of the noise, noise attenuation would reduce typical construction-related maximum noise levels from 90 dB to 65 dB.

With respect to the proposed construction phasing schedule and the above discussion, constructed and occupied residences that are located within 900 feet of an area under construction could potentially experience nuisance noise (i.e., average noise levels above 65 dB).

The generation of noise from construction activities during sensitive time periods upon completed and occupied components of the project is considered a significant nuisance. As such, project-generated construction noise would pose a potentially significant effect on noise-sensitive

receptors if construction hour limitations are not imposed. However, with adherence to a restricted construction schedule dictating project-related site preparation and construction activities, consistent with the City's noise ordinance, significant construction-related noise impacts could be avoided. In order to avoid potentially significant construction-related noise impacts, mitigation is provided (see *Section 5.11.5*, *Mitigation Measures*, Mitigation Measure 5.11-f).

***Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?***

Ground-borne vibration is typically attenuated over short distances. The heavier pieces of construction equipment that may be used at this site include a dozer, scraper, excavator and loaded materials trucks. These types of construction equipment would be located approximately 50 or more feet from the closest existing residences. Based on the anticipated construction equipment, the demolition of existing structures and excavation of the site could generate perceptible vibrations at some residences in the project vicinity. However, the vibration levels would be below levels that would significantly disturb the residences. Additionally, construction hours will be limited by the City's noise ordinance. Therefore, the potential vibration impacts to these residential structures are less than significant. Once construction is completed, the project would not generate groundborne vibration or groundborne noise levels.

***Would the project result in substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?***

A permanent increase in ambient noise levels will occur in the project vicinity with implementation of the project due to added traffic volumes. However, as discussed above, the project's contribution to significant traffic noise impacts is less than significant (a 1 dB or less increase, which by itself is not a discernible increase).

## 5.11.5 Mitigation Measures

**5.11-a** Residential lots located adjacent to Sanderson Avenue shall include an 11-foot-high noise barrier; residential lots adjacent to Ramona Boulevard and Cawston Avenue (between Ramona Boulevard and De Anza Drive) shall require noise barriers a minimum of 6 feet in height. The project noise barriers must have a surface density of at least 4 pounds per square foot, and have no openings or cracks. The noise barriers may be constructed of acrylic glass, any masonry material, earthern berm, or a combination of these materials.

**5.11-b** Individual acoustical analyses shall be prepared as part of site plan/development plan review for future commercial development applications submitted to the City, to ensure noise levels would comply with the City's General Plan noise standards (maximum exterior noise levels of 65 dB CNEL; maximum interior noise levels of 45 dB CNEL) and not result in significant noise impacts at adjacent park land or residences. The

applicant for each commercial development proposal shall be required to commission or fund the required acoustical analysis. Although the future building-specific noise study will determine exact specifications, it is likely that interior noise mitigation would consist of sound-rated windows and mechanical ventilation systems for the commercial buildings. All required noise control measures identified in the acoustical analysis shall be made conditions of ultimate development approval to ensure that all measures are implemented to fully mitigate anticipated noise impacts.

**5.11-c** For the high school site, the specified noise barriers along Ramona Boulevard and Cawston Avenue shall be installed to protect exterior use areas of the site from traffic-related noise.

**5.11-d** A Notice-to-Property Owner shall be recorded on a separate buyer information sheet with the final map providing notice to potential future property owners in the vicinity of the school site (i.e., Planning Areas 1, 3, and 19) stating that they could be exposed to noise associated with outdoor activities at the high school. The disclosure will function to make potential buyers aware of the anticipated noise levels/impacts, such that particularly noise-sensitive individuals would have the opportunity to decide against purchase of a home which is subject to these periodic noise conditions.

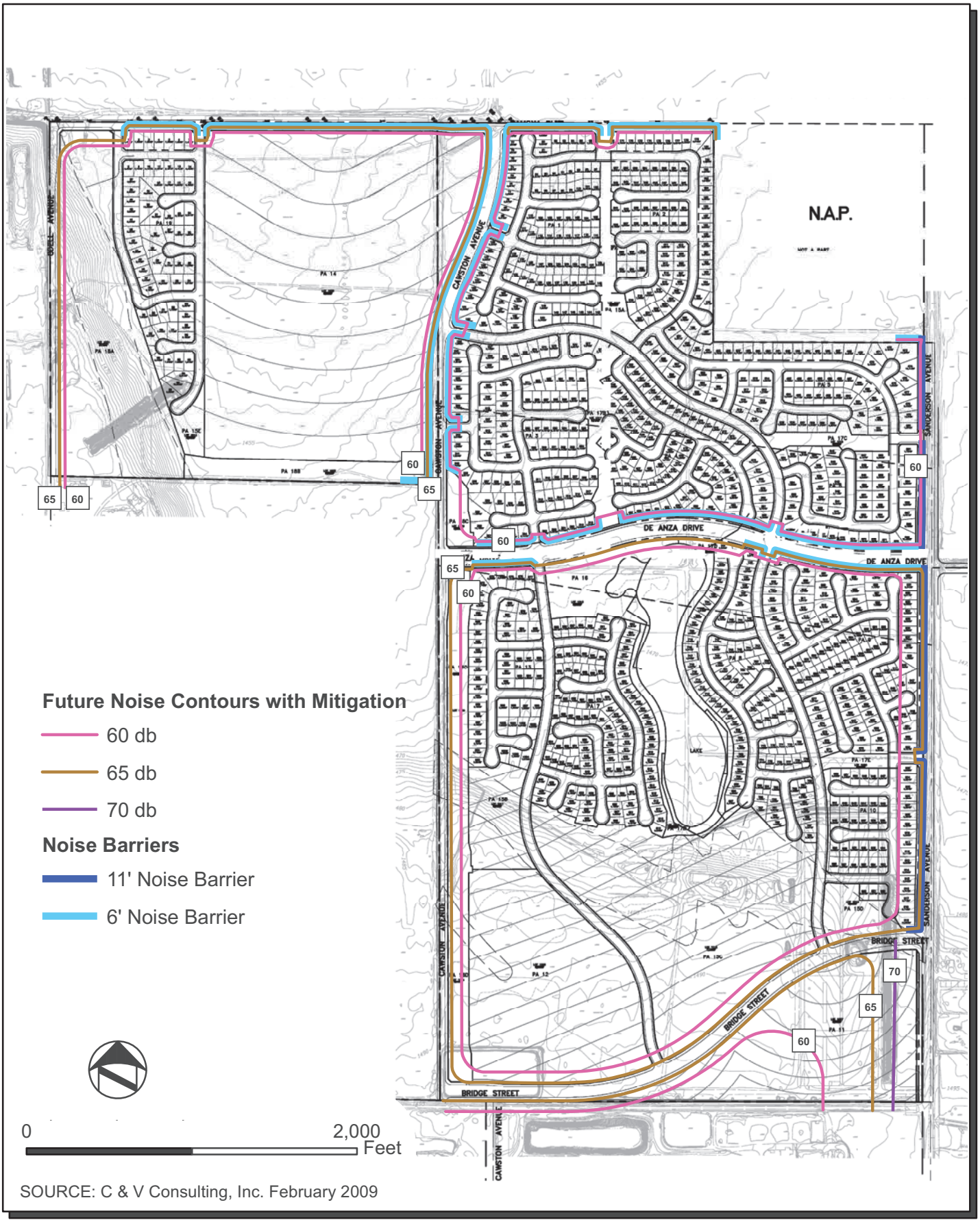
**5.11-e** For residences proposed within the future 60 dB CNEL contour, an interior acoustical analysis shall be required prior to the issuance of building permits to ensure that the interior CNEL would not exceed 45 dB. Interior noise mitigation would most likely consist of sound-rated windows and mechanical ventilation systems for the homes. All required noise control measures identified in the acoustical analysis shall be made conditions of building permit issuance.

**5.11-f** Future project-related site preparation and construction activities shall be conducted in accordance with the City's noise ordinance. No construction shall occur Sundays or federal holidays (e.g., Thanksgiving, July 4th, Labor Day, etc.). Construction operation and equipment maintenance shall be limited to the hours of 7:00 a.m. to 7:00 p.m. Non-noise-generating construction activities, such as interior painting, are not subject to these restrictions.

## 5.11.6 Residual Impacts/Level of Significance after Mitigation

With implementation of the mitigation measures included in *Section 5.11.5* to ensure that adequate noise control elements are designed and implemented for the proposed development, potential noise impacts would be less than significant and residual impacts would not occur.

*Figure 5.11-4 Noise Contours with Mitigation* illustrates the residual noise levels under future traffic conditions, and with installation of prescribed noise walls.




SOURCE: C & V Consulting, Inc. February 2009

Villages of San Jacinto EIR

**Future Noise Contours with Mitigation**

FIGURE 5.11-4

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# 5.12 PUBLIC SERVICES AND UTILITIES

## 5.12.1 Introduction and Methodology

This section discusses public services and utilities necessary to serve the proposed Villages of San Jacinto and includes an analysis of potential project impacts to fire and police protection services, parks and recreation and, schools facilities; the availability of wastewater treatment facilities, stormwater drainage facilities, domestic water supply resources, and solid waste disposal and recycling.

Potential project impacts associated with increased demand on public services including fire, police, park and recreational facilities were evaluated per correspondence with City fire, police and regional park personnel and per the criteria identified in the City of San Jacinto Development Impact Fee Justification Study, prepared by David Taussig & Associates, Inc., approved by the City in October 2005. Impacts to school facilities associated from increased demand resulting from project development were analyzed pursuant to correspondence with school district personnel and utilizing the San Jacinto Unified School District Residential Development School Fee Justification Study and the Commercial/Industrial Development School Fee Justification Study prepared by David Taussig & Associates, Inc., February 13, 2004.

The availability of adequate domestic water supply and infrastructure necessary to serve the proposed Villages of San Jacinto area was determined by a Water Supply Assessment Report prepared by the Eastern Municipal Water District, December 15, 2004, and a letter dated May 11, 2009, confirming their previous conclusions. Both documents are included in *Appendix K*. In addition, the availability of water, wastewater and drainage facilities and related infrastructure required to serve the project were evaluated through a November 2005 Study prepared by RBF, the May 2006 Preliminary Drainage Study for TTM 34081 prepared by RBF, the August 2006 Phase 1, and 2 Drainage Study prepared by RBF, the December 12, 2006, Preliminary Drainage Analysis for Phases 1, 1A, 1B and 1C prepared by RBF and the February 23, 2009, *Preliminary Hydrology and Hydraulics Study for the Villages of San Jacinto* by JLC Engineering & Consulting Inc. (all included as *Appendix G*). Impacts associated with solid waste production and disposal and availability of recycling facilities were analyzed be means of evaluating the availability of sufficient landfill capacity to receive solid waste generated by the proposed development, including construction-generated wastes and projected, long-term residential and commercial-generated wastes, and the ability of the proposed development and City programs to meet State mandated recycling requirements.

Unlike other environmental impact sections in this EIR, this section is organized by category instead of a discussion of all existing conditions followed by significance criteria followed by impacts and finally a discussion of mitigation. *Section 5.12* is instead organized by topic. Each

topic includes a description of existing conditions, followed by significance criteria associated with the specific topic, impact assessment, mitigation measures and finally a discussion of the impact after mitigation. For example, Fire Protection – first a discussion of existing conditions is provided, then the relevant significance criteria related to fire protection, followed by an impact discussion on fire protection and finally a discussion of relevant mitigation measures. After a complete discussion of fire protection, police protection is provided and so on. It was determined that this method of analysis presentation would be easier to follow. Existing and Proposed Public Facilities and Service Systems are depicted on *Figures 5.12-1, Existing Public Services and Facilities, 5.12-2, Master Sewer Plan* and *5.12-3, Master Water Plan.*

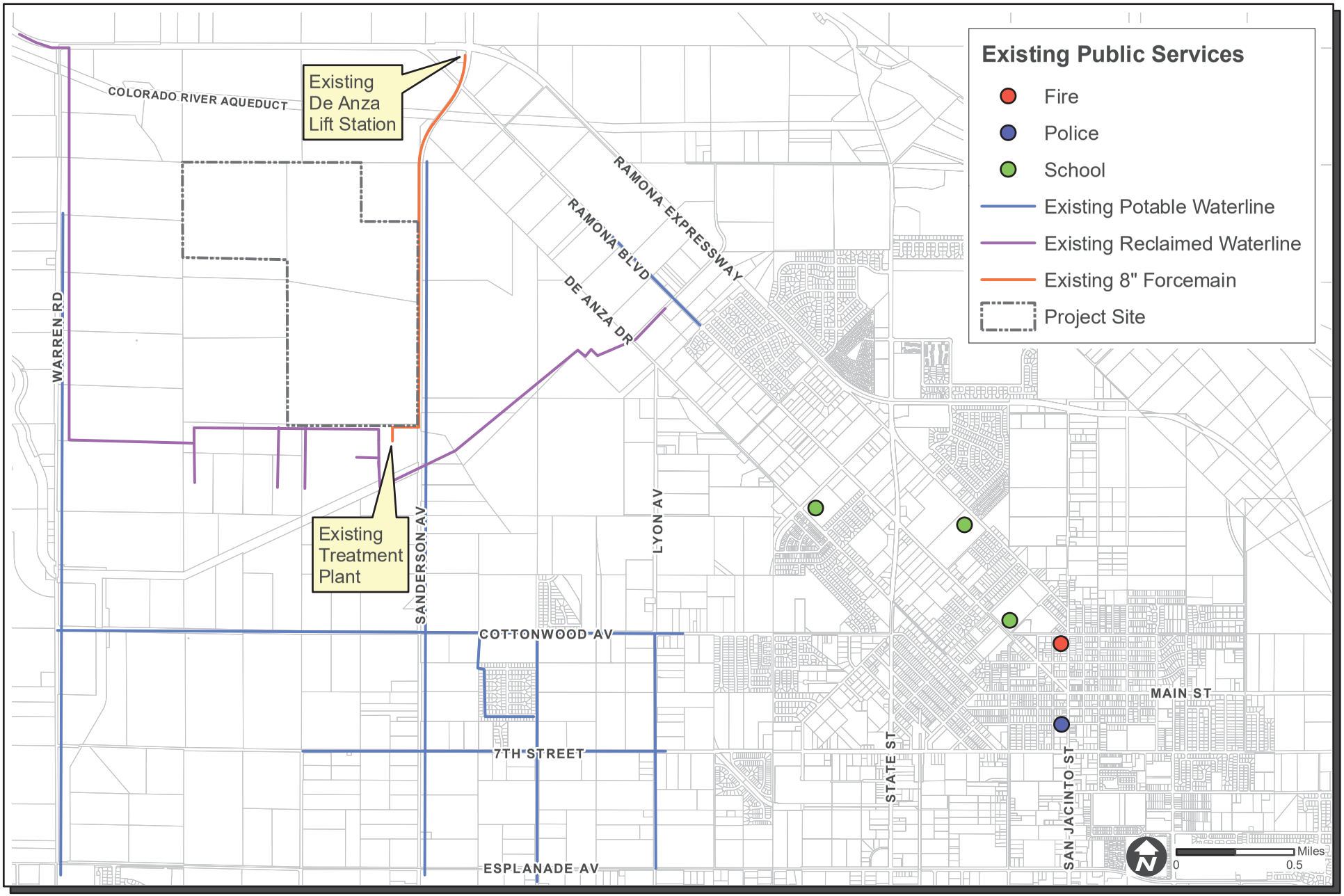
## 5.12.2 Fire Protection

### Existing Conditions

Fire protection services are provided throughout the City of San Jacinto under contract by the Riverside County Fire Department (RCOFD)/California Department of Forestry and Fire Protection (CAL Fire). The Departments provide services for fire suppression, emergency medical services, hazardous materials team response, fire prevention, public education, disaster preparedness and operations planning and staff training. The Riverside County Fire Department is staffed with 1,300 career employees (contracted from California Department of Fire), 300 Riverside County personnel, and 750 volunteer fire fighters, and currently serves approximately 1.6 million residents within an approximate area of 7,000 square miles. This service area consists of the unincorporated County areas, fourteen contract cities, one Community Service District, and one correctional corporation. The City of San Jacinto is served by Fire Station No. 25 located at 132 South San Jacinto Avenue, approximately 3 miles from the project area. Seven city firefighters (3 on duty each day) and approximately 5 volunteer personnel are assigned to Station No. 25 which maintains one city and one state fire engine. The City is also served by Station No. 78, located at 2450 West Cottonwood Avenue, approximately one mile south from the project site. This Station is currently staffed with 8 city firefighters and maintains one city fire engine for daily operations. (Personal Communication, Fire Captain Tim Chavez, June 25, 2009).

### Significance Criteria

1. ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?***




Village of San Jacinto EIR

## Existing Public Services and Facilities

FIGURE 5.12-1

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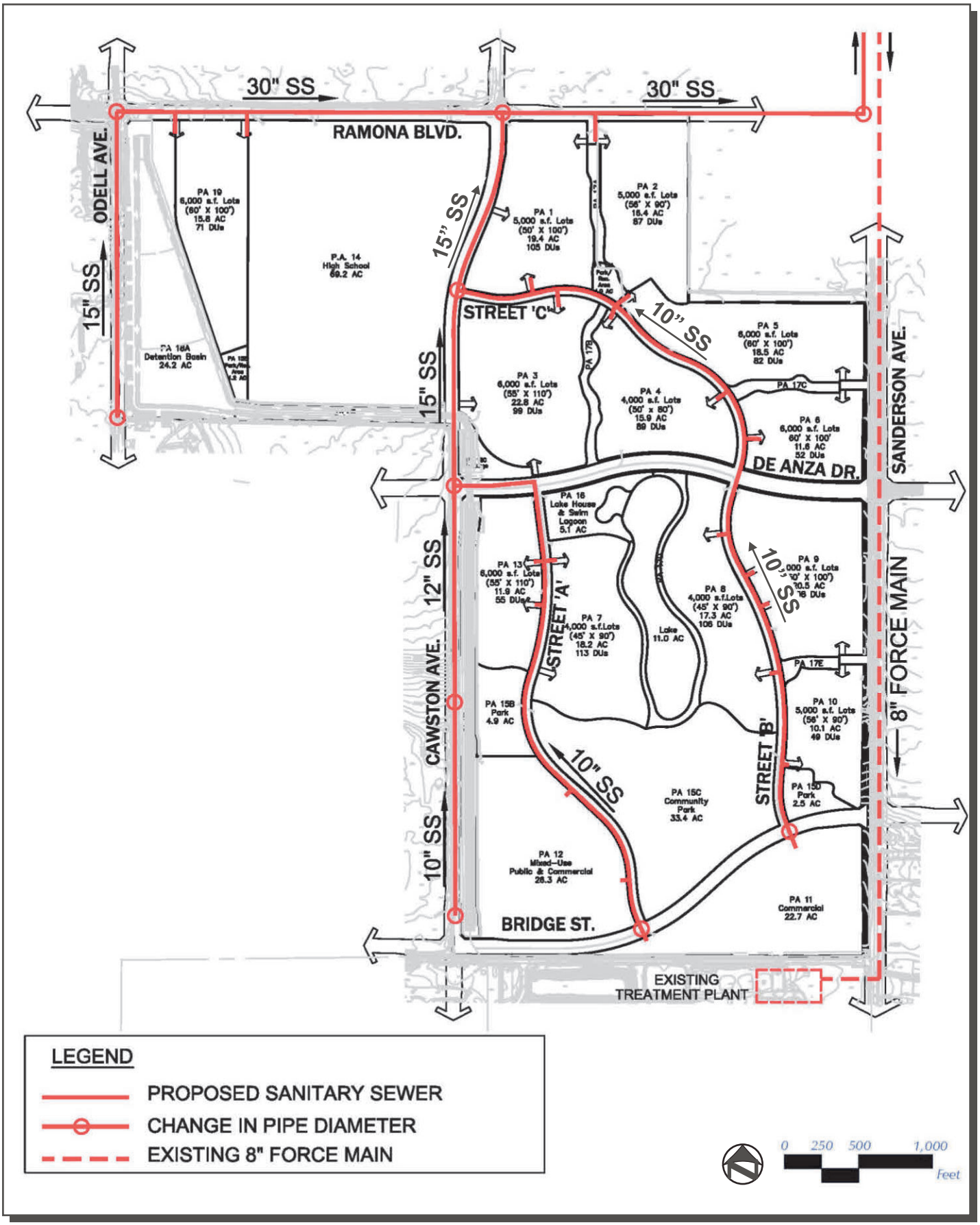


SPECIFIC MAP SOURCE: T&B PLANNING CONSULTANTS, February 2009

Villages of San Jacinto EIR

## Proposed Sanitary Sewer Facilities

FIGURE 5.12-2

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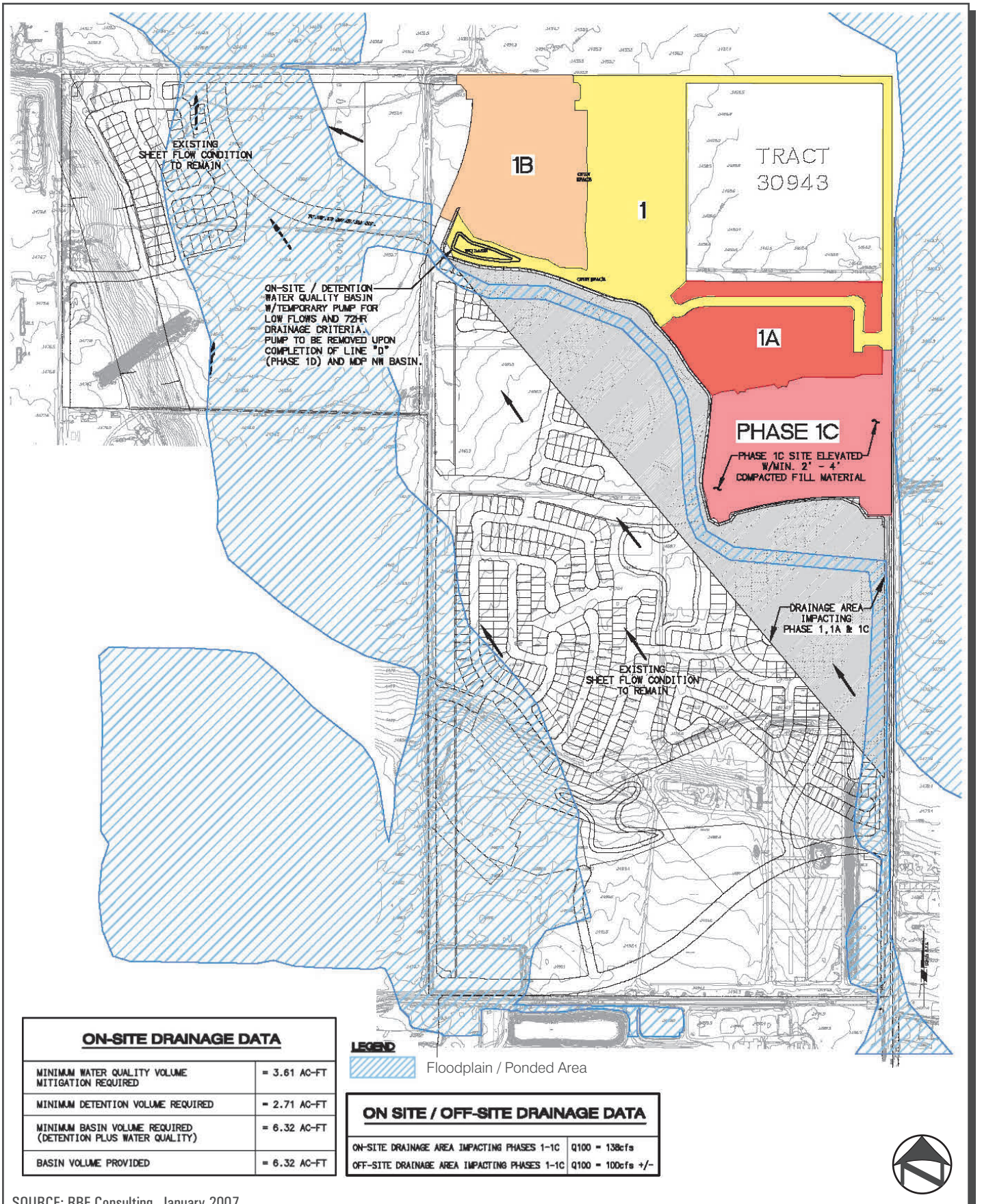


| ON-SITE DRAINAGE DATA | |
|---|---|
| MINIMUM WATER QUALITY VOLUME MITIGATION REQUIRED | = 3.61 AC-FT |
| MINIMUM DETENTION VOLUME REQUIRED | = 2.71 AC-FT |
| MINIMUM BASIN VOLUME REQUIRED (DETENTION PLUS WATER QUALITY) | = 6.32 AC-FT |
| BASIN VOLUME PROVIDED | = 6.32 AC-FT |

| ON SITE / OFF-SITE DRAINAGE DATA | |
|---|---|
| ON-SITE DRAINAGE AREA IMPACTING PHASES 1-1C | Q100 = 138cfs |
| OFF-SITE DRAINAGE AREA IMPACTING PHASES 1-1C | Q100 = 100cfs +/- |

SOURCE: RBF Consulting, January 2007

Villages of San Jacinto EIR

# Proposed Phase 1-1C Interim Drainage Scenario

FIGURE
5.12-3

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## Impacts

The proposed Villages of San Jacinto is located within an existing fire protection service area. The City of San Jacinto Development Impact Fee Justification Study, states that City staff has determined existing public facilities to be sufficient to meet the current health, safety, and welfare needs of existing residents and employees (City of San Jacinto 2009). The development of the Villages of San Jacinto would result in an incremental increase in the local demand for fire services. Calls for emergency fire protection and emergency medical services generated from the new development are expected to be similar to that of other suburban residential and commercial areas within the City. Potential hazards and medical emergencies can be adequately addressed with the types of equipment typically found at City fire stations (e.g., response vehicles, EMT equipment) and the proposed project's internal circulation network would provide access to individual home sites and commercial areas from major roadways and would facilitate any necessary community evacuation plans.

The development of the Villages of San Jacinto would result in an incremental increase in demand for fire protection and emergency medical services and, when combined with the increased demand associated with other potential development projects within the project area, additional fire personnel, support staff, and related equipment and facilities would ultimately be required to effectively meet the demands of the proposed development and that of anticipated future development in the surrounding area.

Although the development of the proposed Villages of San Jacinto will not independently impact existing fire services, the City recognizes that new residential and non-residential development in the City within the next 15 years will generate additional residents and employees which will result in increased service calls and increased demand for fire protection personnel and facilities. The City of San Jacinto Development Impact Fee Justification Study identifies the City's determination that four new fire stations and one new fire training facility, and a number of additional service vehicles, will be needed to adequately service new development in the City within the next 15-year period. The Development Impact Fee Justification Study evaluates the need for new fire facilities as it relates to the level of service demanded by new development, which varies in proportion to the equivalent dwelling unit (EDU) generated by a specific land use. When evaluating the level of service demand for new fire protection facilities associated with new development, specific land uses (single family residential, retail commercial and non-retail commercial) are assigned an EDU factor that is derived from the number of persons per residential unit or the number of employees per commercial acreage.

The proposed development would result in a minor incremental increase in demand for fire protection services and, with consideration of future cumulative increases in demand for fire protection services associated with other development proposals and area-wide growth, could

potentially result in decreased levels of service within the project area and city-wide. The proposed project would, therefore, result in potentially significant cumulative impacts to fire protection services. However, feasible mitigation has been identified which would require the developer to pay appropriate development impact mitigation fees which would be used exclusively for future facility improvements as discussed above to ensure that the development contributes its fair share of the cost of the fire facilities and equipment determined to be necessary to adequately accommodate new development in the City. Development of the proposed school site into single-family homes, allowing for a maximum of 1,329 dwelling units would create the highest demand for fire protection services. Implementation of *Mitigation Measure 5.12-a* would ensure that the appropriate mitigation fees are contributed by the development to aid in acquiring the additional resources needed to reduce potential cumulative impacts to fire services to less than significant levels. Therefore, cumulative impacts associated with fire protection services are potentially significant. In order to avoid potential impacts, mitigation is provided (see *Section 5.12.5, Mitigation Measures, Mitigation Measure 5.12-a*).

## Mitigation Measures

**5.12-a** The Developer shall be required to pay the Development Impact Mitigation Fees, as determined to be necessary by the development agreement, City Community Development Department and Public Works Department to offset impacts on City fire services. The current fee amount is outlined in *Table 5.12-1, Fire Facilities Fee Derivation Summary*.

**Table 5.12-1**
**Fire Facilities Fee Derivation Summary***

| Land Use | Residents/ Employees per Unit/Acre | EDUs per Unit/Acre | Number of Proposed EDUs/Acres | Development Impact Fee per Unit/Acre | Total Facility Impact Fee |
|---|---|---|---|---|---|
| Single Family | 3.05 | 1.00 | 1,329** | $212 | $281,748 |
| Retail Commercial | 15.03 | 4.93 | 22.7 | $1,042 | $23,653 |
| Non-Retail Commercial | 12.70 | 4.16 | 26.3 | $880 | $23,144 |
| | | | | **Total** | **$328,545** |

* Fees are based on those established by the City at the time this RDEIR No. 2 was prepared. Fees may be adjusted in the future as building permits are requested for each specific phase.
** Assumes worse-case scenario that the proposed school site will be developed into single-family homes

## Residual Impacts/Level of Significance after Mitigation

The proposed Villages of San Jacinto Specific Plan includes development standards that would apply to all future build-out of the planning area which specifically includes development elements and/or policies and measures to ensure that adequate public facilities and services such

as fire protection are provided in conjunction with build-out of the development. With implementation of the additional mitigation measure above, impacts to fire protection services/facilities would be less than significant.

## 5.12.3 Police Protection

**Existing Conditions**

The San Jacinto Police department, located approximately three miles from the project area at 160 West Sixth Street, provides police protection in the City of San Jacinto. As of May 2009, police services are provided throughout the City of San Jacinto under contract by the Riverside County Sheriff's Department. The police department employs a total of 48 staff employees, consisting of 39 sworn personnel (including the police chief, captains, detectives, juvenile officer, and training support supervisor) and 9 non-sworn personnel (community service officers, dispatch supervisor, dispatchers, communications specialist); and maintains 22 marked patrol units, 8 unmarked units and 3 volunteer automobiles. The Department operates in 3 shifts per day, consisting of 3 deputies and 1 sergeant. Emergency call response times for priority 1 calls in the City of San Jacinto average just over four minutes, which is considered slightly below the average and acceptable response times defined by the County Sheriff's Department for other contract City and County police departments. (Personal Communication, Sergeant Brian Tonseth, June 26, 2009).

**Significance Criteria**

2. ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?***

**Impacts**

The proposed project would result in a maximum of 1,329 residential dwelling units, assuming that the proposed high school would be developed with single-family homes. The development of the school site into single-family homes would create the greatest impact to police protection services and, therefore, that scenario is analyzed. In addition, the proposed project would include public parks and other passive recreational facilities, 22.7 acres of general commercial development, and 26.3 acres of mixed-use development. The proposed Villages of San Jacinto is serviced by the City of San Jacinto Police Department which currently maintains acceptable levels of emergency call response times as defined by the County Sheriff's Department for other contract City and County police departments. The development of the Specific Plan area would

result in an incremental increase in the local demand for police services. Police personnel have indicated that the project area is located in a relatively rural area of limited development where few calls are currently received and attended; therefore, project development will likely result in an increase in the Department's average response time when attending calls from the proposed development (Tonseth, personal communication, June 26, 2009).

The development of the Villages of San Jacinto would result in an incremental increase in demand on police services and, when combined with the demand associated with anticipated population growth and other potential development projects within the project area, additional police personnel, support staff, and related equipment and facilities would be required to effectively meet the demands of the proposed development as well as anticipated future development in the surrounding area. However, the increased demand that would occur with development of the Villages of San Jacinto would be a small portion of the anticipated area-wide increased demand associated with overall population growth and other development projects within the project area. Therefore, increased demand for police protection services resulting from development of the Villages of San Jacinto would be minor and incremental in nature and is not expected to substantially diminish existing service levels of police response or necessitate the construction of any new police facilities (or the expansion of any existing police facilities) that could entail changes in the physical environment. Therefore, impacts to police services would be less than significant.

Although the development of the proposed Villages of San Jacinto would not independently impact existing police services, the City recognizes that new residential and non-residential development in the City of San Jacinto within the next 15-years would generate additional residents and employees, which would result in increased service calls and increased demand for police protection personnel and facilities. The City of San Jacinto Draft Development Impact Fee Justification Study identifies the City's determination that one new police facility and a number of additional service vehicles would be needed to adequately service new development in the City within the next 15-year period. The Draft Development Impact Fee Justification Study evaluates the need for new police facilities as it relates to the level of service demanded by new development, which varies in proportion to the equivalent dwelling unit (EDU) generated by a specific land use. When evaluating the level of service demand for new police protection facilities associated with new development, land uses are assigned an EDU factor that is derived from the number of calls for police services generated for specific land uses (single family residential, multiple family residential, retail commercial, and non-retail commercial).

The proposed development would result in a minor incremental increase in demand for police services and, with consideration of future cumulative increases in demand for police services associated with other development proposals and area-wide growth, could potentially result in decreased levels of service within the project area and city-wide. The proposed project would,

therefore, contribute to potentially significant cumulative impacts to police services. However, feasible mitigation has been identified which would require the developer to pay appropriate development impact mitigation fees which would be used exclusively for the future facility improvements as discussed above to ensure that the development contributes its fair share of the cost of the police facilities and equipment determined to be necessary to adequately accommodate new development in the City. Therefore, cumulative impacts associated with police services are potentially significant. In order to reduce potential impacts, mitigation is provided (see *Section 5.12.5, Mitigation Measures, Mitigation Measure 5.12-b*).

### Mitigation Measures

**5.12-b** The Developer shall be required to pay the Development Impact Mitigation Fees, as determined to be necessary by the development agreement, City Community Development Department and Public Works Department to offset impacts on police services. Current fee amounts are summarized in *Table 5.12-2, Police Facilities Fee Derivation Summary*.

**Table 5.12-2**
**Police Facilities Fee Derivation Summary***

| Land Use | Call Generation Rate | EDUs per Unit/Acre | Number of Proposed EDUs | Development Impact Fee per Unit/Acre | Total Facility Impact Fee |
|---|---|---|---|---|---|
| Single Family | 3.05 | 1.00 | 1,329** | $198 | $263,142 |
| Retail Commercial | 15.03 | 4.93 | 22.7 | $2,012 | $45,672 |
| Non-Retail Commercial | 12.70 | 4.16 | 26.3 | $2,012 | $52,916 |
| | | | | **Total** | **$361,730** |

* Fees are based on those established by the City at the time this RDEIR No. 2 was prepared. Fees may be adjusted in the future as building permits are requested for each specific phase.
** Assumes worse-case scenario that school site will be developed into single-family homes

### Residual Impacts/Level of Significance after Mitigation

The proposed Villages of San Jacinto Specific Plan includes development standards that would apply to all future build-out of the planning area which specifically includes development elements and/or policies and measures to ensure that adequate public facilities and services such as police protection are provided in conjunction with build-out of the development. With implementation of the additional mitigation measure above, impacts to police protection services/facilities would be less than significant.

## 5.12.4 Parks and Recreation

### Existing Conditions

The City of San Jacinto owns and maintains three parks throughout the City including Salle Park (3.5 to 4 acres) located near Monte Vista School, Mistletoe Park (5 acres) located on Main Street, and Rancho San Jacinto Park (7 acres). In addition, a 36-acre regional park, owned and operated by the Valley Wide Park and Recreation District, is located at 901 W. Esplanade in San Jacinto and includes a 22,000-square-foot sports center, six lighted tennis courts, seven baseball/softball diamonds, six soccer fields, picnic areas with barbecues and play equipment, batting cages, administration offices, outside basketball and volleyball courts, and six horseshoe pits. None of these park facilities are located in the vicinity of the proposed Villages of San Jacinto project site.

The City's General Plan Land Use Map indicates that a total of approximately 44.7 acres of land area on the project site is currently designated for Open Space- Recreation (OS-R) land use. The General Plan indicates that the OS-R category allows for preservation of open space as well as outdoor recreational facilities.

### Significance Criteria

3. ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?***

### Impacts

As seen in *Table 5.12-3, Proposed Open Space Designation,* the proposed Villages of San Jacinto project includes a total of 105.4 acres of open space/recreation uses. There will be a total of 43 acres of parks provided on site, including three public parks (40.8 acres) and two private neighborhood parks (2.2 acres). The largest of these parks is the 33.4-acre public Community Park north of Bridge Street in the southern portion of the proposed development. Other recreational amenities include a 5.1-acre Lake House Beach Club and Swim Lagoon. The 11-acre private lake will be located adjacent to the Swim Lagoon. It will feature a concrete trail surrounding lake and connecting to the community park. A total of 9.6 acres of landscaped walkways or "paseos" will serve as pedestrian linkages between land uses and will create landscaped buffer areas between Planning Areas. These paseos will be a minimum of 50 feet wide and have 10-foot-wide concrete trails. The proposed Villages of San Jacinto would result in

an increase in the 44.7 acres of land area within the project area presently designated for open space to a total of 105.4 acres.

**Table 5.12-3**
**Proposed Open Space Designation**

| Land Use Type | Acres |
|---|---|
| Public Neighborhood and Community Parks | 40.8 |
| Private Neighborhood Parks | 2.2 |
| Paseos | 9.6 |
| Drainage/Basins | 15.2 |
| Lake Surfaces | 11.0 |
| Landscape Easements | 2.4 |
| Water Quality Detention Basin | 24.2 |
| **Total** | **105.4** |

The City's General Plan requires that developers of residential projects provide adequate parkland equal to 5 acres per 1,000 residents and non-residential development provide parkland equal to 2.5 acres per employee. Based on factors in the Development Fee Justification Study (*Table 5.12-1*), the project would result in up to 4,054 residents (1,329 units × 3.05 residents per dwelling unit) creating the need for 20 acres of parkland. Employees associated with the project would create the need for approximately 2 acres of parkland for a total of 22 acres. Since the project provides 41 acres of public parkland, it would exceed the General Plan requirement and no mitigation is required. It should be noted that, in the previous recirculated DEIR (January 2007), a park mitigation fee was required due to the private nature of proposed parks. Because the project provides adequate public parkland, this is no longer the case and the fee is not required. Therefore, development of the Villages of San Jacinto would have an overall beneficial impact to the supply of park land and recreational opportunities to new residents of this community and the public.

**Mitigation Measures**

None.

**Residual Impacts/Level of Significance after Mitigation**

The proposed Villages of San Jacinto Specific Plan includes development standards that would apply to all future build-out of the planning areas. These standards specifically include development elements and/or policies and measures to ensure that adequate public facilities and services, such as parks and recreational facilities, are provided in conjunction with build-out of the development. Therefore, impacts to parks and recreational facilities would be less than significant.

## 5.12.5 Schools

### Existing Conditions

The project site is located in the San Jacinto Unified School District (SJUSD) which serves approximately 7,000 students in eight primary K-5 schools, two middle 6–8 schools and two 9–12 high schools (website accessed May 5, 2009, http://www.sanjacinto.k12.ca.us/). The City's Land Use Map indicates that two future school sites are planned at the project site.

The closest existing elementary school site to the project area is De Anza Elementary located at 1089 De Anza Drive. The proposed project includes a potential new high school facility which would serve students of the proposed development. Should the proposed high school site not be included in the final build-out of the development, San Jacinto High School, located at 500 Idyllwild Drive, would accommodate high schools students from the project area. Monte Vista Middle School, located at 181 North Ramona Boulevard, would accommodate middle school students from the project area.

According to the San Jacinto Unified School District Residential Development School Fee Justification Study, prepared by David Taussig & Associates, Inc., February 13, 2004, the overall capacity of the District facilities was 7,456 students (including the addition of 7 portables at the elementary level), determined per Section 17071.10 of the California Education Code. The Study determined that of the 7,456 seats, 4,065 were at the elementary level, 1,418 were at the middle-school level, and 1,973 were at the high school level. The study determined that student enrollment in the 2003–2004 school year exceeded the District's facilities at the elementary level, but fell 354 and 158 seats short of the District's middle and high school capacity levels, respectively.

District personnel have indicated that facilities of the San Jacinto Unified School District currently exceed design capacity and the District has been adding additional portable classrooms to accommodate enrollment levels. Of the thirty portable classrooms currently planned to be installed, twenty will be used for elementary students and ten will be used for middle school students. In addition, the District is currently pursuing two new elementary school sites; however, these planned school sites are incorporated into other development proposals and would not accommodate new students generated by the proposed development (Arthur 2004).

### Significance Criteria

4. ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios,***

***response times or other performance objectives for fire other public facilities such as schools?***

## Impacts

The proposed project would result in development of a maximum 1,329 dwelling units, assuming worse case that the proposed school site is developed into single-family homes. The proposed project would also include 22.7 acres of general commercial development, a 26.3-acre mixed-use development, and would also potentially include a 69.1 acre site for a new high school that would accommodate up to 2,000 students. However, as discussed above, existing school facilities in the City are currently at capacity or exceeding capacity at all education levels and the development of future residences on the property would produce new demand for school resources. As such, new development in the City of San Jacinto would result in an increase in residents and employees within the City and would thereby increase demand on school facilities potentially resulting in a significant impact to schools which are already at or approaching maximum enrollment capacity levels.

The San Jacinto Unified School District utilizes student generation rates as published in the District's Residential Development School Fee Justification Study and the Commercial/ Industrial Development School Fee Justification Study to determine the projected number of students that would be generated for a new development proposal. *Table 5.12-4, Residential Project Student Generation,* contains the anticipated student generation that would result from the proposed residential development and *Table 5.12-5, Commercial Project Student Generation,* contains the anticipated student generation that would result from the proposed commercial development. The total projected student generation is based on student generation factors contained in the Residential Development School Fee Justification Study and the Commercial/Industrial Development School Fee Justification Study as provided by the School District.

**Table 5.12-4**
**Residential Project Student Generation**

| School District/ Grade Level | Residential Unit Type | # of Units | Generation Factor (Students/Unit) | Total Students |
|---|---|---|---|---|
| **Proposed Project** | | | | |
| Elementary | | | | |
| K–6 | Single-Family | 1,329[1] | 0.4832 | 642 |
| Middle School | | | | |
| 7–8 | Single-Family | 1,329[1] | 0.1320 | 175 |
| High School | | | | |
| 9–12 | Single-Family | 1,329[1] | 0.2302 | 306 |
| | | | **Total Student Generation** | **1,123** |

[1] Assumes worse-case scenario that proposed school site will be developed into single-family homes

Based on the proposed number and type of residential units and student generation rates as presented in *Table 5.12-3, Residential Project Student Generation*, the proposed project would generate 642 elementary school students, 175 middle school students and 306 high school students. A total of 1,123 students would be generated by the proposed residential development. In addition, based on the proposed land use type and the amount of new commercial square footage, and student generation rates as presented in *Table 5.12-5, Commercial Project Student Generation,* the proposed project would generate 93 elementary school students, 25 middle school students and 45 high school students for a total of 163 new students and a combined total of 1,286 students.

**Table 5.12-5**
**Commercial Project Student Generation**

| School District/ Grade Level | Proposed Land Use | Square Footage | Student Generation/ 1,000 Square Feet | Total Students |
|---|---|---|---|---|
| **Elementary** | | | | |
| K–6 | Retail | 247,000 | 0.1188 | 29 |
| | Mixed-Use | 343,400 | 0.1856 | 64 |
| | | | *Subtotal K–6* | *93* |
| **Middle School** | | | | |
| 7-8 | Retail | 247,000 | 0.0322 | 8 |
| | Mixed-Use | 343,400 | 0.0503 | 17 |
| | | | *Subtotal 7–8* | *25* |
| **High School** | | | | |
| 9-12 | Retail | 247,000 | 0.0572 | 14 |
| | Mixed-Use | 343,400 | 0.0895 | 31 |
| | | | *Subtotal 9–12* | *45* |
| | | | **Total Student Generation** | **163** |

The proposed project would be required to pay state-mandated school facilities fees (per Government Code Section 65996) at a maximum of $4.46 per residential square foot and $0.47 per square foot of new commercial development per current requirements. These fees may be adjusted by the state in the future as building permits for each phase are requested. Payment of such fees represents full mitigation for impacts to schools (see *Section 5.12.5, Mitigation Measures, Mitigation Measure 5.12-c*). Additionally, the proposed project would potentially include the designation of a new 69.1-acre high school site, to be located in the northwest portion (PA 14) of the site, which would accommodate the additional high school students that would be generated by the proposed development.

As discussed above, it is anticipated that the proposed high school site would accommodate 2,000 students. Provision of this school facility in the Villages of San Jacinto Specific Plan would serve new students generated by the proposed development as well as students from adjacent neighborhoods. Payment of state mandated fees will help to offset the cost of this facility.

**Mitigation Measures**

**5.12-c** The Developer shall be required to pay the Development Impact Mitigation Fees, as determined to be necessary by the development agreement, City Community Development Department, Public Works Department and San Jacinto School District, to offset impacts on school facilities.

Requiring payment of the school facility mitigation fees would aid in acquiring the additional resources to provide adequate school facilities necessary to accommodate existing and future residents. Therefore, contribution of the mitigation fees by the developer would ensure that adequate mitigation is provided to reduce potential direct and cumulative school impacts to less than significant levels. Should the developer assist the City in facilitating the construction of the school site identified in the Specific Plan, the City may decide to waive or reduce some portion of the school mitigation fees typically required to an appropriate lesser amount in consideration of the partial mitigation provided by developer-assisted, on-site school facility construction.

**Residual Impact/Level of Significance after Mitigation**

The proposed Villages of San Jacinto Specific Plan includes development standards that would apply to all future build-out of the planning area which specifically includes development elements and/or policies and measures to ensure that adequate public facilities and services such as schools are provided in conjunction with build-out of the development. With implementation of the additional mitigation measure above, impacts to schools would be less than significant.

## 5.12.6 Wastewater Treatment

**Existing Conditions**

Wastewater treatment for the City of San Jacinto is provided by the Eastern Municipal Water District (EMWD) Hemet/San Jacinto Regional Water Reclamation Facility. The facility collects and treats municipal sewage and produces recycled water for reuse. According to the Eastern Municipal Water District's wastewater treatment website page for the Hemet/San Jacinto Regional Water Reclamation Facility the facility currently maintains a typical daily treatment flow of 7.8 million gallons a day (MGD) and a maximum raw sewage treatment capacity of 11

MGD. The facility is slated for an expansion to provide a maximum of 27 MGD treatment capacity to accommodate projected future sewage production from growth in the facility's service area (EMWD, http://www.emwd.org/news/Insights/insights_hemet-san_jacinto.pdf accessed May 5, 2009). All EMWD facilities are currently determined to be in compliance with Regional Water Quality Control Board wastewater treatment requirements. Currently, there is an existing force main located within the Sanderson Avenue right-of-way along the east property boundary. The existing De Anza lift station located at the northeast corner of the project area conveys flows through the sewer main to the Hemet/San Jacinto Regional Water Reclamation Facility located directly south of the project site.

**Significance Criteria**

5. ***Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?***

6. ***Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?***

7. ***Would the project result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

**Impacts**

Wastewater treatment for the City of San Jacinto is provided by the EMWD Hemet/San Jacinto Regional Water Reclamation Facility. The facility collects and treats municipal sewage and produces recycled water for reuse, maintaining a typical daily treatment flow of 7.8 MGD and a raw sewage treatment capacity of 11 MGD. The facility is slated for an ultimate expansion of 27 MGD to accommodate projected future sewage production from growth in the facility's service area. All EMWD facilities are currently determined to be in compliance with Regional Water Quality Control Board wastewater treatment requirements.

Wastewater production of the proposed project would be conveyed via on-site infrastructure improvements and the City's existing public sewer system facilities to the Hemet/San Jacinto Regional Water Reclamation Facility for treatment. The proposed development would include new on-site sewer infrastructure improvements including 12- to 30-inch sewer lines that would gravity flow via the proposed internal roadways to within a 30-inch trunk line in Ramona Boulevard and then continue to gravity flow toward the existing De Anza lift station, which would then travel through a force main to the Hemet/San Jacinto Regional Water Reclamation Facility for treatment (see *Figure 5.12-2, Master Sewer Plan*).

Based on an average sewage generation rate of 300 gallons per day per household, and 1,700 gallons per day per acre of commercial/mixed-use development, the proposed project's maximum of 1,329 residential units and 49 acres of commercial/mixed-use would generate 482,000 gallons per day of wastewater (based on factors from RBF Consulting, November 9, 2005). This wastewater would be treated by the Hemet/San Jacinto Regional Water Reclamation Facility. This assumes that the school site would be developed into single-family residential (the 313 dwelling units that would be built at the school site would generate more wastewater than a school and thus represents a worst case scenario). As described above, the Hemet/San Jacinto Regional Water Reclamation Facility currently treats up to 7.8 MGD and has a current capacity of 11 MGD and ultimate capacity of 27 MGD. The quantity of wastewater generated by the proposed project would not exceed the current sewage treatment capacity, assuming a worst-case scenario that no expansion of the facility takes place prior to project completion. Therefore, the proposed project's impacts related to availability of existing sewer treatment services would be less than significant.

The Specific Plan identifies the following conditions for development in the Specific Plan area:

- All water and sewer lines will be designed per the Eastern Municipal Water District's Water and Sewer System Planning and Design Criteria dated July 2, 2007, and September 1, 2006, respectively.
- The infrastructure system and phasing shall be designed and installed consistent with the City of San Jacinto Engineering Department requirements.
- The Eastern Municipal Water District will manage the development of infrastructure for the project area.
- Water and sewer facilities shall be installed in accordance with the requirements and specifications of the San Jacinto Engineering Department and the Riverside County Health Department.

The quantity of wastewater generated by the proposed development is not expected to exceed the sewage treatment capacity and the proposed Specific Plan policies require that a written agreement with EMWD be executed which states that the provision of services shall be available prior to the recordation of any tract maps. The Specific Plan policies further require that new sewer facilities are developed consistent with EMWD's planning and design criteria, and in accordance with the City Engineering Department. Therefore, all necessary facility infrastructure will be appropriately designed and constructed to serve the proposed development. Impacts related to sewer services would be less than significant.

### Mitigation Measures

None.

### Residual Impact/Level of Significance after Mitigation

The proposed Villages of San Jacinto Specific Plan includes development standards that would apply to all future build-out of the planning area which specifically includes development elements and/or policies and measures to ensure that adequate public facilities and services such as wastewater are provided in conjunction with build-out of the development. Therefore, impacts to wastewater systems would be less than significant.

## 5.12.7 Storm Drain Facilities

### Existing Conditions

Stormwater runoff generated in the Specific Plan area currently drains primarily via sheet flow in a northerly direction toward the San Jacinto River. Existing drainage features on or near the project site consist of an open channel adjacent to the east property boundary that runs along Sanderson Avenue that conveys runoff north toward the San Jacinto River, and a depressed portion of land located at the northwest section of the project area which receives drainage across the site.

### Significance Criteria

8. ***Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

### Impacts

The project site generally drains in a northwesterly direction toward the San Jacinto River, primarily in a sheet flow pattern. The northerly portion of the project site is within the 100-year floodplain. The Drainage Plan provides 100-year flood protection for the project site for the interim and ultimate condition as described below.

#### *Interim Condition*

The interim condition assumes that surrounding areas remain undeveloped (such as in the existing condition), and the on-site development of the Villages of San Jacinto and corresponding infrastructure is independently functional. This includes the construction of two interim facilities and the reconstruction of an earthen roadway east of the De Anza Drive and

Sanderson Avenue intersection. These interim drainage facilities are required to control and convey the interim flow rates originating from the off-site area. Interim facilities include Culvert V, which will provide 100-year flood protection for Bridge Street; Culvert E, located north of the intersection of Sanderson Avenue and the Casa Loma Canal.

The Specific Plan identifies the following conditions for development of the Villages of San Jacinto:

- Drainage and flood control facilities and improvements shall be provided in accordance with City of San Jacinto and Riverside County Flood Control and Water Conservation District (RCFC & WCD) requirements.
- Project drainage facilities shall be publicly maintained. The City of San Jacinto will maintain storm drain systems that are equal to or less than 36-inches in diameter and all roadway culverts. RCFC & WCD will maintain all open channels and subsurface storm drains greater than 36-inches in diameter.
- RCFC & WCD will maintain lines and grades for all open channels. The City of San Jacinto will be required to maintain all landscape features and appurtenances. Additionally, the City will maintain turf reinforcement mats that will be used for stability of channel invert erosion.
- All projects proposing construction activities including: clearing, grading, or excavation that results in the disturbance of at least five acres total land area, or activity which is part of a larger common plan of development of five acres or greater, shall obtain the appropriate NPDES construction permit and pay the appropriate fees. All development within the Specific Plan boundaries shall be subject to future requirements adopted by the City to implement the NPDES program. Mitigation measures may include, but are not limited to: covered storage of all outside storage facilities; vegetated swales; monitoring programs; etc.

*Section 5.8, Water Quality and Hydrology*, indicates that improvements to the stormwater collection system and installation of a new on-site drainage system would be necessary to provide adequate storm drainage within the Villages of San Jacinto (see *Figure 5.8-2, On-Site Drainage Facilities*). The Specific Plan incorporates policies regarding control of stormwater runoff to reduce the overall quantity of stormwater and the Plan includes several specified components to improve drainage conditions and to ensure that drainage facilitates are provided to adequately control runoff from the site.

**Mitigation Measures**

See Mitigation Measures in *Section 5.8.5*, *Water Quality and Hydrology,* for measures related to provision of adequate storm drainage facilities.

**Residual Impact/Level of Significance after Mitigation**

The proposed Villages of San Jacinto Specific Plan includes development standards that would apply to all future build-out of the planning areas which specifically includes development elements and/or policies and measures to ensure that adequate public facilities and services such as storm drainage are provided in conjunction with build-out of the development. With implementation of the mitigation measures in *Section 5.8.5, Water Quality and Hydrology Mitigation Measures*, impacts to stormwater drainage systems would be less than significant.

## 5.12.8 Domestic Water Supply

The following discussion is based in part on the previously referenced Water Supply Assessment Report (December 15, 2004), and a letter from EMWD confirming their previous conclusions (May 11, 2009).

**Existing Conditions**

Domestic water supply is provided to the City of San Jacinto by the Eastern Municipal Water District (EMWD) which provides domestic and agricultural water supply, wastewater collection and treatment service, and recycled water in a 555 square mile service area from Moreno Valley to Temecula, and from Hemet and San Jacinto to Good Hope and Mead Valley. The EMWD serves a population of approximately 675,000 in Western Riverside County and generally provides approximately 110 million gallons of water per day for domestic and agricultural supplies and for other water agencies in the area (Eastern Municipal Water District, http://www.emwd.org/news/Insights/Insights4-09.pdf, accessed May 5, 2009). Water resources used to sustain the existing agricultural operations is provided primarily as recycled water by the EMWD, which is supplemented by groundwater produced by three on-site wells for which there are no restrictions on private use. Currently, irrigation for the turf farm operation consists of a combination of 95% reclaimed water and 5% groundwater.

The City is aware that some time has passed since the project's Water Supply Assessment (WSA) was adopted (December 15, 2004); therefore, the City has confirmed with EMWD that its WSA conclusions are still valid (letter dated May 11, 2009). The original WSA and confirmation letter are contained in Appendix K. The City has also taken into account other developments in water supply that may affect the project area and has provided this analysis below.

***Delta Smelt: Kempthorne Case and New FWS Biological Opinion***

On May 25, 2007, the United States District Court for the Eastern District of California ruled that the biological opinion prepared by the United States Fish and Wildlife Service (FWS) concerning the effects of long-term operations of the State Water Project (SWP) and the federal Central Valley Project (CVP) upon delta smelt was invalid under the federal Endangered Species Act. (Natural Resources Defense Council v. Kempthorne, et al., USDC Case No. 05-CV-1207-OWW.) On December 14, 2007, the court issued an Interim Remedial Order and Findings of Fact and Conclusions of Law requiring that the SWP and CVP operate according to certain specified criteria until a new biological opinion for the delta smelt was issued. Based on estimates prepared by the California Department of Water Resources (DWR), MWD estimated that for the year 2008, it would be subject to reductions in SWP supplies of up to a 30% as a result of the Kempthorne order, depending on prevailing hydrologic conditions and migratory status of the delta smelt.

On December 15, 2008, the FWS issued a new B.O. regarding the effects of CVP and SWP operations on delta smelt. According to preliminary information published DWR, which operates the SWP, the new B.O. will continue reductions in SWP and CVP exports from the Delta that were in effect since December 2007 under the federal court order in Kempthorne. DWR has estimated that under average water year conditions, the "most likely" result of the new B.O. is a 1% increase in the amount of available SWP supplies in comparison to the Kempthorne restrictions, although a worst-case scenario could result in a 13% decrease in available supplies. Under dry water year conditions, DWR states the "most likely" result of the new B.O. is the exact same type of potential restrictions as set forth in Kempthorne, although restrictions could possibly increase by 21% under a worst-case scenario. (See www.water.ca.gov/news/newsreleases/2008/121508swpimpacts.pdf.) As with the Kempthorne order, potential water supply restrictions under the new B.O. are dependent on various factors that cannot be predicted with a high degree of certainty, including hydrologic conditions, migratory and reproductive patterns of delta smelt, and other factors affecting delta smelt abundance in the Delta.

Due to a number of alleged scientific and other deficiencies in the new B.O., water agencies holding contracts to receive SWP supplies from DWR, among others, filed complaints in the Federal District Court for the Eastern District of California challenging the B.O. (See, *San Luis Delta-Mendota Water Authority et al. v. Salazar et al.*, Case No. 1:09-cv-407 (E.D. Cal., filed Mar. 3, 2009); *State Water Contractors v. Salazar, et al.*, Case No. 1:09-CV-422 (E.D. Cal., filed Mar. 4, 2009); *Coalition for a Sustainable Delta et al. v. United States Fish and Wildlife Service et al.*, Case No. 1:09-cv-480 (E.D. Cal., filed Mar. 12, 2009; amended complaint filed May 28, 2009); *Metropolitan Water District v. United States Fish and Wildlife Service*, Case No. 1:09-CV-631 (E.D. Cal., filed Apr. 8, 2009); and *Stewart & Jasper Orchards et al. v. United*

*States Fish and Wildlife Service et al.*, Case No. 1:09-cv-892 (E.D. Cal., filed May 21, 2009)) These litigation matters challenging the validity of the new B.O. give rise to the additional possibility that SWP delivery reductions as set forth by the *Kempthorne* order could be put back in place pending final legal resolution of the new B.O. In light of these various factors, the degree to which SWP deliveries may be reduced under the new B.O. for delta smelt remains somewhat speculative at this time.

***Salmon/Anadromous Species: Gutierrez Case and New NMFS Biological Opinion***

SWP and CVP operations have also been challenged in a separate litigation matter, entitled *Pacific Coast Federation of Fishermen's Association / Institute for Fisheries Resources, et al. v. Gutierrez, et al*., (USDC Case No. 1:06-CV-00245-OWW). In October 2004, the National Marine Fisheries Service (NMFS) issued a "no jeopardy" determination and biological opinion (B.O.) analyzing impacts to threatened winter and spring-run salmon and steelhead trout in connection with SWP and CVP operations in the Delta through the year 2030. As with the *Kempthorne* case above, the project/action evaluated in the NMFS B.O. included current and future Delta pumping operations under the Operations and Criteria Plan (OCAP). In August 2005, several environmental plaintiff groups filed suit in federal court against NMFS and the Secretary of Commerce challenging the validity of the B.O. Several public agencies that hold contracts to receive water from the CVP and SWP intervened in the action. The plaintiffs later filed an amended complaint and thereafter the case was stayed for a period of time while the parties attempted to negotiate a settlement of the issues. The stay was later lifted and, in May 2007, the plaintiffs filed a motion for summary judgment to invalidate the B.O. without a trial. Similar to the situation discussed above in the *Kempthorne* case, NMFS and the Bureau of Reclamation decided, notwithstanding the outcome of the litigation, to reinitiate ESA Section 7 consultation regarding how the projects affect the protected anadromous species. Thus, the two agencies are now preparing the necessary documentation to produce a new B.O. A hearing on the summary judgment motions in the *Gutierrez* case was held on October 3, 2007, and on April 16, 2008, the Court issued its decision invalidating the NMFS B.O. for failing to comply with the federal ESA. As with *Kempthorne*, the Court did not vacate the B.O., meaning that CVP and SWP operations are authorized to continue pending the preparation of a new B.O. and any interim requirements the Court may impose. Proceedings were scheduled thereafter to determine whether interim restrictions such as those ordered in the *Kempthorne* case would be required pending the new B.O. On July 18, 2008, Judge Wanger issued Findings of Fact and Conclusions of Law which determined, among other things, that additional water supply restrictions beyond those required in *Kempthorne* (and now the new B.O.) are not required at this time. The Court again reached the same conclusion in a subsequent decision dated October 21, 2008.

On June 4, 2009, NMFS issued a new B.O. regarding the effects of CVP and SWP operations on protected salmon, steelhead, green sturgeon, and resident killer whales. According to draft

information published by DWR, NMFS has calculated that the B.O. has the potential to reduce combined CVP and SWP deliveries from the Delta by 5 to 7%, while DWR has initially estimated that average year reductions have the potential to range closer to 10%, in addition to restrictions imposed under the FWS B.O. for delta smelt. (See, http://www.water.ca.gov/news/newsreleases/2009/060409salmon.pdf.) As with the FWS B.O. for delta smelt and the Incidental Take Permit for longfin smelt, potential water supply restrictions under the NMFS B.O. are dependent on various factors that cannot be predicted with a high degree of certainty, including hydrologic conditions in the Delta region, migratory and reproductive patterns of protected anadromous fish, and other factors affecting the abundance of those species in the Delta. In June 2009, legal challenges were filed against the NMFS B.O. in the United States District Court for the Eastern District of California alleging, among other things, that the water supply restrictions set forth in the B.O. were established in violation of the federal Endangered Species, the federal Administrative Procedures Act, and other laws. (See, e.g., *San Luis & Delta Mendota Water Authority, et al. v. Locke, et al.*, Case No. 1:09-CV-01053-OWW-DLB; *Stockton East Water District v. United States National Oceanic and Atmospheric Administration, et al.*, Case No. 1:09-CV-01090-OWW-DLB.) The above-mentioned cases and other potential litigation that could be filed against the NMFS B.O. call into question whether the water supply restrictions in the B.O. can be imposed against the SWP. For these reasons, the degree to which SWP deliveries may be reduced under the new NMFS B.O. species remains speculative at this time.

***Longfin Smelt: California Department of Fish and Game Incidental Take Permit***

Another factor having the potential to affect the availability and reliability of SWP supplies is the March 4, 2009, decision by the California Fish and Game Commission (Commission) that listing the longfin smelt as a "threatened" species is warranted under the California Endangered Species Act (CESA). The longfin smelt is a small pelagic fish species, related to the delta smelt, whose habitat includes the Sacramento-San Joaquin Delta, among other areas along the West Coast. Under CESA, a threatened species is a native species or subspecies that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future absent special protection and management efforts. CESA sets forth a general prohibition against the take of a threatened species except as otherwise authorized under CESA. One such authorization is provided by California Fish and Game Code section 2081, wherein the California Department of Fish and Game (DFG) may authorize the incidental taking of a threatened species in connection with an otherwise lawful activity through the issuance of a permit. On February 29, 2009, DFG issued Incidental Take Permit No. 2081-2009-001-03 (Permit) to DWR as the owner and operator of the SWP. The Permit applies to the ongoing and long-term operation of the SWP's facilities in the Delta, including Clifton Court Forebay, the John E. Skinner Fish Facility, the Harvey O. Banks Pumping Plant and the North Bay Aqueduct,

and authorizes DWR to incidentally take longfin smelt in connection with its operation of the SWP, provided the terms and conditions of the Permit are satisfied. The Permit imposes operating restrictions on the SWP facilities that are based in large part on the restrictions imposed on the SWP by the new B.O. issued by FWS for delta smelt (see above). As with the B.O. for delta smelt, potential water supply restrictions under the Permit are dependent on various factors that cannot be predicted with a high degree of certainty, including hydrologic conditions in the Delta region, migratory and reproductive patterns of longfin smelt, and other factors affecting longfin smelt abundance in the Delta. DWR has not indicated whether any particular reductions in SWP exports are likely to result from the Permit. Due to a number of alleged scientific and other deficiencies in the Permit, an organization of water agencies holding contracts to receive SWP supplies from DWR has filed a complaint in Sacramento County Superior Court challenging the Permit. (See, *State Water Contractors v. California Dept. of Fish and Game, et al*., Sac. Sup. Ct. Case No. 34-2009-80000203.) That case has brought DFG's ability to enforce the Permit into question. In light of the foregoing factors, potential reductions in SWP supplies resulting from DFG's Incidental Take Permit for longfin smelt remain speculative at this time.

***SWP Supply Reliability: DWR 2007 SWP Delivery Reliability Report***

While various factors can affect the availability and reliability of imported water supplies from the State Water Project (SWP), the likelihood of those supplies being available to MWD over the short, intermediate and long-term periods during normal, single-dry and multiple-dry year hydrologic cycles have been extensively analyzed and addressed by the California Department of Water Resources (DWR). In fact, commencing in 2003 and every two years thereafter, DWR prepares a SWP Delivery Reliability Report that is intended to assist local agencies, cities and counties in conducting water supply analyses to demonstrate whether their water supplies are sufficient for development projects subject to the CEQA review process. DWR's most recent 2007 Final SWP Delivery Reliability Report (DWR Reliability Report) was published in August 2008.

According to the DWR Reliability Report, the long-term average delivery of contractual amounts of SWP Table A supply is expected to range from 63% under current (2007) conditions to between 66 and 69% under future (2027) conditions. (DWR Reliability Report, pp. 44-45, 51-52, 55-56, 78.) Within that long-term average, SWP Table A deliveries can range from 6% (single dry year) to 90% of contractual amounts under current conditions (DWR Reliability Report, p. 44), and from 6 to 7% (single dry year) to 100% of contractual amounts under future conditions. (DWR reliability Report, pp. 51, 55-56.) The analyses provided in the DWR Reliability Report are based upon 82 years of historical records for rainfall and runoff that have been adjusted to reflect the current and future levels of development in the sources areas by analyzing land use patterns and projecting future land and water uses. (DWR Reliability Report, p. 20.) Of key

importance, the studies utilized in the DWR Reliability Report for current through future conditions (20-year projection) assume and account for current facility and institutional limitations facing the SWP, such as: water quality issues; fishery protections; export curtailments and other requirements under State Board Water Rights Decision 1641; the Vernalis Adaptive Management Plan (VAMP) as described in the 2004 Operations Criteria and Plan (OCAP); recent court-ordered Delta flow targets in Old and Middle Rivers to protect listed fish species; and potential effects of Delta levee failures and other seismic or flood events. (See, e.g., DWR Reliability Report, pp. 8, 16, 18-21, 27, 30, 32, 35, 37-39, Appendices A and B.)

In addition, DWR's long-term SWP delivery reliability analyses incorporate assumptions to account for potential supply shortfalls related to global climate change factors. (Ibid.) The DWR Reliability Report accounts for potential affects of future climate change on SWP deliveries through the year 2050 by examining four climate change scenarios: weak temperature warming and weak precipitation increase in California under model PCM; modest warming and modest drying under model PCM; modest warming and modest drying under model GFDL v. 2.0; and weak temperature warming and weak precipitation increase in California under model GFDL v. 2.0. (See DWR Reliability Report, pp. 1, 17, 27, 37-39, 43, Appendices A and B.) Thus, the effects of these institutional, administrative and court-ordered reductions in SWP exports, as well as the potential effects of long-term global climate change, have been extensively analyzed and accounted for in the supply forecasts set forth by DWR's 2007 Final SWP Delivery Reliability Report.

The 29 SWP Contractors and water agencies throughout California utilize the DWR Reliability Report in their water supply analyses, planning and reporting obligations. Indeed, both MWD's Regional UWMP and EMWD's 2005 UWMP acknowledge that SWP entitlements differ from actual SWP deliveries made available to SWP Contractors. (See, MWD Regional UWMP, pp. III-41 to III-50; EMWD 2005 UWMP, pp. 32-35.) SWP Contractors, including MWD, generally anticipate that the variability of SWP supplies may increase in the future as the Contractors request their maximum Table A amounts and as system-wide issues such as Delta exports are resolved. At the same time, however, SWP Contractors such as MWD who utilize groundwater basins to recharge portions of their SWP deliveries, as well as other exchange and transfer arrangements, can plan to receive long-term average deliveries of 66 to 69% of their SWP Table A allotments. (2007 DWR Reliability Report, pp. 39-40.) As indicated above, MWD has incorporated DWR's SWP reliability studies and analyzed several other key factors in developing its conservative estimate of long-term SWP deliveries. (MWD Regional UWMP, pp. III-41 to III-50.)

***Drought Conditions: Regional Water Supply Planning, Statewide Drought Declarations, and Water Agency Responses***

In its role as the supplemental water supplier to Southern California, MWD faces ongoing challenges in meeting the region's need for reliable, high-quality water supplies. (MWD Regional UWMP, p. II-1.) Increased environmental regulations and competition for water from outside the region have resulted in changes in delivery patterns and timing of availability of imported water supplies. (Id.) Because of competing needs and uses associated with these resources, and because of concerns related to regional water operations, MWD has undertaken a number of planning initiatives over the past ten years. MWD's Regional UWMP discusses and analyzes those efforts. Particularly important to MWD's mission is its coordinated approach to regional planning through the Integrated Resources Plan (IRP). The outcome of the IRP process was a "Preferred Resource Mix" which would ensure water supply reliability to MWD and its member agencies reliability. As part of the IRP, MWD has developed an overall reliability analysis in its computer-based model referred to as the IRPSIM, which evaluates the reliability of its water supplies, including supplies available from the SWP, the Colorado River, water transfers and exchanges, and other sources. (See, MWD Regional UWMP, pp. II-1 to II-15.) The IRPSIM is based on 70 years of historical hydrology (from 1922 to 1991) to allow it to estimate water surplus and shortage over a 20-year period and beyond. The model has allowed MWD to analyze the reliability of deliveries to its member agencies during worst-case single year and multiple year drought events. The results of MWD's modeling indicate that it can maintain reliable supplies to meet all member agencies' full-service demands without interruption throughout the 2005 to 2030 time period, including under drought conditions. (MWD Regional UWMP, pp. II-2/3, 11, 15.) Detailed analyses regarding MWD's supply projections are also set forth in Appendix A of MWD's Regional UWMP. As detailed in those analyses, MWD's overall supply and delivery reliability is based not just on Colorado River and SWP supplies, but also on conservation programs, groundwater storage programs, and water transfer and exchange programs.

A key component of MWD's water supply strategy is its Water Surplus and Drought Management Plan (WSDM). The purpose of the WSDM is to provide policy guidance and help manage regional water supplies to achieve the reliability goals of the IRP, where MWD seeks to maximize management of wet year supplies and minimize adverse impacts of water shortages to retail customers. Supporting principles of the WSDM include the encouragement of efficient water use and economical local resource programs, coordinated operations with member agencies to make as much surplus water as possible available for use in dry years, and the pursuit of innovative transfer and banking programs to secure more imported water for use in dry years. The WSDM contains the following considerations that would go into any equitable allocation of imported water: impact on retail customers and regional economy; investments in local

resources, including recycling and conservation; population growth; changes and/or losses in local supplies; participation in MWD's non-firm, interruptible programs; and investment in MWD facilities. The WSDM distinguishes between surpluses, shortages, severe shortages, and extreme shortages. Within the WSDM, each year MWD evaluates the level of supplies available and existing levels of water in storage to determine the appropriate management stage for that year. Each stage is associated with specific resource management actions designed to avoid extreme shortage scenarios to the maximum extent possible and minimize adverse impacts to retail customers if an extreme shortage occurs. The sequencing outlined in the WSDM reflects anticipated responses based on detailed modeling of MWD's existing and expected water supply resource mix. When MWD must make net withdrawals from storage to meet demands, it is considered to be in a shortage condition. Under most stages of shortage, MWD is still able to meet all end-use demands for water. For more severe shortage conditions, the WSDM shows that MWD will meet demands by withdrawing water from storage. Under worsening shortage conditions, MWD may undertake additional shortage management steps, including issuing public calls for extraordinary conservation, including the curtailment of Interim Agricultural Water Program deliveries in accordance with their discounted rates, exercising water transfer options, or open market water purchases. In an extreme shortage scenario, MWD may be required to implement a plan to allocate available supply fairly and efficiently among its full-service customers, which allocations are to be based on and enforced through rate surcharges where member agencies will be required to pay more for deliveries exceeding their respective allotments. (MWD RUWMP, pp. II-15/16.) The benefits of aggressive water conservation and public education efforts are also detailed in MWD's RUWMP. (See MWD 2005 RUWMP, pp. III-5 through III-21.)

On February 12, 2008, MWD adopted a Water Supply Allocation Plan (WSAP) as a component of its WSDM. As indicated above, the WSDM guides MWD's supply actions under both wet and dry conditions for achieving overall water supply reliability to its member agencies, including EMWD. The WSDM outlines various water supply conditions and corresponding actions MWD may undertake in response to serious water shortages. Under Condition 1, MWD issues a Water Supply Watch and encourages local agencies to implement voluntary dry-year conservation measures and utilize regional storage reserves. Under Condition 2, MWD issues a Water Supply Alert and calls for cities, counties, its member agencies and all other retail water providers to implement extraordinary conservation through drought ordinances and other measures to mitigate the use of storage reserves. Under Condition 3, MWD may implement its WSAP, which allocates available water supplies among member agencies based on factors such as impacts on retail customers, population and growth of particular member agencies, the availability of recycled water and other local supplies, conservation efforts, participation in MWD's interruptible water supply programs, and investment in MWD's facilities.

On June 4, 2008, the Governor of California proclaimed a statewide drought due to record-low rainfall in spring 2008 and court-ordered restrictions on Delta exports as discussed above. (Executive Order S-06-08.) Soon thereafter, the Governor proclaimed a state of drought emergency to exist within the Counties of Sacramento, San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and Kern. (Proclamation dated June 12, 2008.) In response, MWD determined it was not necessary to implement its Water Supply Allocation Plan but, rather, on June 10, 2008 declared a Condition 2 water scenario and issued a Water Supply Alert, calling on local agencies and residents to take immediate steps for conserving water. On February 27, 2009, the Governor declared a statewide water supply emergency to combat California's third consecutive year of drought. (Proclamation dated February 27, 2009.) Relatively soon thereafter, on April 14, 2009, MWD's Board of Directors implemented its WSAP at a Regional Shortage Level 2 with the goal of reducing regional demand for wholesale water deliveries by 10%. This marks the first time MWD has implemented the WSAP since it was approved in February 2008 after a seven-month development process. The WSAP will go into effect on July 1, 2009, and has the potential to increase the cost of MWD water supplies to particular member agencies.

The WSAP outlines a three step process for determining each member agency's "allocation year" supply during a period of shortage. First, base period local supplies, wholesale demands and retail demands are calculated by averaging data compiled during a three-year base period which MWD established as 2004 through 2006. Base period local supplies are the average annual supplies generated by groundwater production, groundwater recovery, Los Angeles Aqueduct supply (for the Los Angeles Department of Water and Power), surface water production, and other imported supplies, but do not include non-potable recycled water production. Under the Plan, base period wholesale demand includes full-service water deliveries, seawater barrier, seasonal shift, and surface storage operating agreement demands. The base period retail demand is calculated by adding base period local supplies and wholesale demand. Base period demand figures are then used to estimate allocation year retail demands, local supplies and, ultimately, wholesale demands. Notably, total retail demands for the allocation period are calculated by adjusting the base period retail demands for growth. The growth adjustment is calculated using the estimated actual annual rate of population growth at the county level, as determined by the California Department of Finance. Similarly, allocation year local supplies are estimated using the base year local supplies, adding average in-lieu deliveries received during the base period and planned or scheduled increases in supply over the base year, and subtracting losses of local supply due to conditions such as hydrology or water quality. Allocation year wholesale demand, which serves as the basis of a member agency's ultimate allocation, is then calculated by subtracting allocation year local supplies from retail demands.

Extraordinary increases in production over the base year, defined as increases that occur solely due to the circumstances in that year such as purchasing water transfers or overproducing

groundwater yield, are not included in the allocation year local supplies during a Regional Shortage Level 1 or 2 and, therefore, do not reduce allocation year wholesale demand. In years where MWD declares a Regional Shortage Level 3 or above, only a fraction of an agency's extraordinary increase in production will be included in the allocation year local supplies which, in turn, will influence the agency's allocation year wholesale demand. In the final step, the allocation year wholesale demand is converted into a water supply allocation. Actual allocations will be adjusted with credits based upon an agency's past conservation efforts and relative dependence upon MWD water deliveries.

Allocations under the WSAP ultimately are achieved through a penalty rate structure enforced by MWD. If a member agency exceeds its allocation, penalty rates and charges will apply for water deliveries to the agency in excess of the allocation. MWD will track agency water use on a monthly basis and any applicable penalties are to be assessed at the end of an allocation year. Thus, member agencies are not subject to penalties on the basis of a high demand month but, rather, only if their total usage between July 1, 2009, and June 30, 2010, exceeds their total annual allocation. Penalties will be assessed through an ascending block structure that imposes a lower penalty for minor overuse and a higher penalty for higher exceedance of an agency's water supply allocation. The Plan provides for an allocation appeals process which may be used to address miscalculated base period supplies, unforeseen loss or gain in local supply, population growth rates, and other issues affecting an agency's allocation. As indicated above, MWD has implemented its WSAP at a Regional Shortage Level 2 with the goal of reducing wholesale demands within its service area, maintaining storage reserves and decreasing the risk of additional supply allocations in the future.

EMWD has taken numerous steps to prepare itself and its customers for the potential scenario where MWD may implement its WSAP. Through these steps, EMWD has been able to achieve extraordinary water conservation and demand management on an agency-wide basis such that MWD's recent allocation is not expected to result in an actual reduction in MWD water deliveries to EMWD. Rather, EMWD has sought to markedly change the manner in which water is used within its territory as a means of controlling the amount of additional imported supply it may need from MWD during the allocation period. The key components of EMWD's demand management strategy are discussed below.

EMWD recently adopted Ordinance No. 72.24 (February 4, 2009) establishing aggressive new requirements to achieve water use efficiency within its service territory. Indeed, Ordinance No. 72.24 states that the following water efficiency requirements shall apply to all existing and future customers: (a) refrain from hosing down driveways and other hard surfaces, except for health or sanitary reasons and then only by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off devise or a low-volume, high-pressure cleaning machine equipped to recycle any water used; (b) repair faucets, toilets, pipes and other

potential sources of water leaks; (c) irrigate landscape only between 9:00 p.m. and 6:00 a.m., although this provision does not apply when (i) manually watering during the establishment period of a new landscape, (ii) temperatures are predicted to fall below freezing, or (iii) for very short periods of time for the express purpose of adjusting or repairing an irrigation system; (d) refrain from watering or irrigating of any lawn, landscape or other vegetated area with potable water using a landscape irrigation system or watering device that is not continuously attended unless it is limited to no more than fifteen minutes watering per day per station, although this time limitation can be extended for (i) landscape irrigation systems that exclusively use very low flow drip irrigation systems when no emitter produces more than two gallons of water per hour, or (ii) whether based controllers or stream rotor sprinklers that meet a 70% efficiency, provided, however, that over-watering is not permitted in any case; (e) adjust and operate all landscape irrigation systems in a manner which will maximize irrigation efficiency and avoid over watering or watering of hardscape and the resulting runoff; (f) refrain from watering or irrigating any lawn, landscape or other vegetated area that causes or allows excessive water flow or runoff onto an adjoining sidewalk, driveway, street, alley, gutter or ditch; (g) do not use decorative fountains unless they are equipped with a recycling system; (h) do not allow water to run while washing vehicles, instead use a bucket or similar container and/or a handheld hose equipped with a positive self-closing water shut-off device to avoid run off into gutters, streets or alleys; (i) when installing new landscaping, plant low-water demand trees and plants and do not incorporate non-functional turf areas; and (j) refrain from water during rain. (EMWD Ordinance No. 72.24(1)(a)-(j).)

Another notable feature of EMWD's Ordinance No. 72.24 is its enforcement of the agency's tiered rate structure based on water budgets that apply to single-family, multi-family and landscape accounts that receive water from EMWD's domestic water system. Under Ordinance 72.24, four tiers are used to encourage efficient water use by customer groups and discourage the wasteful types of water uses identified above in Section 1 of the Ordinance. EMWD's Tier 1 Rate applies to an indoor water budget that is based on the gallons of water needed per person, per day. The Tier 2 Rate applies to an outdoor water budget that is based on square footage of landscape, actually daily ET, and a conservation factors, where (i) the default conservation factor for meters installed prior to September 1, 2008, is 1.0; (ii) the default conservation factor for meters installed after September 1, 2008, is 0.80 unless a lower ET adjustment factor is specified in the current State of California Model Water Efficiency Landscape Ordinance or the County of Riverside Water Efficient Landscape Requirements Ordinance; and (iii) the conservation factor can be adjusted up to 1.25 for functional areas at the discretion of EMWD. The Tier 3 Rate is applied to excessive water use that is measured as a percentage of Tier 1 and Tier 2 budgets, where a significantly higher rate can be charged for such excessive use. The Tier 4 Rate is applied to wasteful water use that exceed the Tier 3 limits. This rate is extraordinarily higher to discourage waste. (EMWD Ordinance 72.24(2)(a)-(d).) These tiered rates are more specifically

set forth in EMWD Resolution 3352. Ordinance 72.24 also establishes a strict penalty structure for water runoff. (EMWD Ordinance 72.24(3)(a)-(b).)

In a press release dated April 9, 2009, EMWD announced that its first tiered-rate bills had been distributed. In February and March, shadow bills accompanied regular bills to give customers an idea how their bills would have fared under the tiered structure. With EMWD's traditional rate structure, water rates were set according to a single commodity rate, regardless of the volume used. Under the new structure, each of EMWD's residential customers were provided with water budgets designed to give them the water they need for both indoor and outdoor uses. Indoor water budgets are based on the number of residents in the household, each using 60 gallons per day. The default single family residential household budget is based on three people, and multifamily residential is two. This comprises Tier 1. Outdoor water budgets are set according to the property's estimated irrigated area, based on County parcel data (lot size) and GIS information (house footprint, garage/carport area and driveway). The default for irrigated areas is generally set at 3,000 square feet, or up to 6,000 square feet for large landscapes. The outdoor portion comprises Tier 2. Together, the indoor and outdoor tiers form a household's water budget. Unlike other one-size-fits-all tiered rate structures, EMWD's includes allowances for larger households and for weather so greater outdoor irrigation is included in the budget during the summer. As stated in the press release, the purpose of the tiered rate structure is not to force people to go without water, but to eliminate excessive or wasteful use. The shadow bills also confirmed that 80% of EMWD's customers kept within their first two tiers, their water budgets. If tiered rates had been in effect at that time, those customers would have paid 18% less than their fixed commodity rates. Increased budgets can be approved for changes in the number of people in a household, larger landscaping areas, increased needs for large animals, child care or for medical requirements. Justification can also be made for allowing swimming pools to be refilled once every five years.

As an addition water saving measure, Ordinance No. 72.24 establishes stringent requirements for new landscape meters. First, EMWD requires a separate dedicated meter for landscape areas greater than or equal to 3,000 square feet. Second, the Ordinance provides that the efficient use of water should be considered in the design of any new landscape area, where EMWD will calculate an Annual Maximum Allowable Water Budget (AMAWB) for customers that request a new account using the following limitations: (i) the AMAWB will be calculated using the area's reference ET, the size of the landscaped area, and a conservation factor; (ii) for non-functional areas (landscape areas primarily used for aesthetic purposes, such as front yards, median strips, and parkways), a conservation factor of 0.80 will be used unless a lower factor for adjusting ET is specified in the current State of California Model Water Efficiency Landscape Ordinance or the County of Riverside Water Efficient Landscape Requirements Ordinance; (iii) for functional areas (landscape areas that serve as a surface for high traffic activities, such as playing a sport or

group gatherings), a conservation factor of 1.25 will be used at the discretion of EMWD; (iv) reference ET is given in inches per year, may vary by areas across EMWD, and will be established by EMWD; and (v) the AMAWB will be used to estimate outdoor water used, where the actual outdoor water budget applied to the account will be based on actual daily ET. Third, prior to the issuance of a landscape meter, the new customer shall calculate a water budget for each landscaped area, which budget cannot exceed the AMAWB limits calculated by EMWD. (EMWD Ordinance 72.24(4)(a)-(c).)

In addition to the foregoing, EMWD has also adopted a Water Shortage Contingency Plan ("WSCP") as part of its UWMP to address circumstances of drought, supply reductions, failure of water distribution systems or other emergency situations. (See, EMWD 2005 UWMP, Appendix D.) In fact, on March 5, 2009, EMWD adopted Ordinance No. 117.2 to amend its WSCP and more aggressively regulate the use of non-essential potable water during shortage and extreme shortage level conditions. Ordinance No. 117.2 expressly provides that its purposes is to help conserve available water supplies, protect the integrity of water supply infrastructure, and to help implement EMWD's contingency plan for times of drought and water supply shortages. (EMWD Ordinance 117.2, Section I.) Another stated purpose of the Ordinance is to achieve coordination and implementation of MWD's WSAP (see discussion above). (Id., Section III.) The water shortage contingency measures of Ordinance 117.2 apply to all persons, customers and properties within EMWD that utilize potable water and are implemented depending on the declared water supply condition as follows: Stage 1 exists when water deficiencies are predicted to or actually range between 0 and less than 5% of available supply and/or capacity; Stage 2 exists when water deficiencies are predicted to or actually range from 5% up to 10% of available supply and/or capacity; Stage 3 exists when water deficiencies are predicted to or actually range from 10% up to 15% of available supply and/or capacity; Stage 4 exists when water deficiencies are predicted to or actually range from 15 to 25% of available supply and/or capacity and storage is not recovering; Stage 5 exists when water deficiencies are predicted to or actually range from 25 to 35% of available supply and/or capacity and storage is not recovering; Stage 6 exists when water deficiencies are predicted to or actually range from 35 to 50% of available supply and/or capacity and storage is not recovering; Stage 7 exists when water deficiencies are predicted to or actually exceed 50% of available supply and/or capacity and storage is not recovering. (EMWD Ordinance 117.2, Section VII.)

Under any such stage, EMWD may employ any or all of the following public notification procedures: (a) notify the general public and influential local decision-makers about existing water supply conditions, actions to be taken, what customer involvement is intended to achieve, and how actions are to be implemented; (b) the public at large will be informed of the existing water supply conditions and what responses are needed, information that can be disseminated through billing inserts, special mailings, telephone contact, email, roadway signage, water

conservation booths, speaker engagements, community association meetings, newsletters, and other public education programming; (c) all available forms of media should be employed, including public service announcements on radio and television, as well as press coverage in local newspapers; and (d) posting all pertinent information on EMWD's website.

During a Stage 1 shortage, residential and potable landscape customers, as well as commercial, industrial and institutional ("CII") users, are encouraged to achieve a voluntary 10% reduction in water use by implementing the above mentioned requirements of EMWD's Water Use Efficiency Ordinance (Ordinance 72.24). A voluntary 5% reduction in water use is imposed on agricultural use. During Stage 2 conditions, all water users are required on a mandatory basis to comply with Ordinance 72.24 water saving measures to avoid the assessment of penalties. A mandatory 5% reduction in water use is imposed on agricultural use.

During Stage 3 conditions, household, potable landscape, and CII customers are required to achieve a 25% reduction in outdoor use and elimination of wasteful water use. In addition, the following restrictions apply: (1) watering or irrigating of lawn, landscape or other vegetated areas with sprinklers are subject to (i) watering only three days per week from June through August, (ii) two days per week in September, October and March through May, and (iii) one day per week November through February; (2) all leaks, breaks or other malfunctions in the water user's plumbing or distribution system must be repaired within 72 hours; (3) refrain from filling or re-filling of ornamental lakes or ponds; (4) refrain from using potable water to wash or clean a vehicle, including but not limited to, any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not; and (5) maintain existing water levels on swimming pools or outdoor spas. Agricultural customers are required to achieve a 10% reduction in water use.

During Stage 4 conditions, household, potable landscape, and CII customers are required to achieve a 50% reduction in outdoor water use and eliminate wasteful water use. In addition to the Stage 3 requirements set forth above, further restrictions can be used to avoid water use penalties, including: (1) watering or irrigating of lawn, landscape or other vegetated areas with sprinklers are subject to (i) watering only two days per week from June through August and (ii) one day per week from September through May. Agricultural customers are required to achieve a 15% reduction in water use. During Stage 5 conditions, all customers are required to achieve a 50% reduction in outdoor water use in addition to Stage 4 restrictions, and residential and potable landscape customers must eliminate water use in excess of 15% above their total indoor and outdoor water budgets. Agricultural customers are required to achieve a 25% reduction in water use. During Stage 6 conditions, all customers are required to achieve a 50% reduction in outdoor water use in addition to Stage 4 restrictions, and residential and potable landscape customers must eliminate water use in excess of their total indoor and outdoor water budgets. Agricultural customers are required to achieve a 35% reduction in water use. During Stage 7 conditions, residential and potable landscape customers are required to eliminate outdoor water

use except for purposes of health and safety and avoid exceeding indoor water budgets. CII customers are required to eliminate outdoor water use except for purposes of health and safety. Agricultural customers are required to achieve a 50% reduction in water use. (EMWD Ordinance 117.2, Sections IX–XI.)

As indicated by Ordinance No. 117.2, EMWD's implementation of water budgets and tier rate structures is intended to avoid the need for actually rationing community water supplies and preserve some latitude of choice with respect to how much potable water individual customers will use and how much customers are willing to pay for that water. (EMWD Ordinance 117.2, Section XII.) EMWD's approach and response to MWD's WSAP seeks to change the manner in which water is used within the agency, but it does not seek to physically curtail existing water deliveries or discourage new development. Recently, EMWD was declared to be in a Stage 1 water shortage condition where, as indicated above, all residential, potable landscape, and CII customers were encouraged to achieve a voluntary 10% reduction in water use by implementing the above mentioned requirements of EMWD's Water Use Efficiency Ordinance (Ordinance 72.24). On June 17, 2009, EMWD adopted Resolution No. 4918 to approve and authorize the declaration of Stage 2 conditions. The discussion above shows that during Stage 2 conditions, all water users are required on a mandatory basis to comply with Ordinance 72.24 water saving measures to avoid the assessment of penalties for wasteful uses of water.

### Significance Criteria

9. ***Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?***

### Impacts

As previously indicated, EMWD provides an average of approximately 110 million gallons per day to consumers and other water agencies. Approximately 80% of the EMWD potable water supply consists of imported water from the Metropolitan Water District of Southern California (MWD), with additional water supply obtained from local groundwater basins and recycled water produced by five regional water reclamation facilities. Water supply for the City and surrounding region is predominantly obtained through MWD from the State Water Project which conveys most water resources from Northern California and is supplemented by water delivered via the Colorado River Aqueduct. Additionally, the EMWD has developed a 3,000 acre feet per year seasonal storage demonstration program in which untreated State Water Project water is purchased from MWD during years of surplus which is then used to recharge local groundwater basins later to be used in-lieu of imported water. The seasonal storage program results in economic and resource management benefits for both the EMWD and MWD.

As a member agency that receives 80% of its water supply from MWD, the EMWD relies on MWD's ability to provide adequate water supply to meet existing and future demands to asses EMWD's ability to meet the demands of its specific service area. The Water Supply Assessment Report prepared by EMWD for the proposed Villages of San Jacinto Specific Plan, dated December 15, 2004, indicates that in March 2003 MWD prepared a Report on MWD's Water Supplies which finds that with existing and planned water supplies MWD will be able to provide 100% of its member agencies' project demand through the year 2030, including during periods of repeated drought conditions. In addition to the findings for adequate water supply through 2030 of MWD's Report on MWD's Water Supplies, EMWD's Water Supply Assessment Report relies on additional findings of 100% water supply reliability through 2025 provided in MWD's Update to the Integrated Resources Plan, dated July 13, 2004, which considers various changed conditions of Southern California including projections of demographic and economic information obtained from regional planning agencies, the Southern California Association of Governments (SCAG) and San Diego Association of Governments (SANDAG).

Eastern Municipal Water District (EMWD) prepared and adopted an Urban Water Management Plan (UWMP) pursuant to the requirements of the California Urban Water Management Planning Act. The most recent UWMP was approved by the EMWD Board of Directors on December 21, 2005. The UWMP describes how EMWD will address urban water demands and the efficient use of urban water supplies for a 5-year period and includes a discussion of the District's existing and planned water demand management measures, and the methods by which proposed measures will be implemented during the plan period. The Water Supply Assessment Report prepared by EMWD for the proposed development evaluates the estimated project water demand in relation to anticipated date of full build-out of the development and whether the anticipated demand will remain within the limits of the UWMP for the District.

EMWD's water supply assessment for the proposed Villages of San Jacinto initially assumed a maximum residential build out of 2,022 units. The assessment, therefore, provides a conservative estimate of projected water demand for the proposed residential use that would not exceed 1,016 units (or 1,329 units which includes 313 units should the school site be developed with residential uses). Therefore, the projected water demand is a worst-case estimate that would occur. According to the Water Supply Assessment Report, the proposed development at full build-out of the Villages of San Jacinto would result in an average projected water demand of 1,620 acre-feet/year. The assessment assumes a 4-year build out period with an initial water demand of 405 acre-feet per year in 2007, and the total projected water demand of 1,620 acre-feet/year occurring in 2011. The Water Supply Assessment Report indicates that the total projected water demand for the proposed development would remain within the limits of the projected demand of the District's current UWMP.

The Water Supply Assessment Report further indicates that, because EMWD is depending on MWD to supply water to meet future demand, and MWD has projected growth in its service area using anticipated growth information provided by SCAG, EMWD has concluded that it will be able to meet the projected water demand of the proposed development as well as existing and future uses beyond 2025. In addition, EMWD has concluded that it will be able to meet future water demand for the next 20 years in the event of drought given that MWD does not place restrictions on imported water resources on member agencies, and given that MWD has found that, based on water demand determined by regional growth projections, it would be able to meet all member agencies' projected supplemental demand with existing and planned water supplies through 2030 even with the occurrence of repeat drought conditions. A letter from EMWD dated May 11, 2009, confirms their previous conclusions in the December 15, 2004, Water Supply Assessment Report. Therefore, potential impacts associated water supply insufficiencies are considered less than significant.

The existing City water facilities and infrastructure that would serve the Villages of San Jacinto include a 12-inch water line that occurs within the Sanderson Avenue right-of-way just south of the project site. Extension of a 16-inch water line along the Sanderson right-of-way to Ramona Boulevard is currently underway. These existing facilities have sufficient capacity to serve the maximum level of development permitted under the Specific Plan to the point of connection/s that would be required to distribute water throughout the Specific Plan area. A new water distribution system would connect to the Sanderson Avenue line via 12-inch pipelines and would distribute potable water throughout the development area primarily via 8-inch lines within the proposed internal street network (see *Figure 5.12-3, Master Water Plan*).

The Specific Plan identifies the following conditions for development in the Villages of San Jacinto:

- All water and sewer lines will be designed per the Eastern Municipal Water District's Water and Sewer System Planning and Design Criteria dated July 2, 2007, and September 1, 2006, respectively.
- The infrastructure system and phasing shall be designed and installed consistent with the City of San Jacinto Engineering Department requirements.
- The Eastern Municipal Water District will manage the development of infrastructure for the project area.
- Water and sewer facilities shall be installed in accordance with the requirements and specifications of the San Jacinto Engineering Department and the Riverside County Health Department.

Based on a worst case scenario assuming the proposed high school is built and a total of 1,016 homes are built (the school would result in higher water consumption than the 313 dwelling units that would replace the school), the total projected water demand is 853,640 gallons per day (gpd) for the proposed development (based on factors from RBF Consulting, November 9, 2005). This demand is expected to remain within the limits of the District's projected regional demand as outlined in the December 15, 2004, Water Supply Assessment for the project and affirmed by the May 11, 2009, letter from EMWD. The proposed Specific Plan policies require that a written agreement with EMWD be executed which states that the provision of services shall be available prior to the recordation of any tract maps. The Specific Plan policies further require that new water facility infrastructure be developed in accordance with the City Engineering Department and Riverside County Health Department, and development would be manage by EMWD. Therefore, all necessary infrastructure would be appropriately designed and constructed to serve the proposed development. Therefore, impacts related to water services would be less than significant.

**Mitigation Measures**

None.

**Residual Impact/Level of Significance after Mitigation**

The proposed Villages of San Jacinto Specific Plan includes development standards that would apply to all future build-out of the planning area which specifically includes development elements and/or policies and measures to ensure that adequate public facilities and services such as domestic water supply are provided in conjunction with build-out of the development. Therefore, impacts to domestic water supply systems and supplies would be less than significant.

## 5.12.9 Solid Waste and Recycling

**Existing Conditions**

CR&R Stanton Division provides solid waste and recycling management services for the City of San Jacinto. Solid waste disposal for the City of San Jacinto is directed to the Lamb Canyon Landfill which is owned and operated by the Riverside County Waste Management Department (RCWMD). The Landfill also services the Cities of Beaumont, Banning and Hemet, and the unincorporated areas of Pine Cove, Idyllwild, Cherry Valley, Cabazon, Homeland, Romoland and Winchester.

The Lamb Canyon Landfill is a Class III solid waste disposal site consisting of 1,088 acres of total landfill permit area. In December 2003, the California Integrated Waste Management Board approved a request by RCWMD for a Revised Full Solid Waste Facilities Permit and adopted a

Mitigated Negative Declaration to permit an increase in the overall capacity of the fill from 23,601,595 cubic yards to 34,292,000 cubic yards to accommodate the fill's projected design capacity for year 2023. In addition, the revised permit allowed for an increase in the amount of daily received waste from 1,900 tons per day to 3,000 tons per day to accommodate an anticipated five-year growth period of the service area (California Integrated Waste Management Board Resolution 2003-504, December 16–17, 2003).

The City is mandated by the California Integrated Waste Management Board (CIWMB) to divert 50% of its waste stream away from landfills through source reduction, recycling, and composting activities (AB939). Information obtained on the CIWMB website, indicates that the City of San Jacinto met the waste diversion standard with a 51% diversion rate as of the most recent available reporting year of 2006 (CIWMB, http://www.ciwmb.ca.gov, accessed on May 6, 2009).

**Significance Criteria**

10. ***Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?***

11. ***Would the project comply with federal, state, and local statues and regulations related to solid waste?***

**Impacts**

Anticipated uses in the Villages of San Jacinto are typical of urban areas, and would not violate any federal, state, or local statutes or regulations related to solid waste.

As discussed previously, the Lamb Canyon Landfill, which is regulated by the CIWMB, approved a request by the RCWMD to permit an increase in the overall capacity of the fill from 23,601,595 cubic yards to 34,292,000 cubic yards to accommodate the fill's projected necessary design capacity to adequately serve residents of Riverside County through year 2023. The CIWMB also permitted an increase in the amount of daily received waste from 1,900 tons per day to 3,000 tons per day to accommodate an anticipated five-year growth period of the service area (California Integrated Waste Management Board Resolution 2003-504, December 16–17, 2003).

According to personnel of RCWMD, the department does not consider projected population and development growth rates of the service area to determine future waste generation. The fill capacity needed to meet future needs of the service area is due to various factors that affect the amount of solid waste that is actually received at the facility such as required waste diversion programs (AB 939) and construction/demolition materials associated with new development. Likewise, the County does not have a particular threshold to define a significant project-specific

impact to the solid waste system. The RCWMD, as an alternative, determines the landfill's estimated future capacity needs based on historical data that has documented an average 4% increase rate in waste disposal received by the fill (Ma, personal communication, December 3, 2004). Given the 4% growth rate of solid waste anticipated to be received by the landfill and the recent approved expansion of the fill to accommodate the anticipated growth rate for the service area through 2023, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Other factors to consider in evaluating the proposed project's potential impacts relative to waste generation include construction debris, recycling efforts, and potential hazardous waste generation. Because the project site is primarily vacant with the exception of a limited number of out buildings associated with current agricultural operations, development of the proposed project is not anticipated to result in an exceptionally large amount of construction waste generation that may otherwise result from large demolition activities of existing structures. Construction waste generation would be equivalent to that normally associated with new development and, therefore, would not substantially affect the landfill's capacity threshold to accommodate the service area. Therefore, potential impacts associated with solid waste generation and disposal is considered less than significant.

To ensure that the development of the proposed Specific Plan is maintained in compliance with the efforts of the City of San Jacinto to continue to meet the mandate of AB 393, a number of mitigation measures have been identified to facilitate appropriate waste generation minimization and recycling efforts, (see *Section 5.12.5, Mitigation Measures*, *Mitigation Measures 5.12-d through 5.12-f*).

Finally, CR&R Sanitary Service has indicated that it can serve future development in the Villages of San Jacinto area without the need to expand its Resource Recovery Center. Therefore, potential impacts associated with solid waste disposal services are considered less than significant.

**Mitigation Measures**

**5.12-d** Demolition and/or excess construction materials shall be separated on site for reuse/recycling or proper disposal (e.g., concrete asphalt). During grading and construction, separate bins for recycling of construction materials and brush shall be provided on site.

**5.12-e** Landscaping shall be designed and located to utilize drought tolerant species, minimize irrigation, and to reduce green waste generation.

**5.12-f** The developer shall develop and submit a Solid Waste Management Plan to be reviewed and approved by the City Public Works Solid Waste Division and Planning and Development, and shall include:

- Provision of space and/or bins for the storage of recyclable materials within the project site,
- Methods of waste collection,
- Information programs to future residents regarding disposal of hazardous wastes.

**Residual Impact/Level of Significance after Mitigation**

The proposed Villages of San Jacinto Specific Plan includes development standards that would apply to all future build-out of the planning area which specifically includes development elements and/or policies and measures to ensure that adequate solid waste facilities are provided in conjunction with build-out of the development. With implementation of the additional mitigation measures included above, impacts to solid waste facilities and providers would be less than significant.

# 5.13 HAZARDS/RISK OF UPSET

## 5.13.1 Introduction/Methodology

The focus of this section is to outline existing hazards present on site, regulatory guidelines related to hazard assessment and clean-up if necessary and how the proposed project may have an impact on identified hazards or create new hazards to the surrounding community once constructed.

The following analysis is based on the October 10, 2002, *Phase I Environmental Site Assessment Report* prepared by Gradient Engineers, Inc. This report is contained in *Appendix L* to this EIR. Methods used to survey and test the site are contained therein.

## 5.13.2 Existing Conditions

The Phase I Environmental Site Assessment reported one residential structure, one large warehouse, one small warehouse, a storage shed, two office trailers, three groundwater wells (one domestic, two irrigation), shelter areas for cows and equipment storage areas on site. A detention basin is located in the southwest corner of the site. As of a May 1, 2009, site visit, the only remaining structures were the abandoned residence which had deteriorated significantly from the time of the Phase I Environmental Site Assessment and shade structures associated with a former cattle operation (no cattle are currently present at the site). *Figure 5.13-1, Hazardous Materials Site Map* and *Figure 5.13-2, Hazardous Materials Detailed Site Map* show the location of each area described above.

**On-Site Hazardous Material History**

At the time of the survey for the Phase I Environmental Site Assessment, the project site was used as a sod farm and a heifer raising facility. Since 1949 (date of first available records), the property was used for agricultural purposes. In 1980, a heifer farm was established on site. By 1997, part of the property was converted into a sod farm. Quality Turf has leased a portion of the property for production of sod since 1997. Approximately twenty acres of the property has been leased for heifer raising activities since approximately 1978. However, the heifer raising facility was recently removed from the site, along with the manure which was converted to compost. The surrounding area consists of rural agricultural land uses. Agricultural land is located to the north and east while vacant land and a chicken ranch are located west of the project site. The San Jacinto Valley Regional Water Reclamation Facility is located to the south of the site.

One of the former land owners supplied the Phase I investigator with records detailing the removal of three Underground Storage Tanks (USTs). In 1999, two 1,000-gallon and one 10,000-gallon gasoline USTs were removed from the area southwest of the large warehouse. The

area where these tanks were formerly located was over-excavated and approximately 120 tons of contaminated soil transported off site for treatment.

Total petroleum hydrocarbons in the gas range (TPHg), benzene, toluene, ethylbenzene, xylenes and methyl tertiary butyl ether (MTBE). In October 2000, soil in this area of the property was retested for the above contaminants. In December 2000, a vapor extraction well was set up near the former tank locations to determine whether identifiable levels of petroleum hydrocarbons still existed. Contaminant level measurements of each sampling period are summarized in *Table 5.13-1, Historic UST Soil Contaminant Levels*.

**Table 5.13-1**
**Historic UST Soil Contaminant Levels**

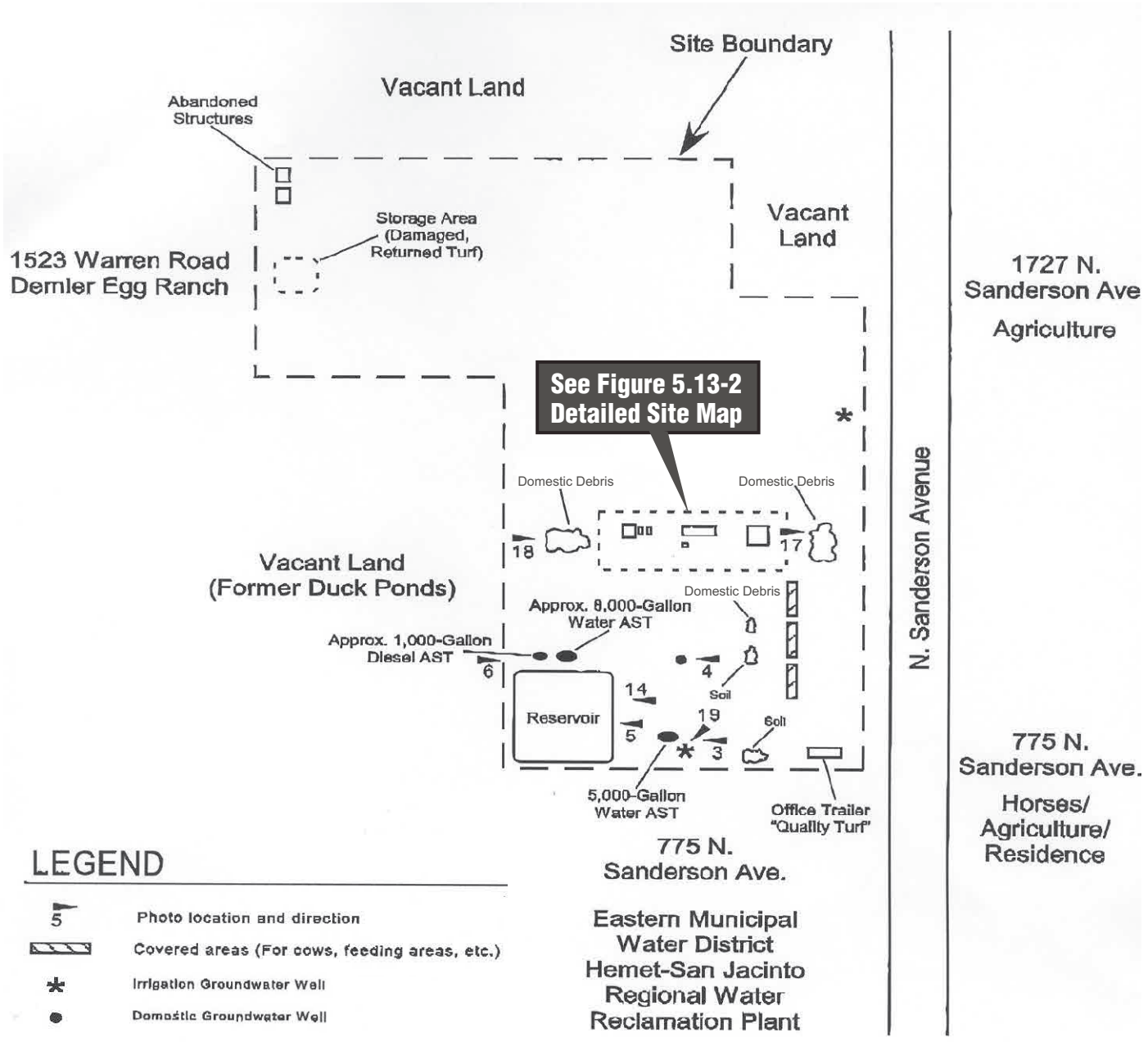
| Petroleum Hydrocarbon Tested | Testing Period | | |
|---|---|---|---|
| | 1999 (during UST removal) | October 2000 | December 2000 (vapor measurements) |
| TPH-g | 5,290 mg/kg | 2,710 mg/kg | Significant levels not detected |
| Benzene | 36.8 mg/kg | Not Measured | Significant levels not detected |
| Toluene | 638 mg/kg | 131 mg/kg | Significant levels not detected |
| Ethylbenzene | 200 mg/kg | Not Measured | Significant levels not detected |
| Xylenes | 352 mg/kg | 486 mg/kg | Significant levels not detected |
| MTBE | 377 mg/kg | 169 mg/kg | Significant levels not detected |

SOURCE: Gradient Engineers Inc, October 2002, p. 5.

Groundwater wells were also drilled to determine the depth of groundwater, and if appropriate, measure the level of contaminants. Groundwater was not encountered at 70 feet below ground surface and was expected to exist approximately 120 feet below ground surface. In December 2000, the Regional Water Quality Control Board recognized that the lack of identifiable vapors from the vapor test well indicated that remaining soil in the immediate area would not pose a threat to groundwater resources.

On December 26, 2001, the RWQCB issued a case closure summary and "no further action" letter for the previous underground storage tank issue. That said, the letter's case closure summary states "corrective action should be reviewed if the land use changes."

A review of aerial photographs indicates that a windmill was historically located at the northwest corner of the site.




**SITE MAP**
APN 431-020-005
APN 431-020-006
APN 431-020-015

SOURCE: GRADIENT ENGINEERS, INC., OCTOBER 2002

Villages of San Jacinto EIR
**Hazardous Materials Site Map**

FIGURE
5.13-1

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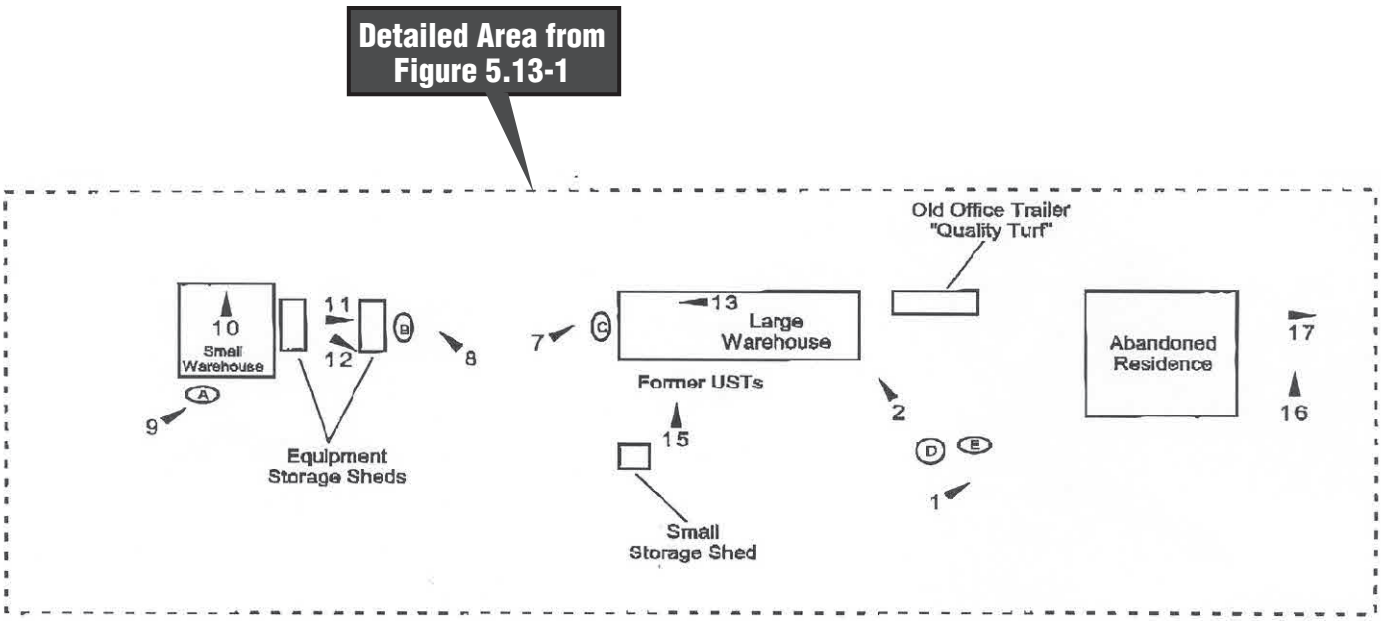


## LEGEND

| | |
|---|---|
| 5 | Photo location and direction |
| A | 500-Gallon Waste Oil AST |
| B | Empty 8,000-Gallon AST (Formerly contained diesel fuel) |
| C | 6,500-Gallon Diesel Fuel AST |
| D | 10-15,000-Gallon Water AST |
| E | 1,500-Gallon Water AST |

**DETAILED SITE MAP**
APN 431-020-005
APN 431-020-006
APN 431-020-015

SOURCE: GRADIENT ENGINEERS, INC., OCTOBER 2002

Villages of San Jacinto EIR

**Hazardous Materials Detailed Site Map**

FIGURE 5.13-2

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### On-Site Hazardous Material Current Presence

As indicated on *Figure 5.13-1* and *5.13-2*, in addition to the structures present on the site, the site reconnaissance noted one 5,000-gallon, one 8,000-gallon, and one 15,000-gallon tank. One 1,500-gallon aboveground water storage tank was also observed. Three diesel fuel above ground storage tanks were also observed on site. Stained and discolored soil was observed beneath the diesel tanks.

Mr. Ralph Daily, manager of the Quality Turf Farm operation, provided a list of hazardous chemicals used for sod farm operations. These chemicals include diesel fuel, waste oil, drained used oil filters, pesticides and herbicides, oil and hydraulic fluids. Oily staining was observed on the concrete pads on the equipment associated with the groundwater irrigation well located east of the reservoir. The floor within the equipment shed was observed to be stained with an oily substance beneath the three 55-gallon drums. The ground beneath the floor was not accessible/observable during the Phase I site reconnaissance.

Visual evidence of Polychlorinated Biphyenyls (PCBs) was not observed on site during the Phase I Environmental Site Assessment visit, however, transformers were observed on poles throughout the property. Staining was not observed beneath these transformers.

Petroleum stained soil was observed beneath the diesel above ground storage tank located northwest of the reservoir, near the irrigation groundwater well located southeast of the reservoir, and on the floor of the equipment shed, beneath three oil containing 55-gallon drums.

Debris, including old equipment, water heaters, trash, etc., was observed in several piles throughout the site (see *Figure 5.13-1*, "cultural debris"). Several mounds of soil were observed on site. According to Mr. Daily, the soil piles were generated from on-site activities and were piled as such for storage.

Two septic systems are located on site. One is located near the residential structures, its exact location unknown and the other northeast of the larger warehouse. One existing reservoir is located on site. This reservoir contains reclaimed water from the nearby San Jacinto Valley Regional Water Reclamation Facility and is used for sod farm irrigation. Historic aerial photographs document previous reservoirs, however during the Phase I Environmental Site Assessment, these reservoirs were no longer located on the property.

Three groundwater wells are located on site. One is used for domestic water while the other two are used for irrigation. According to Mr. Daily, the depth of the domestic water well is approximately 150 feet below ground surface while the irrigation wells range from 300 to 400 feet below ground surface. Oil, gas production or groundwater monitoring wells were not

observed or reported at or near the site. The vapor extraction well noted above was abandoned in 2002.

An asbestos building material and lead-based paint assessments were not performed for the project site.

**Off-Site Hazardous Material History/Presence**

A search on the First Search Report Environmental Database Report System was conducted to determine presence of any nearby hazards outside of the property limit boundaries. The following databases were searched: Federal National Priorities List (NPL), Federal Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS), Federal Resource Conservation Recovery Act (RCRA) Notifiers List, Emergency Response Notification System (ERNS), Toxic Release Inventory System (TRIS), Department of Toxic Substances Control Sites (CALSITES), Solid Waste Landfill Facilities, Underground Storage Tank (UST) sites, Leaking Underground Storage Tank (LUST) sites, and unmapped listings. A description of each list's content is included in Section 4.1.2 of the Phase I Environmental Site Assessment included as *Appendix L* to this EIR.

The above regulatory database lists were reviewed for cases pertaining to leaking USTs and ASTs, hazardous waste sites and abandoned sites within the specified radii of standards established by the American Society for Testing and Materials (ASTM). The First Search Report did not indicate the presence of any facilities that appear to represent a potential source of migration of hazardous substances to soil or groundwater beneath the proposed project site.

The site's location on several local databases was also searched. The following local databases were searched: Riverside County Department of Environmental Health, Riverside County Fire Department, California Regional Water Quality Control Board (Santa Ana Region), Department of Toxic Substances Control and South Coast Air Quality Management District.

In 1990, the State of California conducted a radon survey across the state. The results of the survey indicate that the testing area within which Riverside County is located, is below the U.S. EPA radon action level.

## 5.13.3 Significance Criteria

Based on the criteria identified in Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on hazards/risk of upset if it:

1. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
6. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
7. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
8. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

## 5.13.4 Impacts

***Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

Construction of the proposed project would involve the transport of gasoline and other potentially hazardous material to the project site for the sole purpose of equipment fueling. However, once project construction is complete, the transport, use or disposal of hazardous materials would be limited to household cleaning products, landscaping chemicals and fertilizers, and other substances associated with residential and recreation (park) uses and such items that may be available for resale in future commercial uses. Therefore, significant impacts are not anticipated to occur.

***Would the project create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

Hazardous materials potentially found at the site are related to the historic use of fertilizers, herbicides and pesticides; potential methane production related to former cattle feed lot; petroleum residues; household debris; and asbestos in older buildings.

Due to the historic use of approximately 20 acres of the property as a heifer raising farm, the presence of manure may result in significant environmental impacts related to methane gas exposure. In order to reduce potential impacts to a level below significance, mitigation is provided (see *Section 5.13.5, Mitigation Measures, Mitigation Measure 5.13-a*).

As indicated in *Section 5.13.3*, the vapor extraction test well installed in December 2000 to monitor residual contaminants left from the previous underground storage tanks did not indicate a significant presence of petroleum hydrocarbons in the soil. Any remnant petroleum hydrocarbons remaining in the soil are not extensive enough to pose a threat to nearby groundwater. The issuance of the Regional Water Quality Control Board's "no further action" letter indicates that hazardous materials previously present on the site have been removed to a level that no longer poses a threat to the environment. Therefore, while the project site contains historic environmental hazards, these hazards have been removed and would no longer pose significant health risks to the public or environment. That said, the Regional Water Quality Control Board and Riverside County Department of Health Services will be notified of the change in use and regulatory procedures may be required to ensure that the site is safe for reuse (see *Section 5.13.5, Mitigation Measures, Mitigation Measure 5.13-b*).

Historic windmills were often powered by diesel fuel. The diesel fuel source was often stored in underground storage tanks. During the Phase I Site Assessment, diesel storage tanks were not noted nor did they appear on federal or state databases within the vicinity of the old windmill. That said, often underground storage tanks are unreported and therefore could be discovered during grading. If an underground storage tank or stained soil or soil with a petroleum hydrocarbon odor is uncovered, a potentially significant impact could occur. In order to reduce potential impacts related to undocumented underground storage tanks or contaminated soil, mitigation is provided (see *Section 5.13.5, Mitigation Measures, Mitigation Measure 5.13-c*).

According to Mr. Daily, when the sod is harvested, a portion of the soil is harvested along with the sod. Pesticides and herbicides are normally found in the upper one to two feet of soil, therefore, with the continual harvesting of the sod, it is unlikely that significant pesticide, herbicide or fertilizer residue remains in the soil or represent an environmental concern to development of the site. Early pesticide and/or herbicide use would have degraded into the soil

over the years and would also not result in an existing environmental concern. Furthermore, the types of pesticides/herbicides used for current sod operations are not an environmental concern.

Visual evidence of Polychlorinated Biphyenyls (PCBs) was not observed on site during the Phase I Environmental Site Assessment visit, however, transformers were observed on poles throughout the property. Staining was not observed beneath these transformers. Therefore contamination from transformer activity on site is not expected. Therefore, a less than significant impact would occur.

Petroleum stained soil was observed beneath the diesel above ground storage tank located northwest of the reservoir, near the irrigation groundwater well located southwest of the reservoir and on the floor of the equipment shed, beneath three oil containing 55-gallon drums. In order to avoid potential exposure of the environment or the public to potential contaminants in these areas, mitigation is provided (see *Section 5.13.5, Mitigation Measures, Mitigation Measure 5.13-d*).

Debris, including old equipment, water heaters, trash, etc., was observed in several piles throughout the site. In order to avoid potential significant impacts related to improper disposal of debris piles, mitigation is provided (see *Section 5.13.5, Mitigation Measures, Mitigation Measure 5.13-e*).

Two septic systems are located on site. In order to reduce potential impacts related to biohazard contamination as a result of septic tank residue, mitigation is provided (see *Section 5.13.5, Mitigation Measures, Mitigation Measure 5.13-f*).

Once the project is developed, domestic water will come from imported water sources from Eastern Municipal Water District rather than on-site groundwater supplies. In order to close the three on-site groundwater wells, and any additional wells that are discovered during site development, without resulting in potentially significant impacts to the environment, namely local groundwater sources, mitigation is provided (see *Section 5.13.5, Mitigation Measures, Mitigation Measure 5.13-g*).

In 1990, the State of California conducted a radon survey across the state. The results of the survey indicate that the testing area within which Riverside County is located, is below the U.S. EPA radon action level. Therefore, the potential for elevated radon levels at the site appear to be low.

Due to the age of many on-site buildings, the potential for asbestos-laden material exists on site. In order to reduce any impacts related to asbestos hazards, mitigation is provided (see *Section 5.13.5, Mitigation Measures, Mitigation Measure 5.13-h*).

Due to the age of many on-site buildings, the potential for lead-based paint materials exists on site. In order to reduce any impacts related to lead-based paint hazards, mitigation is provided (see *Section 5.13.5, Mitigation Measures, Mitigation Measure 5.13-i*).

***Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

There are no existing schools within one-quarter mile of the site, but the project includes a planning area for a potential high school. However, the project does not include any proposed land uses which would result in the release or handling of hazardous or acutely hazardous materials.

***Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or environment?***

As indicated in the second impact response above, a number of hazardous conditions may exist on the project site due to historical uses. All of these potential impacts have been reduced to a less than significant level with recommended mitigation. As discussed above under Section 5.13.2, a search of federal databases was conducted to determine presence of any nearby hazards outside of the property limit boundaries which did not indicate the presence of any facilities that appear to represent a potential source of migration of hazardous substances to soil or groundwater beneath the proposed project site.

***For a project within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?***

The project would not subject users to safety hazards associated with public or private airports, since no airports are located within two miles of the project site.

***Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

In order to reduce the potential for construction traffic conflicts which may include emergency evacuation plans, a traffic control plan shall be developed to the satisfaction of the City Engineer, as a standard condition of the project.

***Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?***

The project site is not located adjacent to wildland areas. The project site is surrounded by mainly by agricultural land uses, scattered residential and the water reclamation facility located to the south. As such, the project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

## 5.13.5 Mitigation Measures

**5.13-a** In order to ensure that methane hazards do not exist on the 20 acre portion of the site formerly used for heifer raising activities, the Riverside County's Methane Investigation Protocol shall be followed during and after site preparation. After grading of the 20 acres, methane gas sampling and any associated mitigation mechanism installation shall occur in accordance with the most recent Riverside County Department of Environmental Health protocols.

**5.13-b** The Regional Water Quality Control Board and Riverside County Department of Health Services shall be notified of potential site reuse in accordance with the December 26, 2001 "no further action" letter provided for the remediated leaking underground storage tanks. These agencies may require additional processing or testing depending on the ultimate reuse of the specific area contaminated. In order to ensure that regulatory compliance has been met, on-site soils shall be tested prior to grading to determine the presence of contaminants. Testing results will help determine if permissible levels of contaminants have been exceeded. If levels have been exceeded, impacted soils shall be remediated in accordance with Riverside County Department of Health Service protocol.

**5.13-c** The former windmill site shall be flagged prior to site grading. During site grading near the former windmill site, a qualified hazardous materials specialist shall monitor grading activities. If an underground storage tank or petroleum hydrocarbon odor-laden soil is uncovered near the old windmill site, grading and site work shall cease and the Regional Water Quality Control Board and Riverside County Department of Health Services notified. A remediation plan shall be developed to ensure that all contaminated soil and structures are removed, handled and disposed of in accordance with existing state and local regulations. Sampling in the area of impacted soils shall continue until contaminant levels reach an acceptable risk.

**5.13-d** In order to mitigate for potential hazards associated with petroleum stained soil beneath diesel storage tanks and on the floor of the equipment shed beneath 55-gallon oil storing drums, collection of surface and near surface samples by a qualified hazardous materials

specialist must occur. Following removal of the equipment shed, observations will be made for any stained soil beneath the shed. If stained areas are observed, surface and near surface samples shall be collected. Testing for contaminant levels must occur and an assessment of significance under state and local hazardous material regulations must follow. Once contaminant levels are determined, the Regional Water Quality Control Board and Riverside County Department of Environmental Health must be contacted to determine the proper mitigation method prior to site redevelopment. Any soil and other materials contaminated with hazardous materials may be considered hazardous waste and therefore must be disposed of in accordance with federal, state and local regulations.

**5.13-e** During removal of debris piles, a qualified hazardous materials specialist shall be on site. The hazardous materials specialist will conduct a site assessment of debris pile content and direct disposal accordingly. All waste products will be disposed of in accordance with state and local laws.

**5.13-f** In order to mitigate for potential hazards associated with existing septic tanks on site, the construction contractor shall remove the tanks and residue material in accordance with Riverside County Department of Environmental Health protocol. The project applicant will then be required to provide proof of septic tank removal to the City prior to issuance of building permits.

**5.13-g** In order to prevent groundwater contamination, the three on-site groundwater wells and vapor monitoring well, and any additional wells uncovered during site development, shall be abandoned and decommissioned in accordance with Regional Water Quality Control Board and Riverside County Department of Health protocols. The project applicant will be required to provide proof of well decommissioning to the City prior to issuance of building permits.

**5.13-h** Prior to demolition of on-site buildings, an asbestos survey shall be performed by a certified asbestos abatement contractor. Findings in the survey shall be used to determine what precautions shall be taken during demolition activities. If asbestos is present, removal shall occur in accordance with Riverside County Department of Environmental Health protocol.

**5.13-i** All building material suspected to contain lead-based paint shall be tested prior to demolition. If lead-based paints are present, removal shall occur in accordance with Riverside County Department of Environmental Health protocol.

## 5.13.6 Residual Impacts/Level of Significance after Mitigation

Incorporation of the proposed mitigation measures would reduce any potential impacts to a level below significance.

# SECTION 6.0
# CUMULATIVE IMPACTS

## 6.1 INTRODUCTION/PURPOSE

In many cases, the impact of a single project may not be significant, but when combined with other projects, the "cumulative" impact may be significant. Section 15355 of the CEQA Guidelines defines "cumulative impacts" as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines Section 15130(b) states that "the discussion [of cumulative impacts] need not provide as great of detail as is provided of the effects attributable to the project alone." Section 15130(b) further states that a cumulative impacts discussion should be guided by the standards of practicality and reasonableness.

Cumulative impacts can occur from the interactive effects of a single project. For example, the combination of noise and dust generated during construction activities can be additive and can have a greater impact than either noise or dust alone. However, substantial cumulative impacts more often result from the combined effect of past, present and future projects that are located in proximity to the project under review. For example, the wastewater treatment demand generated by a project may not be significant when analyzed alone, however, when analyzed in combination with the wastewater demands of approved or proposed projects, the wastewater demands may exceed the resource capabilities of the service agency, resulting in a significant cumulative impact. Therefore, it is important for a cumulative impacts analysis to be viewed over time and in conjunction with other related past, present and reasonably foreseeable future developments which may have impacts that might compound or interrelate with those of the project under review.

## 6.2 CUMULATIVE FORECASTING METHODOLOGY

Section 15130 (b)(1)(A) of the CEQA Guidelines allows for the preparation of a list of past, present, and reasonably anticipated future project as a viable method of determining cumulative impacts. This discussion utilizes that approach: an initial list and description of all related projects followed by a discussion of the effects that the proposed project may have on each environmental category of concern, such as traffic, noise, or biology. Consistent with CEQA, this discussion is guided by the standards of practicality and reasonableness.

## 6.3 LIST OF RELATED PROJECTS

This section of the analysis provides a list of past, present, and reasonably foreseeable future projects. Several development proposals, City projects and public infrastructure projects have been submitted for consideration or have been recently approved by local government agencies

in proximity to the proposed project that together with the proposed project would result in an increase in urban development/construction-related environmental impacts. To analyze cumulative impacts, the western San Jacinto area will serve as the study area which includes land along the western city limits to the general State Street area to the east (some projects east of State Street are included consistent with the traffic analysis as discussed below). Esplanade Avenue makes up the southern boundary and the northern city limits and areas adjacent to Ramona Expressway the northern boundary. The list of cumulative projects was compiled throughout the EIR preparation process (late 2004 to spring 2009). The existing list was updated in April 2009 in association with development of the most recent traffic report for the project (*Villages of San Jacinto Traffic Impact Analysis*, Urban Crossroads, April 24, 2009, included in *Appendix H* of this report). This list is similar to those contained in *Table 5.9-4, 2023 Cumulative Project Trip Generation*. However, some of the smaller projects and public infrastructure projects were not included in the traffic report. However, these projects have been included in the table below.

General project description information for each cumulatively considerable project is contained in *Table 6.0-1*, *Villages of San Jacinto Cumulative Projects List*. The location of each project is depicted on *Figure 6.0-1*, *Cumulative Projects.*

## Table 6.0-1
## Villages of San Jacinto Cumulative Projects List

| Project Name | Map Indicator | Location | Status | Units/Square Footage | Reference |
|---|---|---|---|---|---|
| **Urban Development Projects** | | | | | |
| SP 1-01 | 1 | west of Warren Road | in planning process (April 2009) | 490 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project. |
| TR – 31037 | 2 | west of Ramona Boulevard | in planning process (April 2009) | 131 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31282 | 2 | west of Ramona Boulevard | in planning process (April 2009) | 274 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31154 | 2 | west of Ramona Boulevard | in planning process (April 2009) | 135 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31900 | 2 | west of Ramona Boulevard | in planning process (April 2009) | 112 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 33072 | 2 | west of Ramona Boulevard | in planning process (April 2009) | 140 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 33138 | 2 | west of Ramona Boulevard | in planning process (April 2009) | 28 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| VTR – 31384 | 2 | west of Ramona Boulevard | in planning process (April 2009) | 48 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 33249 | 2 | west of Ramona Boulevard | in planning process (April 2009) | 25 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 34364 | 2 | west of Ramona Boulevard | in planning process (April 2009) | 8 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30814 | 3 | northeast corner of North Sanderson Avenue/Cottonwood Avenue Intersection | in planning process (April 2009) | 155 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30481 | 3 | northeast corner of North Sanderson Avenue/Cottonwood Avenue Intersection | in planning process (April 2009) | 126 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |

## Table 6.0-1 (Continued)

| Project Name | Map Indicator | Location | Status | Units/Square Footage | Reference |
|---|---|---|---|---|---|
| TR – 31555 | 3 | northeast corner of North Sanderson Avenue/Cottonwood Avenue Intersection | in planning process (April 2009) | 115 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30813 | 3 | northeast corner of North Sanderson Avenue/Cottonwood Avenue Intersection | in planning process (April 2009) | 186 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30335 | 3 | northeast corner of North Sanderson Avenue/Cottonwood Avenue Intersection | in planning process (April 2009) | 69 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30944 | 3 | northeast corner of North Sanderson Avenue/Cottonwood Avenue Intersection | in planning process (April 2009) | 102 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| VTR – 31097 | 4 | northwest corner of North State Street/Cottonwood Avenue Intersection | in planning process (April 2009) | 214 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31293 | 4 | northwest corner of North State Street/Cottonwood Avenue Intersection | in planning process (April 2009) | 100 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 29384 | 4 | northwest corner of North State Street/Cottonwood Avenue Intersection | in planning process (April 2009) | 39 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31246 | 4 | northwest corner of North State Street/Cottonwood Avenue Intersection | in planning process (April 2009) | 128 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30878 | 5 | South of Cottonwood Avenue, east of Sanderson Avenue | in planning process (April 2009) | 170 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 32250 | 6 | South of Cottonwood Avenue, east of Sanderson Avenue | in planning process (April 2009) | 53 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |

## Table 6.0-1 (Continued)

| Project Name | Map Indicator | Location | Status | Units/Square Footage | Reference |
|---|---|---|---|---|---|
| TR – 30559 | 6 | South of Cottonwood Avenue, east of Sanderson Avenue | in planning process (April 2009) | 20 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31929 | 6 | South of Cottonwood Avenue, east of Sanderson Avenue | in planning process (April 2009) | 78 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| VPM 31281 | 7A | South of Ramona Expressway, north of project site | in planning process (April 2009) | 500 TSF commercial<br>62.5 TSF industrial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| PM 31522 | 7B | South of Ramona Expressway, north of project site | in planning process (April 2009) | 200 TSF commercial<br>250 TSF industrial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| Bahan Hopkins | 7C | Northeast of intersection of Ramona Expressway, Sanderson Avenue | in planning process (April 2009) | 1,100 TSF commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| SJ 106, LLC | 7D | Northeast of intersection of Ramona Expressway, Sanderson Avenue | in planning process (April 2009) | 250 TSF commercial<br>321 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| Target Center SP-1-08 | 7E | southeast of intersection of Ramona Expressway, Sanderson Avenue | in planning process (April 2009) | 771 TSF commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| McCleish Group | 7F | South of Ramona Expressway, north of project site | in planning process (April 2009) | 200 TSF commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30603 | 8 | north of Esplanade Avenue east of Lyon Avenue | in planning process (April 2009) | 203 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 22665 | 8 | west of North Sanderson Avenue immediately east of the northeast corner of the proposed project | in planning process (April 2009) | 147 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 29917 | 9 | East of State Street | in planning process (April 2009) | 134 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31794 | 9 | East of State Street | in planning process (April 2009) | 62 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 32518 | 9 | East of State Street | in planning process (April 2009) | 34 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |

## Table 6.0-1 (Continued)

| Project Name | Map Indicator | Location | Status | Units/Square Footage | Reference |
|---|---|---|---|---|---|
| TR – 31544 | 9 | East of State Street | in planning process (April 2009) | 135 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 29992 | 10 | east of State Street, north of Blodgett Street | in planning process (April 2009) | 30 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30884 | 10 | east of North Ramona Boulevard and west of Ramona Expressway | in planning process (April 2009) | 14 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 33509 | 10 | south of Cottonwood Avenue and east of Lyon Avenue | in planning process (April 2009) | 37 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| VTR – 30484 | 11 | East of State Street | in planning process (April 2009) | 117 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31566 | 11 | East of State Street | in planning process (April 2009) | 61 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 32053 | 12 | East of State Street | in planning process (April 2009) | 178 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 32053 | 12 | East of State Street | in planning process (April 2009) | 108 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30644 | 13 | East of State Street | in planning process (April 2009) | 66 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31035 | 13 | East of State Street | in planning process (April 2009) | 77 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 32376 | 13 | East of State Street | in planning process (April 2009) | 337 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31886 | 14 | North of Ramona Boulevard | in planning process (April 2009) | 321 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 32843 | 14 | North of Ramona Boulevard | in planning process (April 2009) | 143 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| PM 30532 | 14 | North of Ramona Boulevard | in planning process (April 2009) | 2 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 32555 | 14 | North of Ramona Boulevard | in planning process (April 2009) | 12 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |

## Table 6.0-1 (Continued)

| Project Name | Map Indicator | Location | Status | Units/Square Footage | Reference |
|---|---|---|---|---|---|
| SP 1-03 | 15 | West of Gilman Springs Road | in planning process (April 2009) | 580 single-family residential units | Urban Crossroads. East of State Street April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 32080 | 15 | West of Gilman Springs Road | in planning process (April 2009) | 53 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 29341 | 15 | West of Gilman Springs Road | in planning process (April 2009) | 251 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30597 | 16 | Southwest of Sanderson Avenue and Cottonwood Avenue intersection | in planning process (April 2009) | 116 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31855 | 16 | Southwest of Sanderson Avenue and Cottonwood Avenue intersection | in planning process (April 2009) | 161 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31855 | 17 | East of State Street | in planning process (April 2009) | 126 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 31855 | 17 | East of State Street | in planning process (April 2009) | 192 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| Kasbergen Hafliger Property | 17 | East of State Street | in planning process (April 2009) | 147 single-family residential units<br>30 TSF commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| SP 1-02 | 18 | Northwest of Warren Road and Esplanade Avenue intersection | in planning process (April 2009) | 613 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR – 30828 | 19 | West of Sanderson Avenue, south of Cottonwood Avenue | in planning process (April 2009) | 293 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR- 31544 | 20 | East of Sanderson Avenue, south of Ramona Boulevard | in planning process (April 2009) | 134 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TTM 32155 | 21 | West of Sanderson Avenue, south of Cottonwood Avenue | in planning process (April 2009) | 253 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR- 33408 | 22 | East of Sanderson Avenue, south of Ramona Boulevard | in planning process (April 2009) | 210 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |

## Table 6.0-1 (Continued)

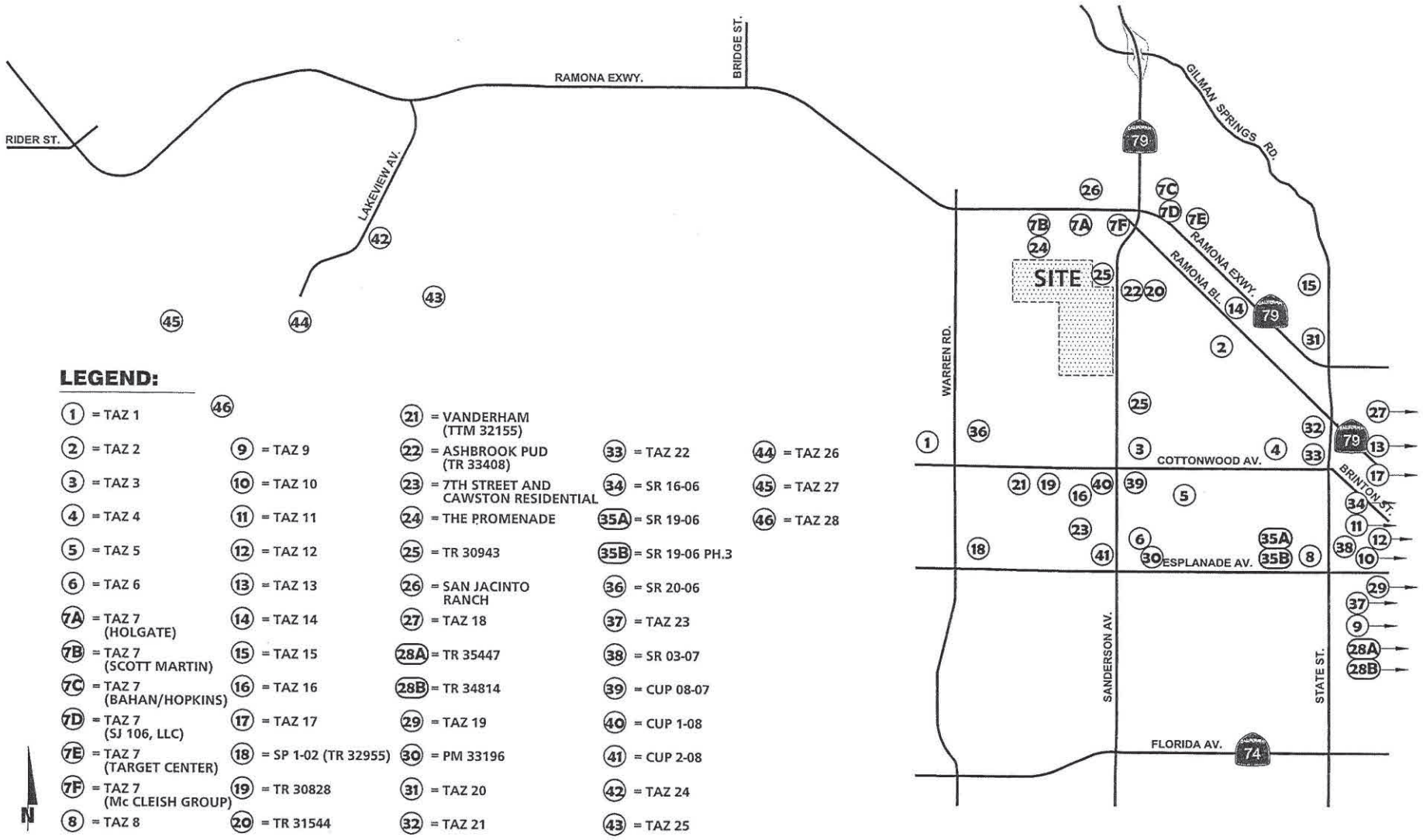
| Project Name | Map Indicator | Location | Status | Units/Square Footage | Reference |
|---|---|---|---|---|---|
| Cawston Residential | 23 | West of Sanderson Avenue, south of Cottonwood Avenue | in planning process (April 2009) | 128 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| The Promenade | 24 | Just north of project site south of Ramona Expressway | in planning process (April 2009) | 600 Apartments<br>39 TSF office<br>40 TSF retail | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR- 30943 | 25 | Northeast of project site west of Sanderson Avenue, south of Ramona Expressway | in planning process (April 2009) | 210 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| SP 1-07 | 26 | North of Ramona Expressway, north of project site | in planning process (April 2009) | 228 single-family residential units<br>1,008 Condo residential units<br>174 TSF commercial<br>31 TSF office | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| PM 33196 | 30 | Northeast of intersection of Sanderson Avenue and Esplanade Avenue. | in planning process (April 2009) | 118 TSF commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| SR 10-06 | 33 | Northwest corner of State Street and Cottonwood Avenue intersection | in planning process (April 2009) | 8.2 TSF Commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| SR 04-07 | 33 | Northwest corner of State Street and Cottonwood Avenue intersection | in planning process (April 2009) | 21.5 TSF Commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| SR 16-06 | 34 | East of State Street | in planning process (April 2009) | 12.2 TSF Medical Office | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| SR 19-06 | 35B | West of State Street, north of Esplanade Avenue | in planning process (April 2009) | 74 TSF Medical Office | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| SR 20-06 | 36 | Northeast of intersection of Warren Road and Cottonwood Avenue | in planning process (April 2009) | 64 TSF General Office | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |

## Table 6.0-1 (Continued)

| Project Name | Map Indicator | Location | Status | Units/Square Footage | Reference |
|---|---|---|---|---|---|
| SR 03-07 | 38 | East of State Street, north of Esplanade Avenue | in planning process (April 2009) | 13.3 TSF Commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| CUP 08-07 | 39 | Southeast of intersection of Cottonwood Avenue and Sanderson Avenue | in planning process (April 2009) | 171 TSF Commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| CUP 1-08 | 40 | Southwest of intersection of Cottonwood Avenue and Sanderson Avenue | in planning process (April 2009) | 141 TSF Commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| CUP 2-08 | 41 | Northwest of intersection of Sanderson Avenue and Cottonwood Avenue | in planning process (April 2009) | 134 TSF Commercial | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR-30915<br>TR-32165<br>TR-32764 | 42 | East of Lakeview Avenue, south of Ramona Expressway | in planning process (April 2009) | 419 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR-33177<br>TR-33178 | 43 | East of Lakeview Avenue, south of Ramona Expressway | in planning process (April 2009) | 33 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR-29315 | 45 | West of Lakeview Avenue, north of Nuevo Road | in planning process (April 2009) | 327 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| TR-31583 | 46 | South of Nuevo Road | in planning process (April 2009) | 171 single-family residential units | Urban Crossroads. April 2009. Traffic Analysis for Villages of San Jacinto Project |
| **Public Infrastructure** | | | | | |
| Eastern Municipal Water District – San Jacinto Valley Regional Water Reclamation Facility Agriculture Groundwater Exchange | Not on Map | South of proposed project limits east to San Jacinto River pump station and south to citrus fields. | Pending | construction of a pipeline and pump station to replace groundwater with up to 7,000 acre-feet of recycled water for citrus irrigation. | www.emwd.org |

## Table 6.0-1 (Continued)

| Project Name | Map Indicator | Location | Status | Units/Square Footage | Reference |
|---|---|---|---|---|---|
| RCTC/Riverside County – SR 79 Realignment | Not on Map | Gilman Springs Road to Domenigoni Parkway | Draft EIR/EIS expected to be circulated late 2009 with construction expected to begin by 2011. | realignment of existing highway (linear facility) | www.rctc.org |
| RCTC/Riverside County – Mid County Parkway Project | Not on Map | Ramona Expressway from its intersection with SR 79 to Cajalco Road to its intersection with I-15 | Draft EIR/EIS expected to be circulated late 2009 with construction expected to begin by 2012. | 32-mile east-west limited access route connecting Corona with San Jacinto | www.rctc.org |
| Sanderson Avenue and Ramona Expwy. Intersection enhancements | Not on Map | Sanderson Avenue/Ramona Expwy. intersection | Scheduled construction: summer 2009 | Intersection capacity enhancements and signal modification | San Jacinto, City of. 2008-2009 Capital Improvement Program |
| Sanderson Avenue/Cottonwood Avenue | Not on Map | Street widening and improvements | Scheduled construction fall/winter 2009 | roadway improvements | San Jacinto, City of. 2008-2009 Capital Improvement Program |
| Kirby Street/Cottonwood Avenue Traffic Signal | Not on Map | Intersection of Kirby Street and Cottonwood Avenue | Pending | traffic signal installation | San Jacinto, City of. 2008-2009 Capital Improvement Program |
| Hewitt Street Storm Drain Line | Not on Map | Hewitt Street from Commonwealth Avenue to Park Avenue | In Design | storm drain pipeline (linear facility) | San Jacinto, City of. 2008-2009 Capital Improvement Program |
| Line G Flood Control project | Not on Map | De Anza Drive from Palm Avenue to Lyon Avenue | Pending | storm drain pipeline (linear facility) | San Jacinto, City of. 2008-2009 Capital Improvement Program |
| San Jacinto River Levee | Not on Map | From existing USACE levee to west of Sanderson Avenue | Construction Pending final engineering and environmental | roadway rehabilitation (linear facility) | San Jacinto, City of. 2008-2009 Capital Improvement Program |




SOURCE: URBAN CROSSROADS

Villages of San Jacinto EIR

**Cumulative Projects**

FIGURE 6.0-1

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## 6.4 IMPACTS TO ENVIRONMENTAL FACTORS

### Land Use Planning and Zoning

This project, when combined with the others planned within the western portion of the City of San Jacinto, would result in a large increase in suburban land uses adjacent to existing agricultural land uses. However, this area will continue to convert to urban-type uses consistent with the General Plan, which would ultimately alleviate potential land use conflicts between existing agricultural uses and planned development. Therefore, the cumulative impact of land uses would not be incompatible with the surrounding mixture of land uses planned within the area. This portion of the City, when combined with the other projects outlined in *Table 6.0-1* would be consistent with the City of San Jacinto General Plan adopted on May 4, 2006, and the latest General Plan Land Use Map approved in February 2009 which reflects the future direction of land use form envisioned for this portion of the City. Analysis of individual projects as they are submitted to the City will ensure compatibility with applicable plans and policies.

### Agricultural Resources

The proposed project would result in significant, unmitigable impacts to agricultural resources. When combined with the other surrounding projects which also involve conversion of agricultural resources into suburban uses, a significant decrease in agricultural land use within the City of San Jacinto would occur. In summary, the project, when combined with many of the cumulatively considerable projects listed in *Table 6.0-1*, would contribute to a significant, unmitigable cumulative impact to agricultural resources. As discussed in *Section 5.3, Agricultural Resources*, the City's General Plan EIR (January 2006) discusses a number of reasons mitigation for loss of agriculture is infeasible. Rising land costs to replace agricultural lands, increasing water costs, labor costs, urbanization and environmental regulations all contribute to ongoing conversion of farmland. Without property owner cooperation and substantial financial incentives, it is infeasible to provide permanent on or off-site mitigation to replace converted farmland.

### Landform Alteration and Aesthetics

The proposed project will contribute to the gradual change in visual character of the Sanderson Avenue corridor and the western San Jacinto Valley. The project represents a transition from a rural and agricultural area to a landscape that can be characterized as suburban in nature. These visual changes will be most evident from Sanderson Avenue and other major roadways which have sweeping views of the project site. However, neither the project, nor cumulative development would represent a substantial degradation in visual quality of designated scenic resources such as the Lakeview Mountains or other unique topographic features or result in a substantial impediment to scenic views provided such development is consistent with planned

land uses in the vicinity of the project and with General Plan development and design guidelines. Therefore, cumulative impacts related to visual resources are not anticipated.

**Biological Resources**

Although the project will result in minimal direct impacts to biological resources, development of this project, combined with the others described above would contribute to the increase in human presence within the western San Jacinto Valley. Continued development within the western areas of the City would extend urban land uses into vacant areas characterized by natural and/or agriculturally utilized habitats that are used by the region's sensitive plant and wildlife species. That said, the project is consistent with the Western Riverside County MSHCP, which is, in effect, an attempt at a cumulative/big-picture approach to mitigating the impacts of increased urban development on the region's plant and wildlife species. Analysis of individual projects for consistency with the MSHCP will provide mitigation for biological resources, including payment of development fees to support implementation of the MSHCP and will reduce cumulative impacts to less-than-significant levels.

**Cultural Resources**

Any potentially significant cultural resource impacts associated with development on surrounding projects would be site-specific and can be mitigated on a project-by-project basis. Therefore, since individual projects would be fully mitigated, residual cumulative impacts to the region would not occur. Therefore, the cumulative effect when considering all these projects combined would result in a less than significant cumulative impact to cultural resources.

**Geology/Soils**

Most geology and soil hazards associated with development on surrounding projects would be site-specific and can be mitigated on a project-by-project basis. Such hazards include exposure of people or structures to rupture of an earthquake fault, liquefaction, landslides, unstable geologic units, and expansive soils. The individual project mitigation for these hazards will ensure that there are no residual cumulative impacts. There is potential for a cumulative impact of all related projects on soil erosion in the project area. However, the City of San Jacinto requires construction Best Management Practices which include soil stabilization and erosion control techniques. Therefore, no significant residual cumulative impacts related to geology and soils resources would occur.

**Paleontological Resources**

As with other cultural resources, all significant paleontological resources associated with this and other projects will be mitigated on a project-by-project basis. Because each project would be

required to fully mitigate for any potential paleontological resources, residual cumulative impacts to regional paleontological resources would not occur.

**Water Quality and Hydrology**

Runoff from project construction areas and parking lot and landscape irrigation systems will contribute to the incremental increase in urban runoff to the San Jacinto River system. However, compliance with Regional Water Quality Control Board requirements of attenuating all project drainage on site to ensure that post construction discharge does not exceed existing quantities, ensures that both a project-specific and cumulative increase to regional drainage (and therefore potential flooding of downstream systems) is avoided. Further, by ensuring that project mitigation measures (which are in the form of construction, design, and operational best management practices) are incorporated, any runoff does not result in a localized water quality contamination issue. Further, because all surrounding projects are regulated under the same City and Regional Water Quality Control Board standards, they too will be required to attenuate all drainage on site (to maintain pre development flow quantities) and incorporate water quality design features to prevent cumulative impacts to local drainage systems or water quality.

Further, although the City does not have control over it, a regional drainage master plan, referred to as the San Jacinto Master Drainage Plan (MDP) is being planned to provide a regional stormwater conveyance system for the western San Jacinto area. This regional drainage system will also help appropriately convey and/or attenuate drainage generated by future western San Jacinto urban development. This future facility would help with cumulative drainage issues in this region. However, as indicated above, the absence of this facility is not resulting in a project-specific or cumulative impact to drainage because all existing projects in the planning process are being required to attenuate all flows on site in the interim basis.

**Transportation, Circulation and Access**

Implementation of the mitigation measures included in *Section 5.9.5*, *Mitigation Measures*, would ensure that regional traffic conditions do not dip below an acceptable LOS (LOS D) for existing plus project conditions. However, without completion of the Mid County Parkway and SR-79 projects, the project would contribute to a cumulative significant impact. Mitigation proposed for this significant cumulative impact is infeasible due to exceedance of General Plan roadway criteria (i.e., triple left turn lanes at Warren Road and Ramona Expressway, and extensive improvements required along Sanderson Avenue) and the uncertainty of obtaining adequate right-of-way for such measures. Therefore, because the City can not guarantee that regional improvements would be implemented prior to completion of the project, a significant unmitigable cumulative traffic impact would occur. That said, it should be noted that the unacceptable LOS conditions would occur with or without the project under cumulative

conditions in the absence of the Mid County Parkway and SR-79 improvements. Significant cumulative impacts can not be mitigated; therefore, significant cumulative impacts would occur as a result of the proposed project and many other cumulatively considerable projects depicted on *Figure 6.0-1*.

**Air Quality**

***Regional Air Quality***

Implementation of the project would result in short-term impacts to air quality associated with construction and long-term impacts associated with increased vehicle traffic to and from the site as well as energy use. Buildout of the proposed project would occur from 2011 to 2033, with the nonresidential land uses constructed during the last 10 years. As the proposed construction would occur over a 22-year time period, there is the potential that additional construction activity associated with future projects in the vicinity of the proposed project could occur concurrently and cumulatively impact the same sensitive receptors. Construction schedules for potential future projects are currently unknown; therefore, potential impacts to sensitive receptors that might be located within an area of overlap between emissions from two simultaneous projects are speculative. The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (Title 14, California Code of Regulations, Section 15145). This analysis is nonetheless provided in an effort to provide good faith analysis and comply with CEQA's information disclosure requirements. Air pollutant emissions associated with construction activity of future projects would be reduced through the implementation of mitigation measures required by the South Coast Air Quality Management District (SCAQMD). Cumulative $PM_{10}$ and $PM_{2.5}$ emissions would be reduced as all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. As indicated in Section 5.10, the application of architectural coatings (exterior/interior paint and other finishings) would produce VOC emissions that would exceed the SCAQMD's established quantitative significance threshold. As VOC is a precursor to ozone, construction of the proposed project along with other nearby projects would contribute to the South Coast Air Basin's (SCAB) ozone nonattainment designation. The maximum 24-hour $PM_{10}$ and $PM_{2.5}$ concentrations are anticipated to exceed the LST at the maximally impacted sensitive receptor in the vicinity of the project site during project construction. Fugitive dust, as well as vehicle and equipment exhaust, generated during project construction would also contribute to the SCAB nonattainment designation for $PM_{10}$ and $PM_{2.5}$.

Operations of the project would produce VOC, $NO_x$, CO, $SO_x$, $PM_{10}$ and $PM_{2.5}$ emissions from all combined proposed residential and nonresidential project land uses. The projected operational emissions from both area source and vehicular emissions are substantially above the SCAQMD

significance criteria for all pollutants except $SO_x$. Long-term operational air quality impacts are considered significant and unmitigable, even with application of all feasible mitigation measures. The cumulative effect of the proposed project and other projects in the vicinity would incrementally contribute to the SCAB's levels of $O_3$, $NO_2$, CO, $PM_{10}$, and $PM_{2.5}$. The location of the project within a nonattainment area for ozone $PM_{10}$, and $PM_{2.5}$, when combined with other foreseeable projects within the area would result in significant, unmitigable cumulative air quality impacts from both a short and long term perspective even with incorporation of all feasible area source and vehicular source mitigation measures. Because feasible mitigation measures consist of many emission reduction strategies (i.e., architectural design features, encouragement of alternative transportation, etc.), most of which help reduce emissions, current technology doesn't allow for a complete reduction of emissions given the types of development proposed. Therefore despite the City's efforts to require all feasible mitigation, significant unmitigable impacts would remain.

***Global Climate Change***

The project would also contribute to the overall production of greenhouse gas (GHG) emissions during construction and operation. As stated in *Section 5.10.4*, the proposed project's contribution to state, national, and GHG emission inventories and the resultant effect on global climate should be evaluated on a cumulative basis. The proposed project would generate GHG emissions, which would contribute to potential cumulative impacts of GHG emissions on global climate.

Under Section 15065 of the CEQA Guidelines, an EIR must discuss cumulative impacts if a project would have a cumulatively considerable effect on a resource, where "cumulatively considerable" is defined as "…the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." However, as Section 15064(h)(4) states, "The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, the fact that the proposed project would result in emissions of GHGs (chiefly carbon dioxide), and that global GHG emissions contribute to the greenhouse effect and the resultant impacts on global climate, does not mean that the proposed project would have a cumulatively considerable contribution to impacts on global climate. The potential contribution of the project to this cumulative impact is evaluated relative to whether the project could impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32.

The proposed project is evaluated with respect to the California Air Resources Board's (CARB) Climate Change Scoping Plan, which established the state's framework for meeting the goals of

AB 32. Many of the Scoping Plan measures to be adopted in the next several years will reduce GHG emissions from all development projects and their users in California. For example, adoption of the Low Carbon Fuel Standard and more stringent energy conservation standards would apply to all motor vehicle users and owners of homes and commercial properties, including those of the proposed project. Given that the GHG reduction goal of AB 32 (i.e., reduction of emissions to 1990 levels by 2020) would require a statewide reduction of approximately 30% from "business as usual" (i.e., the emissions that would occur in the absence of any regulation of GHG emissions), a large portion of a specific project's GHG emissions will result from statewide measures. Nonetheless, each development project should incorporate measures intend to achieve the goals of AB 32.

The Specific Plan incorporates several design features that reduce indirect emissions of GHGs by reducing vehicle trips and conserving water that would otherwise be consumed by the proposed project:

- Incorporates commercial (retail) and mixed-use (office/retail) components to improve jobs/housing balance and reduce vehicle trips.
- Incorporates public and private on-site recreational facilities
- Provides drought-tolerant and water-efficient landscaping for the community to reduce waste usage.
- Incorporates recycled water from Eastern Municipal Water District to supply the lake and irrigate landscaping to minimize the use of potable water.

By incorporating the commercial and mixed-use components of the proposed project, the project's residents will be able to use retail services and take advantage of job opportunities within proximity to the residential development. Thus, motor vehicle trips and their associated GHG emissions would be reduced relative to a project that would not include these nonresidential uses. The traffic impact analysis estimated that 5,020 trips are captured internally by the project for trips between the residential and commercial/mixed-use components. If these trips were required to go to off-site commercial and mixed-use locations, they would generate a minimum of 6,693 metric tons of carbon dioxide equivalent ($CO_2E$) of GHGs. This amount would be even larger if the project residents were required to drive farther to such uses, which would be likely given the lack of retail and commercial development in proximity to the proposed project. Additionally, there are on-site recreational facilities which would further reduce the need for longer vehicle trips associated with such uses at another location.

The use of recycled water to supply the lake and for landscape irrigation will reduce the GHG emissions associated with electricity needed for conveyance, treatment, and distribution of potable water. The estimated amount of water needed to supply the lake and irrigation of

common landscaping area (e.g., parks and greenbelts) is 402 acre-feet per year. Using recycled water would offset an equivalent amount of potable water, which would result in the generation of 1,137 metric tons $CO_2E$ of GHG emissions from electricity for conveyance, treatment, and distribution.

Together, the incorporation of commercial/mixed-use components and use of recycled water would reduce the proposed project's GHG emissions by an estimated 7,830 metric tons $CO_2E$ per year, or 14%, relative to the business-as-usual scenario.

In addition, the Specific Plan would reduce GHG emissions associated with vehicle trips by encouraging pedestrian and bicycle activity within the community. The project would include a 9.6-acre network of paseos and pathways linking the Beach Club and lake to all of the residential neighborhoods, commercial and mixed use areas, and the recreational amenities including the neighborhood parks and the Community Park. Neighborhood design will maximize pedestrian access to the paseo system by providing that a minimum of 50% of the streets terminate in cul-de-sacs that access the paseos.

The following design guidelines have been incorporated into the Energy Efficiency Guidelines in the Villages of San Jacinto Specific Plan to help reduce vehicle trips, electrical and natural gas usage, and conserve water, all of which would reduce the proposed project's GHG emissions.

**Energy Efficiency**

1. All buildings shall employ passive heating and cooling design strategies to the extent practical.
2. Shading of windows and entrance locations with a combination of structural elements and landscape materials will reduce heat gain and lower the temperature around each house.
3. Consider installing natural lighting systems such as skylights and interior transom windows to reduce energy consumption in commercial, office and municipal structures.
4. When appropriate to the architectural style, consider constructing light colored roof, which absorb less heat, reduce solar heat gain, and reduce use of mechanical cooling systems.
5. Use energy-efficient appliances and programmable thermostats to reduce the amount of consumed energy and reduce utility bills.
6. Automatic devices to turn off lights after business hours shall be used to the extent feasible in the commercial and business park land uses. Similarly, install timers on outdoor lighting to limit operating hours.

7. Install fluorescent bulbs in all indoor and outdoor fixtures unless unsuitable for the application.
8. Offer homebuyers the option of a natural gas stove, which reduces the consumption of electricity.
9. Use of passive solar energy minimizes the consumption of electricity. If possible, offer additional energy conservation features as homebuyer options, including but not limited to:
    a. Photovoltaic panels for electrical power needs of home.
    b. Photovoltaic landscape lighting, gate openers, water features.
    c. Solar water heating system.

**Water Conservation**

1. Drought tolerant and native plants are required as part of the plant palette, as required by Riverside County Ordinance No. 859.
2. Use a drip irrigation system and/or zoned irrigation system with a rain sensor shutoff feature.
3. Consider xeriscape landscape treatments instead of lawns. Where lawns or gardens are proposed, incorporate detention grading and/or construct as a swale to allow for maximum detention and control of stormwater flows.
4. Utilize water efficient faucets, high-efficiency toilets (HETs), and water-conserving shower heads in residential homes.

**Landfill Waste**

1. During building construction, use long-lasting products, such as engineered lumber and durable, non-combustible flooring, siding, and roofing materials, if feasible.
2. Consider the use of sustainable building materials for use during building design and construction.

**Pedestrian Activity and Bicycle Paths**

1. Provide on-site improvements, such as sidewalks or pedestrian walkways, to promote on-site pedestrian activity and reduce the amount of vehicle trips within the community.
2. Provide a pedestrian access network and pedestrian facilities to internally link all uses and connect to all existing/planned external streets and public facilities.

3. Provide a designated bicycle route connecting all units, on-site bicycle parking facilities, and all streets contiguous with the community.
4. Design traffic calming elements to encourage walking and biking.

Implementation of these design guidelines would likely result in additional reductions in the GHG emissions from natural gas and electrical usage. However, those emission reductions cannot be quantified because the guidelines do not provide sufficient detail to compute the actual reductions in natural gas and electrical usage.

The Climate Change Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32. The Scoping Plan recommendations serve as statewide strategies to reduce the state's existing GHG emissions and proposed project's contributions. Although a framework for the adoption of specific regulations and measures, the Scoping Plan is the current state's plan to reduce GHG emissions. *Table 6.0-2, Project Consistency with Scoping Plan GHG Emission Reduction Strategies*, highlights measures to be developed under the Scoping Plan that would be applicable to the proposed project or its users. The proposed project's consistency with the applicable Scoping Plan measures is assessed.

**Table 6.0-2**
**Project Consistency with Scoping Plan GHG Emission Reduction Strategies**

| Scoping Plan Measure | Measure Number | Project Consistency |
|---|---|---|
| Pavley Motor Vehicle Standards (AB 1493) | T-1 | The proposed project's residents and employees would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase. |
| Limit High GWP Use in Consumer Products | H-4 | The proposed project's residents would use consumer products that would comply with the regulations that are in effect at the time of manufacture. |
| Motor Vehicle Air Conditioning Systems – Reduction from Non-Professional Servicing | H-1 | The proposed project's residents would be prohibited from performing air conditioning repairs and required to use professional servicing. |
| Tire Pressure Program | T-4 | Motor vehicles driven by project residents and employees would maintain proper tire pressure when their vehicles are serviced. |
| Low Carbon Fuel Standard | T-2 | Motor vehicles driven by project residents and employees would use compliant fuels in the future. |
| Water Use Efficiency | W-1 | The Specific Plan includes measures to minimize water use and maximize efficiency. |
| Water Recycling | W-2 | The proposed project will use recycled water for the lake and irrigation of common landscaped areas. |
| Solar Water Heating (AB 1470) | CR-2 | The Specific Plan includes an energy efficiency guideline to offer home purchasers the option of installing solar hot water heaters. |
| Million Solar Roofs | E-4 | The Specific Plan includes an energy efficiency to offer home purchasers the option of installing photovoltaic panels for electrical power needs. |

**Table 6.0-2 (Continued)**

| Scoping Plan Measure | Measure Number | Project Consistency |
|---|---|---|
| Green Buildings | GB-1 | The proposed project will be required to be constructed in compliance with state or local green building standards in effect at the time of building construction. |
| Air Conditioning Refrigerant Leak Test During Vehicle Smog Check | H-5 | Motor vehicles driven by the proposed project's residents and employees would comply with the leak test requirements during smog checks. |
| Renewable Portfolios Standard (33% by 2020) | E-3 | The electricity used by residents and businesses in the proposed project will benefit from reduced GHG emissions resulting from increased use of renewable energy sources. |
| Energy Efficiency Measures (Electricity) | E-1 | The proposed project will comply with energy efficiency standards for electrical appliances and other devices at the time of building construction. |
| Energy Efficiency (Natural Gas) | CR-1 | The proposed project will comply with energy efficiency standards for natural gas appliances and other devices at the time of building construction. |
| Greening Public Schools | GB-1 | The proposed school would meet green building standards that are in effect at the time of design and construction. |
| Greening New Residential and Commercial Construction | GB-1 | The proposed project's residential and commercial buildings would meet green building standards that are in effect at the time of design and construction. |
| Greening Existing Homes and Commercial Buildings | GB-1 | The proposed project's residential and commercial buildings would meet retrofit standards when they become effective. |

SOURCE: CARB 2009.

In addition to the strategies being developed under the Climate Change Scoping Plan, the Attorney General and others have recommended mitigation measures that can be applied to a project to reduce its GHG contribution. The Attorney General's list (Office of the California Attorney General 2008) includes many of the measures that are project design features or are incorporated into the Specific Plan's Energy Efficiency Guidelines. These include, but are not limited to, the following:

- Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.
- Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.
- Install light colored “cool” roofs, cool pavements, and strategically placed shade trees
- Install energy efficient heating and cooling systems, appliances and equipment, and control systems.
- Limit the hours of operation of outdoor lighting.

- Install solar and wind power systems, solar and tankless hot water heaters, and energy-efficient heating ventilation and air conditioning.
- Create water-efficient landscapes.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
- Use reclaimed water for landscape irrigation in new developments and on public property. Install the infrastructure to deliver and use reclaimed water.
- Design buildings to be water-efficient. Install water-efficient fixtures and appliances.
- Include mixed-use, infill, and higher density in development projects to support the reduction of vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods.
- Preserve and create open space and parks.
- Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling or walking.
- Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments
- Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.

In January 2008, the California Air Pollution Control Officers Association (CAPCOA) published *CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act* (CAPCOA 2008). This white paper is "intended as a resource, not a guidance document. It is not intended, and should not be interpreted, to dictate the manner in which an air district or lead agency chooses to address greenhouse gas emissions in the context of its review of projects under CEQA" (CAPCOA 2008). However, this document provides an extensive list of potential GHG mitigation measures; however, many of them would be only implementable by the users of the proposed project and not enforceable by the City or the applicant. Again, many of them, as listed below, are project design features or incorporated into the Energy Efficiency Guidelines:

- Bike parking
- Proximity to bike path/bike lanes
- Pedestrian network
- Orientation to existing/planned transit, bikeway, or pedestrian corridor
- Suburban mixed use

- No wood-burning fireplaces or stoves
- Energy efficient appliances
- Shading mechanisms
- Programmable thermostats
- Passive heating and cooling systems.

Based on the analysis in *Table 6.0-2*, the proposed project would substantially reduce its contribution to GHG emissions and global climate due to its consistency with the strategies and measures in the Scoping Plan, as well as mitigation measures suggested by the Attorney General and CAPCOA. In addition, the proposed project would result in GHG emissions of approximately 49,650 metric tons per year (0.05 million metric tons) as shown in *Table 5.10-13*, which is 14% below the level that would have been emitted under a business-as-usual scenario. Furthermore, compared to the estimated GHG for all sources in California (423 million metric tons, excluding out-of-state electrical generation, in 2004), the project would result in a contribution of approximately 0.012% to California's GHG emissions inventory without accounting for the implementation of statewide emissions that would reduce both the project's and the state's emission inventories. In light of the project's consistency with the Scoping Plan and other suggested measures through its design features and Energy Efficiency Guidelines and its substantial reduction from business as usual, it is concluded that the proposed project would not impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32. Therefore, the proposed project would not result in a cumulatively considerable contribution to global climate change, and this cumulative impact would be less than significant.

**Noise**

Cumulative noise impacts are discussed in terms of traffic related noise and a general increase in urbanization in an area. A project specific contribution to cumulative traffic noise would be evaluated on an individual basis, and if significant impacts are identified (e.g., non-compliance with noise standards) then mitigation requirements would be imposed. In the long term, the increase in traffic noise from the proposed project and cumulative developments (i.e., General Plan build-out) is calculated to range from 5 to 7 dB, which is a noticeable change in the noise environment. The noise increase associated with traffic from cumulative developments is therefore considered potentially significant. However, the project's contribution to cumulatively significant traffic noise impacts is less than significant (1 dB or less increase, which by itself is not a discernible increase). Consequently, mitigation is not required for the project's contribution to off-site noise impacts associated with General Plan build-out traffic volumes but is required

for the cumulatively significant impact, Mitigation to address this significant cumulative noise impact is included in Section 5.11.5, Mitigation Measures, Mitigation Measure 5.11-a.

**Public Services and Utilities**

The project would involve an incremental increase in demand for public facilities. As described in *Section 5.12*, *Public Services and Utilities*, consistency and contribution to City public facility fee structures would eliminate adverse cumulative impacts on local sewer, water, police and fire services. The proposed project includes development standards that would apply to all future build-out of the planning area which specifically includes development elements and/or policies and measures to ensure that adequate public facilities and services are provided in conjunction with build-out of the development.

**Hazards/Risk of Upset**

Potential hazards associated with development of the project and development of surrounding projects would be site-specific and can be mitigated on a project-by-project basis. Each project is required to ensure that no hazardous conditions exist at the project site or that the project itself would not result in a hazard to the public or the environment. The proposed project could potentially result in significant hazard impacts, however mitigation has been provided which would reduce project-specific impacts to a level below significance. Because all projects are required to fully mitigate any on-site hazards, residual cumulative impacts related to hazards/risk of upset would not occur.

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# SECTION 7.0
# EFFECTS FOUND NOT TO BE SIGNIFICANT

## 7.1 INTRODUCTION/PURPOSE

Section 15128 of the CEQA Guidelines requires that an EIR briefly describe any potential environmental effects that were determined not to be significant during the initial project scoping and, therefore, were not discussed in detail in the EIR.

Several subjects required to be analyzed under CEQA were determined not to be potentially significant during Initial Study preparation and during the public scoping period. Therefore, these environmental issues have not been analyzed in the EIR and have received no further consideration.

## 7.2 ISSUES FOUND NOT TO BE SIGNIFICANT

**Mineral Resources**

The main mineral resource recovery areas within western Riverside County are in the Temescal Wash area, the Santa Ana River Valley, and sporadic pockets dotted throughout the lowland areas. Valuable sand, gravel, and crushed rock resources, which are extremely important to the local and regional construction industry, are located within these areas. The project is located within a "MRZ-3" designation in the Riverside County General Plan Open Space Element. "MRZ-3" indicates that there are significant mineral deposits within the area; however, the significance of the deposits have yet to be determined (County of Riverside 2003, p. OS-26 and Figure OS-5).

The project site is underlain by alluvial materials composed of inter-bedded sands and silts (Leighton and Associates 2004). Mineral resources are generally composed of gravels and rock materials. The site, therefore, does not support mineral resources that are considered to be of high value.

**Population and Housing**

The CEQA Appendix G Checklist includes two basic questions related to population and housing: (1) Will the project induce substantial population growth in an area, either directly or indirectly, and (2) Will the project displace substantial numbers of people or residences, necessitating the construction of replacement housing elsewhere? The first question relates to the project's growth inducing nature; therefore, this issue is discussed in *Section 8.0, Growth Inducing Impacts*. The second question relates to displacement, which is an "Effect Found Not to be Significant" and is therefore discussed below.

One unoccupied residence is currently located on the project site. The project would therefore involve the removal of this dwelling. The loss of one residence would be sufficiently offset by the construction of up to 1,329 new residential units on the site. Therefore, significant impacts related to population and housing displacement would not occur.

**Noise**

The CEQA Appendix G Checklist includes two questions related to noise, which were not discussed in *Section 5.11, Noise*: (1) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise, and (2) For a project within the vicinity if a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? The project is not located within 2 miles of a public airport or private use airport. Therefore, impacts associated with aircraft noise to people residing on the project site would not occur.

# SECTION 8.0
# GROWTH INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines mandate that the growth inducing nature of the proposed project be discussed. This CEQA Guideline states the growth inducing analysis is intended to address the potential for the project to "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Further, as discussed in *Section 7.0, Effects Found Not Significant*, the CEQA Appendix G Checklist (Population and Housing) also mandates that a CEQA document speak to the project's likelihood to induce substantial population growth in an area, either directly (for example, by proposing new homes or businesses) or indirectly (for example, through extension of roads or other infrastructure).

A project may be distinguished as either facilitating planned growth or inducing unplanned growth. Facilitating growth is relating to the establishment of direct employment, population or housing growth that would occur within a project site. Inducing growth is related to lowering or removing barriers to growth or by creating an amenity or facility that attracts new population/economic activity. For purposes of this EIR analysis, a significant growth inducement impact would occur if the project, and all associated infrastructure improvements, directly or indirectly remove obstacles to growth such that the induced growth would significantly burden existing community services, the environment or cause a demand for General Plan Amendments.

The large-scale nature of the project would contribute substantial funding for roadway and utility infrastructure improvements needed to accommodate growth planned in the western portion of the City of San Jacinto. The project would not contribute excess infrastructure capacity that would induce growth in surrounding areas, but would rather help accommodate the continued population influx in western Riverside County over the next several decades. Improvements to transportation, utilities and public service infrastructure as part of the project would help alleviate existing infrastructure deficiencies and accommodate planned growth, but would not result in a significant amount of unplanned growth to the area. For example, water and sewer pipelines in North Sanderson Avenue are already sized appropriately to service the site, the project would not result in an extension of large-capacity pipeline network beyond what is already in place that could then facilitate easy connections by other planned developments within the area. Similarly, while the project would result in a General Plan Amendment, significant growth inducing impacts to land use would not occur as this project site and the surrounding land is planned for urban uses. No features of the proposed project, on its own, would encourage or enhance the likelihood of growth in the surrounding areas other than anticipated under the applicable general plan. Therefore, while the project will induce planned population growth in the area, it will not induce growth in the area that is not already planned and permitted under the City's General Plan. Therefore growth inducing impacts would not occur.

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# SECTION 9.0
# SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

## 9.1 Significant Effects Which Cannot be Avoided

Section 15126.2(b) of the CEQA Guidelines requires an EIR to identify significant environmental effects that cannot be avoided if the proposed project is implemented. As discussed in this EIR, implementation of the proposed project would result in significant project impacts to agriculture and air quality and contribute to a significant unavoidable impact for cumulative traffic conditions. As discussed in Section 5.3, Agricultural Resources, there is no feasible mitigation to replace agricultural resources and this impact will therefore remain significant and unavoidable. Even with application of feasible mitigation measures, significant unavoidable air quality impacts will occur due to application of architectural coatings, potential CO "hotspots," and projected operational emissions from both area source and vehicular emissions. Because the City can not guarantee that the MCP and SR 79 projects would be in place prior to project build-out, the project would contribute to a significant, unavoidable cumulative impact to regional traffic service levels in the absence of these facilities.

## 9.2 Significant Irreversible Environmental Changes Which Would be Caused by the Project Should it be Implemented

CEQA Section 15126.2(c) requires the evaluation of the uses of nonrenewable resources during the initial and continued phases of a project when a large commitment of such resources makes removal or non-removal or non-use thereafter unlikely. Approval of the proposed development of the site from an agricultural operation to a residential/commercial/business park community commits the area to urban uses. The project would permanently remove approximately 475.1 acres of land from local agricultural production. However, the change in use is both planned and projected. The proposed project would require commitment of nonrenewable resources associated with construction and long-term operation, including but not limited to, lumber and other related forest products, sand, gravel and concrete, asphalt, petrochemical construction materials, steel, copper, lead and other metals, water, fuels and energy. Use of these resources would represent an incremental effect on the regional consumption of these commodities. Implementation of the Villages of San Jacinto project would involve consumption of energy resources, such as electricity and natural gas, derived from non-renewable sources such as fossil fuels.

The predominant irreversible environmental change that would occur as a result of the project would be continuation of planned commitment of land resources to urban/developed uses. This would constitute a permanent change. Once construction occurs, reversal of the land to its

original condition is nearly impossible. Other permanent changes would include more traffic and hence noise, permanent landform alteration, increased human presence in the area and the transition from a rural to urban development. Irreversible commitments of energy resources would occur with the proposed project. These resources would include electricity, natural gas, potable water and building materials.

The CEQA Guidelines require that an EIR identify "feasible measures which could minimize significant adverse impacts, including where relevant, inefficient and unnecessary consumption of energy" (Title 14, California Code of Regulations, Section 15126.4(a)(1)). Examples of energy conservation measures are provided in Appendix F of the State CEQA Guidelines (Section 15126.4(a)(1)(C)). The proposed project will consume energy in several different forms: gasoline and diesel fuels for motor vehicles; natural gas for water and space heating and cooking; electricity to operate lighting, heating and air conditioning systems, water transport including water for landscaping, and other uses.

Appendix F, Energy Conservation, of the CEQA Guidelines, recommends that EIRs include a discussion of the potentially significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy (see also Public Resources Code Section 21100(b)(3)). Appendix F also states that mitigation measures may include siting, orientation, and design to minimize energy consumption, including transportation energy, water conservation and solid-waste reduction; the potential for reducing peak energy demand; alternate fuels (particularly renewable ones) or energy systems; energy conservation which could result from recycling efforts; and other potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal.

The Specific Plan identifies elements in the site planning, design and construction phases that would be implemented to achieve a high level of energy efficient performance. Following standard planning and building practices typically ensures compliance with building code requirements and issuances of the necessary permits; however, implementation of the Specific Plan's Energy Efficient Guidelines are intended to reduce energy use even further, thereby reduce operating costs and contributing to the reduction in environmental impacts associated with air quality, hydrology, water quality, hazards, and utilities. The Specific Plan's Energy Efficient Guidelines, summarized below, are consistent with Appendix F recommended mitigation measures.

The Energy Efficiency Guidelines include the following strategies to minimize the energy demands of the proposed project:

- Passive heating and cooling design strategies such as orientation
- Natural ventilation, including cross-ventilation in residential units

- High insulation values, energy efficient windows including high performance glass
- Light-colored roofing and exterior walls
- Window shading through strategically placed landscaping
- Landscaping that provides shading during appropriate seasons
- Natural lighting systems such as skylights and interior transom windows in commercial, office and municipal structures
- Energy-efficient appliances and programmable thermostats.

The Specific Plan also includes water conservation strategies that would reduce water demand and the associated electrical consumption for water transport and distribution. The water conservation strategies include:

- Utilization of water-efficient faucets, high-efficiency toilets (HETs), and water-conserving shower heads in residential homes
- Drought tolerant and native plants, as required as part of the plant palette in the Specific Plan
- Installation of xeriscape landscape treatments instead of lawns
- Drip irrigation systems and/or zoned irrigation systems with a rain sensor shutoff feature
- Use of reclaimed waste water for irrigation of community landscaping.

In addition to water conservation, smart landscaping practices included in the Specific Plan would also reduce the reliance on mechanical cooling systems and the associated electrical consumption. Shade-producing trees planted in accordance with the Specific Plan's Shade Standards, would minimize the heat island effect, while permeable materials reduce the amount of heat absorbed and re-radiated from the surface and prevent additional solar heat gain surrounding residences. The Specific Plan also includes improvements to the existing street network to promote on-site bicycle and pedestrian activity and reduce the amount of vehicle trips and associated motor vehicle fuel use within the community. These improvements include:

- Development of sidewalks or pedestrian walkways
- Pedestrian access network and pedestrian facilities to internally link all uses and connect to all existing/planned external streets and public facilities
- Designated bicycle route connecting all units, on-site bicycle parking facilities, and all streets contiguous with the community
- Traffic calming elements to encourage walking and biking.

In addition to the Specific Plan's Energy Efficient Guidelines, the commercial/mixed-use elements of the proposed project would reduce total vehicle-miles traveled and associated motor vehicle fuel use. As commercial and retail uses would be within close distance to residential uses, trip lengths would be reduced. Development of commercial uses within walking or bicycling distance of residences would help to reduce reliance on motor vehicles. Although the implementation of the proposed project would involve consumption of energy resources, such as electricity and natural gas, derived from non-renewable sources such as fossil fuels, the project incorporates energy conservation strategies that would reduce the project's incremental effect on regional energy consumption.

# SECTION 10.0
# PROJECT ALTERNATIVES

CEQA requires that an EIR evaluate a "reasonable" range of alternatives. According to the CEQA Guidelines, "…an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (Cal. Code Regs., Title 14, Section 15126.6(a)). Specifically, the Guidelines require the analysis of the No Project Alternative and alternatives which would be "capable of avoiding or substantially lessening any significant effects of the project" (Cal. Code Regs., Title 14, Section 15126.6(b)). It also requires a discussion of why other alternatives were rejected if they were considered in developing the proposed project and still would meet the project objectives. Although an exhaustive analysis is not necessary, an EIR "must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation" (Cal. Code Regs., Title 14, Section 15126.6(a)).

Pursuant to the guidelines stated above, a range of alternatives to the proposed project are considered and evaluated in this EIR. These alternatives were developed in the course of project planning, environmental review, and public hearings. The discussion in this section provides:

In order to summarize these project alternatives, as suggested in CEQA Section 15126.6(d), a matrix has been prepared to summarize and compare the impacts of each project alternative.

## 10.1 ALTERNATIVES CONSIDERED BUT REJECTED

The following alternative was eliminated from further consideration.

### 10.1.1 Alternative Site Location

Off-site alternative locations were considered as part of the alternatives process. Per CEQA Guidelines Section 15126.6(f)(2)(A), the key question and first step in analysis of the off-site location is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location.

It should be noted that the availability of an alternative site does not in and of itself reduce impact potential. It is expected that developing a similar project would result in a similar array of project impacts and would simply transfer this impact potential to areas surrounding the alternate site location. For these reasons, an alternate site location would not necessarily be preferred over the proposed project site.

**Project Description**

Due to the undeveloped nature and existing land use designations found throughout much of the areas surrounding the project vicinity, suitable sites exist for this type/scale of development in the surrounding area.

**Environmental Analysis**

Because of the type, number of units and densities proposed, a similar amount of land would be required to accommodate the project at a different location. Depending on the location of this alternative, it would be expected to result in similar impacts to aesthetics, biological resources, cultural resources, geology/soils hazards and hazardous materials, hydrology and water quality, land use and planning, noise and public services to that of the proposed project at its present location, and would require a similar level of mitigation to reduce identified impacts to less than significant levels. If an alternative site included important farmland as designated by the California Resources Agency, it would result in a similar direct unavoidable impact due to loss of agricultural resources. An alternative location would also have unavoidable air quality impacts due to application of architectural coatings, potential CO "hotspots," and projected operational emissions from both area source and vehicular emissions. It would also likely have significant urban/rural land use conflicts between the planned development and existing agricultural uses in the area. The trip generation associated with the project would be the same; therefore, the alternative site location would be expected to contribute to a significant unavoidable impact for cumulative traffic conditions if the MCP and SR 79 projects are not in place upon completion.

**Consideration/Elimination**

Per CEQA Guidelines Section 15126.6 (f)(1), "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." The applicant cannot reasonably acquire, control, or otherwise have access to an alternative site; therefore, an alternative site is infeasible. Additionally, since project related impacts would be similar for surrounding area properties, project development on an alternative site would simply shift impacts from one area to another, without the benefit of removing any significant unavoidable impacts.

## 10.2 ALTERNATIVES UNDER CONSIDERATION

Three alternatives were deemed appropriate for analysis in this EIR section. Because it was initially determined that the "Reduced Density" and "Existing General Plan Designation"

alternatives could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects, these two alternatives are analyzed. While the third alternative, "No Project/No Development" would not likely meet most of the project objectives, CEQA requires that this scenario also be analyzed. Inclusion of the No Project/No Development alternative provides the public/decision makers with a reasonable range of choices and allows comparison of impacts of approving the proposed project with the impacts of not approving the proposed project.

Each alternative is analyzed for potential environmental effects including Landform Alteration/Aesthetics, Agricultural Resources, Biological Resources, Geology and Soils, Cultural Resources, Paleontological Resources, Hydrology and Water Quality, Transportation, Circulation and Access, Air Quality, Noise, Public Utilities and Services and Hazards/Risk of Upset. Due to the lack of significant Land Use/Planning impacts, this issue is not discussed in this alternatives analysis. After each environmental issue is analyzed, a consideration/elimination discussion follows. This discussion relates to the project's feasibility as well as the project's relationship to the project objectives included in *Section 3.0, Project Description*.

CEQA Section 15126.6(c) indicates that a project alternative should meet "most" of the basic objectives of the project. In an attempt to provide an equal analysis factor, "most" is met if over eight of the twelve project objectives are met (roughly two thirds). To determine feasibility, site suitability, economic viability, availability of infrastructure, general plan consistency and other regulatory/planning limitations were considered.

### 10.2.1 No Project/No Development Alternative

**Project Description**

The No Project/No Development Alternative assumes that the project site would not be developed and the existing land uses (agricultural operations) present would remain.

**Environmental Analysis**

***Landform Alteration and Aesthetics***

The No Project/No Development Alternative would maintain existing aesthetic conditions on the site and would continue to contribute to the existing agricultural nature of the western San Jacinto Valley area. However, none of the proposed landscape improvements along adjacent roadways would occur without project development.

### *Agricultural Resources*

The No Project/No Development Alternative would result in the continuance of agricultural resource use on the project site. Significant, unmitigable impacts to agricultural resources (such as would occur with the proposed project) would be avoided. The persistence of agricultural use on the site would maintain the non-conforming use on the site as the site is planned for residential and commercial land uses in the existing General Plan Planned Land Use Map. Due to the existing residential General Plan designation, it is reasonable to assume that future development proposals will be brought forward for this project site. Therefore, the No Project/No Development alternative may not ensure that agricultural resources remain on site well into the future.

### *Biological Resources*

The No Project/No Development Alternative would not result in any direct impacts to on-site biological resources. All impacts to biological resources present on site would be avoided.

### *Geology and Soils*

Potential geologic impacts related to seismically induced earth movement would be avoided under the No Project/No Development Alternative. The existing faults located on site would continue to exist and not pose a risk to structures due to the undeveloped nature of the site.

### *Cultural Resources*

This alternative would not involve disturbing any subsurface material that could potentially support cultural resources beyond existing agricultural activities. It is not possible to predict the type of agricultural use that would remain on the project site; if future agricultural uses were to occur on site which required excavation or heavy land disturbance, if present, cultural resources may be impacted.

### *Paleontological Resources*

This alternative would not involve disturbing any subsurface geologic formations that could potentially support paleontological resources as would the proposed project. It is not possible to predict the type of agricultural use that would remain on the project site; if future agricultural uses were to occur on site which required excavation or heavy land disturbance, if present, paleontological resources may be impacted.

### *Water Resources and Water Quality*

Potential impacts associated with increased urban runoff, such as the introduction of petroleum products from paved surfaces would be avoided under the No Project/No Development Alternative. However, structural systems are not currently in place to control the pollutants associated with the existing land uses. Based on the proximity of the site to the San Jacinto River, potential hazards to runoff and water quality from the existing agricultural uses may be present. Further, no development on the site would eliminate the potential for contribution to the City's overall master drainage plan/infrastructure construction within the western San Jacinto area.

### *Transportation, Circulation and Access*

This alternative would not promote additional trips along North Sanderson, Cawston Avenue, Odell Avenue and other nearby roadways such as SR 79, State Street, Ramona Expressway, SR 74 and Ramona Boulevard. It should be noted that the no project alternative would not assist the City of San Jacinto in completing circulation infrastructure in this growing area of the City due to the elimination of proposed improvements being made by the applicant and by no contribution of TUMF fees from project development.

### *Air Quality*

The No Project/No Development Alternative would avoid the air quality impacts associated with site grading, construction, vehicular emissions and building operations.

### *Noise*

Noise impacts associated with the proposed project would be avoided by the No Project/No Redevelopment Alternative. However, as the western portion of the City of San Jacinto continues to be built-out and development/traffic increases along North Sanderson Avenue, Cawston Avenue, Odell Avenue and other surrounding streets, the ambient noise setting within the area will increase regardless of project implementation. The project's elimination would not necessarily improve the existing and future noise environment.

### *Public Services and Utilities*

The elimination of development on this site would reduce the demand for local public services and facility capacity and would also not provide for expansion of infrastructure.

*Hazards/Risk of Upset*

The potential for additional hazards and the risk of upset of unknown hazards would not occur under this alternative. While implementation of the No Project/No Development alternative would not disturb soils on site that may result in a release of contaminants, it would also not result in the beneficial effect of cleanup on the site.

**Relationship to Project Objectives**

The No Project/No Development Alternative WOULD meet the following project objectives:

- Consider topographic, geologic, hydrologic, and environmental opportunities and constraints to create a design which safely accommodates seismic and hydrologic hazards.

This alternative would NOT meet the following project objectives (explanations follow each objective and have been *italicized*):

- Provide for the establishment of a master-planned community through implementation of a Specific Plan, consisting of a maximum of 1,329 dwelling units, which is consistent with the scale and character of planned land uses in surrounding areas.

*This alternative would result in continuing agricultural use and vacant fallow land that would not result in establishment of a master-planned community.*

- Provide a variety of detached single-family lot sizes in traditional and non-traditional subdivision layouts that offer a wide range of affordability to meet the changing economic and demographic profile of the City of San Jacinto.

*This alternative would not result in any new housing opportunities.*

- Provide public and private recreational amenities for the benefit of residents of this community and of the City of San Jacinto.

*There would be no new recreational amenities associated with this alternative.*

- Provide drought-tolerant and water-efficient landscaping for the community.

*No new landscaping of any kind would be provided under this alternative.*

- Incorporate recycled water from EMWD to supply the lake and irrigate landscaping to minimize the use of potable water.

*The agricultural uses on site would presumably continue to use primarily recycled water.*

- Provide development opportunities for municipal, office, professional, and neighborhood retail commercial land uses within the community to support the economic growth of the City and to reduce the reliance of automobile use within the surrounding community.

*The no project alternative would not provide any these development opportunities and would not reduce the length of automobile trips in the surrounding community.*

- Provide a system of public and community facilities within residential neighborhoods to support development in an efficient and timely manner.

*None of the public and community amenities would be provided under this alternative.*

- Provide a development with unified design elements, such as architecture, landscaping, color palette, paving, walls, fencing, signage, and entry treatments.

*This alternative would not allow an opportunity to provide any such design elements as the project would not be implemented.*

- Develop an environment that is visually attractive, efficient, and effectively organized, which includes a pleasing landscape palette.

*No new landscaping of any kind or any developed environment would be provided under this alternative.*

- Integrate the project with the character of the surrounding community and establish development that results in logical, coordinated growth.

- Establish a circulation system that meets projected traffic volumes and accommodates a variety of transportation modes and encourages alternatives to automobile use within the community.

*The no project alternative does not provide circulation improvements or encourage alternative transportation modes.*

## 10.2.2 Existing General Plan Designation Alternative

### Project Description

As shown on Figure 5.1-3, General Plan Comparison vs. Proposed Specific Plan, existing General Plan designations establish 136.5 acres of low density residential and 239.5 acres of medium density residential. This would allow for a maximum of 2,390 medium density dwellings (10 du/ac maximum) and up to 682 low density dwellings (5 du/ac maximum) for a total of 3,072 dwelling units under the existing General Plan. This compares with the proposed project which would result in 657 medium density dwellings and 359 low density dwellings for a total of 1,016 dwellings. Therefore, this alternative could result in more than three times the number of dwellings proposed under the project. This alternative would also provide 54.4 acres of commercial uses along Sanderson Avenue as opposed to a combined 49 acres of commercial and mixed uses under the project. This alternative results in fewer acres of open space/parks (44.7 as opposed to 110.5 under the project) and does not provide for a future high school on site.

### Environmental Analysis

#### *Landform Alteration and Aesthetics*

This alternative would represent a similar change in urban land use as it would also appear as a developed suburban neighborhood in the western San Jacinto Valley. However, it does not provide as many transitions between land uses and would not guarantee the extensive open space amenities, street landscaping and landscaped trails that provide a visual buffer between land uses. Therefore, this alternative is viewed as slightly inferior to the project, but it is expected that significant visual impacts could be mitigated.

#### *Agricultural Resources*

This alternative would be similar to the proposed project in that it would eliminate agricultural land use from the project site.

#### *Biological Resources*

This alternative would result in similar impacts as the proposed project as it would eliminate existing biological resources on site. This project alternative does not provide for fewer impacts to biological resources compared to the proposed project.

### *Geology and Soils*

Similar impacts related to seismic hazards would occur under this project alternative. It is anticipated that similar mitigation measures would be imposed and similar to the proposed project, result in all significant impacts being mitigated.

### *Cultural Resources*

Because the presence of undiscovered cultural resources is unknown for both this and the proposed project alternative, risk of significant impacts would be the same as the proposed project. It is anticipated that similar mitigation measures would be imposed as for the proposed project which would result in all significant impacts being mitigated.

### *Paleontological Resources*

Because the presence of paleontological resources is unknown for both this and the proposed project alternative, risk of significant impacts would be the same as the proposed project. It is anticipated that similar mitigation measures would be imposed and similar to the proposed project, result in all significant impacts being mitigated.

### *Water Resources and Water Quality*

Similar water quality impacts would result under this alternative as described for the proposed project. The project site would likely be susceptible to the same flooding and groundwater hazards as outlined for the proposed project. It is anticipated that application of mitigation measures such as those required of the proposed project would have similar impact reducing effects for this alternative.

### *Transportation, Circulation and Access*

Due to the increase in the number of dwelling units, the existing General Plan land use scenario would result in higher traffic volumes from a greater number of residents and more intensive construction phase as compared to the proposed project. Therefore, there is no guarantee that this alternative could mitigate all significant traffic impacts and is therefore viewed as inferior to the proposed project.

### *Air Quality*

Due to three times more dwelling units allowed under this alternative, the existing General Plan land use scenario would result in higher traffic volumes and result in higher air quality impacts compared to the proposed project. Also, the application of architectural coatings would contribute higher overall VOC emissions and would be expected to exceed the daily threshold

for a greater number of days. Therefore, this alternative is viewed as environmentally inferior to the project due to anticipated greater air quality impacts.

***Noise***

Although similar noise levels would be expected, due to the increase in number of dwelling units, the length of the construction period is likely to be longer under this alternative. Also, the increased traffic volumes associated with the greater number of dwellings can be expected to result in higher noise levels on surrounding roadways as compared to the project. Therefore, this alternative is viewed as environmentally inferior to the project due to anticipated greater noise impacts.

***Public Services and Utilities***

Due to the more intensive land use anticipated with this alternative, additional new residents would likely result in increased demand on public utilities and services including police, fire, water, wastewater, solid waste disposal, etc. While it is assumed that an increase in demand for these services could be off-set by mitigation, a greater impact to public services and utilities would likely result from the proposed alternative.

***Hazards/Risk of Upset***

Similar hazards would result under this alternative as anticipated for the proposed project. Hazardous materials would need to be disposed of and any remaining soil hazards remediated. Further, hazards associated with former cattle raising areas would be the same type as anticipated for the proposed project.

**Relationship to Project Objectives**

The Existing Zoning/General Plan Designation alternative WOULD meet the following project objectives:

- Provide drought-tolerant and water-efficient landscaping for the community.
- Consider topographic, geologic, hydrologic, and environmental opportunities and constraints to create a design that safely accommodates seismic and hydrologic hazards.
- Reinforce the community identity of the project through control of project design elements such as architecture, landscaping, color palette, paving, walls, fencing, signage and entry treatments.
- Develop an environment that is visually attractive, efficient, and effectively organized, which includes a pleasing landscape palette.

- Integrate the project with the character of the surrounding community and establish development that results in logical, coordinated growth.
- Provide a system of public and community facilities within residential neighborhoods to support development in an efficient and timely manner.
- Provide a development with unified design elements, such as architecture, landscaping, color palette, paving, walls, fencing, signage, and entry treatments.

*All of the above objectives would likely be required under a different Specific Plan for the project site, while utilizing all of the General Plan designations.*

This alternative would NOT meet the following project objectives (explanations follow each objective and have been *italicized*):

- Provide for the establishment of a master-planned community through implementation of a Specific Plan, consisting of a maximum of 1,329 dwelling units, which is consistent with the scale and character of planned uses in surrounding areas.

*Part of this objective would be met in that the City requires a Specific Plan to be prepared for projects over 100 acres. However, the number of dwelling units would be much greater than what is proposed for the project.*

- Provide a variety of detached single-family lot sizes in traditional subdivision layouts that are marketable within the evolving economic and demographic profile of the City of San Jacinto.

*This alternative could result in only two housing types that utilize the maximum allowable density range.*

- Provide public and private recreational amenities for the benefit of residents of this community and of the City of San Jacinto.

*The General Plan allows for a variety of recreational uses under the Open Space Recreation designation, but this alternative would not necessarily result in such uses being available to the public.*

- Incorporate recycled water from EMWD to supply the lake and irrigate landscaping to minimize the use of potable water.

*There is no guarantee that this alternative would accommodate a lake. However, it is likely that any landscaping could use recycled water, thus meeting part of this objective.*

- Provide development opportunities for municipal, office, professional, and neighborhood retail commercial land uses within the community to support the economic growth of the City and to reduce the reliance of automobile use within the surrounding community.

*This alternative does not allow for development of municipal, office, and professional land uses.*

- Establish a circulation system that meets projected traffic volumes and accommodates a variety of transportation modes and encourages alternatives to automobile use within the community.

*There is no guarantee that the circulation system associated with this alternative could adequately accommodate the projected increase in traffic volumes.*

## 10.2.3 Reduced Density Alternative

**Project Description**

This project alternative would involve the development of a low density housing tract with approximately 1-acre lots. Due to drainage and infrastructure needs, this alternative would consist of approximately 350 single-family homes (on approximately 350 acres), 41 acres of parks, 27 acres of greenbelts, 14 acres of drainage basin, 18 acres of lake surfaces, 18 acres of roadways and a 3 acre clubhouse. Due to the existing nature of the site topography, this project alternative would be prepared, graded and designed in a similar fashion as the proposed project.

**Environmental Analysis**

***Landform Alteration and Aesthetics***

This alternative would represent a similar change in urban land use as the proposed alternative but would be less intense. This alternative would appear as a developed suburban neighborhood in the western San Jacinto Valley in place of the existing agricultural setting.

***Agricultural Resources***

This alternative would be similar to the proposed project in that it would eliminate agricultural land use from the project site. This project alternative does not provide for reduced impacts to agricultural resources because it proposes development over the entire site.

***Biological Resources***

This alternative would result in similar impacts as the proposed project. All significant impacts of the project are mitigated through project-specific mitigation, and therefore the alternative does

not offer mitigation that is necessary to reduce significant impacts to less than significant levels. The project's relationship with the Western Riverside MSHCP would be similar as described for the proposed project.

***Geology and Soils***

Similar impacts related to seismic hazards would occur under this project alternative. It is anticipated that similar mitigation measures would be imposed and similar to the proposed project, result in all significant impacts being mitigated.

***Cultural Resources***

Because the presence of undiscovered cultural resources is unknown for both this and the proposed project alternative, risk of significant impacts would be the same as the proposed project. It is anticipated that similar mitigation measures would be imposed as for the proposed project which would result in all significant impacts being mitigated.

***Paleontological Resources***

Because the presence of paleontological resources is unknown for both this and the proposed project alternative, risk of significant impacts would be the same as the proposed project. It is anticipated that similar mitigation measures would be imposed and would similarly result in all significant impacts being mitigated.

***Water Resources and Water Quality***

Similar water quality impacts would result under this alternative as described for the proposed project. The project site would likely be susceptible to the same flooding and groundwater hazards as outlined for the proposed project. It is anticipated that application of mitigation measures such as those required of the proposed project would have similar impact reducing effects for this alternative. However, this alternative is not inherently less impactive from a drainage/run-off and urban pollutant perspective than the proposed project due to less intensity of land use. Therefore, it is likely that this project alternative would reduce potential water quality impacts compared to the proposed project.

***Transportation, Circulation and Access***

Similar to the proposed project, this alternative would likely necessitate reconfiguration of several intersections; however, certain mitigation measures (intersection improvements) may not be necessary due to the elimination of the school, commercial/mixed uses and 666 fewer housing units as compared with the project. While directional splits of traffic for this alternative would be

different than those of the proposed project, this alternative would result in substantially less traffic to surrounding roadways.

### *Air Quality*

Because of the South Coast Air Basin's non-attainment status for several criteria pollutants, air quality impacts, although less in quantity, would still occur under this reduced density scenario. Therefore, this alternative would not substantially reduce impacts to air quality due to fewer mobile source emissions. Short term air quality impacts related to application of architectural coatings could be substantially reduced under this alternative. However, impacts to air quality would likely remain at a significant, unmitigable level due to contribution of long term vehicular emissions.

### Noise

The reduction in traffic under this alternative would reduce overall traffic noise anticipated on Sanderson Avenue, Odell Avenue and other nearby streets. While the project itself wouldn't generate as much traffic-producing noise, it is likely that homes along both internal and external roadways would require analysis of anticipated noise levels at property lines, etc. It is therefore assumed that similar noise impacts to future property owners would occur and mitigation measures in the form of set-backs and noise attenuation walls would be necessary to mitigate any noise impact.

### *Public Services and Utilities*

The demand on public facilities such as water and sewer service would be less under this alternative due to a smaller user group at the site. However, no significant impacts were identified for public services and facilities, and therefore, this alternative does not offer any substantial benefits in terms of impact reduction.

### *Hazards/Risk of Upset*

Similar hazards would result under this alternative as anticipated for the proposed project. Hazardous materials would need to be disposed of and any remaining soil hazards remediated. Further, hazards associated with existing cattle raising areas would be the same type as anticipated for the proposed project.

### Relationship to Project Objectives

The Reduced Density Alternative WOULD meet the following project objectives:

- Consider topographic, geologic, hydrologic, and environmental opportunities and constraints to create a design which safely accommodates seismic and hydrologic hazards.
- Develop an environment that is visually attractive, efficient, and effectively organized, which includes a pleasing landscape palette.
- Integrate the project with the character of the surrounding community and establish development that results in logical, coordinated growth.
- Establish a circulation system that meets projected traffic volumes and accommodates a variety of transportation modes.
- Provide drought-tolerant and water-efficient landscaping for the community.
- Incorporate recycled water from EMWD to supply the lake and irrigate landscaping to minimize the use of potable water.
- Provide public and private recreational amenities for the benefit of residents of this community and of the City of San Jacinto.
- Provide a system of public and community facilities within residential neighborhoods to support development in an efficient and timely manner.
- Provide a development with unified design elements, such as architecture, landscaping, color palette, paving, walls, fencing, signage, and entry treatments.

This alternative would NOT meet the following project objectives:

- Provide for the establishment of a master-planned community through implementation of a Specific Plan, consisting of a maximum of 1,329 dwelling units, which is consistent with the scale and character of planned uses in surrounding areas.

*Part of this objective would be met in that the City requires a Specific Plan to be prepared for projects over 100 acres. However, the number of dwelling units would be much lower than what is proposed for the project.*

- Implement housing-type diversity by providing a variety of detached single-family lot sizes in traditional and non-traditional subdivision layouts that offer a wide range of affordability to meet the changing economic and demographic profile of the City of San Jacinto.

*This alternative would not meet this objective in that only one housing type would be provided.*

- Provide development opportunities for municipal, office, professional, and neighborhood retail commercial land uses within the community to support the economic growth of the City and to reduce the reliance of automobile use within the surrounding community.

*This alternative would not meet any of these objectives in that it would not provide any municipal, office, professional or retail commercial land uses.*

## 10.3 COMPARATIVE ANALYSIS

A matrix displaying the major characteristics and significant environmental effects of each alternative is provided in *Table 10.0-1, Alternatives Summary*. The matrix also indicates whether the alternative would be feasible in terms of meeting the project objectives as defined in *Section 3.0, Project Description*, of this EIR.

**Table 10.0-1**
**Alternatives Summary**

| Environmental Issue | Proposed Project | No Project/No Development | Existing General Plan Designation | Reduced Density |
|---|---|---|---|---|
| Landform Alteration/ Aesthetics | Mitigable Impacts | Reduced impacts due to lack of changed aesthetic nature | Similar, but does not provide as many transitions between land uses | Similar |
| Agricultural Resources | Unmitigable Impacts | No Impact | Similar | Similar |
| Biological Resources | Mitigable Impacts | No Impact | Similar | Similar |
| Geology and Soils | Mitigable Impacts | No Impact | Similar | Similar |
| Cultural Resources | Mitigable Impacts | No Impact | Similar | Similar |
| Paleontological Resources | Mitigable Impacts | No Impact | Similar | Similar |
| Water Quality/ Hydrology | Mitigable Impacts | No Impact | Similar | Similar but less impervious surface due to less intensity of land use. |
| Transportation/ Circulation/Access | Mitigable Project Impacts<br><br>Unmitigable Cumulative Impacts | No traffic impacts, but would not facilitate City's goal of installing infrastructure in western San Jacinto | Similar, but would result in higher traffic volumes that may not be completely mitigated. | Less impacts due to less overall trips |
| Air Quality | Unmitigable Impacts | No Impact | Greater Impacts | Less impacts but likely still significant and unmitigable due to non-attainment status of basin |
| Noise | Mitigable Impacts | No Impact | Greater Impacts | Similar |

**Table 10.0-1 (continued)**

| Environmental Issue | Proposed Project | No Project/No Development | Existing General Plan Designation | Reduced Density |
|---|---|---|---|---|
| Public Services/Utilities | Mitigable Impacts | No Impact | Similar, but water use and other utility use would be much higher under this alternative | Less impacts due to less demand for services |
| Hazards/Risk of Upset | Mitigable Impacts | No Impact | Similar | Similar |
| Meets Most Project Objectives? | Yes | No | No | No |

## Environmentally Superior Alternative

CEQA requires that an environmentally superior alternative, other than the No Project Alternative, be identified in an EIR. As shown in *Table 10.0-1*, although the Reduced Density Alternative does not meet most of the project objectives, it would reduce traffic, noise, public services/utilities and air quality impacts when compared to the proposed project. Consequently, this alternative is considered the environmentally superior alternative. That said, as analyzed in this chapter, no substantial advantages are offered by the Reduced Density Alternative when compared to the proposed project since the project would mitigate all significant public services/utilities and noise impacts to less than significant levels. All other impacts associated with the Reduced Density Alternative would be similar to the proposed project, and would require a similar level of mitigation. As with the proposed project, the Reduced Density Alternative would contribute pollutants to the air basin which is currently in non-attainment status, therefore significant, unmitigable air quality impacts would remain. Furthermore the environmentally superior alternative would also contribute to a significant cumulative traffic impact if the MCP and SR-79 improvement projects are not in place when the project is completed.

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# SECTION 11.0
# REFERENCES/ORGANIZATIONS CONSULTED

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N/A

## PROJECT ALTERNATIVES

N/A

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***Preliminary Water Quality Management Plan, JLC Engineering & Consulting Inc. (February 2009)***

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October 27, 2021

Steven Perales
Director, Industrial Acquisitions & Development
Shea Properties
130 Vantis Street, Suite 200
Aliso Viejo, California 92656

Re: Phase II Subsurface Investigation Letter Report
Proposed Industrial Building Complex, North Sanderson Avenue, San Jacinto, Riverside County, California

Dear Mr. Perales:

Roux Associates, Inc. (Roux) has prepared this Phase II Subsurface Investigation Letter Report (Report) for Shea Properties (CLIENT) to summarize the findings of the subsurface investigations conducted at the approximately 470-acre vacant property located west of North Sanderson Avenue, east of Odel Avenue and south of Ramona Boulevard in the City of San Jacinto, California (Site; Figure 1). The scopes of work, as detailed in Roux's proposals dated August 19, 2021 and October 1, 2021, were developed to address recognized environmental conditions (RECs), identified by Roux in the Phase I Environmental Site Assessment (Phase I ESA), dated October 25, 2021.

The Phase II Investigation focused on addressing the following RECs:

- Potential pesticide impacts to shallow soils from former agricultural (row crop) uses;
- Potential VOC, metals, pesticides, total petroleum hydrocarbon (TPH), and/or methane impacts from former on-Site heifer raising farm uses, including multiple livestock corrals and an unlined pond; and
- Potential petroleum impacts from former on-Site aboveground storage tanks (ASTs);

The sections that follow provide additional details of the investigation activities completed.

## METHODS OF INVESTIGATION

### *Pre-Field Activities*

Prior to the start of field activities, Roux prepared a Site-specific Health and Safety Plan (HASP) to ensure worker safety. In addition to containing information regarding Roux's standard safety practices, the HASP contained information about potential hazards related to Site activities and provided the locations and contact information of nearby emergency services. Field workers acknowledged their familiarity with all safety procedures and indicated their intent to follow the HASP by signing the HASP after the tailgate safety meeting, which took place at the beginning of each field day.

At least 48 hours prior to fieldwork, the areas of the Site targeted for the investigation were marked in white paint and Underground Service Alert (USA) was notified of the intended intrusive work. Additionally, to assess the locations of buried utilities (i.e., natural gas, electric, water, sewer, telephone, fiber optic, etc.) or obstructions, a private geophysical services and utility locating firm, Spectrum Geophysics of Chatsworth, California, was contracted to perform a geophysical survey to clear the proposed boring locations of potential subsurface obstructions prior to boring advancement.



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***Soil Sampling – Agricultural Uses***

On September 1 and 2, 2021, a total of 184 soil samples were collected from 46 quadrants (SS-1 through SS-46) across the Site at depths of 0.5 feet below ground surface (bgs) as shown in Figure 2. Soil sampling locations were evenly distributed in a grid pattern across each quadrant.

Four soil samples were collected with a trowel and/or a hand auger from each quadrant, composited in the field, and placed into laboratory-provided glass jars. A total of 184 soil samples were composited into 46 composite samples (SS-COMP-1 through SS-COMP-46).

After sample collection, all soil samples were labeled, placed on ice, and transported under chain-of-custody to Enthalpy Analytical (Enthalpy) of Garden Grove, California, a California-certified laboratory. Soil samples were analyzed in accordance with the sampling and analysis plan as shown in Table 1.

***Soil Sampling – USTs, Livestock, and Unlined Pond***

On September 7, 2021, under the direction of Roux, Strongarm Environmental Field Services, Inc. (Strongarm) of Fullerton, California advanced 10 soil borings (SV-1 through SV-10, Figure 2). The sampling locations for this investigation targeted the former USTs. Borings SV-1 and SV-2 were advanced to a depth of 5 feet below ground surface (bgs) using a hand auger to clear for utilities and subsequently drilled to the terminal depth of 20 feet bgs using a direct push drilling rig. Borings SV-3 through SV-10 were advanced to a terminal depth of 5.5 feet bgs using a hand auger.

Based on the laboratory results for samples collected on September 7, 2021, additional soil samples were collected on October 8, 2021. Under the direction of Roux, Strongarm advanced seven additional borings at the Site. Two borings, SV-1A and SV-3A, were placed near the original SV-1 and SV-3 locations, respectively. Five additional borings (SV-11 through SV-15, Figure 3) were placed in the proximity of the former residential/agricultural structures on-Site. All borings were pre-cleared to a depth of 5 feet bgs using a hand auger to check for utilities and subsequently drilled to a terminal depth of 25 feet bgs using a direct push drilling rig.

During boring advancement, soil samples were collected from borings SV-1 and SV-2 at depths of 5, 10, 15, and 20 feet bgs; from borings SV-3 and SV-4 at 5 feet bgs; and from borings SV-5 at 0.5 and 5 feet bgs. The soil samples collected at 0.5 feet bgs from borings SV-5 as well as all soil samples collected at 5 feet bgs from borings SV-1 through SV-5 were collected directly from the hand auger bucket. The soil samples collected at depths of 10, 15, and 20 feet bgs from borings SV-1 and SV-2 were collected from acetate sleeves.

After sample collection, all soil samples were labeled, placed on ice, and transported under chain-of-custody to Enthalpy of Garden Grove, California, a California-certified laboratory. Soil samples were analyzed in accordance with the sampling and analysis plan as shown in Table 1.

***Soil Vapor Probe Installation***

On September 7, 2021, following advancement of borings SV-1 through SV-10, temporary soil vapor probes were installed. Dual-nested soil vapor probes were installed at depths of 5 feet bgs and 15 feet bgs at locations SV-1 and SV-2. Soil vapor probes were installed at 5 feet bgs at SV-3 through SV-10. Soil vapor sampling locations are shown in Figures 3 and 4.

On October 8, 2021, following advancement of borings SV-1A, SV-3A, and SV-11 through SV-15, temporary soil vapor probes were installed. One soil vapor probe was installed at a depth of 25 feet bgs at location SV-1A, one dual-nested soil vapor probe was installed at 15 and 25 feet bgs at location SV-3A, and five triple-nested soil vapor probes at depths of 5, 15, and 25 feet bgs were installed at locations SV-11 through SV-15. Soil vapor sampling locations are shown in Figures 3 and 4.

The soil vapor probes were constructed in general accordance with the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board (LARWQCB), and San Francisco Regional Water Quality Control Board Advisory, Active Soil Gas Investigations (Soil Gas Advisory), dated July 2015. After the installation of each soil vapor probe, a minimum 48-hour equilibrium period was observed prior to sampling the five-foot probes and a minimum two-hour equilibrium period was observed prior to sampling 15-foot and 25-foot probes, per the Soil Gas Advisory.

***Soil Vapor Sampling***

On September 10, 2021, Roux collected samples from the temporary soil vapor probes installed at SV-1 through SV-10. On October 11, 2021, under the direction of Roux, Optimal Technology (Optimal) of Thousand Oaks, CA, collected samples from the temporary soil vapor probes installed at SV-1A, SV-3A, and SV-11 through SV-15. Prior to purging and sampling, a shut-in test was performed at each probe to confirm that the above-ground lines and valves were properly sealed. Upon successful completion of the shut-in test, three purge volumes of stagnant air were subsequently extracted from the soil vapor probe system at a flow rate of 200 milliliters per minute (mL/min). During purging and sampling, a leak check compound, 1,1-difluoroethane (1,1-DFA) or Isobutane, was applied adjacent to the sample train connections as a tracer gas to detect potential leaks in the sampling system.

After purging soil vapor probes SV-1 through SV-10, Roux collected soil vapor samples using 1-liter summa canisters equipped with 200 mL/min flow controllers. Following sample collection, soil vapor samples were transported under proper chain of custody to Enthalpy.

After purging soil vapor probes SV-1A, SV-3A, and SV-11 through SV-15, Optimal collected soil vapor samples in laboratory-prepared glass syringes; and immediately analyzed them on-Site using a mobile laboratory.

Soil vapor samples collected from SV-1 through SV-4, SV-1A, SV-3A, and SV-11 through SV-15 were analyzed for VOCs by USEPA Method TO-15 or USEPA Method 8260B. Soil vapor samples collected from SV-5 through SV-10 were analyzed for VOCs by USEPA Method TO-15 and methane by ASTM Method D-1946.

**RESULTS**

Analytical results for soil samples are summarized in Tables 2 through 5, and soil vapor results are presented in Tables 6 and 7. The complete analytical laboratory reports are included in Attachment A.

***Soil Results***

The sections that follow provide a summary of the soil analytical results. Soil sampling locations are shown in Figures 2 and 3.

*OCPs*

A summary of analytical results for OCPs in soil is presented in Table 2.

In general, individual OCP constituents were reported above laboratory method reporting limits (MRLs) in several borings including:

- dichlorodiphenyldichloroethane (4,4'-DDD);
- dichlorodiphenyldichloroethylene (4,4'-DDE);
- dichlorodiphenyltrichloroethane (4,4'-DDT); and

- eldrin aldehyde.

Detected concentrations were compared to the applicable May 2021 USEPA Regional Screening Level (RSL) for industrial soil and the June 2020 DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 Screening Level for industrial/commercial soil.

**Conclusion: No OCPs were detected above the commercial/industrial screening levels established by USEPA RSLs or DTSC HERO HHRA Note 3 SLs.**

*Metals*

A summary of analytical results for metals in soil is presented in Table 3. A total of 11 metals were detected above laboratory detection limits in at least one of the soil samples analyzed. Detected concentrations were compared to the applicable May 2021 USEPA RSL for industrial soil and the June 2020 DTSC HERO HHRA Note 3 Screening Level for industrial/commercial soil.

Arsenic was detected at concentrations exceeding the regulatory screening levels, ranging from 1.0 to 9.3 milligrams per kilogram (mg/kg), which exceeds the DTSC Note 3 SL (0.36 mg/kg). However, arsenic concentrations were below the upper range of the *Southern California Regional Background Arsenic Concentration in Soil* (Determination of a Southern California Regional Background Arsenic Concentration in Soil, G., Bosan, W., and Outiz, D., DTSC) of 12 mg/kg.

**Conclusion:** No metals were above background concentrations or the commercial/industrial screening levels established by USEPA RSLs or DTSC HERO HHRA Note 3 SLs.

*TPH*

A summary of the analytical results for TPH in soil is presented in Table 4.

**Conclusion: TPH was not detected above laboratory reporting limits in carbon ranges C6-C44 in any of the samples analyzed.**

*VOCs*

A summary of the analytical results for VOCs in soil is presented in Table 5. Two VOCs, methylene chloride and tert-butyl alcohol (TBA), were detected above laboratory reporting limits in at least one soil sample.

**Conclusion: VOCs were not detected above either the applicable USEPA RSL for industrial soil or the DTSC SL for commercial/industrial soil.**

***Soil Vapor Results***

The sections that follow provide a summary of the soil vapor analytical results. A summary of the soil vapor analytical results is presented in Tables 6 and 7. Soil sampling locations are shown in Figures 2 and 3.

*VOCs*

A summary of the analytical results for VOCs in soil vapor is presented in Table 6.

A total of 17 VOCs were detected above laboratory reporting limits in at least one soil vapor sample. Detected concentrations were compared to the applicable USEPA RSL for commercial/industrial soil vapor and the DTSC SL for commercial/industrial soil vapor when an attenuation factor of 0.03 was applied.

- Trichloroethene (TCE) was detected in soil vapor at concentrations exceeding screening levels. TCE was detected above the applicable USEPA RSL (100 micrograms per cubic meter [µg/m$^3$]) in two samples (SV-1-15 and SV-3-5) at concentrations of 110 µg/m$^3$ and 210 µg/m$^3$, respectively.
    - Borings SV-1 and SV-3 were located in the area of former residential and agricultural structures including a maintenance building.
    - All detections of TCE were below the applicable DTSC SL (267 µg/m$^3$).
    - Additional soil vapor sampling, focused in the area of the former residential/agricultural structures, did not yield detectable concentrations of TCE above laboratory reporting limits.

**Conclusion: TCE was detected at concentrations that exceeded applicable conservative USEPA RSL at two locations. However, no sources were identified on-Site and the generally low TCE concentrations do not suggest that any mitigation or remediation will be required. All other VOCs were below the DTSC's Commercial/Industrial Soil Vapor SL or USEPA's Industrial Soil Vapor RSL.**

*Methane*

A summary of the analytical results for methane in soil vapor is presented in Table 7.

Methane was detected above laboratory method reporting limits in six soil vapor samples (SV-5-5 through SV-10-5) at concentrations ranging from 2.3 parts per million by volume (ppmv) to 3.7 ppmv. Detections of methane did not exceed the cautionary value of 1,000 ppmv or response value of 5,000 ppmv established by the DTSC Advisory on Methane Assessment and Common Remedies at School Sites.

**Conclusion: Methane concentrations detected at the Site do not present a potential concern for the Site.**

## RECOMMENDATIONS

Based on the results of this Phase II Subsurface Investigation, Roux has addressed the RECs identified in the Phase I ESA and does not have any additional recommendations at this time.

## CLOSING

Should you have any questions or require any further information regarding the contents of this Report, please do not hesitate to contact Mauricio Escobar by telephone at 310-879-4920 or by email at mescobar@rouxinc.com.

Sincerely,

**ROUX ASSOCIATES, INC.**

Mauricio Escobar, P.G.
Principal Geologist

Enclosures:

| | |
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2. Organochlorine Pesticides in Soil
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**Table 1. Sampling and Analysis Plan**
870 North Sanderson Avenue
San Jacinto, California

| Boring / Probe ID | Media | Depth / Screen (feet bgs) | USEPA Soil Analysis Method | | | | | Soil Vapor Analysis Method | | | Objective / Target Feature(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Title 22 Metals by 6010B / 7471 | Lead and Arsenic by 6010B | Organochlorine Pesticides 8081A | TPH-cc by 8015 | VOCs by 8260B | VOCs by TO-15 | VOCs by 8260B | Methane by ASTM D-1946 | |
| **Operations Samples (Red)** | | | | | | | | | | | |
| SV-1 | Soil | 5, 10, 15, & 20 | X | | | X | X | | | | Assess former tanks, septic systems, other on-Site operations |
| | Soil Vapor | 5 & 15 | | | | | | X | | | |
| SV-1A | Soil Vapor | 25 | | | | | | | X | | |
| SV-2 | Soil | 5, 10, 15, & 20 | X | | | X | X | | | | |
| | Soil Vapor | 5 & 15 | | | | | | X | | | |
| SV-3 | Soil | 5 | X | | | X | X | | | | |
| | Soil Vapor | 5 | | | | | | X | | | |
| SV-3A | Soil Vapor | 15 & 25 | | | | | | | X | | |
| SV-4 | Soil | 5 | X | | | X | X | | | | |
| | Soil Vapor | 5 & 15 | | | | | | X | | | |
| SV-11 | Soil Vapor | 5, 15, & 25 | | | | | | | X | | |
| SV-12 | Soil Vapor | 5, 15, & 25 | | | | | | | X | | |
| SV-13 | Soil Vapor | 5, 15, & 25 | | | | | | | X | | |
| SV-14 | Soil Vapor | 5, 15, & 25 | | | | | | | X | | |
| SV-15 | Soil Vapor | 5, 15, & 25 | | | | | | | X | | |
| **Pond Samples (Blue)** | | | | | | | | | | | |
| SV-5 | Soil | 0.5 | X | | X | | | | | | Assess wastewater pond |
| | | 5 | | | | X | X | | | | |
| | Soil Vapor | 5 | | | | | | X | | X | |
| **Corral Samples (Green)** | | | | | | | | | | | |
| SV-6 | Soil Vapor | 5 | | | | | | X | | X | Assess former heifer-raising operations |
| SV-7 | Soil Vapor | 5 | | | | | | X | | X | |
| SV-8 | Soil Vapor | 5 | | | | | | X | | X | |
| SV-9 | Soil Vapor | 5 | | | | | | X | | X | |
| SV-10 | Soil Vapor | 5 | | | | | | X | | X | |
| **Agricultural Soil Composite Samples (Yellow)** | | | | | | | | | | | |
| SS-COMP-1 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-2 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-3 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-4 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-5 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-6 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-7 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-8 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-9 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-10 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-11 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-12 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-13 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-14 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-15 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-16 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-17 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-18 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-19 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-20 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-21 | Soil | 0.5 | | X | X | | | | | | |

**Table 1. Sampling and Analysis Plan**
870 North Sanderson Avenue
San Jacinto, California

| Boring / Probe ID | Media | Depth / Screen (feet bgs) | USEPA Soil Analysis Method | | | | | Soil Vapor Analysis Method | | | Objective / Target Feature(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Title 22 Metals by 6010B / 7471 | Lead and Arsenic by 6010B | Organochlorine Pesticides 8081A | TPH-cc by 8015 | VOCs by 8260B | VOCs by TO-15 | VOCs by 8260B | Methane by ASTM D-1946 | |
| SS-COMP-22 | Soil | 0.5 | | X | X | | | | | | Assess former agricultural use |
| SS-COMP-23 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-24 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-25 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-26 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-27 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-28 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-29 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-30 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-31 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-32 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-33 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-34 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-35 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-36 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-37 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-38 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-39 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-40 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-41 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-42 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-43 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-44 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-45 | Soil | 0.5 | | X | X | | | | | | |
| SS-COMP-46 | Soil | 0.5 | | X | X | | | | | | |

**Notes:**
bgs = below ground surface
USEPA = United States Environmental Protection Agency
TPH = Total Petroleum Hydrocarbons
VOC = Volatile Organic Compound
ASTM = American Society for Testing and Materials
N/A = Sample was not analyzed

**Table 2. Organochlorine Pesticides in Soil**
870 North Sanderson Avenue
San Jacinto, California

| Sample ID | Approximate Sample Depth (feet bgs) | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Endrin aldehyde | All Other OCPs |
|---|---|---|---|---|---|---|---|
| **Analytical Method** | | | USEPA Method 8081A | | | | |
| **Units** | | | µg/Kg | | | | |
| **USEPA Industrial Soil RSLs** | | | 9,600 | 9,300 | 8,500 | NS | Varies |
| **DTSC Commercial/Industrial Soil SL** | | | 6,200 | 9,300 | 7,100 | NS | Varies |
| SS-COMP-1 | 0.5 | 9/1/2021 | <5.0 | **20** | <5.0 | <5.0 | ND |
| SS-COMP-2 | 0.5 | 9/1/2021 | <5.0 | **170** | **7.3 #,C** | <5.0 | ND |
| SS-COMP-3 | 0.5 | 9/1/2021 | <10 | **200** | <10 | <10 | ND |
| SS-COMP-4 | 0.5 | 9/1/2021 | <10 | **110** | <10 | <10 | ND |
| SS-COMP-5 | 0.5 | 9/1/2021 | <10 | <10 | <10 | <10 | ND |
| SS-COMP-6 | 0.5 | 9/1/2021 | <10 | <10 | <10 | <10 | ND |
| *SS-COMP-6 DUP* | *0.5* | *9/1/2021* | *<10* | *<10* | *<10* | *<10* | *ND* |
| SS-COMP-7 | 0.5 | 9/1/2021 | <10 | **100** | **28** | <10 | ND |
| SS-COMP-8 | 0.5 | 9/1/2021 | <10 | **150** | <10 | <10 | ND |
| SS-COMP-9 | 0.5 | 9/1/2021 | <25 | **130** | <25 | <25 | ND |
| SS-COMP-10 | 0.5 | 9/1/2021 | <5.0 | **56** | <5.0 | <5.0 | ND |
| SS-COMP-11 | 0.5 | 9/1/2021 | <5.0 | **55** | <5.0 | <5.0 | ND |
| SS-COMP-12 | 0.5 | 9/1/2021 | <5.0 | **36** | <5.0 | <5.0 | ND |
| SS-COMP-13 | 0.5 | 9/1/2021 | <5.0 | **28** | <5.0 | <5.0 | ND |
| SS-COMP-14 | 0.5 | 9/1/2021 | <25 | **61** | <25 | <25 | ND |
| SS-COMP-15 | 0.5 | 9/1/2021 | <5.0 | **42** | **7.6 #** | <5.0 | ND |
| SS-COMP-16 | 0.5 | 9/1/2021 | <5.0 | **28** | **6.5 #** | <5.0 | ND |
| SS-COMP-17 | 0.5 | 9/1/2021 | <5.0 | **16** | <5.0 | <5.0 | ND |
| SS-COMP-18 | 0.5 | 9/1/2021 | <5.0 | **36** | <5.0 | <5.0 | ND |
| SS-COMP-19 | 0.5 | 9/1/2021 | <5.0 | **31** | <5.0 | <5.0 | ND |
| *SS-COMP-19-DUP* | *0.5* | *9/1/2021* | *<5.0* | ***57*** | *<5.0* | *<5.0* | *ND* |
| SS-COMP-20 | 0.5 | 9/1/2021 | <5.1 | **75** | <5.1 | <5.1 | ND |
| SS-COMP-21 | 0.5 | 9/1/2021 | <4.9 | **66** | **12** | <4.9 | ND |
| SS-COMP-22 | 0.5 | 9/1/2021 | <5.1 | **9.2** | <5.1 | <5.1 | ND |
| SS-COMP-23 | 0.5 | 9/1/2021 | <5.1 | **20** | <5.1 | <5.1 | ND |
| SS-COMP-24 | 0.5 | 9/1/2021 | <5.1 | **40** | <5.1 | <5.1 | ND |
| SS-COMP-25 | 0.5 | 9/1/2021 | <5.0 | **59** | **5.2** | <5.0 | ND |
| SS-COMP-26 | 0.5 | 9/2/2021 | **6.5** | **83** | **94** | <5.0 | ND |
| SS-COMP-27 | 0.5 | 9/2/2021 | **8.1** | **100** | **130** | <5.0 | ND |
| *SS-COMP-27-DUP* | *0.5* | *9/2/2021* | ***8.3*** | ***110*** | ***120*** | *<4.9* | *ND* |
| SS-COMP-28 | 0.5 | 9/2/2021 | **18** | **97** | **240** | <5.0 | ND |
| SS-COMP-29 | 0.5 | 9/2/2021 | <5.0 | **63** | **6.8** | <5.0 | ND |
| SS-COMP-30 | 0.5 | 9/2/2021 | <4.9 | **90** | **10** | <4.9 | ND |
| *SS-COMP-30-DUP* | *0.5* | *9/2/2021* | *<5.1* | ***80*** | ***12*** | *<5.1* | *ND* |
| SS-COMP-31 | 0.5 | 9/2/2021 | **39** | **91** | **740** | **5.6** | ND |
| SS-COMP-32 | 0.5 | 9/2/2021 | **48** | **81** | **750** | **8.2** | ND |
| SS-COMP-33 | 0.5 | 9/2/2021 | **27** | **120** | **250** | <5.0 | ND |
| SS-COMP-34 | 0.5 | 9/2/2021 | <5.0 | **120** | **11** | <5.0 | ND |
| SS-COMP-35 | 0.5 | 9/2/2021 | **7.7** | **12** | **50** | <5.1 | ND |
| SS-COMP-36 | 0.5 | 9/2/2021 | **22** | **20 C** | **120** | <5.1 | ND |
| SS-COMP-37 | 0.5 | 9/2/2021 | **15** | **60** | **69 #** | <5.0 | ND |
| SS-COMP-38 | 0.5 | 9/2/2021 | <5.0 | **41** | <5.0 | <5.0 | ND |
| SS-COMP-39 | 0.5 | 9/2/2021 | <5.0 | <5.0 | <5.0 | <5.0 | ND |
| SS-COMP-40 | 0.5 | 9/2/2021 | <5.0 | <5.0 | <5.0 | <5.0 | ND |
| SS-COMP-41 | 0.5 | 9/2/2021 | <5.0 | <5.0 | <5.0 | <5.0 | ND |
| *SS-COMP-41-DUP* | *0.5* | *9/2/2021* | *<5.0* | *<5.0* | *<5.0* | *<5.0* | *ND* |
| SS-COMP-42 | 0.5 | 9/2/2021 | <5.0 | <5.0 | <5.0 | <5.0 | ND |
| SS-COMP-43 | 0.5 | 9/2/2021 | <5.0 | <5.0 | <5.0 | <5.0 | ND |
| SS-COMP-44 | 0.5 | 9/2/2021 | <5.0 | <5.0 | <5.0 | <5.0 | ND |
| SS-COMP-45 | 0.5 | 9/2/2021 | **5.2** | <5.0 | **7.4 #,C** | <5.0 | ND |
| SS-COMP-46 | 0.5 | 9/2/2021 | <5.0 | <5.0 | <5.0 | <5.0 | ND |

**Notes:**
1. OCPs = organochlorine pesticides
2. USEPA = United States Environmental Protection Agency
3. µg/kg = micrograms per kilogram
4. USEPA RSL = USEPA Regional Screening Levels for Soil, Hazard Quotient (HQ) = 1.0, May 2021.
5. DTSC SL = Human Health Risk Assessment (HHRA) Note 3, Department of Toxic Substances Control Screening Levels (DTSC-SLs) for Soil, June 2020.
6. bgs = below ground surface
7. Only compounds detected in soil above laboratory reporting limits in at least one sample are shown on this table
8. <X = not detected above laboratory reporting limits
9. **Bold** indicates value exceeds laboratory reporting limit
10. *Italics* indicates duplicate sample
11. NS = no screening criteria available
12. C = relative percent difference between QC samples exceeds 40%
13. # = continuing calibration verification (CCV) drift outside limits; average CCV drift within limits per method requirements

**Table 3. Metals in Soil**
870 North Sanderson Avenue
San Jacinto, California

| Sample ID | Approximate Sample Depth (feet bgs) | Sample Date | Arsenic | Lead | Antimony | Barium | Beryllium | Cadmium | Chromium | Cobalt | Copper | Molybdenum | Nickel | Selenium | Silver | Thallium | Vanadium | Zinc | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analytical Method** | | | USEPA Method 6010B | | | | | | | | | | | | | | | | USEPA Method 7471A |
| **Units** | | | mg/kg | | | | | | | | | | | | | | | | |
| **Typical range for California Soil[1]** | | | 12[a] | 14.3-107.9 | 0.15-1.95 | 133-1,400 | 0.25-2.70 | 0.05-1.7 | 23-1,579 | 2.7-46.9 | 9.1-96.4 | 0.1-9.6 | 9-509 | NS | NS | NS | 39-288 | 88-236 | 0.10-0.90 |
| **USEPA RSL - Industrial Soil** | | | 3.0 | 800 | 470 | 220,000 | 2,300 | 980 | NS | 350 | 47,000 | 5,800 | 22,000 | 64,000 | 64,000 | 64,000 | 5,800 | 350,000 | 46 |
| **DTSC Commercial/Industrial Soil SL** | | | 0.36 | 320* | NS | NS | 230 | 780 | NS | NS | NS | NS | 11,000 | NS | NS | NS | NS | NS | 4.4* |
| **Operations Samples** | | | | | | | | | | | | | | | | | | | |
| SV-1-5 | 5 | 9/7/2021 | <1.1 | **3.6** | <3.3 | **140** | <0.54 | <0.54 | **7.4** | **4.1** | **8.1** | <1.1 | **4.2** | <3.3 | <0.54 | <3.3 | **23** | **56** | <0.16 |
| SV-1-10 | 10 | 9/7/2021 | <0.9 | **3.4** | <2.6 | **180** | <0.43 | <0.43 | **6.9** | **4.3** | **5.3** | <0.87 | **3.2** | <2.6 | <0.43 | <2.6 | **24** | **44** | <0.16 |
| SV-1-15 | 15 | 9/7/2021 | **1.1** | **2.7** | <3.3 | **130** | <0.54 | <0.54 | **8.6** | **4.1** | **6.3** | <1.1 | **4.4** | <3.3 | <0.54 | <3.3 | **25** | **44** | <0.16 |
| SV-1-20 | 20 | 9/7/2021 | <0.9 | **2.2** | <2.8 | **350** | <0.47 | <0.47 | **9.8** | **5.5** | **5.5** | <0.94 | **5.2** | <2.8 | <0.47 | <2.8 | **29** | **49** | <0.16 |
| SV-2-5 | 5 | 9/7/2021 | **1.2** | **3.2** | <2.8 | **220** | **0.53** | <0.46 | **11** | **6.2** | **7.0** | <0.93 | **5.5** | <2.8 | <0.46 | <2.8 | **33** | **64** | <0.14 |
| SV-2-10 | 10 | 9/7/2021 | <1.0 | **3.8** | <3.1 | **230** | **0.57** | <0.51 | **11** | **6.8** | **8.0** | <1.0 | **5.8** | <3.1 | <0.51 | <3.1 | **38** | **74** | <0.15 |
| SV-2-15 | 15 | 9/7/2021 | <1.0 | **2.2** | <3.1 | **160** | <0.51 | <0.51 | **7.8** | **4.2** | **5.2** | <1.0 | **4.0** | <3.1 | <0.51 | <3.1 | **19** | **39** | <0.16 |
| SV-2-20 | 20 | 9/7/2021 | **1.4** | **2.4** | <2.9 | **200** | <0.49 | <0.49 | **7.7** | **4.3** | **5.9** | <1.0 | **4.4** | <2.9 | <0.49 | <2.9 | **23** | **44** | <0.15 |
| SV-3-5 | 5 | 9/7/2021 | **1.5** | **2.5** | <2.8 | **190** | <0.46 | <0.46 | **7.9** | **5.1** | **4.8** | **1.1** | **4.5** | <2.8 | <0.46 | <2.8 | **28** | **53** | <0.14 |
| SV-4-5 | 5 | 9/7/2021 | **2.0** | **2.5** | <2.8 | **150** | <0.46 | <0.46 | **7.7** | **5.1** | **5.8** | <0.92 | **4.2** | <2.8 | <0.46 | <2.8 | **33** | **54** | <0.16 |
| **Pond Samples (Blue)** | | | | | | | | | | | | | | | | | | | |
| SV-5-0.5 | 0.5 | 9/7/2021 | <1.0 | **4.4** | <3.1 | **280** | **0.73** | <0.52 | **12** | **8.0** | **8.2** | <1.0 | **6.5** | <3.1 | <0.52 | <3.1 | **48** | **94** | <0.15 |
| SV-5-5 | 5 | 9/7/2021 | **3.9** | **5.2** | <2.9 | **330** | **0.75** | <0.49 | **13** | **9.0** | **9.0** | <1.0 | **7.1** | <2.9 | <0.49 | <2.9 | **54** | **99** | <0.16 |
| **Corral Samples (Green)** | | | | | | | | | | | | | | | | | | | |
| SS-COMP-1 | 0.5 | 9/1/2021 | **1.2** | **5.2** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-2 | 0.5 | 9/1/2021 | **1.2** | **4.6** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-3 | 0.5 | 9/1/2021 | **1.4** | **4.8** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-4 | 0.5 | 9/1/2021 | **1.3** | **5.1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-5 | 0.5 | 9/1/2021 | **1.3** | **4.4** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-6 | 0.5 | 9/1/2021 | **1.4** | **4.6** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *SS-COMP-6 DUP* | *0.5* | *9/1/2021* | ***1.5*** | ***4.5*** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-7 | 0.5 | 9/1/2021 | **1.3** | **3.8** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-8 | 0.5 | 9/1/2021 | **1.5** | **10** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-9 | 0.5 | 9/1/2021 | **1.4** | **4.2** | <3.1 | **170** | <0.52 | <0.52 | **10** | **5.2** | **31** | <1.0 | **5.8** | <3.1 | <0.5 | <3.1 | **31** | **91** | <0.16 |
| SS-COMP-10 | 0.5 | 9/1/2021 | **1.4** | **3.8** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-11 | 0.5 | 9/1/2021 | **1.5** | **3.1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-12 | 0.5 | 9/1/2021 | **1.4** | **4.0** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-13 | 0.5 | 9/1/2021 | **1.5** | **4.1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-14 | 0.5 | 9/1/2021 | **1.4** | **3.8** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-15 | 0.5 | 9/1/2021 | <0.94 | **2.8** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-16 | 0.5 | 9/1/2021 | <1.0 | **2.6** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-17 | 0.5 | 9/1/2021 | <0.93 | **3.1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-18 | 0.5 | 9/1/2021 | <0.94 | **3.4** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-19 | 0.5 | 9/1/2021 | <1.1 | **3.7** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *SS-COMP-19-DUP* | *0.5* | 9/1/2021 | ***1.2*** | ***4.3*** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-20 | 0.5 | 9/1/2021 | **1.9** | **4.7** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-21 | 0.5 | 9/1/2021 | **1.1** | **3.3** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-22 | 0.5 | 9/1/2021 | **1.5** | **2.9** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-23 | 0.5 | 9/1/2021 | **1.0** | **3.0** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-24 | 0.5 | 9/1/2021 | **1.2** | **4.1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-25 | 0.5 | 9/1/2021 | **1.2** | **4.5** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-26 | 0.5 | 9/2/2021 | **1.4** | **3.7** | <3.1 | **200** | <0.52 | <0.52 | **10** | **5.8** | **37** | <1.0 | **5.9** | <3.1 | <0.52 | <3.1 | **34** | **89** | <0.16 |
| SS-COMP-27 | 0.5 | 9/2/2021 | **1.3** | **3.8** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *SS-COMP-27-DUP* | *0.5* | *9/2/2021* | ***1.5*** | ***3.6*** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-28 | 0.5 | 9/2/2021 | **9.3** | **5.2** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-29 | 0.5 | 9/2/2021 | **1.1** | **4.1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-30 | 0.5 | 9/2/2021 | **1.2** | **4.2** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *SS-COMP-30-DUP* | *0.5* | *9/2/2021* | ***1.4*** | ***4.2*** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-31 | 0.5 | 9/2/2021 | **1.5** | **4.1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-32 | 0.5 | 9/2/2021 | **2.4** | **4.6** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-33 | 0.5 | 9/2/2021 | **1.3** | **4.6** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-34 | 0.5 | 9/2/2021 | **1.0** | **3.8** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-35 | 0.5 | 9/2/2021 | **1.7** | **3.6** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-36 | 0.5 | 9/2/2021 | **1.7** | **3.9** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-37 | 0.5 | 9/2/2021 | **1.9** | **15** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-38 | 0.5 | 9/2/2021 | **1.5** | **3.9** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-39 | 0.5 | 9/2/2021 | **1.5** | **4.3** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-40 | 0.5 | 9/2/2021 | **2.2** | **4.5** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-41 | 0.5 | 9/2/2021 | **2.0** | **4.2** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *SS-COMP-41-DUP* | *0.5* | *9/2/2021* | ***1.5*** | ***4.0*** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-42 | 0.5 | 9/2/2021 | **2.1** | **3.7** | <3.0 | **220** | **0.6** | <0.5 | **12** | **6.7** | **14** | <1.0 | **6.7** | <3.0 | <0.5 | <3.0 | **39** | **96** | <0.14 |
| SS-COMP-43 | 0.5 | 9/2/2021 | **1.2** | **3.9** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-44 | 0.5 | 9/2/2021 | **1.7** | **4.6** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-45 | 0.5 | 9/2/2021 | **1.2** | **3.9** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SS-COMP-46 | 0.5 | 9/2/2021 | **2.0** | **3.6** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

**Notes:**

[1] Bradford, G.R., Chang, A.C., Page, A.L., Bakhtar, D., Frampton, J.A., and Wright, H., 1996, Background of Trace and Major Elements in California Soils, Kearney Foundation of Soil Sciences Special Report, Division of Agriculture and Natural Resources, University of California

[a]Upper-bound background concentrations from Chernoff, G., Bosan, W., and Outiz, D., DTSC. Determination of a Southern California Regional Background Arsenic Concentration in Soil.

USEPA = United States Environmental Protection Agency

USEPA RSL = USEPA Regional Screening Level for industrial soil, dated May 2021

DTSC SL = Department of Toxic Substances Control Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 Screening Level for industrial/commercial soil, dated June 2020

* SL is for "Lead and Compounds"

mg/kg = milligrams per kilogram

bgs = below ground surface

<X = not detected above laboratory reporting limits

**Bold** indicates value exceeds laboratory reporting limit

*Italics* indicates duplicate sample

Yellow = Concentration exceeds DTSC SL but does not exceed USEPA RSL

Orange = Concentration exceeds USEPA RSL

NS = no screening criteria available

**Table 4. Total Petroleum Hydrocarbons in Soil**
870 North Sanderson Avenue
San Jacinto, California

| Sample ID | Approximate Sample Depth (feet bgs) | Sample Date | TPH (C6-C12) | TPH (C13-C22) | TPH (C23-C44) |
|---|---|---|---|---|---|
| | | **Analytical Method** | USEPA Method 8015B (M) | | |
| | | **Units** | mg/kg | | |
| | | **SSL for TPH** | 500 | 1,000 | 10,000 |
| SV-1-5 | 5 | 9/7/2021 | <10 | <10 | <10 |
| SV-1-10 | 10 | 9/7/2021 | <10 | <10 | <10 |
| SV-1-15 | 15 | 9/7/2021 | <10 | <10 | <10 |
| SV-1-20 | 20 | 9/7/2021 | <10 | <10 | <10 |
| SV-2-5 | 5 | 9/7/2021 | <10 | <10 | <10 |
| SV-2-10 | 10 | 9/7/2021 | <10 | <10 | <10 |
| SV-2-15 | 15 | 9/7/2021 | <10 | <10 | <10 |
| SV-2-20 | 20 | 9/7/2021 | <10 | <10 | <10 |
| SV-3-5 | 5 | 9/7/2021 | <10 | <10 | <10 |
| SV-4-5 | 5 | 9/7/2021 | <10 | <10 | <10 |
| SV-5-0.5 | 0.5 | 9/7/2021 | <10 | <10 | <10 |

**Notes:**
USEPA = United States Environmental Protection Agency

SSL for TPH = Maximum Soil Screening Levels for Total Petroleum Hydrocarbons above Drinking Water Aquifers (20-150 feet above groundwater), California Regional Water Quality Control Board Remediation Guidances for Petroleum and VOC Impacted Sites, May 1996

mg/kg = milligrams per kilogram

bgs = below ground surface

Only compounds detected in soil above laboratory reporting limits in at least one sample are shown.
<X = not detected above laboratory reporting limits
**Bold** indicates value exceeds laboratory reporting limit
*Italics* indicates duplicate sample
NS = No screening criteria established

**Table 5. Volatile Organic Compounds in Soil**
870 North Sanderson Avenue
San Jacinto, California

| Sample ID | Approximate Sample Depth (feet bgs) | Sample Date | Methylene Chloride | tert-Butyl Alcohol (TBA) | All Other VOCs |
|---|---|---|---|---|---|
| **Analytical Method** | | | USEPA Method 8260B | | |
| **Units** | | | µg/kg | | |
| **DTSC Commercial/Industrial Soil SL** | | | 26,000 | NS | Varies |
| **USEPA Industrial Soil RSLs** | | | 1,000,000 | NS | Varies |
| **Operations Samples** | | | | | |
| SV-1-5 | 5 | 9/7/2021 | <5.2 | <10 | ND |
| SV-1-10 | 10 | 9/7/2021 | **6.1** | <10 | ND |
| SV-1-15 | 15 | 9/7/2021 | <4.5 | <9.1 | ND |
| SV-1-20 | 20 | 9/7/2021 | <4.3 | **13** | ND |
| SV-2-5 | 5 | 9/7/2021 | <5.1 | <10 | ND |
| SV-2-10 | 10 | 9/7/2021 | <5.0 | <10 | ND |
| SV-2-15 | 15 | 9/7/2021 | <4.8 | <9.6 | ND |
| SV-2-20 | 20 | 9/7/2021 | <7.6 | **23** | ND |
| SV-3-5 | 5 | 9/7/2021 | **6.9** | <10 | ND |
| SV-4-5 | 5 | 9/7/2021 | **5.8** | <10 | ND |
| **Pond Samples (Blue)** | | | | | |
| SV-5-0.5 | 0.5 | 9/7/2021 | **8.1** | <13 | ND |
| SV-5-5 | 5 | 9/7/2021 | **8.1** | <12 | ND |

**Notes:**
USEPA = United States Environmental Protection Agency
USEPA RSL = USEPA Regional Screening Level for industrial soil, updated May 2021.
DTSC SL = Department of Toxic Substances Control Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 Screening Level for industrial/commercial soil, dated June 2020.
µg/kg = micrograms per kilogram
bgs = below ground surface
Only compounds detected in soil above laboratory reporting limits in at least one sample are shown on this table
<X = not detected above laboratory reporting limits
**Bold** indicates value exceeds laboratory reporting limit
*Italics* indicates duplicate sample
NS = no screening criteria available

**Table 6. Volatile Organic Compounds in Soil Vapor**
870 North Sanderson Avenue
San Jacinto, California

| Sample ID | Sample Depth (feet bgs) | Sample Date | 1,2,4-Trimethylbenzene | 2-Butanone | 4-Methyl-2-Pentanone | Acetone | Benzene | Carbon Disulfide | Chloroform | Chloromethane | cis-1,2-Dichloroethene | Freon 12 | Isopropanol (IPA) | Methylene Chloride | n-Hexane | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analytical Method** | | | USEPA Method TO-15 and USEPA Method 8260B | | | | | | | | | | | | | | | | |
| **Units** | | | µg/m$^3$ | | | | | | | | | | | | | | | | |
| **USEPA Industrial Soil Vapor RSL[1]** | | | 1,500 | 733,333 | NS | 4,666,667 | 53 | 103,333 | 18 | 13,000 | 1,200 | 14,667 | 29,333 | 40,000 | 103,333 | 1,567 | 733,333 | 1,200 | 100 |
| **DTSC Commercial/Industrial Soil Vapor SL[1]** | | | NS | NS | NS | NS | 14 | NS | NS | NS | 1,167 | NS | NS | 400 | NS | 67 | 43,333 | 11,667 | 267 |
| SV-1-5 | 5 | 9/10/2021 | <1.7 | <5.0 | <1.4 | **20** | **1.5** | **1.7** | <1.7 | <0.7 | <1.3 | **2.5** | **8.6** | **2.8** | <1.2 | **14** | <1.3 | <1.3 | **9.2** |
| SV-1-15 | *15* | 9/10/2021 | **2.0** | **8.0** | **6.3** | **28** | **4.4** | **17** | <1.7 | <0.7 | <1.3 | **2.6** | **12** | **1.3** | **15** | **19** | **5.4** | <1.3 | **110** |
| SV-2-5 | 5 | 9/10/2021 | <1.7 | **6.7** | **2.7** | **30** | **3.9** | **4.5** | **2.2** | <0.7 | **3.0** | **2.6** | **10** | **16** | **8.2** | **5.2** | **3.4** | **1.7** | **23** |
| SV-2-15 | 15 | 9/10/2021 | **5.9** | **9.0** | **4.0** | **35** | **6.4** | **28** | <1.8 | **1.5** | <1.4 | **2.7** | **9.0** | **4.5** | **31** | <2.4 | **4.7** | <1.4 | **5.0** |
| SV-3-5 | 5 | 9/10/2021 | <1.8 | **10** | <1.5 | **45** | **2.4** | **4.8** | **2.0** | **4.3** | <1.4 | **2.6** | **15** | **3.3** | **6.8** | **22** | **4.4** | <1.4 | **210** |
| SV-4-5 | 5 | 9/10/2021 | <1.7 | <5.0 | <1.4 | **22** | **1.5** | **1.8** | <1.7 | <0.7 | <1.3 | **2.5** | **9.3** | **6.8** | **3.0** | **4.5** | **1.8** | <1.3 | <1.8 |
| *SV-4-5-DUP* | *5* | *9/10/2021* | *<1.6* | *<4.7* | *<1.3* | **15** | **1.3** | **1.7** | **1.6** | *<0.7* | *<1.3* | **2.5** | **4.3** | *<1.1* | **2.4** | *<2.2* | **1.2** | *<1.3* | *<1.7* |
| SV-5-5 | 5 | 9/11/2021 | <1.6 | **6.1** | **1.7** | **35** | **1.8** | **3.4** | **2.0** | **1.2** | <1.3 | **2.6** | **5.6** | **8.0** | **41.0** | <2.2 | **2.0** | <1.3 | <1.7 |
| SV-1A-25 | 25 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-3A-15 | 15 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-3A-25 | 25 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-11-5 | 5 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | **16** | <1,000 | <1,000 | <10 |
| SV-11-15 | 15 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-11-25 | 25 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| *SV-11-25 DUP* | 25 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-12-5 | 5 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-12-15 | 15 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-12-25 | 25 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-13-5 | 5 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-13-15 | 15 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-13-25 | 25 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | **5** | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-14-5 | 5 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | **17** | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-14-15 | 15 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | **13** | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-14-25 | 25 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| *SV-14-25 DUP* | 25 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-15-5 | 5 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-15-15 | 15 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |
| SV-15-25 | 25 | 10/11/2021 | <1,000 | <1,000 | <1,000 | <1,000 | <3 | -- | <4 | <1,000 | <200 | -- | -- | <30 | -- | <10 | <1,000 | <1,000 | <10 |

**Notes:**

[1] Soil Gas Screening Levels (SGSLs) were calculated by applying an attenuation factor of 0.03 to the DTSC SLs or USEPA RSLs, per the DTSC Draft Supplemental Guidance, dated February 2020
USEPA = United States Environmental Protection Agency
USEPA RSL = USEPA Regional Screening Level for industrial air, dated May 2021
DTSC SL = Department of Toxic Substances Control Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 Screening Level for industrial/commercial air, dated June 2020; and DTSC HERO HHRA Note 5 Trichloroethene Indoor Air Response Action Levels for Commercial/Industrial (8-hour workday), dated August 23, 2014
µg/m$^3$ = micrograms per cubic meter
Only compounds detected in soil vapor above laboratory reporting limits in at least one sample are shown on this table
<X = not detected above laboratory reporting limits
**Bold** indicates value exceeds laboratory reporting limit
*Italics* indicates duplicate sample
Orange = Concentration exceeds USEPA RSL
NS = no screening criteria available

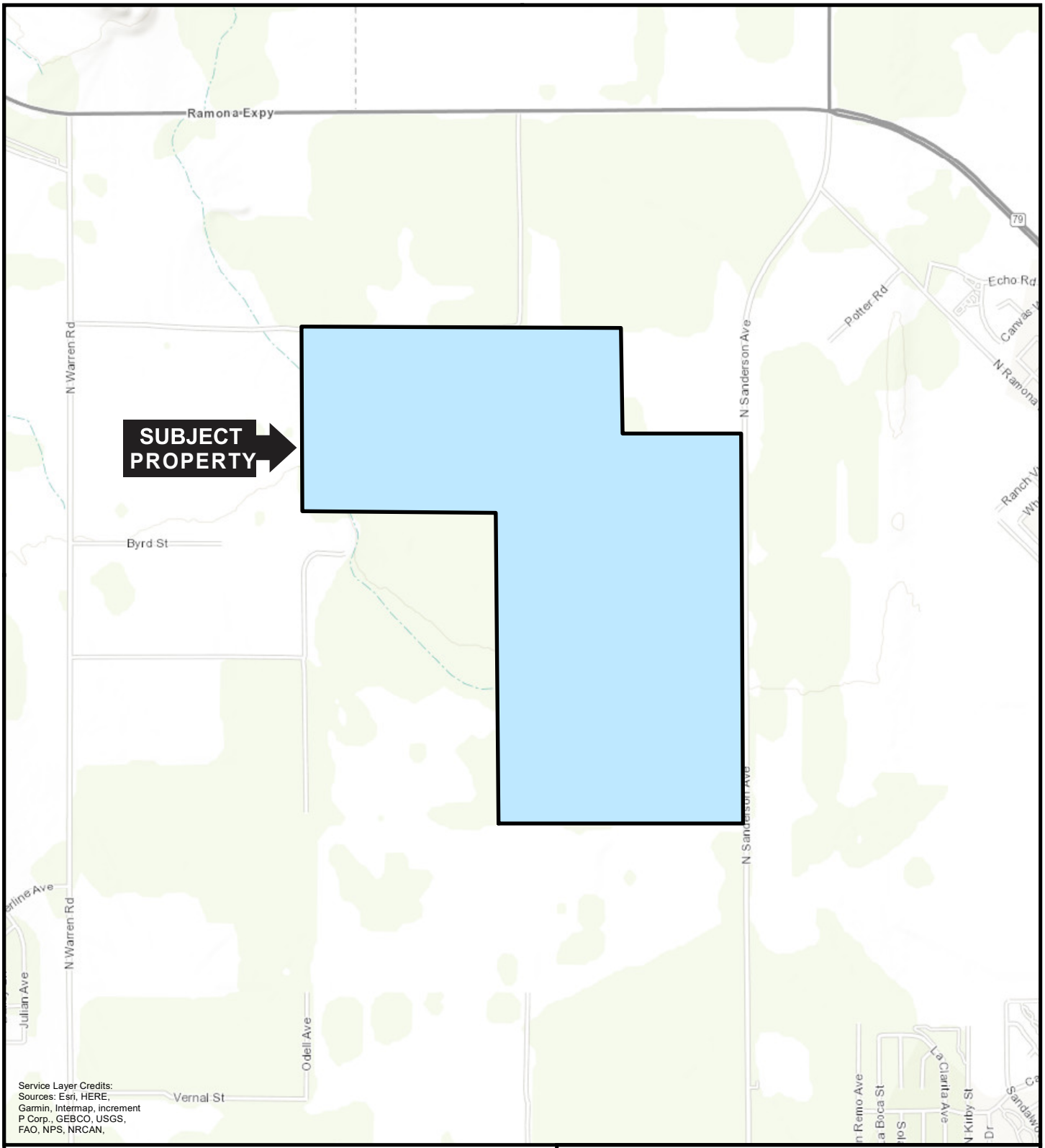
**Table 7. Methane in Soil Vapor**
870 North Sanderson Avenue
San Jacinto, CA

| Sample ID | Sample Depth (feet bgs) | Sample Date | Methane |
|---|---|---|---|
| | | **Analytical Method** | ASTM D-1946 |
| | | **DTSC Cautionary Value for Methane** | 1,000 |
| | | **DTSC Response Value for Methane** | 5,000 |
| | | **Units** | ppmv |
| SV-5-5 | 5 | 9/10/2021 | **3.7** |
| SV-6-5 | 5 | 9/10/2021 | **2.7** |
| SV-7-5 | 5 | 9/10/2021 | **2.6** |
| SV-8-5 | 5 | 9/10/2021 | **2.8** |
| SV-9-5 | 5 | 9/10/2021 | **2.3** |
| SV-10-5 | 5 | 9/10/2021 | **2.4** |

**Notes:**
ASTM = American Society for Testing Materials
ppmv = parts per million by volume
**Bold** indicates analyte detected above method reporting limits
DTSC Cautionary and Response Values = DTSC Advisory on Methane Assessment and Common Remedies at School Sites, dated June 16, 2005.

# FIGURES

1. Site Location Map
2. Site Plan
3. Soil Vapor VOC Sampling Locations




QUADRANGLE LOCATION

N

1,000 0 1,000'

Title:

# SITE LOCATION MAP

870 North Sanderson Avenue
San Jacinto, Riverside County, California

Prepared for:

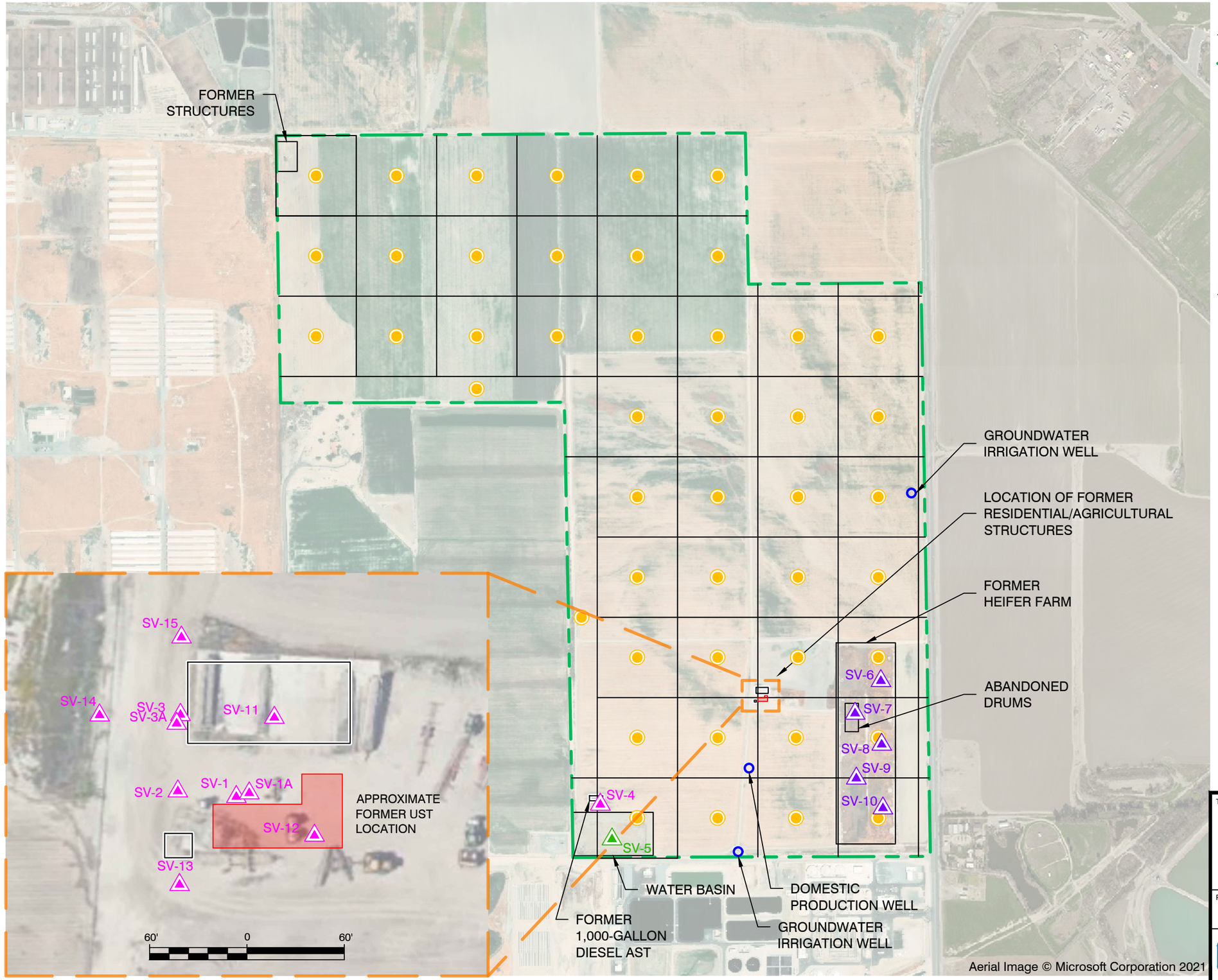
SHEA PROPERTIES LLC

ROUX

| | |
|---|---|
| Compiled by: C.M. | Date: 08/04/21 |
| Prepared by: C.M. | Scale: AS SHOWN |
| Project Mgr: R.Q. | Project: 2217.0025L |

FIGURE 1

S:\OFFICE ADMIN\REFERENCE LIBRARY\CMF\FIGURE 1 - SAN JACINTO.MXD




LEGEND

- APPROXIMATE SITE BOUNDARY
- APPROXIMATE WATER WELL LOCATION
- OPERATIONS SAMPLES
- POND SAMPLE
- AGRICULTURAL SOIL COMPOSITE SAMPLES
- CORRAL SAMPLES

NOTES

1) SAMPLES IN AREA OF FORMER RESIDENTIAL/AGRICULTURAL STRUCTURES SHOWN ONLY IN INSET.

N

800' 0 800'

Title:

# SITE PLAN

870 NORTH SANDERSON AVENUE
SAN JACINTO, CALIFORNIA

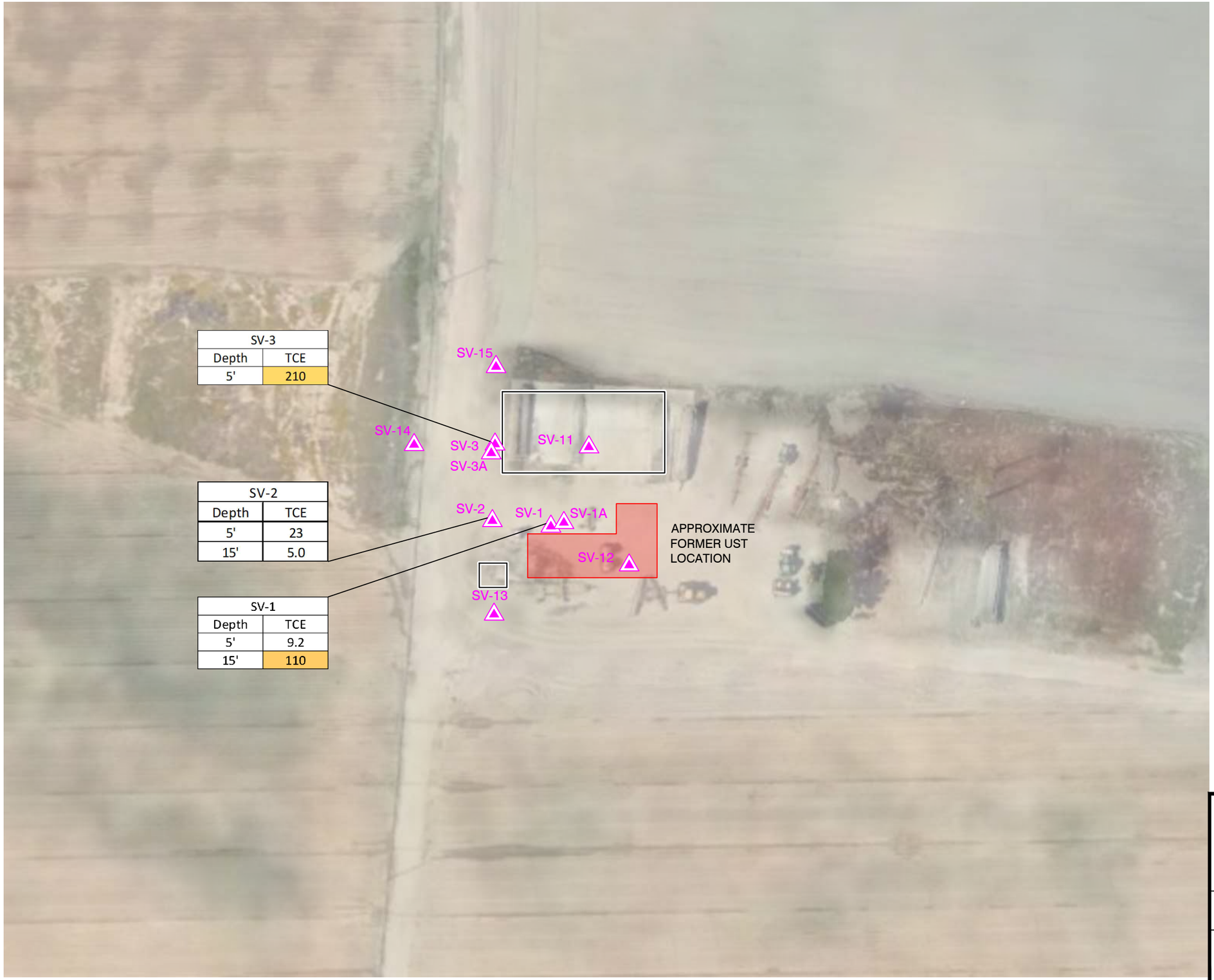
Prepared for:

SHEA PROPERTIES

ROUX

| | | |
|---|---|---|
| Compiled by: A.MOK | Date: 18 OCT 2021 | FIGURE |
| Prepared by: A.F. | Scale: AS SHOWN | 2 |
| Project Mgr: R.Q. | Project: 2217.0025L | |
| File: 006_2217.0025_SITE PLAN.DWG | | |

\\SRVLACAFP1\LA SHARED\CLIENTS\2217.0025L SHEA SAN JACINTO MHE\10CAD\006_2217.0025_SITE PLAN.DWG




LEGEND

▲ OPERATIONS SAMPLES

NOTES

1) TCE = TRICHLOROETHENE
2) BOLD INDICATES VALUE EXCEEDS LABORATORY REPORTING LIMIT.
3) ALL UNITS ARE IN MICROGRAMS PER CUBIC METER (µg/m³).
4) ORANGE HIGHLIGHT INDICATES VALUE EXCEEDS UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGIONAL SCREENING LEVEL FOR INDUSTRIAL SOIL VAPOR.

N

60' 0 60'

Title:

# SOIL VAPOR VOC SAMPLING LOCATIONS

870 NORTH SANDERSON AVENUE
SAN JACINTO, CALIFORNIA

Prepared for:

SHEA PROPERTIES

ROUX

| | | |
|---|---|---|
| Compiled by: A.MOK | Date: 18 OCT 2021 | FIGURE |
| Prepared by: A.F. | Scale: AS SHOWN | 3 |
| Project Mgr: R.Q. | Project: 2217.0025L | |
| File: 007_2217.0025_TCE CONCENTRATIONS.DWG | | |

\\SRVLACAFP1\LA SHARED\CLIENTS\2217.0025L SHEA SAN JACINTO MHE\10CAD\007_2217.0025_TCE CONCENTRATIONS.DWG

# ATTACHMENT A

Laboratory Analytical Reports

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

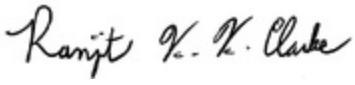
| | |
|---|---|
| Lab Job Number: | 450050 |
| Report Level: | II |
| Report Date: | 09/10/2021 |

**Analytical Report** *prepared for:*

Rocio Quinones
Roux Associates, Inc.
5150 E. Pacific Coast Hwy.
Suite 450
Long Beach, CA 90804

Location: Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA

*Authorized for release by:*



Ranjit K Clarke, Project Manager
(714) 771-9906
Ranjit.Clarke@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE Member

ENTHALPY ANALYTICAL

# Sample Summary

| | | |
|---|---|---|
| Rocio Quinones<br>Roux Associates, Inc.<br>5150 E. Pacific Coast Hwy.<br>Suite 450<br>Long Beach, CA 90804 | Lab Job #:<br>Location:<br><br>Date Received: | 450050<br>Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA<br>09/02/21 |

| Sample ID | Lab ID | Collected | Matrix |
|---|---|---|---|
| SS-COMP-1 | 450050-001 | 09/01/21 08:42 | Soil |
| SS-COMP-2 | 450050-002 | 09/01/21 09:08 | Soil |
| SS-COMP-3 | 450050-003 | 09/01/21 09:30 | Soil |
| SS-COMP-4 | 450050-004 | 09/01/21 09:46 | Soil |
| SS-COMP-5 | 450050-005 | 09/01/21 10:03 | Soil |
| SS-COMP-6 | 450050-006 | 09/01/21 10:23 | Soil |
| SS-COMP-6 DUP | 450050-007 | 09/01/21 10:23 | Soil |
| SS-COMP-7 | 450050-008 | 09/01/21 12:15 | Soil |
| SS-COMP-8 | 450050-009 | 09/01/21 11:58 | Soil |
| SS-COMP-9 | 450050-010 | 09/01/21 11:38 | Soil |
| SS-COMP-10 | 450050-011 | 09/01/21 11:20 | Soil |
| SS-COMP-11 | 450050-012 | 09/01/21 11:04 | Soil |
| SS-COMP-12 | 450050-013 | 09/01/21 10:50 | Soil |
| SS-COMP-13 | 450050-014 | 09/01/21 17:09 | Soil |
| SS-COMP-14 | 450050-015 | 09/01/21 16:50 | Soil |
| SS-COMP-15 | 450050-016 | 09/01/21 16:21 | Soil |
| SS-COMP-16 | 450050-017 | 09/01/21 16:04 | Soil |
| SS-COMP-17 | 450050-018 | 09/01/21 15:50 | Soil |
| SS-COMP-18 | 450050-019 | 09/01/21 15:35 | Soil |
| SS-COMP-19 | 450050-020 | 09/01/21 15:11 | Soil |
| SS-COMP-19-DUP | 450050-021 | 09/01/21 15:11 | Soil |
| SS-COMP-20 | 450050-022 | 09/01/21 14:45 | Soil |
| SS-COMP-21 | 450050-023 | 09/01/21 17:27 | Soil |
| SS-COMP-22 | 450050-024 | 09/01/21 17:41 | Soil |
| SS-COMP-23 | 450050-025 | 09/01/21 17:57 | Soil |
| SS-COMP-24 | 450050-026 | 09/01/21 18:12 | Soil |
| SS-COMP-25 | 450050-027 | 09/01/21 18:31 | Soil |
| SS-COMP-26 | 450050-028 | 09/02/21 09:27 | Soil |

ENTHALPY ANALYTICAL

# Sample Summary

| | | |
|---|---|---|
| Rocio Quinones<br>Roux Associates, Inc.<br>5150 E. Pacific Coast Hwy.<br>Suite 450<br>Long Beach, CA 90804 | Lab Job #:<br>Location:<br><br>Date Received: | 450050<br>Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA<br>09/02/21 |

| Sample ID | Lab ID | Collected | Matrix |
|---|---|---|---|
| SS-COMP-27 | 450050-029 | 09/02/21 08:32 | Soil |
| SS-COMP-27-DUP | 450050-030 | 09/02/21 08:32 | Soil |
| SS-COMP-28 | 450050-031 | 09/02/21 08:14 | Soil |
| SS-COMP-29 | 450050-032 | 09/02/21 07:52 | Soil |
| SS-COMP-30 | 450050-033 | 09/02/21 07:32 | Soil |
| SS-COMP-30-DUP | 450050-034 | 09/02/21 07:32 | Soil |
| SS-COMP-31 | 450050-035 | 09/02/21 09:44 | Soil |
| SS-COMP-32 | 450050-036 | 09/02/21 10:04 | Soil |
| SS-COMP-33 | 450050-037 | 09/02/21 10:24 | Soil |
| SS-COMP-34 | 450050-038 | 09/02/21 10:43 | Soil |
| SS-COMP-35 | 450050-039 | 09/02/21 12:04 | Soil |
| SS-COMP-36 | 450050-040 | 09/02/21 11:45 | Soil |
| SS-COMP-37 | 450050-041 | 09/02/21 11:26 | Soil |
| SS-COMP-38 | 450050-042 | 09/02/21 11:04 | Soil |
| SS-COMP-39 | 450050-043 | 09/02/21 13:10 | Soil |
| SS-COMP-40 | 450050-044 | 09/02/21 13:27 | Soil |
| SS-COMP-41 | 450050-045 | 09/02/21 13:45 | Soil |
| SS-COMP-41-DUP | 450050-046 | 09/02/21 13:45 | Soil |
| SS-COMP-42 | 450050-047 | 09/02/21 14:08 | Soil |
| SS-COMP-43 | 450050-048 | 09/02/21 14:30 | Soil |
| SS-COMP-44 | 450050-049 | 09/02/21 14:50 | Soil |
| SS-COMP-45 | 450050-050 | 09/02/21 15:11 | Soil |
| SS-COMP-46 | 450050-051 | 09/02/21 15:31 | Soil |

ENTHALPY ANALYTICAL

# Case Narrative

| | | |
|---|---|---|
| Roux Associates, Inc.<br>5150 E. Pacific Coast Hwy.<br>Suite 450<br>Long Beach, CA 90804<br>Rocio Quinones | Lab Job Number: | 450050 |
| | Location: | Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA |
| | Date Received: | 09/02/21 |

This data package contains sample and QC results for fifty one soil samples, requested for the above referenced project on 09/02/21. The samples were received cold and intact.

**Pesticides (EPA 8081A):**

Low recoveries were observed for endrin aldehyde and endrin ketone in the MS/MSD for batch 273570; the parent sample was not a project sample, and the LCS was within limits. High recoveries were observed for a number of analytes; the LCS was within limits. High RPD was observed for aldrin, endosulfan sulfate, and endrin; these analytes were not detected at or above the RL in the associated sample. High RPD was observed for methoxychlor in the MS/MSD of SS-COMP-1 (lab # 450050-001); this analyte was not detected at or above the RL in the associated samples. High RPD was observed for endrin ketone in the MS/MSD for batch 273369; the parent sample was not a project sample, and this analyte was not detected at or above the RL in the associated samples. Many samples were diluted due to the dark color of the sample extracts. SS-COMP-7 (lab # 450050-008) was diluted due to the color of the sample extract. No other analytical problems were encountered.

**Metals (EPA 6010B and EPA 7471A):**

High response was observed for antimony in the CCV analyzed 09/09/21 15:28; affected data was qualified with "b". High response was observed for antimony in the CCV analyzed 09/09/21 16:09; affected data was qualified with "b". Low recoveries were observed for antimony in the MS/MSD of SS-COMP-9 (lab # 450050-010); the LCS was within limits, and the associated RPD was within limits. Low recoveries were observed for antimony in the MS/MSD of SS-COMP-25 (lab # 450050-027); the LCS was within limits, and the associated RPD was within limits. High recoveries were observed for silver and barium in the MS of SS-COMP-25 (lab # 450050-027); the LCS was within limits. High RPD was also observed for silver and barium in the MS/MSD of SS-COMP-25 (lab # 450050-027). Low recoveries were observed for antimony in the MS/MSD of SS-COMP-42 (lab # 450050-047); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

# ENTHALPY ANALYTICAL

**Chain of Custody Record**

Lab No: 450050

Page: 1 of 6

**Turn Around Time (rush by advanced notice only)**

| Standard: | ✓ | 5 Day: | | 3 Day: | |
|---|---|---|---|---|---|
| 2 Day: | | 1 Day: | | Custom TAT: | |


**Enthalpy Analytical - Orange**

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900


**Matrix:** A = Air S = Soil/Solid W = Water DW = Drinking Wate SD = Sediment PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other

**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

**Sample Receipt Temp:** 38/2.5 58/5.0 (lab use only)

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| Company: | Roux | Name: | San Jacinto |
| Report To: | Rocio Quinones | Number: | 2217.0025L |
| Email: | rquinones@rouxinc.com | P.O. #: | |
| Address: | 5160 E Pacific Coast Hwy, Suite 450, Long Beach | Address: | 870 N. Sanderson Ave, San Jacinto |
| Phone: | 424-232-9444 (AF) | Global ID: | |
| Fax: | | Sampled By: | OJ + AF |

| | Sample ID | Sampling Date | Sampling Time | Matrix | Container No. / Size | Pres. | Analysis Request: DCPs 8081A | Title 22 Metal 6010B | T22 6010B (PbrAs only) | Test Instructions / Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SS-COMP-1 | 9/1/2021 | 0842 | S | 8oz. glass | | X | | X | |
| 2 | SS-COMP-2 | | 0908 | | | | | | | |
| 3 | SS-COMP-3 | | 0930 | | | | | | | |
| 4 | SS-COMP-4 | | 0946 | | | | | | | |
| 5 | SS-COMP-5 | | 1003 | | | | | | | |
| 6 | SS-COMP-6 | | 1023 | | | | | | | |
| 7 | SS-COMP-6-DUP | | 1023 | | | | | | | |
| 8 | SS-COMP-7 | | 1215 | | | | | | | |
| 9 | SS-COMP-8 | | 1158 | | | | | | | |
| 10 | SS-COMP-9 | | 1138 | | | | | X | | |

| | Signature | Print Name | Company / Title | Date / Time |
|---|---|---|---|---|
| [1] Relinquished By: | Amelia Feick | Amelia Feick | Roux | 9/2/21 1803 |
| [1] Received By: | | Glim | EA | 9/2/21 1803 |
| [2] Relinquished By: | | | | |
| [2] Received By: | | | | |
| [3] Relinquished By: | | | | |
| [3] Received By: | | | | |

# ENTHALPY ANALYTICAL

## Chain of Custody Record

Lab No: 450050

Page: 2 of 6

**Turn Around Time (rush by advanced notice only)**

| Standard: | ✓ | 5 Day: | | 3 Day: | |
|---|---|---|---|---|---|
| 2 Day: | | 1 Day: | | Custom TAT: | |


**Enthalpy Analytical - Orange**

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900


**Matrix:** A = Air S = Soil/Solid W = Water DW = Drinking Wate SD = Sediment PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other

**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

**Sample Receipt Temp:** (lab use only)

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| Company: | Roux | Name: | San Jacinto |
| Report To: | Rocio Quinones | Number: | 2217.0025L |
| Email: | rquinones@rouxinc.com | P.O. #: | |
| Address: | 5150 E Pacific Coast Hwy, Suite 450, Long Beach | Address: | 870 N. Sanderson Ave, San Jacinto |
| Phone: | 424 · 232 · 9444 | Global ID: | |
| Fax: | | Sampled By: | OJ + AF |

| | Sample ID | Sampling Date | Sampling Time | Matrix | Container No. / Size | Pres. | Analysis Request: OCPs 8081A | T22 Metals 6010B | T22 6010B (Pb as only) | Test Instructions / Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SS-COMP-10 | 9/1/2021 | 1120 | S | 8oz/glass | | X | | X | |
| 2 | SS-COMP-11 | ↓ | 1104 | ↓ | ↓ | | ↓ | | ↓ | |
| 3 | SS-COMP-12 | | 1050 | | | | | | | |
| 4 | SS-COMP-13 | | 1709 | | | | | | | |
| 5 | SS-COMP-14 | | 1650 | | | | | | | |
| 6 | SS-COMP-15 | | 1621 | | | | | | | |
| 7 | SS-COMP-16 | | 1604 | | | | | | | |
| 8 | SS-COMP-17 | | 1550 | | | | | | | |
| 9 | SS-COMP-18 | | 1535 | | | | | | | |
| 10 | SS-COMP-19 | ↓ | 1511 | ↓ | ↓ | | ↓ | | ↓ | |

| | Signature | Print Name | Company / Title | Date / Time |
|---|---|---|---|---|
| [1] Relinquished By: | Amelia Feick | Amelia Feick | Roux | 9/2/21 1803 |
| [1] Received By: | | C Lem | ESA | 9/2/21 1803 |
| [2] Relinquished By: | | | | |
| [2] Received By: | | | | |
| [3] Relinquished By: | | | | |
| [3] Received By: | | | | |

# ENTHALPY ANALYTICAL

## Chain of Custody Record

Lab No: 450050

Page: 3 of 6

**Turn Around Time (rush by advanced notice only)**

| Standard: | ✓ | 5 Day: | | 3 Day: | |
|---|---|---|---|---|---|
| 2 Day: | | 1 Day: | | Custom TAT: | |


**Enthalpy Analytical - Orange**

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900


**Matrix:** A = Air S = Soil/Solid W = Water DW = Drinking Wate SD = Sediment PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other

**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

**Sample Receipt Temp:** (lab use only)

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| Company: | Roux | Name: | San Jacinto |
| Report To: | Rocio Quinones | Number: | 2217.0025L |
| Email: | rquinones@rouxinc.com | P.O. #: | |
| Address: | 6150 E Pacific Coast Hwy | Address: | 870 N. Sanderson Ave, |
| | Suite 450, Long Beach | | San Jacinto |
| Phone: | 424-232-9444 | Global ID: | |
| Fax: | | Sampled By: | CJ+AF |

| | Sample ID | Sampling Date | Sampling Time | Matrix | Container No. / Size | Pres. | OCPs 8081A | T22 metals 6010B | T22 ~~metals~~ 6010B (PbAs only) | Analysis Request | Test Instructions / Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SS-COMP-19-DUP | 9/1/2021 | 1511 | S | 8oz/glass | | X | | X | | |
| 2 | SS-COMP-20 | ↓ | 1445 | ↓ | ↓ | | ↓ | | ↓ | | |
| 3 | SS-COMP-21 | | 1727 | | | | | | | | |
| 4 | SS-COMP-22 | AF | ~~1721~~ 1741 | | | | | | | | |
| 5 | SS-COMP-23 | | 1757 | | | | | | | | |
| 6 | SS-COMP-24 | | 1812 | | | | | | | | |
| 7 | SS-COMP-25 | ↓ | 1831 | | | | | | ↓ | | |
| 8 | SS-COMP-26 | 9/2/2021 | 0927 | | | | | X | ~~X~~ AF | | |
| 9 | SS-COMP-27 | ↓ | 0832 | | | | | | X | | |
| 10 | SS-COMP-27-DUP | ↓ | 0832 | ↓ | ↓ | | ↓ | | X | | |

| | Signature | Print Name | Company / Title | Date / Time |
|---|---|---|---|---|
| [1] Relinquished By: | Amelia Feick | Amelia Feick | Roux | 9/2/21 1803 |
| [1] Received By: | | Glynn | GT | 9/2/21 1803 |
| [2] Relinquished By: | | | | |
| [2] Received By: | | | | |
| [3] Relinquished By: | | | | |
| [3] Received By: | | | | |

# ENTHALPY ANALYTICAL

**Chain of Custody Record**

Lab No: 450050

Page: 4 of 6

**Turn Around Time (rush by advanced notice only)**

| Standard: | ✓ | 5 Day: | | 3 Day: | |
|---|---|---|---|---|---|
| 2 Day: | | 1 Day: | | Custom TAT: | |


**Enthalpy Analytical - Orange**

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900


**Matrix:** A = Air S = Soil/Solid W = Water DW = Drinking Wate SD = Sediment PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other

**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

**Sample Receipt Temp:** (lab use only)

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| Company: | Roux | Name: | San Jacinto |
| Report To: | Rocio Quinones | Number: | 2217.00852 |
| Email: | rquinones@rouxinc.com | P.O. #: | |
| Address: | 5150 E. Pacific Coast Hwy | Address: | 970 N. Sanderson Ave. |
| | Suite 450, Long Beach, CA | | San Jacinto, CA |
| Phone: | 424-232-9444 | Global ID: | |
| Fax: | | Sampled By: | CJ+AF |

| | Sample ID | Sampling Date | Sampling Time | Matrix | Container No. / Size | Pres. | OCPs 8081A | TPH Purity (Lead) | T-22 6010B (Pb+As only) | Test Instructions / Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SS-COMP-28 | 9/2/2021 | 0814 | S | 8 oz. glass | | X | | X | |
| 2 | SS-COMP-29 | ↓ | 0752 | ↓ | ↓ | | ↓ | | ↓ | |
| 3 | SS-COMP-30 | | 0732 | | | | | | | |
| 4 | SS-COMP-30-DUP | | 0732 | | | | | | | |
| 5 | SS-COMP-31 | | 0944 | | | | | | | |
| 6 | SS-COMP-32 | | 1004 | | | | | | | |
| 7 | SS-COMP-33 | | 1024 | | | | | | | |
| 8 | SS-COMP-34 | | 1043 | | | | | | | |
| 9 | SS-COMP-35 | | 1204 | | | | | | | |
| 10 | SS-COMP-36 | ↓ | 1145 | ↓ | ↓ | | ↓ | | ↓ | |

| | Signature | Print Name | Company / Title | Date / Time |
|---|---|---|---|---|
| [1] Relinquished By: | Amelia Feick | Amelia Feick | ROUX | 9/2/21 1803 |
| [1] Received By: | | G Kim | EA | 9/2/21 1803 |
| [2] Relinquished By: | | | | |
| [2] Received By: | | | | |
| [3] Relinquished By: | | | | |
| [3] Received By: | | | | |

# ENTHALPY ANALYTICAL

## Chain of Custody Record

Lab No: 450050

Page: 5 of 6

**Turn Around Time (rush by advanced notice only)**

| Standard: | ✓ | 5 Day: | | 3 Day: | |
|---|---|---|---|---|---|
| 2 Day: | | 1 Day: | | Custom TAT: | |


**Enthalpy Analytical - Orange**

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900


**Matrix:** A = Air S = Soil/Solid W = Water DW = Drinking Wate SD = Sediment PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other

**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

**Sample Receipt Temp:** (lab use only)

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| Company: | Roux | Name: | San Jacinto |
| Report To: | Rocio Quinones | Number: | 2217.0025L |
| Email: | rquinones@roxinc.com | P.O. #: | |
| Address: | 5150 E. Pacific Coast Hwy | Address: | 870 N. Sanderson Ave. |
| | Suite 450, Long Beach, CA | | San Jacinto, CA |
| Phone: | 424-232-9444 | Global ID: | |
| Fax: | | Sampled By: | CJ+AF |

| | Sample ID | Sampling Date | Sampling Time | Matrix | Container No. / Size | Pres. | OCP's 8081A | T-22 Metals 6010B | T-22 6010B (Pb+As only) | Test Instructions / Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SS-COMP-37 | 9/2/2021 | 1126 | S | 8oz. glass | | X | | X | |
| 2 | SS-COMP-38 | | 1104 | | | | | | | |
| 3 | SS-COMP-39 | | 1310 | | | | | | | |
| 4 | SS-COMP-40 | | 1327 | | | | | | | |
| 5 | SS-COMP-41 | | 1345 | | | | | | | |
| 6 | SS-COMP-41-DUP | | 1345 | | | | | | | |
| 7 | SS-COMP-42 | | 1408 | | | | | X | X AF | |
| 8 | SS-COMP-43 | | 1430 | | | | | | X | |
| 9 | SS-COMP-44 | | 1450 | | | | | | | |
| 10 | SS-COMP-45 | | 1511 | | | | | | | |

| | Signature | Print Name | Company / Title | Date / Time |
|---|---|---|---|---|
| 1 Relinquished By: | Amelia Feick | Amelia FEICK | ROUX | 9/2/21 1803 |
| 1 Received By: | | Gkim | RA | 9/2/21 1803 |
| 2 Relinquished By: | | | | |
| 2 Received By: | | | | |
| 3 Relinquished By: | | | | |
| 3 Received By: | | | | |

ENTHALPY ANALYTICAL

**Chain of Custody Record**

Lab No: 450050

Page: 6 of 6

**Turn Around Time (rush by advanced notice only)**

| | | | | | |
|---|---|---|---|---|---|
| Standard: | ✓ | 5 Day: | | 3 Day: | |
| 2 Day: | | 1 Day: | | Custom TAT: | |

**Enthalpy Analytical - Orange**

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

**Matrix:** A = Air S = Soil/Solid W = Water DW = Drinking Wate SD = Sediment PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other

**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

**Sample Receipt Temp:** (lab use only)

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| Company: | Roux | Name: | San Jacinto |
| Report To: | Rocio Quinones | Number: | 2217.6025L |
| Email: | rquinones@rouxinc.com | P.O. #: | |
| Address: | 5150 E. Pacific Coast Hwy | Address: | 870 N. Sanderson Ave |
| | Suite 450, Long Beach, CA | | San Jacinto, CA |
| Phone: | 424-234-9444 | Global ID: | |
| Fax: | | Sampled By: | CJ+AF |

**Analysis Request**

| | Sample ID | Sampling Date | Sampling Time | Matrix | Container No. / Size | Pres. | OCP's 8081A | T-22 6018B (PB + As only) | | | | | | | | | Test Instructions / Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SS-COMP-46 | 9/2/2021 | 1531 | S | 8oz glass | | X | X | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

| | Signature | Print Name | Company / Title | Date / Time |
|---|---|---|---|---|
| 1 Relinquished By: | Amelia Feick | Amelia Feick | Roux | 9/2/21 1803 |
| 1 Received By: | [signature] | G Kim | EA | 9/2/21 1803 |
| 2 Relinquished By: | | | | |
| 2 Received By: | | | | |
| 3 Relinquished By: | | | | |
| 3 Received By: | | | | |

ENTHALPY ANALYTICAL

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**

Client: Roux  Project: San Jacinto

Date Received: 9/2/21  Sampler's Name Present: ☑ Yes ☐ No

**Section 2**

Sample(s) received in a cooler? ☑ Yes, How many? 2 ☐ No (skip section 2)  Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 3.8 #2: 5.8 #3: _____ #4: _____

*(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)*

Shipping Information: _____

**Section 3**

Was the cooler packed with: ☑ Ice ☐ Ice Packs ☑ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 2.5 #2: 5.0 #3: _____ #4: _____

| Section 4 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✔ | | |
| Are sample IDs present? | ✔ | | |
| Are sampling dates & times present? | ✔ | | |
| Is a relinquished signature present? | ✔ | | |
| Are the tests required clearly indicated on the COC? | ✔ | | |
| Are custody seals present? | | ✔ | |
| If custody seals are present, were they intact? | | | ✔ |
| Are all samples sealed in plastic bags? (Recommended for Microbiology samples) | ✔ | | |
| Did all samples arrive intact? If no, indicate in Section 4 below. | | ✔ | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✔ | | |
| Were the samples collected in the correct containers for the required tests? | ✔ | | |
| Are the containers labeled with the correct preservatives? | | | ✔ |
| Is there headspace in the VOA vials greater than 5-6 mm in diameter? | | | ✔ |
| Was a sufficient amount of sample submitted for the requested tests? | ✔ | | |

**Section 5** Explanations/Comments

Sample 8: "SS-Comp-7" Received broken, possible ice water contamination.

**Section 6**

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☑ Email (email sent to/on): RKC / 9/2/21

Project Manager's response:

Completed By: _____ Date: 9/2/2021

ENTHALPY ANALYTICAL

# Analysis Results for 450050

Rocio Quinones
Roux Associates, Inc.
5150 E. Pacific Coast Hwy.
Suite 450
Long Beach, CA 90804

Lab Job #: 450050
Location: Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA
Date Received: 09/02/21

**Sample ID: SS-COMP-1** **Lab ID: 450050-001** **Collected: 09/01/21 08:42**
**Matrix: Soil**

| 450050-001 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.2** | | mg/Kg | 1.0 | 1 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Lead | **5.2** | | mg/Kg | 1.0 | 1 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **20** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 85% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 70% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-2 | Lab ID: 450050-002 | Collected: 09/01/21 09:08 |
|---|---|---|
| | Matrix: Soil | |

| 450050-002 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.2** | | mg/Kg | 0.93 | 0.93 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Lead | **4.6** | | mg/Kg | 0.93 | 0.93 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **170** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | **7.3** | #,C | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 80% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 64% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-3 | Lab ID: 450050-003 | Collected: 09/01/21 09:30 |
|---|---|---|
| | Matrix: Soil | |

| 450050-003 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.4** | | mg/Kg | 0.92 | 0.92 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Lead | **4.8** | | mg/Kg | 0.92 | 0.92 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **200** | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 20 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 200 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 100 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 83% | | %REC | 23-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 77% | | %REC | 24-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-4 | Lab ID: 450050-004 | Collected: 09/01/21 09:46 |
|---|---|---|
| | Matrix: Soil | |

| 450050-004 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.3** | | mg/Kg | 1.1 | 1.1 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Lead | **5.1** | | mg/Kg | 1.1 | 1.1 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **110** | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 20 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 200 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 100 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 83% | | %REC | 23-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 78% | | %REC | 24-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-5 | Lab ID: 450050-005 | Collected: 09/01/21 10:03 |
|---|---|---|
| | Matrix: Soil | |

| 450050-005 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.3** | | mg/Kg | 1.0 | 1 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Lead | **4.4** | | mg/Kg | 1.0 | 1 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 20 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 200 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 100 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 89% | | %REC | 23-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 87% | | %REC | 24-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-6 | Lab ID: 450050-006 | Collected: 09/01/21 10:23 |
|---|---|---|
| | Matrix: Soil | |

| 450050-006 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.4** | | mg/Kg | 0.98 | 0.98 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Lead | **4.6** | | mg/Kg | 0.98 | 0.98 | 273379 | 09/03/21 | 09/04/21 | JCP |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 20 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 200 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 100 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 72% | | %REC | 23-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 69% | | %REC | 24-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-6 DUP | Lab ID: 450050-007 | Collected: 09/01/21 10:23 |
|---|---|---|
| | Matrix: Soil | |

| 450050-007 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.5** | | mg/Kg | 0.99 | 0.99 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.5** | | mg/Kg | 0.99 | 0.99 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 20 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 200 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 100 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 79% | | %REC | 23-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 72% | | %REC | 24-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-7 | Lab ID: 450050-008 | Collected: 09/01/21 12:15 |
|---|---|---|
| | Matrix: Soil | |

| 450050-008 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.3** | | mg/Kg | 1.0 | 1 | 273560 | 09/08/21 | 09/09/21 | KLN |
| Lead | **3.8** | | mg/Kg | 1.0 | 1 | 273560 | 09/08/21 | 09/09/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| beta-BHC | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| gamma-BHC | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| delta-BHC | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Heptachlor | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Aldrin | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Heptachlor epoxide | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Endosulfan I | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Dieldrin | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| 4,4'-DDE | **100** | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Endrin | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Endosulfan II | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Endosulfan sulfate | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| 4,4'-DDD | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Endrin aldehyde | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Endrin ketone | ND | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| 4,4'-DDT | **28** | | ug/Kg | 10 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Methoxychlor | ND | | ug/Kg | 20 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Toxaphene | ND | | ug/Kg | 200 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Chlordane (Technical) | ND | | ug/Kg | 100 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 92% | | %REC | 23-120 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |
| Decachlorobiphenyl | 72% | | %REC | 24-120 | 2 | 273570 | 09/09/21 | 09/09/21 | TRN |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-8 | Lab ID: 450050-009 | Collected: 09/01/21 11:58 |
|---|---|---|
| | Matrix: Soil | |

| 450050-009 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.5** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **10** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **150** | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 10 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 20 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 200 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 100 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 79% | | %REC | 23-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 75% | | %REC | 24-120 | 2 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-9 | Lab ID: 450050-010 | Collected: 09/01/21 11:38 |
|---|---|---|
| | Matrix: Soil | |

| 450050-010 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 3.1 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Arsenic | **1.4** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Barium | **170** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Beryllium | ND | | mg/Kg | 0.52 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Cadmium | ND | | mg/Kg | 0.52 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Chromium | **10** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Cobalt | **5.2** | | mg/Kg | 0.52 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Copper | **31** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.2** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Molybdenum | ND | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Nickel | **5.8** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Selenium | ND | | mg/Kg | 3.1 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Silver | ND | | mg/Kg | 0.52 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Thallium | ND | | mg/Kg | 3.1 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Vanadium | **31** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Zinc | **91** | | mg/Kg | 5.2 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.16 | 1.1 | 273447 | 09/07/21 | 09/07/21 | TNN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **130** | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 50 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 500 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| 450050-010 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Chlordane (Technical) | ND | | ug/Kg | 250 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 81% | | %REC | 23-120 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 77% | | %REC | 24-120 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |

**Sample ID: SS-COMP-10** **Lab ID: 450050-011** **Collected: 09/01/21 11:20**
**Matrix: Soil**

| 450050-011 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.4** | | mg/Kg | 0.94 | 0.94 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.8** | | mg/Kg | 0.94 | 0.94 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **56** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 65% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 60% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-11 | Lab ID: 450050-012 | Collected: 09/01/21 11:04 |
|---|---|---|
| | Matrix: Soil | |

| 450050-012 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.5** | | mg/Kg | 0.98 | 0.98 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.1** | | mg/Kg | 0.98 | 0.98 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **55** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 101% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 91% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-12 | Lab ID: 450050-013 | Collected: 09/01/21 10:50 |
|---|---|---|
| | Matrix: Soil | |

| 450050-013 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.4** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.0** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **36** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 78% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 60% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-13 | Lab ID: 450050-014 | Collected: 09/01/21 17:09 |
|---|---|---|
| | Matrix: Soil | |

| 450050-014 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.5** | | mg/Kg | 0.98 | 0.98 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.1** | | mg/Kg | 0.98 | 0.98 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **28** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 70% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 59% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-14 | Lab ID: 450050-015 | Collected: 09/01/21 16:50 |
|---|---|---|
| | Matrix: Soil | |

| 450050-015 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.4** | | mg/Kg | 0.98 | 0.98 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.8** | | mg/Kg | 0.98 | 0.98 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **61** | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 25 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 50 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 500 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 250 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 77% | | %REC | 23-120 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 59% | | %REC | 24-120 | 5 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-15 | Lab ID: 450050-016 | Collected: 09/01/21 16:21 |
|---|---|---|
| | Matrix: Soil | |

| 450050-016 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | ND | | mg/Kg | 0.94 | 0.94 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **2.8** | | mg/Kg | 0.94 | 0.94 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **42** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | **7.6** | # | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 65% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 51% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-16 | Lab ID: 450050-017 | Collected: 09/01/21 16:04 |
|---|---|---|
| | Matrix: Soil | |

| 450050-017 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | ND | | mg/Kg | 0.96 | 0.96 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **2.6** | | mg/Kg | 0.96 | 0.96 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **28** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | **6.5** | # | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 92% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 73% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-17 | Lab ID: 450050-018 | Collected: 09/01/21 15:50 |
|---|---|---|
| | Matrix: Soil | |

| 450050-018 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | ND | | mg/Kg | 0.93 | 0.93 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.1** | | mg/Kg | 0.93 | 0.93 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **16** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 73% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 58% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-18 | Lab ID: 450050-019 | Collected: 09/01/21 15:35 |
|---|---|---|
| | Matrix: Soil | |

| 450050-019 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | ND | | mg/Kg | 0.94 | 0.94 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.4** | | mg/Kg | 0.94 | 0.94 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **36** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 85% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 75% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-19 | Lab ID: 450050-020 | Collected: 09/01/21 15:11 |
|---|---|---|
| | Matrix: Soil | |

| 450050-020 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | ND | | mg/Kg | 1.1 | 1.1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.7** | | mg/Kg | 1.1 | 1.1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **31** | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 96% | | %REC | 23-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 88% | | %REC | 24-120 | 1 | 273339 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-19-DUP | Lab ID: 450050-021 | Collected: 09/01/21 15:11 |
|---|---|---|
| | Matrix: Soil | |

| 450050-021 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.2** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.3** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **57** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 75% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 85% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-20 | Lab ID: 450050-022 | Collected: 09/01/21 14:45 |
|---|---|---|
| | Matrix: Soil | |

| 450050-022 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.9** | | mg/Kg | 1.1 | 1.1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.7** | | mg/Kg | 1.1 | 1.1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **75** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 51 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 68% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 81% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-21 | Lab ID: 450050-023 | Collected: 09/01/21 17:27 |
|---|---|---|
| | Matrix: Soil | |

| 450050-023 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.1** | | mg/Kg | 0.99 | 0.99 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.3** | | mg/Kg | 0.99 | 0.99 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **66** | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **12** | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 9.8 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 98 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 49 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 63% | | %REC | 23-120 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 74% | | %REC | 24-120 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-22 | Lab ID: 450050-024 | Collected: 09/01/21 17:41 |
|---|---|---|
| | Matrix: Soil | |

| 450050-024 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.5** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **2.9** | | mg/Kg | 1.0 | 1 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **9.2** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 51 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 69% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 80% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-23 | Lab ID: 450050-025 | Collected: 09/01/21 17:57 |
|---|---|---|
| | Matrix: Soil | |

| 450050-025 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.0** | | mg/Kg | 0.94 | 0.94 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.0** | | mg/Kg | 0.94 | 0.94 | 273380 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **20** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 51 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 67% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 79% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-24 | Lab ID: 450050-026 | Collected: 09/01/21 18:12 |
|---|---|---|
| | Matrix: Soil | |

| 450050-026 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.2** | | mg/Kg | 0.98 | 0.98 | 273380 | 09/03/21 | 09/07/21 | KLN |
| Lead | **4.1** | | mg/Kg | 0.98 | 0.98 | 273380 | 09/03/21 | 09/07/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **40** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 51 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 77% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 92% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-25 | Lab ID: 450050-027 | Collected: 09/01/21 18:31 |
|---|---|---|
| | Matrix: Soil | |

| 450050-027 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.2** | | mg/Kg | 1.1 | 1.1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.5** | | mg/Kg | 1.1 | 1.1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **59** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **5.2** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 71% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 85% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-26 | Lab ID: 450050-028 | Collected: 09/02/21 09:27 |
|---|---|---|
| | Matrix: Soil | |

| 450050-028 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 3.1 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Arsenic | **1.4** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Barium | **200** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Beryllium | ND | | mg/Kg | 0.52 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Cadmium | ND | | mg/Kg | 0.52 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Chromium | **10** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Cobalt | **5.8** | | mg/Kg | 0.52 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Copper | **37** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.7** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Molybdenum | ND | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Nickel | **5.9** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Selenium | ND | | mg/Kg | 3.1 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Silver | ND | | mg/Kg | 0.52 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Thallium | ND | | mg/Kg | 3.1 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Vanadium | **34** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Zinc | **89** | | mg/Kg | 5.2 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.16 | 1.1 | 273447 | 09/07/21 | 09/07/21 | TNN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **83** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | **6.5** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **94** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| 450050-028 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 71% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 93% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |

**Sample ID: SS-COMP-27** **Lab ID: 450050-029** **Collected: 09/02/21 08:32**
**Matrix: Soil**

| 450050-029 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.3** | | mg/Kg | 0.98 | 0.98 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.8** | | mg/Kg | 0.98 | 0.98 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **100** | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | **8.1** | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **130** | | ug/Kg | 5.0 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 9.9 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 99 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 74% | | %REC | 23-120 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 87% | | %REC | 24-120 | 0.99 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-27-DUP | Lab ID: 450050-030 | Collected: 09/02/21 08:32 |
|---|---|---|
| | Matrix: Soil | |

| 450050-030 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.5** | | mg/Kg | 0.98 | 0.98 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.6** | | mg/Kg | 0.98 | 0.98 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **110** | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | **8.3** | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **120** | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 9.8 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 98 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 49 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 74% | | %REC | 23-120 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 88% | | %REC | 24-120 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-28 | Lab ID: 450050-031 | Collected: 09/02/21 08:14 |
|---|---|---|
| | Matrix: Soil | |

| 450050-031 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **9.3** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **5.2** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **97** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | **18** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **240** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 69% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 79% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-29 | Lab ID: 450050-032 | Collected: 09/02/21 07:52 |
|---|---|---|
| | Matrix: Soil | |

| 450050-032 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.1** | | mg/Kg | 0.96 | 0.96 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.1** | | mg/Kg | 0.96 | 0.96 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **63** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **6.8** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 71% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 83% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-30 | Lab ID: 450050-033 | Collected: 09/02/21 07:32 |
|---|---|---|
| | Matrix: Soil | |

| 450050-033 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.2** | | mg/Kg | 1.1 | 1.1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.2** | | mg/Kg | 1.1 | 1.1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **90** | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **10** | | ug/Kg | 4.9 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 9.8 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 98 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 49 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 71% | | %REC | 23-120 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 81% | | %REC | 24-120 | 0.98 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-30-DUP | Lab ID: 450050-034 | Collected: 09/02/21 07:32 |
|---|---|---|
| | Matrix: Soil | |

| 450050-034 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.4** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.2** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **80** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **12** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 51 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 75% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 83% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-31 | Lab ID: 450050-035 | Collected: 09/02/21 09:44 |
|---|---|---|
| | Matrix: Soil | |

| 450050-035 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.5** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.1** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **91** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | **39** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | **5.6** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **740** | | ug/Kg | 25 | 5 | 273393 | 09/03/21 | 09/09/21 | TRN |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 74% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 92% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-32 | Lab ID: 450050-036 | Collected: 09/02/21 10:04 |
|---|---|---|
| | Matrix: Soil | |

| 450050-036 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **2.4** | | mg/Kg | 0.93 | 0.93 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.6** | | mg/Kg | 0.93 | 0.93 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **81** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | **48** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | **8.2** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **750** | | ug/Kg | 25 | 5.1 | 273393 | 09/03/21 | 09/09/21 | TRN |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 51 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 65% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 83% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-33 | Lab ID: 450050-037 | Collected: 09/02/21 10:24 |
|---|---|---|
| | Matrix: Soil | |

| 450050-037 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.3** | | mg/Kg | 1.1 | 1.1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.6** | | mg/Kg | 1.1 | 1.1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **120** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | **27** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **250** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 75% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 88% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-34 | Lab ID: 450050-038 | Collected: 09/02/21 10:43 |
|---|---|---|
| | Matrix: Soil | |

| 450050-038 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.0** | | mg/Kg | 0.93 | 0.93 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.8** | | mg/Kg | 0.93 | 0.93 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **120** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **11** | | ug/Kg | 5.0 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 67% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 79% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-35 | Lab ID: 450050-039 | Collected: 09/02/21 12:04 |
|---|---|---|
| | Matrix: Soil | |

| 450050-039 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.7** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.6** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **12** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | **7.7** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **50** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 51 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 68% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 77% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-36 | Lab ID: 450050-040 | Collected: 09/02/21 11:45 |
|---|---|---|
| | Matrix: Soil | |

| 450050-040 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.7** | | mg/Kg | 0.96 | 0.96 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.9** | | mg/Kg | 0.96 | 0.96 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| beta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| gamma-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| delta-BHC | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Aldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Heptachlor epoxide | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan I | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Dieldrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDE | **20** | C | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan II | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endosulfan sulfate | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDD | **22** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin aldehyde | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Endrin ketone | ND | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| 4,4'-DDT | **120** | | ug/Kg | 5.1 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Chlordane (Technical) | ND | | ug/Kg | 51 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 67% | | %REC | 23-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |
| Decachlorobiphenyl | 84% | | %REC | 24-120 | 1 | 273393 | 09/03/21 | 09/08/21 | MTS |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-37 | Lab ID: 450050-041 | Collected: 09/02/21 11:26 |
|---|---|---|
| | Matrix: Soil | |

| 450050-041 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.9** | | mg/Kg | 0.95 | 0.95 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **15** | | mg/Kg | 0.95 | 0.95 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **60** | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | **15** | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | **69** | # | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 66% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 53% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-38 | Lab ID: 450050-042 | Collected: 09/02/21 11:04 |
|---|---|---|
| | Matrix: Soil | |

| 450050-042 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.5** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **3.9** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | **41** | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 73% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 63% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-39 | Lab ID: 450050-043 | Collected: 09/02/21 13:10 |
|---|---|---|
| | Matrix: Soil | |

| 450050-043 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.5** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.3** | | mg/Kg | 1.0 | 1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 57% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 47% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-40 | Lab ID: 450050-044 | Collected: 09/02/21 13:27 |
|---|---|---|
| | Matrix: Soil | |

| 450050-044 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **2.2** | | mg/Kg | 0.98 | 0.98 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.5** | | mg/Kg | 0.98 | 0.98 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 64% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 52% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-41 | Lab ID: 450050-045 | Collected: 09/02/21 13:45 |
|---|---|---|
| | Matrix: Soil | |

| 450050-045 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **2.0** | | mg/Kg | 1.1 | 1.1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.2** | | mg/Kg | 1.1 | 1.1 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 68% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 52% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| Sample ID: SS-COMP-41-DUP | Lab ID: 450050-046 | Collected: 09/02/21 13:45 |
|---|---|---|
| | Matrix: Soil | |

| 450050-046 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.5** | | mg/Kg | 0.97 | 0.97 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Lead | **4.0** | | mg/Kg | 0.97 | 0.97 | 273381 | 09/03/21 | 09/04/21 | KLN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 66% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 52% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-42 | Lab ID: 450050-047 | Collected: 09/02/21 14:08 |
|---|---|---|
| | Matrix: Soil | |

| 450050-047 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 3.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Arsenic | **2.1** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Barium | **220** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Beryllium | **0.58** | | mg/Kg | 0.50 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Cadmium | ND | | mg/Kg | 0.50 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Chromium | **12** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Cobalt | **6.7** | | mg/Kg | 0.50 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Copper | **14** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Lead | **3.7** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Molybdenum | ND | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Nickel | **6.7** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Selenium | ND | | mg/Kg | 3.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Silver | ND | | mg/Kg | 0.50 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Thallium | ND | | mg/Kg | 3.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Vanadium | **39** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Zinc | **96** | | mg/Kg | 5.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.14 | 1 | 273447 | 09/07/21 | 09/07/21 | TNN |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

# Analysis Results for 450050

| 450050-047 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 77% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 63% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |

**Sample ID: SS-COMP-43** **Lab ID: 450050-048** **Collected: 09/02/21 14:30**
**Matrix: Soil**

| 450050-048 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.2** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Lead | **3.9** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 76% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |
| Decachlorobiphenyl | 64% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TJW |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-44 | Lab ID: 450050-049 | Collected: 09/02/21 14:50 |
|---|---|---|
| | Matrix: Soil | |

| 450050-049 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.7** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Lead | **4.6** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 63% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Decachlorobiphenyl | 83% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450050

| Sample ID: SS-COMP-45 | Lab ID: 450050-050 | Collected: 09/02/21 15:11 |
|---|---|---|
| | Matrix: Soil | |

| 450050-050 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **1.2** | | mg/Kg | 1.1 | 1.1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Lead | **3.9** | | mg/Kg | 1.1 | 1.1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| 4,4'-DDD | **5.2** | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| 4,4'-DDT | **7.4** | #,C | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 66% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Decachlorobiphenyl | 83% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450050

| Sample ID: SS-COMP-46 | Lab ID: 450050-051 | Collected: 09/02/21 15:31 |
|---|---|---|
| | Matrix: Soil | |

| 450050-051 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Arsenic | **2.0** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Lead | **3.6** | | mg/Kg | 1.0 | 1 | 273383 | 09/03/21 | 09/03/21 | JCP |
| Method: EPA 8081A<br>Prep Method: EPA 3546 | | | | | | | | | |
| alpha-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| beta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| gamma-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| delta-BHC | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Heptachlor | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Aldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endosulfan I | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Dieldrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endrin | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endosulfan II | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Endrin ketone | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Methoxychlor | ND | | ug/Kg | 10 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Toxaphene | ND | | ug/Kg | 100 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| **Surrogates** | | | | **Limits** | | | | | |
| TCMX | 76% | | %REC | 23-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |
| Decachlorobiphenyl | 101% | | %REC | 24-120 | 1 | 273369 | 09/03/21 | 09/03/21 | TRN |

# CCV drift outside limits; average CCV drift within limits per method requirements
C Presence confirmed, but RPD between columns exceeds 40%
ND Not Detected



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Batch QC

| | | |
|---|---|---|
| **Type: Blank** | **Lab ID: QC942031** | **Batch: 273339** |
| **Matrix: Soil** | **Method: EPA 8081A** | **Prep Method: EPA 3546** |

| QC942031 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| alpha-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| beta-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| gamma-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| delta-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Heptachlor | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Aldrin | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endosulfan I | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Dieldrin | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endrin | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endosulfan II | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endrin ketone | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Methoxychlor | ND | | ug/Kg | 10 | 09/03/21 | 09/03/21 |
| Toxaphene | ND | | ug/Kg | 100 | 09/03/21 | 09/03/21 |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 09/03/21 | 09/03/21 |
| **Surrogates** | | | | **Limits** | | |
| TCMX | 91% | | %REC | 23-120 | 09/03/21 | 09/03/21 |
| Decachlorobiphenyl | 90% | | %REC | 24-120 | 09/03/21 | 09/03/21 |

ENTHALPY ANALYTICAL

# Batch QC

| | | |
|---|---|---|
| **Type: Lab Control Sample** | **Lab ID: QC942032** | **Batch: 273339** |
| **Matrix: Soil** | **Method: EPA 8081A** | **Prep Method: EPA 3546** |

| QC942032 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| alpha-BHC | 56.32 | 50.00 | ug/Kg | 113% | | 22-129 |
| beta-BHC | 54.34 | 50.00 | ug/Kg | 109% | | 28-125 |
| gamma-BHC | 54.11 | 50.00 | ug/Kg | 108% | | 22-128 |
| delta-BHC | 56.40 | 50.00 | ug/Kg | 113% | | 24-131 |
| Heptachlor | 50.65 | 50.00 | ug/Kg | 101% | | 18-124 |
| Aldrin | 47.35 | 50.00 | ug/Kg | 95% | | 23-120 |
| Heptachlor epoxide | 49.76 | 50.00 | ug/Kg | 100% | | 26-120 |
| Endosulfan I | 55.07 | 50.00 | ug/Kg | 110% | | 25-126 |
| Dieldrin | 50.87 | 50.00 | ug/Kg | 102% | | 23-124 |
| 4,4'-DDE | 50.55 | 50.00 | ug/Kg | 101% | | 28-121 |
| Endrin | 55.12 | 50.00 | ug/Kg | 110% | | 25-127 |
| Endosulfan II | 56.32 | 50.00 | ug/Kg | 113% | | 29-121 |
| Endosulfan sulfate | 54.89 | 50.00 | ug/Kg | 110% | | 30-121 |
| 4,4'-DDD | 48.69 | 50.00 | ug/Kg | 97% | | 26-120 |
| Endrin aldehyde | 37.99 | 50.00 | ug/Kg | 76% | | 10-120 |
| Endrin ketone | 57.38 | 50.00 | ug/Kg | 115% | | 28-125 |
| 4,4'-DDT | 54.38 | 50.00 | ug/Kg | 109% | # | 22-125 |
| Methoxychlor | 53.16 | 50.00 | ug/Kg | 106% | # | 28-130 |
| **Surrogates** | | | | | | |
| TCMX | 48.31 | 50.00 | ug/Kg | 97% | | 23-120 |
| Decachlorobiphenyl | 48.09 | 50.00 | ug/Kg | 96% | | 24-120 |

ENTHALPY ANALYTICAL

# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike** | **Lab ID:** | **QC942033** | **Batch:** | **273339** |
| **Matrix (Source ID):** | **Soil (450050-001)** | **Method:** | **EPA 8081A** | **Prep Method:** | **EPA 3546** |

| QC942033 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| alpha-BHC | 47.06 | ND | 50.00 | ug/Kg | 94% | | 46-120 | 1 |
| beta-BHC | 43.15 | ND | 50.00 | ug/Kg | 86% | | 41-120 | 1 |
| gamma-BHC | 47.37 | 1.028 | 50.00 | ug/Kg | 93% | | 41-120 | 1 |
| delta-BHC | 46.96 | 2.844 | 50.00 | ug/Kg | 88% | | 38-123 | 1 |
| Heptachlor | 42.25 | 2.151 | 50.00 | ug/Kg | 80% | | 39-120 | 1 |
| Aldrin | 42.20 | ND | 50.00 | ug/Kg | 84% | | 34-120 | 1 |
| Heptachlor epoxide | 39.92 | ND | 50.00 | ug/Kg | 80% | | 43-120 | 1 |
| Endosulfan I | 44.45 | ND | 50.00 | ug/Kg | 89% | | 45-120 | 1 |
| Dieldrin | 40.14 | ND | 50.00 | ug/Kg | 80% | | 45-120 | 1 |
| 4,4'-DDE | 64.13 | 19.51 | 50.00 | ug/Kg | 89% | | 34-120 | 1 |
| Endrin | 44.85 | ND | 50.00 | ug/Kg | 90% | | 40-120 | 1 |
| Endosulfan II | 42.68 | ND | 50.00 | ug/Kg | 85% | | 41-120 | 1 |
| Endosulfan sulfate | 42.40 | 1.405 | 50.00 | ug/Kg | 82% | | 42-120 | 1 |
| 4,4'-DDD | 39.82 | ND | 50.00 | ug/Kg | 80% | | 41-120 | 1 |
| Endrin aldehyde | 30.20 | 1.224 | 50.00 | ug/Kg | 58% | | 30-120 | 1 |
| Endrin ketone | 43.75 | ND | 50.00 | ug/Kg | 88% | | 45-120 | 1 |
| 4,4'-DDT | 47.31 | 4.043 | 50.00 | ug/Kg | 87% | # | 35-127 | 1 |
| Methoxychlor | 39.34 | ND | 50.00 | ug/Kg | 79% | # | 42-136 | 1 |
| **Surrogates** | | | | | | | | |
| TCMX | 45.39 | | 50.00 | ug/Kg | 91% | | 23-120 | 1 |
| Decachlorobiphenyl | 37.55 | | 50.00 | ug/Kg | 75% | | 24-120 | 1 |

ENTHALPY ANALYTICAL

# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike Duplicate** | **Lab ID:** | **QC942034** | **Batch:** | **273339** |
| **Matrix (Source ID):** | **Soil (450050-001)** | **Method:** | **EPA 8081A** | **Prep Method:** | **EPA 3546** |

| QC942034 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| alpha-BHC | 42.97 | ND | 50.00 | ug/Kg | 86% | | 46-120 | 9 | 30 | 1 |
| beta-BHC | 37.04 | ND | 50.00 | ug/Kg | 74% | | 41-120 | 15 | 30 | 1 |
| gamma-BHC | 39.76 | 1.028 | 50.00 | ug/Kg | 77% | | 41-120 | 17 | 30 | 1 |
| delta-BHC | 40.35 | 2.844 | 50.00 | ug/Kg | 75% | | 38-123 | 15 | 30 | 1 |
| Heptachlor | 37.20 | 2.151 | 50.00 | ug/Kg | 70% | | 39-120 | 13 | 30 | 1 |
| Aldrin | 35.28 | ND | 50.00 | ug/Kg | 71% | | 34-120 | 18 | 30 | 1 |
| Heptachlor epoxide | 34.54 | ND | 50.00 | ug/Kg | 69% | | 43-120 | 14 | 30 | 1 |
| Endosulfan I | 38.88 | ND | 50.00 | ug/Kg | 78% | | 45-120 | 13 | 30 | 1 |
| Dieldrin | 34.93 | ND | 50.00 | ug/Kg | 70% | | 45-120 | 14 | 30 | 1 |
| 4,4'-DDE | 52.89 | 19.51 | 50.00 | ug/Kg | 67% | | 34-120 | 19 | 30 | 1 |
| Endrin | 38.01 | ND | 50.00 | ug/Kg | 76% | | 40-120 | 17 | 30 | 1 |
| Endosulfan II | 36.45 | ND | 50.00 | ug/Kg | 73% | | 41-120 | 16 | 30 | 1 |
| Endosulfan sulfate | 36.57 | 1.405 | 50.00 | ug/Kg | 70% | | 42-120 | 15 | 30 | 1 |
| 4,4'-DDD | 34.61 | ND | 50.00 | ug/Kg | 69% | | 41-120 | 14 | 30 | 1 |
| Endrin aldehyde | 24.20 | 1.224 | 50.00 | ug/Kg | 46% | | 30-120 | 22 | 30 | 1 |
| Endrin ketone | 38.31 | ND | 50.00 | ug/Kg | 77% | | 45-120 | 13 | 30 | 1 |
| 4,4'-DDT | 39.79 | 4.043 | 50.00 | ug/Kg | 72% | # | 35-127 | 17 | 30 | 1 |
| Methoxychlor | 28.84 | ND | 50.00 | ug/Kg | 58% | # | 42-136 | 31* | 30 | 1 |
| **Surrogates** | | | | | | | | | | |
| TCMX | 36.90 | | 50.00 | ug/Kg | 74% | | 23-120 | | | 1 |
| Decachlorobiphenyl | 31.91 | | 50.00 | ug/Kg | 64% | | 24-120 | | | 1 |

ENTHALPY ANALYTICAL

# Batch QC

| | | |
|---|---|---|
| **Type: Blank** | **Lab ID: QC942090** | **Batch: 273369** |
| **Matrix: Soil** | **Method: EPA 8081A** | **Prep Method: EPA 3546** |

| QC942090 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| alpha-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| beta-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| gamma-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| delta-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Heptachlor | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Aldrin | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endosulfan I | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Dieldrin | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endrin | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endosulfan II | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Endrin ketone | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 09/03/21 | 09/03/21 |
| Methoxychlor | ND | | ug/Kg | 10 | 09/03/21 | 09/03/21 |
| Toxaphene | ND | | ug/Kg | 100 | 09/03/21 | 09/03/21 |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 09/03/21 | 09/03/21 |
| **Surrogates** | | | | **Limits** | | |
| TCMX | 87% | | %REC | 23-120 | 09/03/21 | 09/03/21 |
| Decachlorobiphenyl | 49% | | %REC | 24-120 | 09/03/21 | 09/03/21 |

ENTHALPY ANALYTICAL

# Batch QC

| | | |
|---|---|---|
| **Type: Lab Control Sample** | **Lab ID: QC942091** | **Batch: 273369** |
| **Matrix: Soil** | **Method: EPA 8081A** | **Prep Method: EPA 3546** |

| QC942091 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| alpha-BHC | 54.18 | 50.00 | ug/Kg | 108% | # | 22-129 |
| beta-BHC | 62.12 | 50.00 | ug/Kg | 124% | | 28-125 |
| gamma-BHC | 52.61 | 50.00 | ug/Kg | 105% | # | 22-128 |
| delta-BHC | 49.68 | 50.00 | ug/Kg | 99% | # | 24-131 |
| Heptachlor | 52.42 | 50.00 | ug/Kg | 105% | | 18-124 |
| Aldrin | 35.73 | 50.00 | ug/Kg | 71% | | 23-120 |
| Heptachlor epoxide | 35.04 | 50.00 | ug/Kg | 70% | | 26-120 |
| Endosulfan I | 39.41 | 50.00 | ug/Kg | 79% | | 25-126 |
| Dieldrin | 36.93 | 50.00 | ug/Kg | 74% | | 23-124 |
| 4,4'-DDE | 36.16 | 50.00 | ug/Kg | 72% | | 28-121 |
| Endrin | 38.88 | 50.00 | ug/Kg | 78% | | 25-127 |
| Endosulfan II | 35.35 | 50.00 | ug/Kg | 71% | | 29-121 |
| Endosulfan sulfate | 30.82 | 50.00 | ug/Kg | 62% | | 30-121 |
| 4,4'-DDD | 32.75 | 50.00 | ug/Kg | 65% | | 26-120 |
| Endrin aldehyde | 21.81 | 50.00 | ug/Kg | 44% | | 10-120 |
| Endrin ketone | 33.28 | 50.00 | ug/Kg | 67% | | 28-125 |
| 4,4'-DDT | 33.02 | 50.00 | ug/Kg | 66% | | 22-125 |
| Methoxychlor | 33.82 | 50.00 | ug/Kg | 68% | | 28-130 |
| **Surrogates** | | | | | | |
| TCMX | 45.51 | 50.00 | ug/Kg | 91% | | 23-120 |
| Decachlorobiphenyl | 23.15 | 50.00 | ug/Kg | 46% | | 24-120 |

ENTHALPY ANALYTICAL

# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike** | **Lab ID:** | **QC942092** | **Batch:** | **273369** |
| **Matrix (Source ID):** | **Soil (450053-002)** | **Method:** | **EPA 8081A** | **Prep Method:** | **EPA 3546** |

| QC942092 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| alpha-BHC | 48.90 | ND | 50.00 | ug/Kg | 98% | | 46-120 | 1 |
| beta-BHC | 41.85 | ND | 50.00 | ug/Kg | 84% | | 41-120 | 1 |
| gamma-BHC | 42.11 | ND | 50.00 | ug/Kg | 84% | | 41-120 | 1 |
| delta-BHC | 45.48 | ND | 50.00 | ug/Kg | 91% | | 38-123 | 1 |
| Heptachlor | 38.71 | ND | 50.00 | ug/Kg | 77% | | 39-120 | 1 |
| Aldrin | 39.23 | ND | 50.00 | ug/Kg | 78% | | 34-120 | 1 |
| Heptachlor epoxide | 41.80 | ND | 50.00 | ug/Kg | 84% | | 43-120 | 1 |
| Endosulfan I | 32.74 | ND | 50.00 | ug/Kg | 65% | # | 45-120 | 1 |
| Dieldrin | 38.16 | ND | 50.00 | ug/Kg | 76% | | 45-120 | 1 |
| 4,4'-DDE | 285.3 | 277.3 | 50.00 | ug/Kg | 16% | NM | 34-120 | 1 |
| Endrin | 37.96 | ND | 50.00 | ug/Kg | 76% | | 40-120 | 1 |
| Endosulfan II | 37.59 | ND | 50.00 | ug/Kg | 75% | | 41-120 | 1 |
| Endosulfan sulfate | 35.82 | ND | 50.00 | ug/Kg | 72% | | 42-120 | 1 |
| 4,4'-DDD | 44.86 | 19.36 | 50.00 | ug/Kg | 51% | | 41-120 | 1 |
| Endrin aldehyde | 24.34 | ND | 50.00 | ug/Kg | 49% | | 30-120 | 1 |
| Endrin ketone | 42.61 | ND | 50.00 | ug/Kg | 85% | | 45-120 | 1 |
| 4,4'-DDT | 61.67 | 30.86 | 50.00 | ug/Kg | 62% | | 35-127 | 1 |
| Methoxychlor | 43.47 | ND | 50.00 | ug/Kg | 87% | | 42-136 | 1 |
| **Surrogates** | | | | | | | | |
| TCMX | 37.63 | | 50.00 | ug/Kg | 75% | | 23-120 | 1 |
| Decachlorobiphenyl | 29.07 | | 50.00 | ug/Kg | 58% | | 24-120 | 1 |

ENTHALPY ANALYTICAL

# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike Duplicate** | **Lab ID:** | **QC942093** | **Batch:** | **273369** |
| **Matrix (Source ID):** | **Soil (450053-002)** | **Method:** | **EPA 8081A** | **Prep Method:** | **EPA 3546** |

| QC942093 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| alpha-BHC | 37.94 | ND | 50.00 | ug/Kg | 76% | | 46-120 | 25 | 30 | 1 |
| beta-BHC | 35.53 | ND | 50.00 | ug/Kg | 71% | | 41-120 | 16 | 30 | 1 |
| gamma-BHC | 33.54 | ND | 50.00 | ug/Kg | 67% | | 41-120 | 23 | 30 | 1 |
| delta-BHC | 36.28 | ND | 50.00 | ug/Kg | 73% | | 38-123 | 23 | 30 | 1 |
| Heptachlor | 30.94 | ND | 50.00 | ug/Kg | 62% | | 39-120 | 22 | 30 | 1 |
| Aldrin | 29.69 | ND | 50.00 | ug/Kg | 59% | | 34-120 | 28 | 30 | 1 |
| Heptachlor epoxide | 36.20 | ND | 50.00 | ug/Kg | 72% | | 43-120 | 14 | 30 | 1 |
| Endosulfan I | 26.52 | ND | 50.00 | ug/Kg | 53% | # | 45-120 | 21 | 30 | 1 |
| Dieldrin | 30.27 | ND | 50.00 | ug/Kg | 61% | | 45-120 | 23 | 30 | 1 |
| 4,4'-DDE | 299.1 | 277.3 | 50.00 | ug/Kg | 44% | NM | 34-120 | 5 | 30 | 1 |
| Endrin | 32.02 | ND | 50.00 | ug/Kg | 64% | | 40-120 | 17 | 30 | 1 |
| Endosulfan II | 32.41 | ND | 50.00 | ug/Kg | 65% | | 41-120 | 15 | 30 | 1 |
| Endosulfan sulfate | 29.06 | ND | 50.00 | ug/Kg | 58% | | 42-120 | 21 | 30 | 1 |
| 4,4'-DDD | 40.38 | 19.36 | 50.00 | ug/Kg | 42% | | 41-120 | 11 | 30 | 1 |
| Endrin aldehyde | 20.63 | ND | 50.00 | ug/Kg | 41% | | 30-120 | 17 | 30 | 1 |
| Endrin ketone | 30.25 | ND | 50.00 | ug/Kg | 60% | | 45-120 | 34* | 30 | 1 |
| 4,4'-DDT | 53.86 | 30.86 | 50.00 | ug/Kg | 46% | | 35-127 | 14 | 30 | 1 |
| Methoxychlor | 32.73 | ND | 50.00 | ug/Kg | 65% | | 42-136 | 28 | 30 | 1 |
| **Surrogates** | | | | | | | | | | |
| TCMX | 29.61 | | 50.00 | ug/Kg | 59% | | 23-120 | | | 1 |
| Decachlorobiphenyl | 23.76 | | 50.00 | ug/Kg | 48% | | 24-120 | | | 1 |

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Blank** | **Lab ID:** | **QC942129** | **Batch:** | **273379** |
| **Matrix:** | **Soil** | **Method:** | **EPA 6010B** | **Prep Method:** | **EPA 3050B** |

| QC942129 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Arsenic | ND | | mg/Kg | 1.0 | 09/03/21 | 09/03/21 |
| Lead | ND | | mg/Kg | 1.0 | 09/03/21 | 09/03/21 |

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Lab Control Sample** | **Lab ID:** | **QC942130** | **Batch:** | **273379** |
| **Matrix:** | **Soil** | **Method:** | **EPA 6010B** | **Prep Method:** | **EPA 3050B** |

| QC942130 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Arsenic | 99.68 | 100.0 | mg/Kg | 100% | | 80-120 |
| Lead | 98.50 | 100.0 | mg/Kg | 98% | | 80-120 |

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# Batch QC

| Type: | Matrix Spike | Lab ID: | QC942131 | Batch: | 273379 |
|---|---|---|---|---|---|
| Matrix (Source ID): | Soil (449888-002) | Method: | EPA 6010B | Prep Method: | EPA 3050B |

| QC942131 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 106.1 | 0.7777 | 102.0 | mg/Kg | 103% | | 75-125 | 1 |
| Lead | 102.5 | 1.159 | 102.0 | mg/Kg | 99% | | 75-125 | 1 |

| Type: | Matrix Spike Duplicate | Lab ID: | QC942132 | Batch: | 273379 |
|---|---|---|---|---|---|
| Matrix (Source ID): | Soil (449888-002) | Method: | EPA 6010B | Prep Method: | EPA 3050B |

| QC942132 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 105.8 | 0.7777 | 100.0 | mg/Kg | 105% | | 75-125 | 2 | 35 | 1 |
| Lead | 100.9 | 1.159 | 100.0 | mg/Kg | 100% | | 75-125 | 0 | 20 | 1 |

| Type: | Blank | Lab ID: | QC942134 | Batch: | 273380 |
|---|---|---|---|---|---|
| Matrix: | Soil | Method: | EPA 6010B | Prep Method: | EPA 3050B |

| QC942134 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Antimony | ND | | mg/Kg | 3.0 | 09/03/21 | 09/04/21 |
| Arsenic | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Barium | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Beryllium | ND | | mg/Kg | 0.50 | 09/03/21 | 09/04/21 |
| Cadmium | ND | | mg/Kg | 0.50 | 09/03/21 | 09/04/21 |
| Chromium | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Cobalt | ND | | mg/Kg | 0.50 | 09/03/21 | 09/04/21 |
| Copper | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Lead | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Molybdenum | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Nickel | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Selenium | ND | | mg/Kg | 3.0 | 09/03/21 | 09/04/21 |
| Silver | ND | | mg/Kg | 0.50 | 09/03/21 | 09/04/21 |
| Thallium | ND | | mg/Kg | 3.0 | 09/03/21 | 09/04/21 |
| Vanadium | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Zinc | ND | | mg/Kg | 5.0 | 09/03/21 | 09/04/21 |

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# Batch QC

| Type: Lab Control Sample | Lab ID: QC942135 | Batch: 273380 |
|---|---|---|
| Matrix: Soil | Method: EPA 6010B | Prep Method: EPA 3050B |

| QC942135 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Antimony | 104.9 | 100.0 | mg/Kg | 105% | | 80-120 |
| Arsenic | 99.97 | 100.0 | mg/Kg | 100% | | 80-120 |
| Barium | 102.1 | 100.0 | mg/Kg | 102% | | 80-120 |
| Beryllium | 100.6 | 100.0 | mg/Kg | 101% | | 80-120 |
| Cadmium | 99.20 | 100.0 | mg/Kg | 99% | | 80-120 |
| Chromium | 96.84 | 100.0 | mg/Kg | 97% | | 80-120 |
| Cobalt | 102.0 | 100.0 | mg/Kg | 102% | | 80-120 |
| Copper | 94.45 | 100.0 | mg/Kg | 94% | | 80-120 |
| Lead | 98.09 | 100.0 | mg/Kg | 98% | | 80-120 |
| Molybdenum | 102.8 | 100.0 | mg/Kg | 103% | | 80-120 |
| Nickel | 102.0 | 100.0 | mg/Kg | 102% | | 80-120 |
| Selenium | 89.71 | 100.0 | mg/Kg | 90% | | 80-120 |
| Silver | 46.30 | 50.00 | mg/Kg | 93% | | 80-120 |
| Thallium | 107.8 | 100.0 | mg/Kg | 108% | | 80-120 |
| Vanadium | 98.62 | 100.0 | mg/Kg | 99% | | 80-120 |
| Zinc | 105.2 | 100.0 | mg/Kg | 105% | | 80-120 |

| Type: Matrix Spike | Lab ID: QC942136 | Batch: 273380 |
|---|---|---|
| Matrix (Source ID): Soil (450050-010) | Method: EPA 6010B | Prep Method: EPA 3050B |

| QC942136 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| Antimony | 40.88 | ND | 101.0 | mg/Kg | 40% | * | 75-125 | 1 |
| Arsenic | 104.4 | 1.398 | 101.0 | mg/Kg | 102% | | 75-125 | 1 |
| Barium | 300.6 | 174.0 | 101.0 | mg/Kg | 125% | | 75-125 | 1 |
| Beryllium | 101.7 | 0.3998 | 101.0 | mg/Kg | 100% | | 75-125 | 1 |
| Cadmium | 100.7 | ND | 101.0 | mg/Kg | 100% | | 75-125 | 1 |
| Chromium | 109.4 | 10.39 | 101.0 | mg/Kg | 98% | | 75-125 | 1 |
| Cobalt | 103.0 | 5.183 | 101.0 | mg/Kg | 97% | | 75-125 | 1 |
| Copper | 130.9 | 30.76 | 101.0 | mg/Kg | 99% | | 75-125 | 1 |
| Lead | 97.75 | 4.154 | 101.0 | mg/Kg | 93% | | 75-125 | 1 |
| Molybdenum | 101.7 | ND | 101.0 | mg/Kg | 101% | | 75-125 | 1 |
| Nickel | 104.2 | 5.817 | 101.0 | mg/Kg | 97% | | 75-125 | 1 |
| Selenium | 91.78 | ND | 101.0 | mg/Kg | 91% | | 75-125 | 1 |
| Silver | 47.79 | 0.4794 | 50.51 | mg/Kg | 94% | | 75-125 | 1 |
| Thallium | 98.06 | ND | 101.0 | mg/Kg | 97% | | 75-125 | 1 |
| Vanadium | 133.6 | 30.83 | 101.0 | mg/Kg | 102% | | 75-125 | 1 |
| Zinc | 189.8 | 90.53 | 101.0 | mg/Kg | 98% | | 75-125 | 1 |

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# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike Duplicate** | **Lab ID:** | **QC942137** | **Batch:** | **273380** |
| **Matrix (Source ID):** | **Soil (450050-010)** | **Method:** | **EPA 6010B** | **Prep Method:** | **EPA 3050B** |

| QC942137 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 39.00 | ND | 101.0 | mg/Kg | 39% | * | 75-125 | 5 | 41 | 1 |
| Arsenic | 102.1 | 1.398 | 101.0 | mg/Kg | 100% | | 75-125 | 2 | 35 | 1 |
| Barium | 285.7 | 174.0 | 101.0 | mg/Kg | 111% | | 75-125 | 5 | 20 | 1 |
| Beryllium | 100.3 | 0.3998 | 101.0 | mg/Kg | 99% | | 75-125 | 1 | 20 | 1 |
| Cadmium | 98.62 | ND | 101.0 | mg/Kg | 98% | | 75-125 | 2 | 20 | 1 |
| Chromium | 104.9 | 10.39 | 101.0 | mg/Kg | 94% | | 75-125 | 4 | 20 | 1 |
| Cobalt | 101.0 | 5.183 | 101.0 | mg/Kg | 95% | | 75-125 | 2 | 20 | 1 |
| Copper | 140.3 | 30.76 | 101.0 | mg/Kg | 108% | | 75-125 | 7 | 20 | 1 |
| Lead | 95.68 | 4.154 | 101.0 | mg/Kg | 91% | | 75-125 | 2 | 20 | 1 |
| Molybdenum | 99.52 | ND | 101.0 | mg/Kg | 99% | | 75-125 | 2 | 20 | 1 |
| Nickel | 101.1 | 5.817 | 101.0 | mg/Kg | 94% | | 75-125 | 3 | 20 | 1 |
| Selenium | 90.13 | ND | 101.0 | mg/Kg | 89% | | 75-125 | 2 | 20 | 1 |
| Silver | 47.40 | 0.4794 | 50.51 | mg/Kg | 93% | | 75-125 | 1 | 20 | 1 |
| Thallium | 95.56 | ND | 101.0 | mg/Kg | 95% | | 75-125 | 3 | 20 | 1 |
| Vanadium | 132.0 | 30.83 | 101.0 | mg/Kg | 100% | | 75-125 | 1 | 20 | 1 |
| Zinc | 185.6 | 90.53 | 101.0 | mg/Kg | 94% | | 75-125 | 2 | 20 | 1 |

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Blank** | **Lab ID:** | **QC942139** | **Batch:** | **273381** |
| **Matrix:** | **Soil** | **Method:** | **EPA 6010B** | **Prep Method:** | **EPA 3050B** |

| QC942139 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Antimony | ND | | mg/Kg | 3.0 | 09/03/21 | 09/04/21 |
| Arsenic | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Barium | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Beryllium | ND | | mg/Kg | 0.50 | 09/03/21 | 09/04/21 |
| Cadmium | ND | | mg/Kg | 0.50 | 09/03/21 | 09/04/21 |
| Chromium | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Cobalt | ND | | mg/Kg | 0.50 | 09/03/21 | 09/04/21 |
| Copper | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Lead | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Molybdenum | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Nickel | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Selenium | ND | | mg/Kg | 3.0 | 09/03/21 | 09/04/21 |
| Silver | ND | | mg/Kg | 0.50 | 09/03/21 | 09/04/21 |
| Thallium | ND | | mg/Kg | 3.0 | 09/03/21 | 09/04/21 |
| Vanadium | ND | | mg/Kg | 1.0 | 09/03/21 | 09/04/21 |
| Zinc | ND | | mg/Kg | 5.0 | 09/03/21 | 09/04/21 |

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# Batch QC

| Type: Lab Control Sample | Lab ID: QC942140 | Batch: 273381 |
|---|---|---|
| Matrix: Soil | Method: EPA 6010B | Prep Method: EPA 3050B |

| QC942140 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Antimony | 107.2 | 100.0 | mg/Kg | 107% | | 80-120 |
| Arsenic | 100.9 | 100.0 | mg/Kg | 101% | | 80-120 |
| Barium | 104.6 | 100.0 | mg/Kg | 105% | | 80-120 |
| Beryllium | 103.6 | 100.0 | mg/Kg | 104% | | 80-120 |
| Cadmium | 101.1 | 100.0 | mg/Kg | 101% | | 80-120 |
| Chromium | 99.09 | 100.0 | mg/Kg | 99% | | 80-120 |
| Cobalt | 104.2 | 100.0 | mg/Kg | 104% | | 80-120 |
| Copper | 96.82 | 100.0 | mg/Kg | 97% | | 80-120 |
| Lead | 100.0 | 100.0 | mg/Kg | 100% | | 80-120 |
| Molybdenum | 105.7 | 100.0 | mg/Kg | 106% | | 80-120 |
| Nickel | 104.1 | 100.0 | mg/Kg | 104% | | 80-120 |
| Selenium | 90.63 | 100.0 | mg/Kg | 91% | | 80-120 |
| Silver | 47.10 | 50.00 | mg/Kg | 94% | | 80-120 |
| Thallium | 109.4 | 100.0 | mg/Kg | 109% | | 80-120 |
| Vanadium | 101.0 | 100.0 | mg/Kg | 101% | | 80-120 |
| Zinc | 109.5 | 100.0 | mg/Kg | 109% | | 80-120 |

| Type: Matrix Spike | Lab ID: QC942141 | Batch: 273381 |
|---|---|---|
| Matrix (Source ID): Soil (450050-027) | Method: EPA 6010B | Prep Method: EPA 3050B |

| QC942141 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| Antimony | 40.20 | 1.757 | 102.0 | mg/Kg | 38% | * | 75-125 | 1 |
| Arsenic | 98.85 | 1.224 | 102.0 | mg/Kg | 96% | | 75-125 | 1 |
| Barium | 383.2 | 215.5 | 102.0 | mg/Kg | 164% | * | 75-125 | 1 |
| Beryllium | 99.30 | 0.5442 | 102.0 | mg/Kg | 97% | | 75-125 | 1 |
| Cadmium | 95.84 | ND | 102.0 | mg/Kg | 94% | | 75-125 | 1 |
| Chromium | 102.5 | 12.27 | 102.0 | mg/Kg | 88% | | 75-125 | 1 |
| Cobalt | 99.31 | 6.427 | 102.0 | mg/Kg | 91% | | 75-125 | 1 |
| Copper | 109.5 | 18.29 | 102.0 | mg/Kg | 89% | | 75-125 | 1 |
| Lead | 92.80 | 4.459 | 102.0 | mg/Kg | 87% | | 75-125 | 1 |
| Molybdenum | 97.38 | ND | 102.0 | mg/Kg | 95% | | 75-125 | 1 |
| Nickel | 99.03 | 6.628 | 102.0 | mg/Kg | 91% | | 75-125 | 1 |
| Selenium | 87.06 | ND | 102.0 | mg/Kg | 85% | | 75-125 | 1 |
| Silver | 88.76 | 1.456 | 51.02 | mg/Kg | 171% | * | 75-125 | 1 |
| Thallium | 93.36 | ND | 102.0 | mg/Kg | 91% | | 75-125 | 1 |
| Vanadium | 134.9 | 38.52 | 102.0 | mg/Kg | 94% | | 75-125 | 1 |
| Zinc | 169.9 | 93.82 | 102.0 | mg/Kg | 75% | | 75-125 | 1 |

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# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike Duplicate** | **Lab ID:** | **QC942142** | **Batch:** | **273381** |
| **Matrix (Source ID):** | **Soil (450050-027)** | **Method:** | **EPA 6010B** | **Prep Method:** | **EPA 3050B** |

| QC942142 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 35.68 | 1.757 | 103.1 | mg/Kg | 33% | * | 75-125 | 13 | 41 | 1 |
| Arsenic | 107.0 | 1.224 | 103.1 | mg/Kg | 103% | | 75-125 | 7 | 35 | 1 |
| Barium | 311.8 | 215.5 | 103.1 | mg/Kg | 93% | | 75-125 | 21* | 20 | 1 |
| Beryllium | 106.0 | 0.5442 | 103.1 | mg/Kg | 102% | | 75-125 | 6 | 20 | 1 |
| Cadmium | 103.9 | ND | 103.1 | mg/Kg | 101% | | 75-125 | 7 | 20 | 1 |
| Chromium | 110.9 | 12.27 | 103.1 | mg/Kg | 96% | | 75-125 | 7 | 20 | 1 |
| Cobalt | 107.5 | 6.427 | 103.1 | mg/Kg | 98% | | 75-125 | 7 | 20 | 1 |
| Copper | 117.7 | 18.29 | 103.1 | mg/Kg | 96% | | 75-125 | 6 | 20 | 1 |
| Lead | 99.91 | 4.459 | 103.1 | mg/Kg | 93% | | 75-125 | 6 | 20 | 1 |
| Molybdenum | 104.5 | ND | 103.1 | mg/Kg | 101% | | 75-125 | 6 | 20 | 1 |
| Nickel | 106.9 | 6.628 | 103.1 | mg/Kg | 97% | | 75-125 | 7 | 20 | 1 |
| Selenium | 94.31 | ND | 103.1 | mg/Kg | 91% | | 75-125 | 7 | 20 | 1 |
| Silver | 48.68 | 1.456 | 51.55 | mg/Kg | 92% | | 75-125 | 59* | 20 | 1 |
| Thallium | 101.9 | ND | 103.1 | mg/Kg | 99% | | 75-125 | 8 | 20 | 1 |
| Vanadium | 145.2 | 38.52 | 103.1 | mg/Kg | 103% | | 75-125 | 7 | 20 | 1 |
| Zinc | 182.1 | 93.82 | 103.1 | mg/Kg | 86% | | 75-125 | 6 | 20 | 1 |

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Blank** | **Lab ID:** | **QC942147** | **Batch:** | **273383** |
| **Matrix:** | **Soil** | **Method:** | **EPA 6010B** | **Prep Method:** | **EPA 3050B** |

| QC942147 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Antimony | ND | | mg/Kg | 3.0 | 09/03/21 | 09/03/21 |
| Arsenic | ND | | mg/Kg | 1.0 | 09/03/21 | 09/03/21 |
| Barium | ND | | mg/Kg | 1.0 | 09/03/21 | 09/03/21 |
| Beryllium | ND | | mg/Kg | 0.50 | 09/03/21 | 09/03/21 |
| Cadmium | ND | | mg/Kg | 0.50 | 09/03/21 | 09/03/21 |
| Chromium | ND | | mg/Kg | 1.0 | 09/03/21 | 09/03/21 |
| Cobalt | ND | | mg/Kg | 0.50 | 09/03/21 | 09/03/21 |
| Copper | ND | | mg/Kg | 1.0 | 09/03/21 | 09/03/21 |
| Lead | ND | | mg/Kg | 1.0 | 09/03/21 | 09/03/21 |
| Molybdenum | ND | | mg/Kg | 1.0 | 09/03/21 | 09/03/21 |
| Nickel | ND | | mg/Kg | 1.0 | 09/03/21 | 09/03/21 |
| Selenium | ND | | mg/Kg | 3.0 | 09/03/21 | 09/03/21 |
| Silver | ND | | mg/Kg | 0.50 | 09/03/21 | 09/03/21 |
| Thallium | ND | | mg/Kg | 3.0 | 09/03/21 | 09/03/21 |
| Vanadium | ND | | mg/Kg | 1.0 | 09/03/21 | 09/03/21 |
| Zinc | ND | | mg/Kg | 5.0 | 09/03/21 | 09/03/21 |

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# Batch QC

| Type: Lab Control Sample | Lab ID: QC942148 | Batch: 273383 |
|---|---|---|
| Matrix: Soil | Method: EPA 6010B | Prep Method: EPA 3050B |

| QC942148 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Antimony | 105.9 | 100.0 | mg/Kg | 106% | | 80-120 |
| Arsenic | 101.1 | 100.0 | mg/Kg | 101% | | 80-120 |
| Barium | 102.4 | 100.0 | mg/Kg | 102% | | 80-120 |
| Beryllium | 103.0 | 100.0 | mg/Kg | 103% | | 80-120 |
| Cadmium | 99.76 | 100.0 | mg/Kg | 100% | | 80-120 |
| Chromium | 97.69 | 100.0 | mg/Kg | 98% | | 80-120 |
| Cobalt | 103.1 | 100.0 | mg/Kg | 103% | | 80-120 |
| Copper | 98.53 | 100.0 | mg/Kg | 99% | | 80-120 |
| Lead | 100.2 | 100.0 | mg/Kg | 100% | | 80-120 |
| Molybdenum | 104.0 | 100.0 | mg/Kg | 104% | | 80-120 |
| Nickel | 103.2 | 100.0 | mg/Kg | 103% | | 80-120 |
| Selenium | 90.28 | 100.0 | mg/Kg | 90% | | 80-120 |
| Silver | 47.85 | 50.00 | mg/Kg | 96% | | 80-120 |
| Thallium | 107.4 | 100.0 | mg/Kg | 107% | | 80-120 |
| Vanadium | 102.5 | 100.0 | mg/Kg | 103% | | 80-120 |
| Zinc | 105.9 | 100.0 | mg/Kg | 106% | | 80-120 |

| Type: Matrix Spike | Lab ID: QC942149 | Batch: 273383 |
|---|---|---|
| Matrix (Source ID): Soil (450050-047) | Method: EPA 6010B | Prep Method: EPA 3050B |

| QC942149 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| Antimony | 30.10 | 1.973 | 100.0 | mg/Kg | 28% | * | 75-125 | 1 |
| Arsenic | 104.6 | 2.095 | 100.0 | mg/Kg | 102% | | 75-125 | 1 |
| Barium | 310.3 | 221.1 | 100.0 | mg/Kg | 89% | | 75-125 | 1 |
| Beryllium | 99.65 | 0.5809 | 100.0 | mg/Kg | 99% | | 75-125 | 1 |
| Cadmium | 99.11 | ND | 100.0 | mg/Kg | 99% | | 75-125 | 1 |
| Chromium | 105.0 | 12.49 | 100.0 | mg/Kg | 92% | | 75-125 | 1 |
| Cobalt | 101.6 | 6.655 | 100.0 | mg/Kg | 95% | | 75-125 | 1 |
| Copper | 110.9 | 14.14 | 100.0 | mg/Kg | 97% | | 75-125 | 1 |
| Lead | 94.97 | 3.716 | 100.0 | mg/Kg | 91% | | 75-125 | 1 |
| Molybdenum | 98.20 | ND | 100.0 | mg/Kg | 98% | | 75-125 | 1 |
| Nickel | 100.7 | 6.717 | 100.0 | mg/Kg | 94% | | 75-125 | 1 |
| Selenium | 89.88 | ND | 100.0 | mg/Kg | 90% | | 75-125 | 1 |
| Silver | 46.91 | ND | 50.00 | mg/Kg | 94% | | 75-125 | 1 |
| Thallium | 94.14 | ND | 100.0 | mg/Kg | 94% | | 75-125 | 1 |
| Vanadium | 139.4 | 39.45 | 100.0 | mg/Kg | 100% | | 75-125 | 1 |
| Zinc | 179.8 | 96.27 | 100.0 | mg/Kg | 84% | | 75-125 | 1 |

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# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike Duplicate** | **Lab ID:** | **QC942150** | **Batch:** | **273383** |
| **Matrix (Source ID):** | **Soil (450050-047)** | **Method:** | **EPA 6010B** | **Prep Method:** | **EPA 3050B** |

| QC942150 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 32.70 | 1.973 | 101.0 | mg/Kg | 30% | * | 75-125 | 7 | 41 | 1 |
| Arsenic | 106.1 | 2.095 | 101.0 | mg/Kg | 103% | | 75-125 | 0 | 35 | 1 |
| Barium | 314.3 | 221.1 | 101.0 | mg/Kg | 92% | | 75-125 | 1 | 20 | 1 |
| Beryllium | 99.19 | 0.5809 | 101.0 | mg/Kg | 98% | | 75-125 | 1 | 20 | 1 |
| Cadmium | 100.4 | ND | 101.0 | mg/Kg | 99% | | 75-125 | 0 | 20 | 1 |
| Chromium | 103.5 | 12.49 | 101.0 | mg/Kg | 90% | | 75-125 | 2 | 20 | 1 |
| Cobalt | 100.2 | 6.655 | 101.0 | mg/Kg | 93% | | 75-125 | 2 | 20 | 1 |
| Copper | 109.5 | 14.14 | 101.0 | mg/Kg | 94% | | 75-125 | 2 | 20 | 1 |
| Lead | 94.07 | 3.716 | 101.0 | mg/Kg | 89% | | 75-125 | 2 | 20 | 1 |
| Molybdenum | 98.88 | ND | 101.0 | mg/Kg | 98% | | 75-125 | 0 | 20 | 1 |
| Nickel | 99.45 | 6.717 | 101.0 | mg/Kg | 92% | | 75-125 | 2 | 20 | 1 |
| Selenium | 92.01 | ND | 101.0 | mg/Kg | 91% | | 75-125 | 1 | 20 | 1 |
| Silver | 47.70 | ND | 50.51 | mg/Kg | 94% | | 75-125 | 1 | 20 | 1 |
| Thallium | 93.69 | ND | 101.0 | mg/Kg | 93% | | 75-125 | 1 | 20 | 1 |
| Vanadium | 135.8 | 39.45 | 101.0 | mg/Kg | 95% | | 75-125 | 3 | 20 | 1 |
| Zinc | 172.1 | 96.27 | 101.0 | mg/Kg | 75% | | 75-125 | 5 | 20 | 1 |

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# Batch QC

| | | |
|---|---|---|
| **Type: Blank** | **Lab ID: QC942173** | **Batch: 273393** |
| **Matrix: Soil** | **Method: EPA 8081A** | **Prep Method: EPA 3546** |

| QC942173 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| alpha-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| beta-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| gamma-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| delta-BHC | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Heptachlor | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Aldrin | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Endosulfan I | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Dieldrin | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Endrin | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Endosulfan II | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Endrin ketone | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 09/03/21 | 09/08/21 |
| Methoxychlor | ND | | ug/Kg | 10 | 09/03/21 | 09/08/21 |
| Toxaphene | ND | | ug/Kg | 100 | 09/03/21 | 09/08/21 |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 09/03/21 | 09/08/21 |
| **Surrogates** | | | | **Limits** | | |
| TCMX | 73% | | %REC | 23-120 | 09/03/21 | 09/08/21 |
| Decachlorobiphenyl | 87% | | %REC | 24-120 | 09/03/21 | 09/08/21 |

ENTHALPY ANALYTICAL

# Batch QC

| | | |
|---|---|---|
| **Type: Lab Control Sample** | **Lab ID: QC942174** | **Batch: 273393** |
| **Matrix: Soil** | **Method: EPA 8081A** | **Prep Method: EPA 3546** |

| QC942174 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| alpha-BHC | 42.84 | 50.00 | ug/Kg | 86% | | 22-129 |
| beta-BHC | 44.57 | 50.00 | ug/Kg | 89% | | 28-125 |
| gamma-BHC | 42.77 | 50.00 | ug/Kg | 86% | | 22-128 |
| delta-BHC | 41.03 | 50.00 | ug/Kg | 82% | | 24-131 |
| Heptachlor | 42.68 | 50.00 | ug/Kg | 85% | | 18-124 |
| Aldrin | 39.55 | 50.00 | ug/Kg | 79% | | 23-120 |
| Heptachlor epoxide | 43.50 | 50.00 | ug/Kg | 87% | | 26-120 |
| Endosulfan I | 46.67 | 50.00 | ug/Kg | 93% | | 25-126 |
| Dieldrin | 46.20 | 50.00 | ug/Kg | 92% | | 23-124 |
| 4,4'-DDE | 47.09 | 50.00 | ug/Kg | 94% | | 28-121 |
| Endrin | 53.23 | 50.00 | ug/Kg | 106% | | 25-127 |
| Endosulfan II | 51.11 | 50.00 | ug/Kg | 102% | | 29-121 |
| Endosulfan sulfate | 50.02 | 50.00 | ug/Kg | 100% | | 30-121 |
| 4,4'-DDD | 48.21 | 50.00 | ug/Kg | 96% | | 26-120 |
| Endrin aldehyde | 32.19 | 50.00 | ug/Kg | 64% | | 10-120 |
| Endrin ketone | 49.46 | 50.00 | ug/Kg | 99% | | 28-125 |
| 4,4'-DDT | 53.59 | 50.00 | ug/Kg | 107% | | 22-125 |
| Methoxychlor | 56.76 | 50.00 | ug/Kg | 114% | | 28-130 |
| **Surrogates** | | | | | | |
| TCMX | 40.70 | 50.00 | ug/Kg | 81% | | 23-120 |
| Decachlorobiphenyl | 49.73 | 50.00 | ug/Kg | 99% | | 24-120 |

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# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike** | **Lab ID:** | **QC942175** | **Batch:** | **273393** |
| **Matrix (Source ID):** | **Soil (450050-021)** | **Method:** | **EPA 8081A** | **Prep Method:** | **EPA 3546** |

| QC942175 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| alpha-BHC | 43.99 | ND | 50.51 | ug/Kg | 87% | | 46-120 | 1 |
| beta-BHC | 42.92 | ND | 50.51 | ug/Kg | 85% | | 41-120 | 1 |
| gamma-BHC | 42.43 | ND | 50.51 | ug/Kg | 84% | | 41-120 | 1 |
| delta-BHC | 39.35 | ND | 50.51 | ug/Kg | 78% | | 38-123 | 1 |
| Heptachlor | 42.24 | ND | 50.51 | ug/Kg | 84% | | 39-120 | 1 |
| Aldrin | 40.10 | ND | 50.51 | ug/Kg | 79% | | 34-120 | 1 |
| Heptachlor epoxide | 41.85 | ND | 50.51 | ug/Kg | 83% | | 43-120 | 1 |
| Endosulfan I | 44.50 | ND | 50.51 | ug/Kg | 88% | | 45-120 | 1 |
| Dieldrin | 45.11 | ND | 50.51 | ug/Kg | 89% | | 45-120 | 1 |
| 4,4'-DDE | 108.1 | 56.63 | 50.51 | ug/Kg | 102% | | 34-120 | 1 |
| Endrin | 52.46 | ND | 50.51 | ug/Kg | 104% | | 40-120 | 1 |
| Endosulfan II | 48.07 | ND | 50.51 | ug/Kg | 95% | | 41-120 | 1 |
| Endosulfan sulfate | 48.04 | ND | 50.51 | ug/Kg | 95% | | 42-120 | 1 |
| 4,4'-DDD | 44.22 | ND | 50.51 | ug/Kg | 88% | | 41-120 | 1 |
| Endrin aldehyde | 31.34 | ND | 50.51 | ug/Kg | 62% | | 30-120 | 1 |
| Endrin ketone | 45.96 | ND | 50.51 | ug/Kg | 91% | | 45-120 | 1 |
| 4,4'-DDT | 57.06 | 3.682 | 50.51 | ug/Kg | 106% | | 35-127 | 1 |
| Methoxychlor | 55.52 | ND | 50.51 | ug/Kg | 110% | | 42-136 | 1 |
| **Surrogates** | | | | | | | | |
| TCMX | 39.25 | | 50.51 | ug/Kg | 78% | | 23-120 | 1 |
| Decachlorobiphenyl | 45.81 | | 50.51 | ug/Kg | 91% | | 24-120 | 1 |

ENTHALPY ANALYTICAL

# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike Duplicate** | **Lab ID:** | **QC942176** | **Batch:** | **273393** |
| **Matrix (Source ID):** | **Soil (450050-021)** | **Method:** | **EPA 8081A** | **Prep Method:** | **EPA 3546** |

| QC942176 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| alpha-BHC | 41.41 | ND | 50.51 | ug/Kg | 82% | | 46-120 | 6 | 30 | 1 |
| beta-BHC | 39.82 | ND | 50.51 | ug/Kg | 79% | | 41-120 | 7 | 30 | 1 |
| gamma-BHC | 40.08 | ND | 50.51 | ug/Kg | 79% | | 41-120 | 6 | 30 | 1 |
| delta-BHC | 36.26 | ND | 50.51 | ug/Kg | 72% | | 38-123 | 8 | 30 | 1 |
| Heptachlor | 39.97 | ND | 50.51 | ug/Kg | 79% | | 39-120 | 6 | 30 | 1 |
| Aldrin | 36.96 | ND | 50.51 | ug/Kg | 73% | | 34-120 | 8 | 30 | 1 |
| Heptachlor epoxide | 38.39 | ND | 50.51 | ug/Kg | 76% | | 43-120 | 9 | 30 | 1 |
| Endosulfan I | 40.64 | ND | 50.51 | ug/Kg | 80% | | 45-120 | 9 | 30 | 1 |
| Dieldrin | 40.90 | ND | 50.51 | ug/Kg | 81% | | 45-120 | 10 | 30 | 1 |
| 4,4'-DDE | 99.63 | 56.63 | 50.51 | ug/Kg | 85% | | 34-120 | 8 | 30 | 1 |
| Endrin | 48.42 | ND | 50.51 | ug/Kg | 96% | | 40-120 | 8 | 30 | 1 |
| Endosulfan II | 43.18 | ND | 50.51 | ug/Kg | 85% | | 41-120 | 11 | 30 | 1 |
| Endosulfan sulfate | 43.79 | ND | 50.51 | ug/Kg | 87% | | 42-120 | 9 | 30 | 1 |
| 4,4'-DDD | 41.67 | ND | 50.51 | ug/Kg | 82% | | 41-120 | 6 | 30 | 1 |
| Endrin aldehyde | 29.41 | ND | 50.51 | ug/Kg | 58% | | 30-120 | 6 | 30 | 1 |
| Endrin ketone | 42.48 | ND | 50.51 | ug/Kg | 84% | | 45-120 | 8 | 30 | 1 |
| 4,4'-DDT | 51.11 | 3.682 | 50.51 | ug/Kg | 94% | | 35-127 | 11 | 30 | 1 |
| Methoxychlor | 49.97 | ND | 50.51 | ug/Kg | 99% | | 42-136 | 11 | 30 | 1 |
| **Surrogates** | | | | | | | | | | |
| TCMX | 37.07 | | 50.51 | ug/Kg | 73% | | 23-120 | | | 1 |
| Decachlorobiphenyl | 43.01 | | 50.51 | ug/Kg | 85% | | 24-120 | | | 1 |

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Blank** | **Lab ID:** | **QC942352** | **Batch:** | **273447** |
| **Matrix:** | **Soil** | **Method:** | **EPA 7471A** | **Prep Method:** | **METHOD** |

| QC942352 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Mercury | ND | | mg/Kg | 0.14 | 09/07/21 | 09/07/21 |

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Lab Control Sample** | **Lab ID:** | **QC942353** | **Batch:** | **273447** |
| **Matrix:** | **Soil** | **Method:** | **EPA 7471A** | **Prep Method:** | **METHOD** |

| QC942353 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Mercury | 0.8259 | 0.8333 | mg/Kg | 99% | | 80-120 |

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# Batch QC

| Type: | Matrix Spike | Lab ID: | QC942354 | Batch: | 273447 |
|---|---|---|---|---|---|
| Matrix (Source ID): | Soil (450050-010) | Method: | EPA 7471A | Prep Method: | METHOD |

| QC942354 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| Mercury | 0.9051 | 0.07098 | 0.9434 | mg/Kg | 88% | | 75-125 | 1.1 |

| Type: | Matrix Spike Duplicate | Lab ID: | QC942355 | Batch: | 273447 |
|---|---|---|---|---|---|
| Matrix (Source ID): | Soil (450050-010) | Method: | EPA 7471A | Prep Method: | METHOD |

| QC942355 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.9377 | 0.07098 | 0.9615 | mg/Kg | 90% | | 75-125 | 2 | 20 | 1.2 |

| Type: | Blank | Lab ID: | QC942666 | Batch: | 273560 |
|---|---|---|---|---|---|
| Matrix: | Soil | Method: | EPA 6010B | Prep Method: | EPA 3050B |

| QC942666 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Arsenic | ND | | mg/Kg | 1.0 | 09/08/21 | 09/09/21 |
| Lead | ND | | mg/Kg | 1.0 | 09/08/21 | 09/09/21 |

| Type: | Lab Control Sample | Lab ID: | QC942667 | Batch: | 273560 |
|---|---|---|---|---|---|
| Matrix: | Soil | Method: | EPA 6010B | Prep Method: | EPA 3050B |

| QC942667 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Arsenic | 103.4 | 100.0 | mg/Kg | 103% | | 80-120 |
| Lead | 103.8 | 100.0 | mg/Kg | 104% | | 80-120 |

| Type: | Matrix Spike | Lab ID: | QC942668 | Batch: | 273560 |
|---|---|---|---|---|---|
| Matrix (Source ID): | Soil (450216-001) | Method: | EPA 6010B | Prep Method: | EPA 3050B |

| QC942668 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 94.03 | 6.762 | 86.96 | mg/Kg | 100% | | 75-125 | 0.87 |
| Lead | 91.27 | 7.209 | 86.96 | mg/Kg | 97% | | 75-125 | 0.87 |

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# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike Duplicate** | **Lab ID:** | **QC942669** | **Batch:** | **273560** |
| **Matrix (Source ID):** | **Soil (450216-001)** | **Method:** | **EPA 6010B** | **Prep Method:** | **EPA 3050B** |

| QC942669 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 110.7 | 6.762 | 100.0 | mg/Kg | 104% | | 75-125 | 3 | 35 | 1 |
| Lead | 106.1 | 7.209 | 100.0 | mg/Kg | 99% | | 75-125 | 2 | 20 | 1 |

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Blank** | **Lab ID:** | **QC942706** | **Batch:** | **273570** |
| **Matrix:** | **Soil** | **Method:** | **EPA 8081A** | **Prep Method:** | **EPA 3546** |

| QC942706 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| alpha-BHC | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| beta-BHC | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| gamma-BHC | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| delta-BHC | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Heptachlor | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Aldrin | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Heptachlor epoxide | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Endosulfan I | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Dieldrin | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| 4,4'-DDE | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Endrin | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Endosulfan II | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Endosulfan sulfate | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| 4,4'-DDD | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Endrin aldehyde | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Endrin ketone | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| 4,4'-DDT | ND | | ug/Kg | 5.0 | 09/09/21 | 09/09/21 |
| Methoxychlor | ND | | ug/Kg | 10 | 09/09/21 | 09/09/21 |
| Toxaphene | ND | | ug/Kg | 100 | 09/09/21 | 09/09/21 |
| Chlordane (Technical) | ND | | ug/Kg | 50 | 09/09/21 | 09/09/21 |
| **Surrogates** | | | | **Limits** | | |
| TCMX | 88% | | %REC | 23-120 | 09/09/21 | 09/09/21 |
| Decachlorobiphenyl | 87% | | %REC | 24-120 | 09/09/21 | 09/09/21 |

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# Batch QC

| | | |
|---|---|---|
| **Type: Lab Control Sample** | **Lab ID: QC942707** | **Batch: 273570** |
| **Matrix: Soil** | **Method: EPA 8081A** | **Prep Method: EPA 3546** |

| QC942707 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| alpha-BHC | 56.96 | 50.00 | ug/Kg | 114% | | 22-129 |
| beta-BHC | 51.48 | 50.00 | ug/Kg | 103% | | 28-125 |
| gamma-BHC | 56.13 | 50.00 | ug/Kg | 112% | | 22-128 |
| delta-BHC | 54.94 | 50.00 | ug/Kg | 110% | # | 24-131 |
| Heptachlor | 52.67 | 50.00 | ug/Kg | 105% | | 18-124 |
| Aldrin | 49.09 | 50.00 | ug/Kg | 98% | | 23-120 |
| Heptachlor epoxide | 39.48 | 50.00 | ug/Kg | 79% | | 26-120 |
| Endosulfan I | 45.15 | 50.00 | ug/Kg | 90% | | 25-126 |
| Dieldrin | 39.08 | 50.00 | ug/Kg | 78% | | 23-124 |
| 4,4'-DDE | 42.76 | 50.00 | ug/Kg | 86% | | 28-121 |
| Endrin | 44.93 | 50.00 | ug/Kg | 90% | | 25-127 |
| Endosulfan II | 39.57 | 50.00 | ug/Kg | 79% | | 29-121 |
| Endosulfan sulfate | 37.52 | 50.00 | ug/Kg | 75% | # | 30-121 |
| 4,4'-DDD | 39.65 | 50.00 | ug/Kg | 79% | | 26-120 |
| Endrin aldehyde | 27.84 | 50.00 | ug/Kg | 56% | | 10-120 |
| Endrin ketone | 32.92 | 50.00 | ug/Kg | 66% | # | 28-125 |
| 4,4'-DDT | 41.78 | 50.00 | ug/Kg | 84% | | 22-125 |
| Methoxychlor | 36.08 | 50.00 | ug/Kg | 72% | # | 28-130 |
| **Surrogates** | | | | | | |
| TCMX | 42.96 | 50.00 | ug/Kg | 86% | | 23-120 |
| Decachlorobiphenyl | 28.58 | 50.00 | ug/Kg | 57% | | 24-120 |

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# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike** | **Lab ID:** | **QC942708** | **Batch:** | **273570** |
| **Matrix (Source ID):** | **Soil (450073-002)** | **Method:** | **EPA 8081A** | **Prep Method:** | **EPA 3546** |

| QC942708 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| alpha-BHC | 49.59 | ND | 50.00 | ug/Kg | 99% | | 46-120 | 10 |
| beta-BHC | 41.56 | ND | 50.00 | ug/Kg | 83% | | 41-120 | 10 |
| gamma-BHC | 52.91 | ND | 50.00 | ug/Kg | 106% | | 41-120 | 10 |
| delta-BHC | 46.73 | ND | 50.00 | ug/Kg | 93% | # | 38-123 | 10 |
| Heptachlor | 51.17 | ND | 50.00 | ug/Kg | 102% | | 39-120 | 10 |
| Aldrin | 64.95 | ND | 50.00 | ug/Kg | 130% | * | 34-120 | 10 |
| Heptachlor epoxide | 56.94 | ND | 50.00 | ug/Kg | 114% | | 43-120 | 10 |
| Endosulfan I | 48.55 | ND | 50.00 | ug/Kg | 97% | | 45-120 | 10 |
| Dieldrin | 53.27 | ND | 50.00 | ug/Kg | 107% | | 45-120 | 10 |
| 4,4'-DDE | 48.37 | ND | 50.00 | ug/Kg | 97% | | 34-120 | 10 |
| Endrin | 133.4 | ND | 50.00 | ug/Kg | 267% | * | 40-120 | 10 |
| Endosulfan II | 36.92 | ND | 50.00 | ug/Kg | 74% | | 41-120 | 10 |
| Endosulfan sulfate | 46.55 | ND | 50.00 | ug/Kg | 93% | # | 42-120 | 10 |
| 4,4'-DDD | 34.06 | ND | 50.00 | ug/Kg | 68% | | 41-120 | 10 |
| Endrin aldehyde | 0 | ND | 50.00 | ug/Kg | 0% | * | 30-120 | 10 |
| Endrin ketone | 125.4 | ND | 50.00 | ug/Kg | 251% | #,* | 45-120 | 10 |
| 4,4'-DDT | 118.9 | ND | 50.00 | ug/Kg | 238% | * | 35-127 | 10 |
| Methoxychlor | 174.5 | ND | 50.00 | ug/Kg | | DO | 42-136 | 10 |
| **Surrogates** | | | | | | | | |
| TCMX | 46.12 | | 50.00 | ug/Kg | | DO | 23-120 | 10 |
| Decachlorobiphenyl | 0 | | 50.00 | ug/Kg | | DO | 24-120 | 10 |

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# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike Duplicate** | **Lab ID:** | **QC942709** | **Batch:** | **273570** |
| **Matrix (Source ID):** | **Soil (450073-002)** | **Method:** | **EPA 8081A** | **Prep Method:** | **EPA 3546** |

| QC942709 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| alpha-BHC | 52.45 | ND | 50.00 | ug/Kg | 105% | | 46-120 | 6 | 30 | 10 |
| beta-BHC | 53.95 | ND | 50.00 | ug/Kg | 108% | | 41-120 | 26 | 30 | 10 |
| gamma-BHC | 50.48 | ND | 50.00 | ug/Kg | 101% | | 41-120 | 5 | 30 | 10 |
| delta-BHC | 50.75 | ND | 50.00 | ug/Kg | 102% | # | 38-123 | 8 | 30 | 10 |
| Heptachlor | 48.83 | ND | 50.00 | ug/Kg | 98% | | 39-120 | 5 | 30 | 10 |
| Aldrin | 95.56 | ND | 50.00 | ug/Kg | 191% | * | 34-120 | 38* | 30 | 10 |
| Heptachlor epoxide | 50.77 | ND | 50.00 | ug/Kg | 102% | | 43-120 | 11 | 30 | 10 |
| Endosulfan I | 42.24 | ND | 50.00 | ug/Kg | 84% | | 45-120 | 14 | 30 | 10 |
| Dieldrin | 43.60 | ND | 50.00 | ug/Kg | 87% | | 45-120 | 20 | 30 | 10 |
| 4,4'-DDE | 37.61 | ND | 50.00 | ug/Kg | 75% | | 34-120 | 25 | 30 | 10 |
| Endrin | 46.93 | ND | 50.00 | ug/Kg | 94% | | 40-120 | 96* | 30 | 10 |
| Endosulfan II | 30.72 | ND | 50.00 | ug/Kg | 61% | | 41-120 | 18 | 30 | 10 |
| Endosulfan sulfate | 68.22 | ND | 50.00 | ug/Kg | 136% | #,* | 42-120 | 38* | 30 | 10 |
| 4,4'-DDD | 36.08 | ND | 50.00 | ug/Kg | 72% | | 41-120 | 6 | 30 | 10 |
| Endrin aldehyde | 10.84 | ND | 50.00 | ug/Kg | | DO | 30-120 | | 30 | 10 |
| Endrin ketone | 0 | ND | 50.00 | ug/Kg | 0% | #,* | 45-120 | | 30 | 10 |
| 4,4'-DDT | 107.4 | ND | 50.00 | ug/Kg | 215% | * | 35-127 | 10 | 30 | 10 |
| Methoxychlor | 22.25 | ND | 50.00 | ug/Kg | | DO | 42-136 | | 30 | 10 |
| **Surrogates** | | | | | | | | | | |
| TCMX | 47.86 | | 50.00 | ug/Kg | | DO | 23-120 | | | 10 |
| Decachlorobiphenyl | 40.54 | | 50.00 | ug/Kg | | DO | 24-120 | | | 10 |

# CCV drift outside limits; average CCV drift within limits per method requirements
* Value is outside QC limits
DO Diluted Out
ND Not Detected
NM Not Meaningful

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

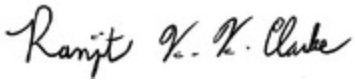
| | |
|---|---|
| Lab Job Number: | 450281 |
| Report Level: | II |
| Report Date: | 09/15/2021 |

**Analytical Report** *prepared for:*

Rocio Quinones
Roux Associates, Inc.
5150 E. Pacific Coast Hwy.
Suite 450
Long Beach, CA 90804

Location: Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA

*Authorized for release by:*



Ranjit K Clarke, Project Manager
(714) 771-9906
Ranjit.Clarke@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE Member

ENTHALPY ANALYTICAL

# Sample Summary

| | | |
|---|---|---|
| Rocio Quinones<br>Roux Associates, Inc.<br>5150 E. Pacific Coast Hwy.<br>Suite 450<br>Long Beach, CA 90804 | Lab Job #:<br>Location:<br><br>Date Received: | 450281<br>Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA<br>09/09/21 |

| Sample ID | Lab ID | Collected | Matrix |
|---|---|---|---|
| SV-1-5 | 450281-001 | 09/07/21 11:08 | Soil |
| SV-1-10 | 450281-002 | 09/07/21 12:52 | Soil |
| SV-1-15 | 450281-003 | 09/07/21 12:56 | Soil |
| SV-1-20 | 450281-004 | 09/07/21 13:07 | Soil |
| SV-2-5 | 450281-005 | 09/07/21 12:38 | Soil |
| SV-2-10 | 450281-006 | 09/07/21 13:55 | Soil |
| SV-2-15 | 450281-007 | 09/07/21 14:02 | Soil |
| SV-2-20 | 450281-008 | 09/07/21 14:09 | Soil |
| SV-3-5 | 450281-009 | 09/07/21 11:00 | Soil |
| SV-4-5 | 450281-010 | 09/07/21 11:19 | Soil |
| SV-5-0.5 | 450281-011 | 09/07/21 11:47 | Soil |
| SV-5-5 | 450281-012 | 09/07/21 11:58 | Soil |

# ENTHALPY ANALYTICAL

## Chain of Custody Record

Lab No: 450281

Page: 1 of 2

**Turn Around Time (rush by advanced notice only)**

| Standard: | X | 5 Day: | | 3 Day: | |
|---|---|---|---|---|---|
| 2 Day: | | 1 Day: | | Custom TAT: | |

**Enthalpy Analytical - Orange**

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

**Matrix:** A = Air S = Soil/Solid W = Water DW = Drinking Wate SD = Sediment PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other

**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

**Sample Receipt Temp:** (lab use only)

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| Company: | Roux Associates, Inc. | Name: | Shea San Jacinto |
| Report To: | Rocio Quinones / Drew Williams | Number: | 2217.0025L |
| Email: | rquinones@rouxinc.com / dwilliams@rouxinc.co | P.O. #: | ROUØ82Ø21A |
| Address: | 5150 Pacific Coast Hwy, Suite 450 | Address: | 870 N. Sanderson Avenue |
| | Long Beach, CA 90804 | | San Jacinto, CA |
| Phone: | 310-879-4900 | Global ID: | |
| Fax: | ' ---- | Sampled By: | |

| | Sample ID | Sampling Date | Sampling Time | Matrix | Container No. / Size | Pres. | TPH-cc by 8015B | VOCs by 8260B | Metals by 6010B / 7471 | Test Instructions / Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SV-1-5 | 9/7/21 | 1108 | Soil | 6 | Yes | X | X | X | |
| 2 | SV-1-10 | " | 1252 | " | " | " | X | X | X | |
| 3 | SV-1-15 | " | 1256 | " | " | " | X | X | X | |
| 4 | SV-1-20 | " | 1307 | " | " | " | X | X | X | |
| 5 | SV-2-5 | " | 1238 | " | " | " | X | X | X | |
| 6 | SV-2-10 | " | 1355 | " | " | " | X | X | X | |
| 7 | SV-2-15 | " | 1402 | " | " | " | X | X | X | |
| 8 | SV-2-20 | " | 1409 | " | " | " | X | X | X | |
| 9 | SV-3-5 | " | 1100 | " | " | " | X | X | X | |
| 10 | SV-4-5 | " | 1119 | " | " | " | X | X | X | |

| | Signature | Print Name | Company / Title | Date / Time |
|---|---|---|---|---|
| [1] Relinquished By: | | Drew Williams | Roux / Proj. Geo | 9/9/21 @ 1023 |
| [1] Received By: | | DON Sampson | EA | 9/9/21 1027 |
| [2] Relinquished By: | | Don Sampson | ea | 9/9/21 1650 |
| [2] Received By: | | Elizabeth Kramm | EA | 9/9/21 16:50 |
| [3] Relinquished By: | | | | |

0.9|5.8

# ENTHALPY ANALYTICAL

## Chain of Custody Record

Lab No: 450281

Page: 2 of 2

**Turn Around Time (rush by advanced notice only)**

| Standard: | X | 5 Day: | | 3 Day: | |
|---|---|---|---|---|---|
| 2 Day: | | 1 Day: | | Custom TAT: | |

**Enthalpy Analytical - Orange**
931 W. Barkley Avenue, Orange, CA 92868
Phone 714-771-6900

**Matrix:** A = Air S = Soil/Solid W = Water DW = Drinking Wate SD = Sediment PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other

**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

**Sample Receipt Temp:** (lab use only)

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| Company: | Roux Associates, Inc. | Name: | Shea San Jacinto |
| Report To: | Rocio Quinones / Drew Williams | Number: | 2217.0025L |
| Email: | rquinones@rouxinc.com / dwilliams@rouxinc.co | P.O. #: | ROU062021A |
| Address: | 5150 Pacific Coast Hwy, Suite 450 | Address: | 870 N. Sanderson Avenue |
| | Long Beach, CA 90804 | | San Jacinto, CA |
| Phone: | 310-879-4900 | Global ID: | |
| Fax: | ' --- | Sampled By: | Drew Williams |

| | Sample ID | Sampling Date | Sampling Time | Matrix | Container No. / Size | Pres. | TPH-cc by 8015B | VOCs by 8260B | Metals by 6010B / 7471 | OCPs by 8081A | | | | | | Test Instructions / Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SV-5-0.5 | 9/7/21 | 1147 | Soil | 6 | Yes | | | X | X | | | | | | |
| 2 | SV-5-5 | 9/7/21 | 1158 | Soil | 6 | Yes | X | X | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |

| | Signature | Print Name | Company / Title | Date / Time |
|---|---|---|---|---|
| [1] Relinquished By: | Drew Williams | Drew Williams | Roux / Proj. Geo. | 9/9/21 @ 1023 |
| [1] Received By: | Don Sampson | Don Sampson | ea | 9/9/21 1023 |
| [2] Relinquished By: | Don Sampson | Don Sampson | ea | 9/9/21 1650 |
| [2] Received By: | Elizabeth Ibarra | Elizabeth Ibarra | EA | 9/9/21 16:50 |
| [3] Relinquished By: | | | | |

0.9/5.8

ENTHALPY ANALYTICAL

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**

Client: Roux Associates, Inc. Project: Shea San Jacinto

Date Received: 9/9/21 Sampler's Name Present: ☑ Yes ☐ No

**Section 2**

Sample(s) received in a cooler? ☑ Yes, How many? 1 ☐ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 5.8 #2: _____ #3: _____ #4: _____

*(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)*

Shipping Information: _____

**Section 3**

Was the cooler packed with: ☑ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 0.9 #2: _____ #3: _____ #4: _____

| Section 4 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✔ | | |
| Are sample IDs present? | ✔ | | |
| Are sampling dates & times present? | ✔ | | |
| Is a relinquished signature present? | ✔ | | |
| Are the tests required clearly indicated on the COC? | ✔ | | |
| Are custody seals present? | | ✔ | |
| If custody seals are present, were they intact? | | | ✔ |
| Are all samples sealed in plastic bags? (Recommended for Microbiology samples) | ✔ | | |
| Did all samples arrive intact? If no, indicate in Section 4 below. | ✔ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✔ | | |
| Were the samples collected in the correct containers for the required tests? | ✔ | | |
| Are the containers labeled with the correct preservatives? | ✔ | | |
| Is there headspace in the VOA vials greater than 5-6 mm in diameter? | | | ✔ |
| Was a sufficient amount of sample submitted for the requested tests? | ✔ | | |

**Section 5** Explanations/Comments

Sample " SV-1-10" (Sample 2) received with possible ice water contamination.

**Section 6**

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☑ Email (email sent to/on): RKC /9/9/21

Project Manager's response:

Completed By: _____ Date: 9/9/21

ENTHALPY ANALYTICAL

# Analysis Results for 450281

Rocio Quinones
Roux Associates, Inc.
5150 E. Pacific Coast Hwy.
Suite 450
Long Beach, CA 90804

Lab Job #: 450281
Location: Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA
Date Received: 09/09/21

**Sample ID: SV-1-5** **Lab ID: 450281-001** **Collected: 09/07/21 11:08**
**Matrix: Soil**

| 450281-001 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 3.3 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Arsenic | ND | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Barium | **140** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Beryllium | ND | | mg/Kg | 0.54 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.54 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Chromium | **7.4** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Cobalt | **4.1** | | mg/Kg | 0.54 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Copper | **8.1** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Lead | **3.6** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Molybdenum | ND | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Nickel | **4.2** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Selenium | ND | | mg/Kg | 3.3 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Silver | ND | | mg/Kg | 0.54 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Thallium | ND | | mg/Kg | 3.3 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Vanadium | **23** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Zinc | **56** | | mg/Kg | 5.4 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.16 | 1.2 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 77% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-001 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichlorofluoromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-001 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 101% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 110% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 101% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 101% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450281

| Sample ID: SV-1-10 | Lab ID: 450281-002 | Collected: 09/07/21 12:52 |
|---|---|---|
| | Matrix: Soil | |

| 450281-002 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 2.6 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Arsenic | ND | | mg/Kg | 0.87 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Barium | **180** | | mg/Kg | 0.87 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Beryllium | ND | | mg/Kg | 0.43 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.43 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Chromium | **6.9** | | mg/Kg | 0.87 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Cobalt | **4.3** | | mg/Kg | 0.43 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Copper | **5.3** | | mg/Kg | 0.87 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Lead | **3.4** | | mg/Kg | 0.87 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Molybdenum | ND | | mg/Kg | 0.87 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Nickel | **3.2** | | mg/Kg | 0.87 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Selenium | ND | | mg/Kg | 2.6 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Silver | ND | | mg/Kg | 0.43 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Thallium | ND | | mg/Kg | 2.6 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Vanadium | **24** | | mg/Kg | 0.87 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Zinc | **44** | | mg/Kg | 4.3 | 0.87 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.16 | 1.2 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 78% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450281

| 450281-002 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | **6.1** | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450281

| 450281-002 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 105% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 110% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 97% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 99% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| Sample ID: SV-1-15 | Lab ID: 450281-003 | Collected: 09/07/21 12:56 |
|---|---|---|
| | Matrix: Soil | |

| 450281-003 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 3.3 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Arsenic | **1.1** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Barium | **130** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Beryllium | ND | | mg/Kg | 0.54 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.54 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Chromium | **8.6** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Cobalt | **4.1** | | mg/Kg | 0.54 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Copper | **6.3** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Lead | **2.7** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Molybdenum | ND | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Nickel | **4.4** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Selenium | ND | | mg/Kg | 3.3 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Silver | ND | | mg/Kg | 0.54 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Thallium | ND | | mg/Kg | 3.3 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Vanadium | **25** | | mg/Kg | 1.1 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Zinc | **44** | | mg/Kg | 5.4 | 1.1 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.16 | 1.1 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 89% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 9.1 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-003 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 91 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 91 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 9.1 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-003 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 4.5 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 107% | | %REC | 70-145 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 112% | | %REC | 70-145 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 99% | | %REC | 70-145 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 99% | | %REC | 70-145 | 0.91 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| Sample ID: SV-1-20 | Lab ID: 450281-004 | Collected: 09/07/21 13:07 |
|---|---|---|
| | Matrix: Soil | |

| 450281-004 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 2.8 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Arsenic | ND | | mg/Kg | 0.94 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Barium | **350** | | mg/Kg | 0.94 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Beryllium | ND | | mg/Kg | 0.47 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.47 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Chromium | **9.8** | | mg/Kg | 0.94 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Cobalt | **5.5** | | mg/Kg | 0.47 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Copper | **5.5** | | mg/Kg | 0.94 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Lead | **2.2** | | mg/Kg | 0.94 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Molybdenum | ND | | mg/Kg | 0.94 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Nickel | **5.2** | | mg/Kg | 0.94 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Selenium | ND | | mg/Kg | 2.8 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Silver | ND | | mg/Kg | 0.47 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Thallium | ND | | mg/Kg | 2.8 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Vanadium | **29** | | mg/Kg | 0.94 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Zinc | **49** | | mg/Kg | 4.7 | 0.94 | 273708 | 09/10/21 | 09/10/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.16 | 1.1 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 80% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | **13** | | ug/Kg | 8.6 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-004 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 86 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 86 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 8.6 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-004 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 4.3 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 100% | | %REC | 70-145 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 109% | | %REC | 70-145 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 103% | | %REC | 70-145 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 100% | | %REC | 70-145 | 0.86 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| Sample ID: SV-2-5 | Lab ID: 450281-005 | Collected: 09/07/21 12:38 |
|---|---|---|
| | Matrix: Soil | |

| 450281-005 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 2.8 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Arsenic | **1.2** | | mg/Kg | 0.93 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Barium | **220** | | mg/Kg | 0.93 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Beryllium | **0.53** | | mg/Kg | 0.46 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.46 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Chromium | **11** | | mg/Kg | 0.93 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cobalt | **6.2** | | mg/Kg | 0.46 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Copper | **7.0** | | mg/Kg | 0.93 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Lead | **3.2** | | mg/Kg | 0.93 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Molybdenum | ND | | mg/Kg | 0.93 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Nickel | **5.5** | | mg/Kg | 0.93 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Selenium | ND | | mg/Kg | 2.8 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Silver | ND | | mg/Kg | 0.46 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Thallium | ND | | mg/Kg | 2.8 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Vanadium | **33** | | mg/Kg | 0.93 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Zinc | **64** | | mg/Kg | 4.6 | 0.93 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.14 | 1 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 88% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-005 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-005 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 5.1 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 102% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 110% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 102% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 100% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| Sample ID: SV-2-10 | Lab ID: 450281-006 | Collected: 09/07/21 13:55 |
|---|---|---|
| | Matrix: Soil | |

| 450281-006 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 3.1 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Arsenic | ND | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Barium | **230** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Beryllium | **0.57** | | mg/Kg | 0.51 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.51 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Chromium | **11** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cobalt | **6.8** | | mg/Kg | 0.51 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Copper | **8.0** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Lead | **3.8** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Molybdenum | ND | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Nickel | **5.8** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Selenium | ND | | mg/Kg | 3.1 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Silver | ND | | mg/Kg | 0.51 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Thallium | ND | | mg/Kg | 3.1 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Vanadium | **38** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Zinc | **74** | | mg/Kg | 5.1 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.15 | 1.1 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 74% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-006 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450281

| 450281-006 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 5.0 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 104% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 117% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 98% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 97% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| Sample ID: SV-2-15 | Lab ID: 450281-007 | Collected: 09/07/21 14:02 |
|---|---|---|
| | Matrix: Soil | |

| 450281-007 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 3.1 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Arsenic | ND | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Barium | **160** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Beryllium | ND | | mg/Kg | 0.51 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.51 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Chromium | **7.8** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cobalt | **4.2** | | mg/Kg | 0.51 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Copper | **5.2** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Lead | **2.2** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Molybdenum | ND | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Nickel | **4.0** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Selenium | ND | | mg/Kg | 3.1 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Silver | ND | | mg/Kg | 0.51 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Thallium | ND | | mg/Kg | 3.1 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Vanadium | **19** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Zinc | **39** | | mg/Kg | 5.1 | 1 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.16 | 1.1 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 73% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 9.6 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450281

| 450281-007 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 96 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 96 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 9.6 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450281

| 450281-007 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 4.8 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 102% | | %REC | 70-145 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 113% | | %REC | 70-145 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 99% | | %REC | 70-145 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 101% | | %REC | 70-145 | 0.96 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| Sample ID: SV-2-20 | Lab ID: 450281-008 | Collected: 09/07/21 14:09 |
|---|---|---|
| | Matrix: Soil | |

| 450281-008 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 2.9 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Arsenic | **1.4** | | mg/Kg | 0.98 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Barium | **200** | | mg/Kg | 0.98 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Beryllium | ND | | mg/Kg | 0.49 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.49 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Chromium | **7.7** | | mg/Kg | 0.98 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cobalt | **4.3** | | mg/Kg | 0.49 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Copper | **5.9** | | mg/Kg | 0.98 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Lead | **2.4** | | mg/Kg | 0.98 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Molybdenum | ND | | mg/Kg | 0.98 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Nickel | **4.4** | | mg/Kg | 0.98 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Selenium | ND | | mg/Kg | 2.9 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Silver | ND | | mg/Kg | 0.49 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Thallium | ND | | mg/Kg | 2.9 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Vanadium | **23** | | mg/Kg | 0.98 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Zinc | **44** | | mg/Kg | 4.9 | 0.98 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.15 | 1.1 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 75% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | **23** | | ug/Kg | 15 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-008 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 150 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 150 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 15 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-008 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 7.6 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 97% | | %REC | 70-145 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 107% | | %REC | 70-145 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 102% | | %REC | 70-145 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 101% | | %REC | 70-145 | 1.5 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| Sample ID: SV-3-5 | Lab ID: 450281-009 | Collected: 09/07/21 11:00 |
|---|---|---|
| | Matrix: Soil | |

| 450281-009 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 2.8 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Arsenic | **1.5** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Barium | **190** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Beryllium | ND | | mg/Kg | 0.46 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.46 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Chromium | **7.9** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cobalt | **5.1** | | mg/Kg | 0.46 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Copper | **4.8** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Lead | **2.5** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Molybdenum | **1.1** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Nickel | **4.5** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Selenium | ND | | mg/Kg | 2.8 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Silver | ND | | mg/Kg | 0.46 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Thallium | ND | | mg/Kg | 2.8 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Vanadium | **28** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Zinc | **53** | | mg/Kg | 4.6 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.14 | 1 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 79% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-009 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | **6.9** | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-009 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 100% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 108% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 99% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 99% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| Sample ID: SV-4-5 | Lab ID: 450281-010 | Collected: 09/07/21 11:19 |
|---|---|---|
| | Matrix: Soil | |

| 450281-010 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 2.8 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Arsenic | **2.0** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Barium | **150** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Beryllium | ND | | mg/Kg | 0.46 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.46 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Chromium | **7.7** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Cobalt | **5.1** | | mg/Kg | 0.46 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Copper | **5.8** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Lead | **2.5** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Molybdenum | ND | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Nickel | **4.2** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Selenium | ND | | mg/Kg | 2.8 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Silver | ND | | mg/Kg | 0.46 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Thallium | ND | | mg/Kg | 2.8 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Vanadium | **33** | | mg/Kg | 0.92 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Zinc | **54** | | mg/Kg | 4.6 | 0.92 | 273708 | 09/10/21 | 09/11/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.16 | 1.1 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 77% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-010 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | **5.8** | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 100 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 10 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-010 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 5.2 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 99% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 108% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 101% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 101% | | %REC | 70-145 | 1 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| Sample ID: SV-5-0.5 | Lab ID: 450281-011 | Collected: 09/07/21 11:47 |
|---|---|---|
| | Matrix: Soil | |

| 450281-011 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 3.1 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Arsenic | ND | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Barium | **280** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Beryllium | **0.73** | | mg/Kg | 0.52 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.52 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Chromium | **12** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Cobalt | **8.0** | | mg/Kg | 0.52 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Copper | **8.2** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Lead | **4.4** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Molybdenum | ND | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Nickel | **6.5** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Selenium | ND | | mg/Kg | 3.1 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Silver | ND | | mg/Kg | 0.52 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Thallium | ND | | mg/Kg | 3.1 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Vanadium | **48** | | mg/Kg | 1.0 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Zinc | **94** | | mg/Kg | 5.2 | 1 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.15 | 1.1 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 82% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 13 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-011 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 130 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | **8.1** | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 130 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 13 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-011 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 6.3 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 103% | | %REC | 70-145 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 112% | | %REC | 70-145 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 98% | | %REC | 70-145 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 102% | | %REC | 70-145 | 1.3 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| Sample ID: SV-5-5 | Lab ID: 450281-012 | Collected: 09/07/21 11:58 |
|---|---|---|
| | Matrix: Soil | |

| 450281-012 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA 6010B<br>Prep Method: EPA 3050B | | | | | | | | | |
| Antimony | ND | | mg/Kg | 2.9 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Arsenic | **3.9** | | mg/Kg | 0.97 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Barium | **330** | | mg/Kg | 0.97 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Beryllium | **0.75** | | mg/Kg | 0.49 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Cadmium | ND | | mg/Kg | 0.49 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Chromium | **13** | | mg/Kg | 0.97 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Cobalt | **9.0** | | mg/Kg | 0.49 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Copper | **9.0** | | mg/Kg | 0.97 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Lead | **5.2** | | mg/Kg | 0.97 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Molybdenum | ND | | mg/Kg | 0.97 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Nickel | **7.1** | | mg/Kg | 0.97 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Selenium | ND | | mg/Kg | 2.9 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Silver | ND | | mg/Kg | 0.49 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Thallium | ND | | mg/Kg | 2.9 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Vanadium | **54** | | mg/Kg | 0.97 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Zinc | **99** | | mg/Kg | 4.9 | 0.97 | 273708 | 09/10/21 | 09/13/21 | SBW |
| Method: EPA 7471A<br>Prep Method: METHOD | | | | | | | | | |
| Mercury | ND | | mg/Kg | 0.16 | 1.1 | 273783 | 09/10/21 | 09/13/21 | TNN |
| Method: EPA 8015B<br>Prep Method: EPA 3580 | | | | | | | | | |
| TPH (C6-C12) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| **Surrogates** | | | | **Limits** | | | | | |
| n-Triacontane | 88% | | %REC | 70-130 | 1 | 273786 | 09/13/21 | 09/13/21 | MES |
| Method: EPA 8260B<br>Prep Method: EPA 5035 | | | | | | | | | |
| 3-Chloropropene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 12 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 12 | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloromethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Vinyl Chloride | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromomethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-012 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Acetone | ND | | ug/Kg | 120 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Freon 113 | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Methylene Chloride | **8.1** | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| MTBE | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloroethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Butanone | ND | | ug/Kg | 120 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2,2-Dichloropropane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chloroform | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromochloromethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1-Dichloropropene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Carbon Tetrachloride | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Benzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Trichloroethene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloropropane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromodichloromethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromomethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichloropropane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Tetrachloroethene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Dibromochloromethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromoethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Chlorobenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Ethylbenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| m,p-Xylenes | ND | | ug/Kg | 12 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| o-Xylene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Styrene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromoform | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Isopropylbenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Propylbenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromobenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 2-Chlorotoluene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 4-Chlorotoluene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450281

| 450281-012 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| sec-Butylbenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| para-Isopropyl Toluene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| n-Butylbenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Hexachlorobutadiene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Naphthalene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Xylene (total) | ND | | ug/Kg | 6.0 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| **Surrogates** | | | | **Limits** | | | | | |
| Dibromofluoromethane | 98% | | %REC | 70-145 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| 1,2-Dichloroethane-d4 | 103% | | %REC | 70-145 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Toluene-d8 | 102% | | %REC | 70-145 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |
| Bromofluorobenzene | 101% | | %REC | 70-145 | 1.2 | 273755 | 09/12/21 | 09/12/21 | LYZ |

ND Not Detected



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Batch QC

| | | |
|---|---|---|
| **Type: Blank** | **Lab ID: QC943135** | **Batch: 273708** |
| **Matrix: Soil** | **Method: EPA 6010B** | **Prep Method: EPA 3050B** |

| QC943135 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Antimony | ND | | mg/Kg | 3.0 | 09/10/21 | 09/10/21 |
| Arsenic | ND | | mg/Kg | 1.0 | 09/10/21 | 09/10/21 |
| Barium | 1.8 | | mg/Kg | 1.0 | 09/10/21 | 09/10/21 |
| Beryllium | ND | | mg/Kg | 0.50 | 09/10/21 | 09/10/21 |
| Cadmium | ND | | mg/Kg | 0.50 | 09/10/21 | 09/10/21 |
| Chromium | ND | | mg/Kg | 1.0 | 09/10/21 | 09/10/21 |
| Cobalt | ND | | mg/Kg | 0.50 | 09/10/21 | 09/10/21 |
| Copper | ND | | mg/Kg | 1.0 | 09/10/21 | 09/10/21 |
| Lead | ND | | mg/Kg | 1.0 | 09/10/21 | 09/10/21 |
| Molybdenum | ND | | mg/Kg | 1.0 | 09/10/21 | 09/10/21 |
| Nickel | ND | | mg/Kg | 1.0 | 09/10/21 | 09/10/21 |
| Selenium | ND | | mg/Kg | 3.0 | 09/10/21 | 09/10/21 |
| Silver | ND | | mg/Kg | 0.50 | 09/10/21 | 09/10/21 |
| Thallium | ND | | mg/Kg | 3.0 | 09/10/21 | 09/10/21 |
| Vanadium | ND | | mg/Kg | 1.0 | 09/10/21 | 09/10/21 |
| Zinc | ND | | mg/Kg | 5.0 | 09/10/21 | 09/10/21 |

| | | |
|---|---|---|
| **Type: Lab Control Sample** | **Lab ID: QC943136** | **Batch: 273708** |
| **Matrix: Soil** | **Method: EPA 6010B** | **Prep Method: EPA 3050B** |

| QC943136 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Antimony | 102.7 | 100.0 | mg/Kg | 103% | | 80-120 |
| Arsenic | 95.89 | 100.0 | mg/Kg | 96% | | 80-120 |
| Barium | 101.0 | 100.0 | mg/Kg | 101% | | 80-120 |
| Beryllium | 98.19 | 100.0 | mg/Kg | 98% | | 80-120 |
| Cadmium | 96.25 | 100.0 | mg/Kg | 96% | | 80-120 |
| Chromium | 95.55 | 100.0 | mg/Kg | 96% | | 80-120 |
| Cobalt | 100.5 | 100.0 | mg/Kg | 100% | | 80-120 |
| Copper | 94.98 | 100.0 | mg/Kg | 95% | | 80-120 |
| Lead | 98.74 | 100.0 | mg/Kg | 99% | | 80-120 |
| Molybdenum | 100.3 | 100.0 | mg/Kg | 100% | | 80-120 |
| Nickel | 99.95 | 100.0 | mg/Kg | 100% | | 80-120 |
| Selenium | 84.65 | 100.0 | mg/Kg | 85% | | 80-120 |
| Silver | 45.62 | 50.00 | mg/Kg | 91% | | 80-120 |
| Thallium | 102.8 | 100.0 | mg/Kg | 103% | | 80-120 |
| Vanadium | 99.03 | 100.0 | mg/Kg | 99% | | 80-120 |
| Zinc | 100.8 | 100.0 | mg/Kg | 101% | | 80-120 |

ENTHALPY ANALYTICAL

# Batch QC

| Type: | Matrix Spike | Lab ID: | QC943137 | Batch: | 273708 |
|---|---|---|---|---|---|
| Matrix (Source ID): | Soil (450084-001) | Method: | EPA 6010B | Prep Method: | EPA 3050B |

| QC943137 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| Antimony | 31.80 | 1.883 | 102.0 | mg/Kg | 29% | * | 75-125 | 1 |
| Arsenic | 105.1 | 1.841 | 102.0 | mg/Kg | 101% | | 75-125 | 1 |
| Barium | 250.6 | 145.5 | 102.0 | mg/Kg | 103% | | 75-125 | 1 |
| Beryllium | 100.5 | 0.6850 | 102.0 | mg/Kg | 98% | | 75-125 | 1 |
| Cadmium | 102.1 | ND | 102.0 | mg/Kg | 100% | | 75-125 | 1 |
| Chromium | 126.1 | 25.71 | 102.0 | mg/Kg | 98% | | 75-125 | 1 |
| Cobalt | 112.3 | 12.30 | 102.0 | mg/Kg | 98% | | 75-125 | 1 |
| Copper | 123.5 | 21.21 | 102.0 | mg/Kg | 100% | | 75-125 | 1 |
| Lead | 104.9 | 7.403 | 102.0 | mg/Kg | 96% | | 75-125 | 1 |
| Molybdenum | 100.6 | ND | 102.0 | mg/Kg | 99% | | 75-125 | 1 |
| Nickel | 115.6 | 17.03 | 102.0 | mg/Kg | 97% | | 75-125 | 1 |
| Selenium | 90.30 | ND | 102.0 | mg/Kg | 88% | | 75-125 | 1 |
| Silver | 47.89 | ND | 51.02 | mg/Kg | 94% | | 75-125 | 1 |
| Thallium | 97.12 | ND | 102.0 | mg/Kg | 95% | | 75-125 | 1 |
| Vanadium | 167.8 | 60.23 | 102.0 | mg/Kg | 105% | | 75-125 | 1 |
| Zinc | 175.2 | 84.28 | 102.0 | mg/Kg | 89% | | 75-125 | 1 |

| Type: | Matrix Spike Duplicate | Lab ID: | QC943138 | Batch: | 273708 |
|---|---|---|---|---|---|
| Matrix (Source ID): | Soil (450084-001) | Method: | EPA 6010B | Prep Method: | EPA 3050B |

| QC943138 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 26.44 | 1.883 | 94.34 | mg/Kg | 26% | * | 75-125 | 11 | 41 | 0.94 |
| Arsenic | 96.81 | 1.841 | 94.34 | mg/Kg | 101% | | 75-125 | 1 | 35 | 0.94 |
| Barium | 241.5 | 145.5 | 94.34 | mg/Kg | 102% | | 75-125 | 1 | 20 | 0.94 |
| Beryllium | 93.61 | 0.6850 | 94.34 | mg/Kg | 98% | | 75-125 | 1 | 20 | 0.94 |
| Cadmium | 93.73 | ND | 94.34 | mg/Kg | 99% | | 75-125 | 1 | 20 | 0.94 |
| Chromium | 117.5 | 25.71 | 94.34 | mg/Kg | 97% | | 75-125 | 1 | 20 | 0.94 |
| Cobalt | 103.7 | 12.30 | 94.34 | mg/Kg | 97% | | 75-125 | 1 | 20 | 0.94 |
| Copper | 115.2 | 21.21 | 94.34 | mg/Kg | 100% | | 75-125 | 1 | 20 | 0.94 |
| Lead | 96.48 | 7.403 | 94.34 | mg/Kg | 94% | | 75-125 | 1 | 20 | 0.94 |
| Molybdenum | 92.44 | ND | 94.34 | mg/Kg | 98% | | 75-125 | 1 | 20 | 0.94 |
| Nickel | 107.2 | 17.03 | 94.34 | mg/Kg | 96% | | 75-125 | 1 | 20 | 0.94 |
| Selenium | 82.98 | ND | 94.34 | mg/Kg | 88% | | 75-125 | 1 | 20 | 0.94 |
| Silver | 43.76 | ND | 47.17 | mg/Kg | 93% | | 75-125 | 1 | 20 | 0.94 |
| Thallium | 89.58 | ND | 94.34 | mg/Kg | 95% | | 75-125 | 0 | 20 | 0.94 |
| Vanadium | 159.1 | 60.23 | 94.34 | mg/Kg | 105% | | 75-125 | 0 | 20 | 0.94 |
| Zinc | 167.8 | 84.28 | 94.34 | mg/Kg | 89% | | 75-125 | 0 | 20 | 0.94 |

ENTHALPY ANALYTICAL

# Batch QC

| | | |
|---|---|---|
| **Type: Blank** | **Lab ID: QC943236** | **Batch: 273755** |
| **Matrix: Soil** | **Method: EPA 8260B** | **Prep Method: EPA 5035** |

| QC943236 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| 3-Chloropropene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| cis-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| trans-1,4-Dichloro-2-butene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Isopropyl Ether (DIPE) | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Ethyl tert-Butyl Ether (ETBE) | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Methyl tert-Amyl Ether (TAME) | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| tert-Butyl Alcohol (TBA) | ND | | ug/Kg | 10 | 09/12/21 | 09/12/21 |
| Freon 12 | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Chloromethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Vinyl Chloride | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Bromomethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Chloroethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Trichlorofluoromethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Acetone | ND | | ug/Kg | 100 | 09/12/21 | 09/12/21 |
| Freon 113 | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,1-Dichloroethene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Methylene Chloride | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| MTBE | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| trans-1,2-Dichloroethene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,1-Dichloroethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 2-Butanone | ND | | ug/Kg | 100 | 09/12/21 | 09/12/21 |
| cis-1,2-Dichloroethene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 2,2-Dichloropropane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Chloroform | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Bromochloromethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,1,1-Trichloroethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,1-Dichloropropene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Carbon Tetrachloride | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,2-Dichloroethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Benzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Trichloroethene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,2-Dichloropropane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Bromodichloromethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Dibromomethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 4-Methyl-2-Pentanone | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| cis-1,3-Dichloropropene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Toluene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| trans-1,3-Dichloropropene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,1,2-Trichloroethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,3-Dichloropropane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Tetrachloroethene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Dibromochloromethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |

ENTHALPY ANALYTICAL

## Batch QC

| QC943236 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Chlorobenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Ethylbenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| m,p-Xylenes | ND | | ug/Kg | 10 | 09/12/21 | 09/12/21 |
| o-Xylene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Styrene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Bromoform | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Isopropylbenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,2,3-Trichloropropane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Propylbenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Bromobenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,3,5-Trimethylbenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 2-Chlorotoluene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 4-Chlorotoluene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| tert-Butylbenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,2,4-Trimethylbenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| sec-Butylbenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| para-Isopropyl Toluene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,3-Dichlorobenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,4-Dichlorobenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| n-Butylbenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,2-Dichlorobenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,2-Dibromo-3-Chloropropane | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,2,4-Trichlorobenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Hexachlorobutadiene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Naphthalene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| 1,2,3-Trichlorobenzene | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| Xylene (total) | ND | | ug/Kg | 5.0 | 09/12/21 | 09/12/21 |
| **Surrogates** | | | | **Limits** | | |
| Dibromofluoromethane | 101% | | %REC | 70-130 | 09/12/21 | 09/12/21 |
| 1,2-Dichloroethane-d4 | 104% | | %REC | 70-145 | 09/12/21 | 09/12/21 |
| Toluene-d8 | 100% | | %REC | 70-145 | 09/12/21 | 09/12/21 |
| Bromofluorobenzene | 97% | | %REC | 70-145 | 09/12/21 | 09/12/21 |

ENTHALPY ANALYTICAL

# Batch QC

| Type: Lab Control Sample | Lab ID: QC943237 | Batch: 273755 |
|---|---|---|
| Matrix: Soil | Method: EPA 8260B | Prep Method: EPA 5035 |

| QC943237 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 52.63 | 50.00 | ug/Kg | 105% | | 70-131 |
| MTBE | 49.61 | 50.00 | ug/Kg | 99% | | 69-130 |
| Benzene | 47.02 | 50.00 | ug/Kg | 94% | | 70-130 |
| Trichloroethene | 49.48 | 50.00 | ug/Kg | 99% | | 70-130 |
| Toluene | 48.19 | 50.00 | ug/Kg | 96% | | 70-130 |
| Chlorobenzene | 48.04 | 50.00 | ug/Kg | 96% | | 70-130 |
| **Surrogates** | | | | | | |
| Dibromofluoromethane | 52.35 | 50.00 | ug/Kg | 105% | | 70-130 |
| 1,2-Dichloroethane-d4 | 51.79 | 50.00 | ug/Kg | 104% | | 70-145 |
| Toluene-d8 | 49.69 | 50.00 | ug/Kg | 99% | | 70-145 |
| Bromofluorobenzene | 52.08 | 50.00 | ug/Kg | 104% | | 70-145 |

| Type: Lab Control Sample Duplicate | Lab ID: QC943238 | Batch: 273755 |
|---|---|---|
| Matrix: Soil | Method: EPA 8260B | Prep Method: EPA 5035 |

| QC943238 Analyte | Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim |
|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 52.28 | 50.00 | ug/Kg | 105% | | 70-131 | 1 | 33 |
| MTBE | 49.82 | 50.00 | ug/Kg | 100% | | 69-130 | 0 | 30 |
| Benzene | 47.02 | 50.00 | ug/Kg | 94% | | 70-130 | 0 | 30 |
| Trichloroethene | 49.84 | 50.00 | ug/Kg | 100% | | 70-130 | 1 | 30 |
| Toluene | 49.01 | 50.00 | ug/Kg | 98% | | 70-130 | 2 | 30 |
| Chlorobenzene | 48.42 | 50.00 | ug/Kg | 97% | | 70-130 | 1 | 30 |
| **Surrogates** | | | | | | | | |
| Dibromofluoromethane | 52.29 | 50.00 | ug/Kg | 105% | | 70-130 | | |
| 1,2-Dichloroethane-d4 | 50.88 | 50.00 | ug/Kg | 102% | | 70-145 | | |
| Toluene-d8 | 50.47 | 50.00 | ug/Kg | 101% | | 70-145 | | |
| Bromofluorobenzene | 51.26 | 50.00 | ug/Kg | 103% | | 70-145 | | |

| Type: Blank | Lab ID: QC943330 | Batch: 273783 |
|---|---|---|
| Matrix: Soil | Method: EPA 7471A | Prep Method: METHOD |

| QC943330 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Mercury | ND | | mg/Kg | 0.14 | 09/10/21 | 09/13/21 |

| Type: Lab Control Sample | Lab ID: QC943331 | Batch: 273783 |
|---|---|---|
| Matrix: Soil | Method: EPA 7471A | Prep Method: METHOD |

| QC943331 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Mercury | 0.7987 | 0.8333 | mg/Kg | 96% | | 80-120 |

ENTHALPY ANALYTICAL

# Batch QC

| Type: Matrix Spike | Lab ID: QC943332 | Batch: 273783 |
|---|---|---|
| Matrix (Source ID): Soil (450272-001) | Method: EPA 7471A | Prep Method: METHOD |

| QC943332 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| Mercury | 0.9425 | 0.07399 | 0.9259 | mg/Kg | 94% | | 75-125 | 1.1 |

| Type: Matrix Spike Duplicate | Lab ID: QC943333 | Batch: 273783 |
|---|---|---|
| Matrix (Source ID): Soil (450272-001) | Method: EPA 7471A | Prep Method: METHOD |

| QC943333 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.9474 | 0.07399 | 0.9259 | mg/Kg | 94% | | 75-125 | 1 | 20 | 1.1 |

| Type: Blank | Lab ID: QC943343 | Batch: 273786 |
|---|---|---|
| Matrix: Soil | Method: EPA 8015B | Prep Method: EPA 3580 |

| QC943343 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| TPH (C6-C12) | ND | | mg/Kg | 10 | 09/13/21 | 09/13/21 |
| TPH (C13-C22) | ND | | mg/Kg | 10 | 09/13/21 | 09/13/21 |
| TPH (C23-C44) | ND | | mg/Kg | 10 | 09/13/21 | 09/13/21 |
| **Surrogates** | | | | Limits | | |
| n-Triacontane | 87% | | %REC | 70-130 | 09/13/21 | 09/13/21 |

| Type: Lab Control Sample | Lab ID: QC943344 | Batch: 273786 |
|---|---|---|
| Matrix: Soil | Method: EPA 8015B | Prep Method: EPA 3580 |

| QC943344 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Diesel C10-C28 | 220.6 | 250.0 | mg/Kg | 88% | | 76-122 |
| **Surrogates** | | | | | | |
| n-Triacontane | 8.577 | 10.00 | mg/Kg | 86% | | 70-130 |

| Type: Matrix Spike | Lab ID: QC943345 | Batch: 273786 |
|---|---|---|
| Matrix (Source ID): Soil (450281-005) | Method: EPA 8015B | Prep Method: EPA 3580 |

| QC943345 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | DF |
|---|---|---|---|---|---|---|---|---|
| Diesel C10-C28 | 228.0 | 1.407 | 250.0 | mg/Kg | 91% | | 62-126 | 1 |
| **Surrogates** | | | | | | | | |
| n-Triacontane | 8.725 | | 10.00 | mg/Kg | 87% | | 70-130 | 1 |

ENTHALPY ANALYTICAL

# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Matrix Spike Duplicate** | **Lab ID:** | **QC943346** | **Batch:** | **273786** |
| **Matrix (Source ID):** | **Soil (450281-005)** | **Method:** | **EPA 8015B** | **Prep Method:** | **EPA 3580** |

| QC943346 Analyte | Result | Source Sample Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel C10-C28 | 238.0 | 1.407 | 250.0 | mg/Kg | 95% | | 62-126 | 4 | 35 | 1 |
| **Surrogates** | | | | | | | | | | |
| n-Triacontane | 9.071 | | 10.00 | mg/Kg | 91% | | 70-130 | | | 1 |

* Value is outside QC limits

ND Not Detected

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

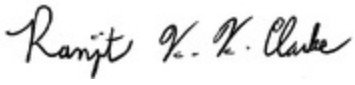
Lab Job Number: 450451
Report Level: II
Report Date: 09/17/2021

**Analytical Report** *prepared for:*

Rocio Quinones
Roux Associates, Inc.
5150 E. Pacific Coast Hwy.
Suite 450
Long Beach, CA 90804

Location: Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA

*Authorized for release by:*



Ranjit K Clarke, Project Manager
(714) 771-9906
Ranjit.Clarke@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE Member

ENTHALPY ANALYTICAL

# Sample Summary

Rocio Quinones
Roux Associates, Inc.
5150 E. Pacific Coast Hwy.
Suite 450
Long Beach, CA 90804

Lab Job #: 450451
Location: Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA
Date Received: 09/13/21

| Sample ID | Lab ID | Collected | Matrix |
|---|---|---|---|
| SV-1-5 | 450451-001 | 09/10/21 11:34 | Air |
| SV-1-15 | 450451-002 | 09/10/21 11:57 | Air |
| SV-2-5 | 450451-003 | 09/10/21 12:10 | Air |
| SV-2-15 | 450451-004 | 09/10/21 12:29 | Air |
| SV-3-5 | 450451-005 | 09/10/21 13:05 | Air |
| SV-4-5 | 450451-006 | 09/10/21 13:56 | Air |
| SV-4-5-DUP | 450451-007 | 09/10/21 14:06 | Air |
| SV-5-5 | 450451-008 | 09/10/21 14:12 | Air |
| SV-6-5 | 450451-009 | 09/10/21 15:55 | Air |
| SV-7-5 | 450451-010 | 09/10/21 16:09 | Air |
| SV-8-5 | 450451-011 | 09/10/21 16:48 | Air |
| SV-9-5 | 450451-012 | 09/10/21 17:42 | Air |
| SV-9-5-DUP | 450451-013 | 09/10/21 17:53 | Air |
| SV-10 | 450451-014 | 09/10/21 16:56 | Air |

# Case Narrative

| | | |
|---|---|---|
| Roux Associates, Inc.<br>5150 E. Pacific Coast Hwy.<br>Suite 450<br>Long Beach, CA 90804<br>Rocio Quinones | Lab Job Number: | 450451 |
| | Location: | Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA |
| | Date Received: | 09/13/21 |

This data package contains sample and QC results for fourteen air samples, requested for the above referenced project on 09/13/21. The samples were received cold and intact.

**Volatile Organics in Air by MS (EPA TO-15):**

High responses were observed for benzyl chloride and 1,2,4-trichlorobenzene in the ICV analyzed 09/11/21 23:05; affected data was qualified with "b". No other analytical problems were encountered.

**Volatile Organics in Air GC (EPA TO-3M):**

No analytical problems were encountered.

# ENTHALPY ANALYTICAL

## Air Chain of Custody Record

Lab No: 450451

Page: 1 of 2

**Turn Around Time (rush by advanced notice only)**

| Standard: | | 5 Day: | | 3 Day: | |
|---|---|---|---|---|---|
| 2 Day: | | 1 Day: | | Custom TAT: | 4 day |


**Enthalpy Analytical - Orange**

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900


Special Instructions:

1,1-DPA tracer used

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| Company: | Roux Associates, Inc. | Name: | Shea San Jacinto |
| Report To: | Rocio Quinones / Drew Williams | Number: | 2217.0025L |
| Email: | rquinones@rouxinc.com / dwilliams@rouxinc.co | P.O. #: | ROU082021A |
| Address: | 5150 Pacific Coast Hwy, Suite 450 Long Beach, C | Address: | 870 N. Sanderson Avenue San Jacinto, CA |
| Phone: | 310-879-4900 | Global ID: | |
| Fax: | -- | Sampled By: | Drew Williams |

| | Sample ID | Type: (I) Indoor (A) Ambient (SV) Soil Vapor (S) Source | Equipment Information: Canister ID | Size (1L, 3L, 6L, 15L) | Flow Controller ID | Sampling Information: Sample Start Date | Sample Start Time | Vacuum Start ("Hg) | Sample End Date | Sample End Time | Vacuum End ("Hg) | Analysis Requested: VOCs by TO-15 | Methane by ASTM D-1945 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SV-1-5 | SV | C10084 | 1.4L | A10194 | 9/10/21 | 1126 | -28.5 | 9/10/21 | ~~1134~~ 1134 | -4 | X | |
| 2 | SV-1-15 | " | C10446 | " | A10238 | " | 1148 | -28 | " | 1157 | -2 | X | |
| 3 | SV-2-5 | " | C10393 | " | A10124 | " | 1202 | -30 | " | 1210 | -4 | X | |
| 4 | SV-2-15 | " | C10230 | " | A10233 | " | 1221 | -29 | " | 1229 | -4 | X | |
| 5 | SV-3-5 | " | C10350 | " | A10177 | " | 1257 | -28.5 | " | 1305 | -3 | X | |
| 6 | SV-4-5 | " | C10198 | " | A10265 | " | 1349 | -29 | " | 1358 | -4 | X | |
| 7 | SV-4-5-DUP | " | C10685 | " | A10265 | " | 1357 | -26 | " | 1406 | -0.5 | X | |
| 8 | SV-5-5 | " | C10689 | " | A10255 | " | 1403 | -27 | " | 1412 | -1 | X | X |
| 9 | SV-6-5 | " | C10409 | " | A10011 | " | 1546 | -24 | " | 1555 | -0.5 | | X |
| 10 | SV-7-5 | " | C10313 | " | A10080 | " | 1601 | -24 | " | 1609 | -2 | | X |

| | Signature | Print Name | Company / Title | Date / Time |
|---|---|---|---|---|
| 1 Relinquished By: | | Drew Williams | Roux / Proj. Geo | 9/13/21 / 1250 |
| 1 Received By: | | Henry G. | EA | 9/13/21 / 1250 |
| 2 Relinquished By: | | Henry G. | EA | 9/17/21 1645 |
| 2 Received By: | Geena Sylvestri | Geena Sylvestri | E.A. | 9/23/21 16:45 |
| 3 Relinquished By: | | | | |
| 3 Received By: | | | | |

# ENTHALPY ANALYTICAL

**Enthalpy Analytical - Orange**
931 W. Barkley Avenue, Orange, CA 92868
Phone 714-771-6900

## Air Chain of Custody Record

Lab No: 450451
Page: 2 of 2

**Turn Around Time (rush by advanced notice only)**

| | | | | | |
|---|---|---|---|---|---|
| Standard: | | 5 Day: | | 3 Day: | |
| 2 Day: | | 1 Day: | | Custom TAT: | 4 day |

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| Company: | Roux Associates, Inc. | Name: | Shea San Jacinto |
| Report To: | Rocio Quinones / Drew Williams | Number: | 2217.0025L |
| Email: | rquinones@rouxinc.com / dwilliams@rouxinc.com | P.O. #: | ROU08201A |
| Address: | 5150 Pacific Coast Hwy, Suite 450 Long Beach, C | Address: | 870 N. Sanderson Avenue San Jacinto, CA |
| Phone: | 310-879-4900 | Global ID: | |
| Fax: | -- | Sampled By: | Drew Williams |

Special Instructions:

1,1-DFA Tracer

* Reg #A10139 was pretty off

| | Sample ID | Type (I) Indoor (A) Ambient (SV) Soil Vapor (S) Source | Equipment Information: Canister ID | Size (1L, 3L, 6L, 15L) | Flow Controller ID | Sampling Information: Sample Start Date | Sample Start Time | Vacuum Start ("Hg) | Sample End Date | Sample End Time | Vacuum End ("Hg) | Analysis Requested: VOCs by TO-15 | Methane by ASTM D-1945 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SV-8-9 | SV | C10456 | 1.4L | A10195 | 9/10/21 | 1637 | -28 | 9/10/21 | 1648 | -1 | | X |
| 2 | SV-9-5 | " | C10366 | " | A10165 | " | 1733 | -29 | " | 1742 | -4 | | X |
| 3 | SV-9-5-DUP | " | C10648 | " | A10165 | " | 1742 | -29 | " | 1753 | -3 | | X |
| 4 | SV-10 | " | C10308 | " | A10139 | " | 1645 | -3.6* | " | 1656 | -10* | | X |
| 5 | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | |

| | Signature | Print Name | Company / Title | Date / Time |
|---|---|---|---|---|
| [1] Relinquished By: | | Drew Williams | Roux / Proj. Geo | 9/13/21 / 1250 |
| [1] Received By: | | Heena G | EA | 9/15/21 1250 |
| [2] Relinquished By: | | Heena G | EA | 9/17/21 1645 |
| [2] Received By: | Geena Sylvestri | Geena Sylvestri | E.A. | 9/13/21 16:45 |
| [3] Relinquished By: | | | | |
| [3] Received By: | | | | |

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# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**

Client: Roux Associates  Project: Shea San Jacinto

Date Received: 9/23/21  Sampler's Name Present: ☑ Yes ☐ No

**Section 2**

Sample(s) received in a cooler? ☐ Yes, How many? _____ ☑ No (skip section 2)  Sample Temp (°C) (No Cooler): 22.5

Sample Temp (°C), One from each cooler: #1: _____ #2: _____ #3: _____ #4: _____

*(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)*

Shipping Information: _____

**Section 3**

Was the cooler packed with: ☐ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____

| **Section 4** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Are sample IDs present? | ✓ | | |
| Are sampling dates & times present? | ✓ | | |
| Is a relinquished signature present? | ✓ | | |
| Are the tests required clearly indicated on the COC? | ✓ | | |
| Are custody seals present? | | ✓ | |
| If custody seals are present, were they intact? | | | ✓ |
| Are all samples sealed in plastic bags? (Recommended for Microbiology samples) | | | ✓ |
| Did all samples arrive intact? If no, indicate in Section 4 below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were the samples collected in the correct containers for the required tests? | ✓ | | |
| Are the containers labeled with the correct preservatives? | | | ✓ |
| Is there headspace in the VOA vials greater than 5-6 mm in diameter? | | | ✓ |
| Was a sufficient amount of sample submitted for the requested tests? | ✓ | | |

**Section 5** Explanations/Comments

canisters ambient.

**Section 6**

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: Yeena Soghoyan  Date: 9/23/21

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# Analysis Results for 450451

Rocio Quinones
Roux Associates, Inc.
5150 E. Pacific Coast Hwy.
Suite 450
Long Beach, CA 90804

Lab Job #: 450451
Location: Shea San Jacinto - 870 N. Sanderson Ave., San Jacinto, CA
Date Received: 09/13/21

**Sample ID: SV-1-5** **Lab ID: 450451-001** **Collected: 09/10/21 11:34**
**Matrix: Air**

| 450451-001 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-15<br>Prep Method: METHOD | | | | | | | | | |
| Freon 12 | **0.51** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Freon 12 | **2.5** | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Freon 114 | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Freon 114 | ND | | ug/m3 | 2.4 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Chloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Chloromethane | ND | | ug/m3 | 0.70 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Vinyl Chloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Vinyl Chloride | ND | | ug/m3 | 0.87 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Bromomethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Bromomethane | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Chloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Chloroethane | ND | | ug/m3 | 0.90 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Trichlorofluoromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Trichlorofluoromethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1-Dichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1-Dichloroethene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Freon 113 | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Freon 113 | ND | | ug/m3 | 2.6 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Acetone | **8.3** | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Acetone | **20** | | ug/m3 | 4.0 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Carbon Disulfide | **0.56** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Carbon Disulfide | **1.7** | | ug/m3 | 1.1 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Isopropanol (IPA) | **3.5** | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Isopropanol (IPA) | **8.6** | | ug/m3 | 4.2 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Methylene Chloride | **0.80** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Methylene Chloride | **2.8** | | ug/m3 | 1.2 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| trans-1,2-Dichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| trans-1,2-Dichloroethene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| MTBE | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| MTBE | ND | | ug/m3 | 1.2 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| n-Hexane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| n-Hexane | ND | | ug/m3 | 1.2 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1-Dichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1-Dichloroethane | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| 450451-001 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl Acetate | ND | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Vinyl Acetate | ND | | ug/m3 | 6.0 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| cis-1,2-Dichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| cis-1,2-Dichloroethene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 2-Butanone | ND | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 2-Butanone | ND | | ug/m3 | 5.0 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Chloroform | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Chloroform | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1,1-Trichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1,1-Trichloroethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Carbon Tetrachloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Carbon Tetrachloride | ND | | ug/m3 | 2.1 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Benzene | **0.48** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Benzene | **1.5** | | ug/m3 | 1.1 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2-Dichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2-Dichloroethane | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Trichloroethene | **1.7** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Trichloroethene | **9.2** | | ug/m3 | 1.8 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2-Dichloropropane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2-Dichloropropane | ND | | ug/m3 | 1.6 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Bromodichloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Bromodichloromethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| cis-1,3-Dichloropropene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| cis-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 4-Methyl-2-Pentanone | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 4-Methyl-2-Pentanone | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Toluene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Toluene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| trans-1,3-Dichloropropene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| trans-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1,2-Trichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1,2-Trichloroethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Tetrachloroethene | **2.1** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Tetrachloroethene | **14** | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 2-Hexanone | ND | | ppbv | 0.85 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 2-Hexanone | ND | | ug/m3 | 3.5 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Dibromochloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Dibromochloromethane | ND | | ug/m3 | 2.9 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2-Dibromoethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2-Dibromoethane | ND | | ug/m3 | 2.6 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Chlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Chlorobenzene | ND | | ug/m3 | 1.6 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Ethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Ethylbenzene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| m,p-Xylenes | ND | | ppbv | 0.68 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| m,p-Xylenes | ND | | ug/m3 | 3.0 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| 450451-001 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| o-Xylene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| o-Xylene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Styrene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Styrene | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Bromoform | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Bromoform | ND | | ug/m3 | 3.5 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1,2,2-Tetrachloroethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 4-Ethyltoluene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 4-Ethyltoluene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,3-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,4-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,4-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Benzyl chloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Benzyl chloride | ND | | ug/m3 | 1.8 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ug/m3 | 2.5 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Hexachlorobutadiene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Hexachlorobutadiene | ND | | ug/m3 | 3.6 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Xylene (total) | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| Xylene (total) | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| TIC:1,1-Difluoroethane | ND | | ppbv | | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| TIC:1,1-Difluoroethane | ND | | ug/m3 | | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |
| **Surrogates** | | | | **Limits** | | | | | |
| Bromofluorobenzene | 103% | | %REC | 60-140 | 1.7 | 273845 | 09/14/21 21:36 | 09/14/21 21:36 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| Sample ID: SV-1-15 | Lab ID: 450451-002 | Collected: 09/10/21 11:57 |
|---|---|---|
| | Matrix: Air | |

| 450451-002 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-15<br>Prep Method: METHOD | | | | | | | | | |
| Freon 12 | **0.53** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Freon 12 | **2.6** | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Freon 114 | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Freon 114 | ND | | ug/m3 | 2.4 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Chloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Chloromethane | ND | | ug/m3 | 0.70 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Vinyl Chloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Vinyl Chloride | ND | | ug/m3 | 0.87 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Bromomethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Bromomethane | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Chloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Chloroethane | ND | | ug/m3 | 0.90 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Trichlorofluoromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Trichlorofluoromethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1-Dichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1-Dichloroethene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Freon 113 | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Freon 113 | ND | | ug/m3 | 2.6 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Acetone | **12** | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Acetone | **28** | | ug/m3 | 4.0 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Carbon Disulfide | **5.5** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Carbon Disulfide | **17** | | ug/m3 | 1.1 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Isopropanol (IPA) | **4.8** | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Isopropanol (IPA) | **12** | | ug/m3 | 4.2 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Methylene Chloride | **0.38** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Methylene Chloride | **1.3** | | ug/m3 | 1.2 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| trans-1,2-Dichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| trans-1,2-Dichloroethene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| MTBE | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| MTBE | ND | | ug/m3 | 1.2 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| n-Hexane | **4.2** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| n-Hexane | **15** | | ug/m3 | 1.2 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1-Dichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1-Dichloroethane | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Vinyl Acetate | ND | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Vinyl Acetate | ND | | ug/m3 | 6.0 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| cis-1,2-Dichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| cis-1,2-Dichloroethene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 2-Butanone | **2.7** | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 2-Butanone | **8.0** | | ug/m3 | 5.0 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| 450451-002 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Chloroform | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Chloroform | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1,1-Trichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1,1-Trichloroethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Carbon Tetrachloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Carbon Tetrachloride | ND | | ug/m3 | 2.1 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Benzene | **1.4** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Benzene | **4.4** | | ug/m3 | 1.1 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2-Dichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2-Dichloroethane | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Trichloroethene | **21** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Trichloroethene | **110** | | ug/m3 | 1.8 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2-Dichloropropane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2-Dichloropropane | ND | | ug/m3 | 1.6 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Bromodichloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Bromodichloromethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| cis-1,3-Dichloropropene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| cis-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 4-Methyl-2-Pentanone | **1.5** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 4-Methyl-2-Pentanone | **6.3** | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Toluene | **1.4** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Toluene | **5.4** | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| trans-1,3-Dichloropropene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| trans-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1,2-Trichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1,2-Trichloroethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Tetrachloroethene | **2.8** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Tetrachloroethene | **19** | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 2-Hexanone | ND | | ppbv | 0.85 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 2-Hexanone | ND | | ug/m3 | 3.5 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Dibromochloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Dibromochloromethane | ND | | ug/m3 | 2.9 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2-Dibromoethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2-Dibromoethane | ND | | ug/m3 | 2.6 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Chlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Chlorobenzene | ND | | ug/m3 | 1.6 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Ethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Ethylbenzene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| m,p-Xylenes | ND | | ppbv | 0.68 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| m,p-Xylenes | ND | | ug/m3 | 3.0 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| o-Xylene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| o-Xylene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Styrene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Styrene | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Bromoform | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Bromoform | ND | | ug/m3 | 3.5 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| 450451-002 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1,2,2-Tetrachloroethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 4-Ethyltoluene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 4-Ethyltoluene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2,4-Trimethylbenzene | **0.41** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2,4-Trimethylbenzene | **2.0** | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,3-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,4-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,4-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Benzyl chloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Benzyl chloride | ND | | ug/m3 | 1.8 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ug/m3 | 2.5 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Hexachlorobutadiene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Hexachlorobutadiene | ND | | ug/m3 | 3.6 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Xylene (total) | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| Xylene (total) | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| TIC:1,1-Difluoroethane | ND | | ppbv | | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| TIC:1,1-Difluoroethane | ND | | ug/m3 | | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |
| **Surrogates** | | | | **Limits** | | | | | |
| Bromofluorobenzene | 103% | | %REC | 60-140 | 1.7 | 273845 | 09/14/21 22:27 | 09/14/21 22:27 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| Sample ID: SV-2-5 | Lab ID: 450451-003 | Collected: 09/10/21 12:10 |
|---|---|---|
| | Matrix: Air | |

| 450451-003 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-15<br>Prep Method: METHOD | | | | | | | | | |
| Freon 12 | **0.53** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Freon 12 | **2.6** | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Freon 114 | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Freon 114 | ND | | ug/m3 | 2.4 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Chloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Chloromethane | ND | | ug/m3 | 0.70 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Vinyl Chloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Vinyl Chloride | ND | | ug/m3 | 0.87 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Bromomethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Bromomethane | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Chloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Chloroethane | ND | | ug/m3 | 0.90 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Trichlorofluoromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Trichlorofluoromethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1-Dichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1-Dichloroethene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Freon 113 | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Freon 113 | ND | | ug/m3 | 2.6 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Acetone | **13** | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Acetone | **30** | | ug/m3 | 4.0 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Carbon Disulfide | **1.4** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Carbon Disulfide | **4.5** | | ug/m3 | 1.1 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Isopropanol (IPA) | **4.1** | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Isopropanol (IPA) | **10** | | ug/m3 | 4.2 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Methylene Chloride | **4.6** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Methylene Chloride | **16** | | ug/m3 | 1.2 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| trans-1,2-Dichloroethene | **0.43** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| trans-1,2-Dichloroethene | **1.7** | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| MTBE | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| MTBE | ND | | ug/m3 | 1.2 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| n-Hexane | **2.3** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| n-Hexane | **8.2** | | ug/m3 | 1.2 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1-Dichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1-Dichloroethane | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Vinyl Acetate | ND | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Vinyl Acetate | ND | | ug/m3 | 6.0 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| cis-1,2-Dichloroethene | **0.75** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| cis-1,2-Dichloroethene | **3.0** | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 2-Butanone | **2.3** | | ppbv | 1.7 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 2-Butanone | **6.7** | | ug/m3 | 5.0 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| 450451-003 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Chloroform | **0.44** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Chloroform | **2.2** | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1,1-Trichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1,1-Trichloroethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Carbon Tetrachloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Carbon Tetrachloride | ND | | ug/m3 | 2.1 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Benzene | **1.2** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Benzene | **3.9** | | ug/m3 | 1.1 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2-Dichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2-Dichloroethane | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Trichloroethene | **4.3** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Trichloroethene | **23** | | ug/m3 | 1.8 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2-Dichloropropane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2-Dichloropropane | ND | | ug/m3 | 1.6 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Bromodichloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Bromodichloromethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| cis-1,3-Dichloropropene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| cis-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 4-Methyl-2-Pentanone | **0.66** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 4-Methyl-2-Pentanone | **2.7** | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Toluene | **0.89** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Toluene | **3.4** | | ug/m3 | 1.3 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| trans-1,3-Dichloropropene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| trans-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1,2-Trichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1,2-Trichloroethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Tetrachloroethene | **0.77** | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Tetrachloroethene | **5.2** | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 2-Hexanone | ND | | ppbv | 0.85 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 2-Hexanone | ND | | ug/m3 | 3.5 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Dibromochloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Dibromochloromethane | ND | | ug/m3 | 2.9 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2-Dibromoethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2-Dibromoethane | ND | | ug/m3 | 2.6 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Chlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Chlorobenzene | ND | | ug/m3 | 1.6 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Ethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Ethylbenzene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| m,p-Xylenes | ND | | ppbv | 0.68 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| m,p-Xylenes | ND | | ug/m3 | 3.0 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| o-Xylene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| o-Xylene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Styrene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Styrene | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Bromoform | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Bromoform | ND | | ug/m3 | 3.5 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| 450451-003 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1,2,2-Tetrachloroethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 4-Ethyltoluene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 4-Ethyltoluene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,3-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,4-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,4-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Benzyl chloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Benzyl chloride | ND | | ug/m3 | 1.8 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ug/m3 | 2.5 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Hexachlorobutadiene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Hexachlorobutadiene | ND | | ug/m3 | 3.6 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Xylene (total) | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| Xylene (total) | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| TIC:1,1-Difluoroethane | ND | | ppbv | | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| TIC:1,1-Difluoroethane | ND | | ug/m3 | | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |
| **Surrogates** | | | | **Limits** | | | | | |
| Bromofluorobenzene | 104% | | %REC | 60-140 | 1.7 | 273845 | 09/14/21 23:18 | 09/14/21 23:18 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| Sample ID: SV-2-15 | Lab ID: 450451-004 | Collected: 09/10/21 12:29 |
|---|---|---|
| | Matrix: Air | |

| 450451-004 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-15<br>Prep Method: METHOD | | | | | | | | | |
| Freon 12 | **0.55** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Freon 12 | **2.7** | | ug/m3 | 1.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Freon 114 | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Freon 114 | ND | | ug/m3 | 2.5 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Chloromethane | **0.71** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Chloromethane | **1.5** | | ug/m3 | 0.74 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Vinyl Chloride | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Vinyl Chloride | ND | | ug/m3 | 0.92 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Bromomethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Bromomethane | ND | | ug/m3 | 1.4 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Chloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Chloroethane | ND | | ug/m3 | 0.95 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Trichlorofluoromethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Trichlorofluoromethane | ND | | ug/m3 | 2.0 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1-Dichloroethene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1-Dichloroethene | ND | | ug/m3 | 1.4 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Freon 113 | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Freon 113 | ND | | ug/m3 | 2.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Acetone | **15** | | ppbv | 1.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Acetone | **35** | | ug/m3 | 4.3 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Carbon Disulfide | **9.0** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Carbon Disulfide | **28** | | ug/m3 | 1.1 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Isopropanol (IPA) | **3.7** | | ppbv | 1.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Isopropanol (IPA) | **9.0** | | ug/m3 | 4.4 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Methylene Chloride | **1.3** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Methylene Chloride | **4.5** | | ug/m3 | 1.3 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| trans-1,2-Dichloroethene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| trans-1,2-Dichloroethene | ND | | ug/m3 | 1.4 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| MTBE | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| MTBE | ND | | ug/m3 | 1.3 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| n-Hexane | **8.7** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| n-Hexane | **31** | | ug/m3 | 1.3 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1-Dichloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1-Dichloroethane | ND | | ug/m3 | 1.5 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Vinyl Acetate | ND | | ppbv | 1.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Vinyl Acetate | ND | | ug/m3 | 6.3 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| cis-1,2-Dichloroethene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| cis-1,2-Dichloroethene | ND | | ug/m3 | 1.4 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 2-Butanone | **3.1** | | ppbv | 1.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 2-Butanone | **9.0** | | ug/m3 | 5.3 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| 450451-004 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Chloroform | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Chloroform | ND | | ug/m3 | 1.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1,1-Trichloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1,1-Trichloroethane | ND | | ug/m3 | 2.0 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Carbon Tetrachloride | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Carbon Tetrachloride | ND | | ug/m3 | 2.3 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Benzene | **2.0** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Benzene | **6.4** | | ug/m3 | 1.2 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2-Dichloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2-Dichloroethane | ND | | ug/m3 | 1.5 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Trichloroethene | **0.94** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Trichloroethene | **5.0** | | ug/m3 | 1.9 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2-Dichloropropane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2-Dichloropropane | ND | | ug/m3 | 1.7 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Bromodichloromethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Bromodichloromethane | ND | | ug/m3 | 2.4 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| cis-1,3-Dichloropropene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| cis-1,3-Dichloropropene | ND | | ug/m3 | 1.6 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 4-Methyl-2-Pentanone | **0.98** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 4-Methyl-2-Pentanone | **4.0** | | ug/m3 | 1.5 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Toluene | **1.2** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Toluene | **4.7** | | ug/m3 | 1.4 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| trans-1,3-Dichloropropene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| trans-1,3-Dichloropropene | ND | | ug/m3 | 1.6 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1,2-Trichloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1,2-Trichloroethane | ND | | ug/m3 | 2.0 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Tetrachloroethene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Tetrachloroethene | ND | | ug/m3 | 2.4 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 2-Hexanone | ND | | ppbv | 0.90 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 2-Hexanone | ND | | ug/m3 | 3.7 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Dibromochloromethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Dibromochloromethane | ND | | ug/m3 | 3.1 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2-Dibromoethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2-Dibromoethane | ND | | ug/m3 | 2.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Chlorobenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Chlorobenzene | ND | | ug/m3 | 1.7 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Ethylbenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Ethylbenzene | ND | | ug/m3 | 1.6 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| m,p-Xylenes | ND | | ppbv | 0.72 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| m,p-Xylenes | ND | | ug/m3 | 3.1 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| o-Xylene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| o-Xylene | ND | | ug/m3 | 1.6 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Styrene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Styrene | ND | | ug/m3 | 1.5 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Bromoform | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Bromoform | ND | | ug/m3 | 3.7 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| 450451-004 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1,2,2-Tetrachloroethane | ND | | ug/m3 | 2.5 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ug/m3 | 2.5 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 4-Ethyltoluene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 4-Ethyltoluene | ND | | ug/m3 | 1.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ug/m3 | 1.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2,4-Trimethylbenzene | **1.2** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2,4-Trimethylbenzene | **5.9** | | ug/m3 | 1.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,3-Dichlorobenzene | ND | | ug/m3 | 2.2 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,4-Dichlorobenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,4-Dichlorobenzene | ND | | ug/m3 | 2.2 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Benzyl chloride | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Benzyl chloride | ND | | ug/m3 | 1.9 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2-Dichlorobenzene | ND | | ug/m3 | 2.2 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ug/m3 | 2.7 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Hexachlorobutadiene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Hexachlorobutadiene | ND | | ug/m3 | 3.8 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Xylene (total) | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| Xylene (total) | ND | | ug/m3 | 1.6 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| TIC:1,1-Difluoroethane | ND | | ppbv | | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| TIC:1,1-Difluoroethane | ND | | ug/m3 | | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |
| **Surrogates** | | | | **Limits** | | | | | |
| Bromofluorobenzene | 103% | | %REC | 60-140 | 1.8 | 273845 | 09/15/21 00:09 | 09/15/21 00:09 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| Sample ID: SV-3-5 | Lab ID: 450451-005 | Collected: 09/10/21 13:05 |
|---|---|---|
| | Matrix: Air | |

| 450451-005 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-15<br>Prep Method: METHOD | | | | | | | | | |
| Freon 12 | **0.52** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Freon 12 | **2.6** | | ug/m3 | 1.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Freon 114 | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Freon 114 | ND | | ug/m3 | 2.5 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Chloromethane | **2.1** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Chloromethane | **4.3** | | ug/m3 | 0.74 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Vinyl Chloride | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Vinyl Chloride | ND | | ug/m3 | 0.92 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Bromomethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Bromomethane | ND | | ug/m3 | 1.4 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Chloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Chloroethane | ND | | ug/m3 | 0.95 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Trichlorofluoromethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Trichlorofluoromethane | ND | | ug/m3 | 2.0 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1-Dichloroethene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1-Dichloroethene | ND | | ug/m3 | 1.4 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Freon 113 | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Freon 113 | ND | | ug/m3 | 2.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Acetone | **19** | | ppbv | 1.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Acetone | **45** | | ug/m3 | 4.3 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Carbon Disulfide | **1.6** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Carbon Disulfide | **4.8** | | ug/m3 | 1.1 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Isopropanol (IPA) | **6.0** | | ppbv | 1.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Isopropanol (IPA) | **15** | | ug/m3 | 4.4 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Methylene Chloride | **0.96** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Methylene Chloride | **3.3** | | ug/m3 | 1.3 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| trans-1,2-Dichloroethene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| trans-1,2-Dichloroethene | ND | | ug/m3 | 1.4 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| MTBE | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| MTBE | ND | | ug/m3 | 1.3 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| n-Hexane | **1.9** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| n-Hexane | **6.8** | | ug/m3 | 1.3 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1-Dichloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1-Dichloroethane | ND | | ug/m3 | 1.5 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Vinyl Acetate | ND | | ppbv | 1.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Vinyl Acetate | ND | | ug/m3 | 6.3 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| cis-1,2-Dichloroethene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| cis-1,2-Dichloroethene | ND | | ug/m3 | 1.4 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 2-Butanone | **3.5** | | ppbv | 1.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 2-Butanone | **10** | | ug/m3 | 5.3 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| 450451-005 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Chloroform | **0.41** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Chloroform | **2.0** | | ug/m3 | 1.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1,1-Trichloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1,1-Trichloroethane | ND | | ug/m3 | 2.0 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Carbon Tetrachloride | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Carbon Tetrachloride | ND | | ug/m3 | 2.3 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Benzene | **0.75** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Benzene | **2.4** | | ug/m3 | 1.2 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2-Dichloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2-Dichloroethane | ND | | ug/m3 | 1.5 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Trichloroethene | **39** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Trichloroethene | **210** | | ug/m3 | 1.9 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2-Dichloropropane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2-Dichloropropane | ND | | ug/m3 | 1.7 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Bromodichloromethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Bromodichloromethane | ND | | ug/m3 | 2.4 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| cis-1,3-Dichloropropene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| cis-1,3-Dichloropropene | ND | | ug/m3 | 1.6 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 4-Methyl-2-Pentanone | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 4-Methyl-2-Pentanone | ND | | ug/m3 | 1.5 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Toluene | **1.2** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Toluene | **4.4** | | ug/m3 | 1.4 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| trans-1,3-Dichloropropene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| trans-1,3-Dichloropropene | ND | | ug/m3 | 1.6 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1,2-Trichloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1,2-Trichloroethane | ND | | ug/m3 | 2.0 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Tetrachloroethene | **3.2** | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Tetrachloroethene | **22** | | ug/m3 | 2.4 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 2-Hexanone | ND | | ppbv | 0.90 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 2-Hexanone | ND | | ug/m3 | 3.7 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Dibromochloromethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Dibromochloromethane | ND | | ug/m3 | 3.1 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2-Dibromoethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2-Dibromoethane | ND | | ug/m3 | 2.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Chlorobenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Chlorobenzene | ND | | ug/m3 | 1.7 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Ethylbenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Ethylbenzene | ND | | ug/m3 | 1.6 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| m,p-Xylenes | ND | | ppbv | 0.72 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| m,p-Xylenes | ND | | ug/m3 | 3.1 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| o-Xylene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| o-Xylene | ND | | ug/m3 | 1.6 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Styrene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Styrene | ND | | ug/m3 | 1.5 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Bromoform | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Bromoform | ND | | ug/m3 | 3.7 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| 450451-005 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1,2,2-Tetrachloroethane | ND | | ug/m3 | 2.5 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ug/m3 | 2.5 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 4-Ethyltoluene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 4-Ethyltoluene | ND | | ug/m3 | 1.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ug/m3 | 1.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ug/m3 | 1.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,3-Dichlorobenzene | ND | | ug/m3 | 2.2 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,4-Dichlorobenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,4-Dichlorobenzene | ND | | ug/m3 | 2.2 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Benzyl chloride | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Benzyl chloride | ND | | ug/m3 | 1.9 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2-Dichlorobenzene | ND | | ug/m3 | 2.2 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ug/m3 | 2.7 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Hexachlorobutadiene | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Hexachlorobutadiene | ND | | ug/m3 | 3.8 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Xylene (total) | ND | | ppbv | 0.36 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| Xylene (total) | ND | | ug/m3 | 1.6 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| TIC:1,1-Difluoroethane | ND | | ppbv | | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| TIC:1,1-Difluoroethane | ND | | ug/m3 | | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |
| **Surrogates** | | | | **Limits** | | | | | |
| Bromofluorobenzene | 89% | | %REC | 60-140 | 1.8 | 273845 | 09/15/21 01:00 | 09/15/21 01:00 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| Sample ID: SV-4-5 | Lab ID: 450451-006 | Collected: 09/10/21 13:56 |
|---|---|---|
| | Matrix: Air | |

| 450451-006 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-15<br>Prep Method: METHOD | | | | | | | | | |
| Freon 12 | **0.51** | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Freon 12 | **2.5** | | ug/m3 | 1.7 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Freon 114 | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Freon 114 | ND | | ug/m3 | 2.4 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Chloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Chloromethane | ND | | ug/m3 | 0.70 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Vinyl Chloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Vinyl Chloride | ND | | ug/m3 | 0.87 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Bromomethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Bromomethane | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Chloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Chloroethane | ND | | ug/m3 | 0.90 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Trichlorofluoromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Trichlorofluoromethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1-Dichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1-Dichloroethene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Freon 113 | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Freon 113 | ND | | ug/m3 | 2.6 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Acetone | **9.1** | | ppbv | 1.7 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Acetone | **22** | | ug/m3 | 4.0 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Carbon Disulfide | **0.58** | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Carbon Disulfide | **1.8** | | ug/m3 | 1.1 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Isopropanol (IPA) | **3.8** | | ppbv | 1.7 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Isopropanol (IPA) | **9.3** | | ug/m3 | 4.2 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Methylene Chloride | **2.0** | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Methylene Chloride | **6.8** | | ug/m3 | 1.2 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| trans-1,2-Dichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| trans-1,2-Dichloroethene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| MTBE | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| MTBE | ND | | ug/m3 | 1.2 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| n-Hexane | **0.86** | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| n-Hexane | **3.0** | | ug/m3 | 1.2 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1-Dichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1-Dichloroethane | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Vinyl Acetate | ND | | ppbv | 1.7 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Vinyl Acetate | ND | | ug/m3 | 6.0 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| cis-1,2-Dichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| cis-1,2-Dichloroethene | ND | | ug/m3 | 1.3 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 2-Butanone | ND | | ppbv | 1.7 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 2-Butanone | ND | | ug/m3 | 5.0 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| 450451-006 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Chloroform | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Chloroform | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1,1-Trichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1,1-Trichloroethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Carbon Tetrachloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Carbon Tetrachloride | ND | | ug/m3 | 2.1 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Benzene | **0.47** | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Benzene | **1.5** | | ug/m3 | 1.1 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2-Dichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2-Dichloroethane | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Trichloroethene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Trichloroethene | ND | | ug/m3 | 1.8 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2-Dichloropropane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2-Dichloropropane | ND | | ug/m3 | 1.6 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Bromodichloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Bromodichloromethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| cis-1,3-Dichloropropene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| cis-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 4-Methyl-2-Pentanone | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 4-Methyl-2-Pentanone | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Toluene | **0.47** | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Toluene | **1.8** | | ug/m3 | 1.3 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| trans-1,3-Dichloropropene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| trans-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1,2-Trichloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1,2-Trichloroethane | ND | | ug/m3 | 1.9 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Tetrachloroethene | **0.67** | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Tetrachloroethene | **4.5** | | ug/m3 | 2.3 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 2-Hexanone | ND | | ppbv | 0.85 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 2-Hexanone | ND | | ug/m3 | 3.5 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Dibromochloromethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Dibromochloromethane | ND | | ug/m3 | 2.9 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2-Dibromoethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2-Dibromoethane | ND | | ug/m3 | 2.6 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Chlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Chlorobenzene | ND | | ug/m3 | 1.6 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Ethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Ethylbenzene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| m,p-Xylenes | ND | | ppbv | 0.68 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| m,p-Xylenes | ND | | ug/m3 | 3.0 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| o-Xylene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| o-Xylene | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Styrene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Styrene | ND | | ug/m3 | 1.4 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Bromoform | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Bromoform | ND | | ug/m3 | 3.5 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| 450451-006 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1,2,2-Tetrachloroethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ug/m3 | 2.3 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 4-Ethyltoluene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 4-Ethyltoluene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ug/m3 | 1.7 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,3-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,4-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,4-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Benzyl chloride | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Benzyl chloride | ND | | ug/m3 | 1.8 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2-Dichlorobenzene | ND | | ug/m3 | 2.0 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ug/m3 | 2.5 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Hexachlorobutadiene | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Hexachlorobutadiene | ND | | ug/m3 | 3.6 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Xylene (total) | ND | | ppbv | 0.34 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| Xylene (total) | ND | | ug/m3 | 1.5 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| TIC:1,1-Difluoroethane | ND | | ppbv | | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| TIC:1,1-Difluoroethane | ND | | ug/m3 | | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |
| **Surrogates** | | | | **Limits** | | | | | |
| Bromofluorobenzene | 89% | | %REC | 60-140 | 1.7 | 273845 | 09/15/21 01:51 | 09/15/21 01:51 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| Sample ID: SV-4-5-DUP | Lab ID: 450451-007 | Collected: 09/10/21 14:06 |
|---|---|---|
| | Matrix: Air | |

| 450451-007 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-15<br>Prep Method: METHOD | | | | | | | | | |
| Freon 12 | **0.51** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Freon 12 | **2.5** | | ug/m3 | 1.6 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Freon 114 | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Freon 114 | ND | | ug/m3 | 2.2 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Chloromethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Chloromethane | ND | | ug/m3 | 0.66 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Vinyl Chloride | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Vinyl Chloride | ND | | ug/m3 | 0.82 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Bromomethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Bromomethane | ND | | ug/m3 | 1.2 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Chloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Chloroethane | ND | | ug/m3 | 0.84 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Trichlorofluoromethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Trichlorofluoromethane | ND | | ug/m3 | 1.8 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1-Dichloroethene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1-Dichloroethene | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Freon 113 | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Freon 113 | ND | | ug/m3 | 2.5 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Acetone | **6.1** | | ppbv | 1.6 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Acetone | **15** | | ug/m3 | 3.8 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Carbon Disulfide | **0.54** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Carbon Disulfide | **1.7** | | ug/m3 | 1.0 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Isopropanol (IPA) | **1.8** | | ppbv | 1.6 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Isopropanol (IPA) | **4.3** | | ug/m3 | 3.9 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Methylene Chloride | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Methylene Chloride | ND | | ug/m3 | 1.1 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| trans-1,2-Dichloroethene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| trans-1,2-Dichloroethene | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| MTBE | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| MTBE | ND | | ug/m3 | 1.2 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| n-Hexane | **0.67** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| n-Hexane | **2.4** | | ug/m3 | 1.1 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1-Dichloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1-Dichloroethane | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Vinyl Acetate | ND | | ppbv | 1.6 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Vinyl Acetate | ND | | ug/m3 | 5.6 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| cis-1,2-Dichloroethene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| cis-1,2-Dichloroethene | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 2-Butanone | ND | | ppbv | 1.6 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 2-Butanone | ND | | ug/m3 | 4.7 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| 450451-007 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Chloroform | **0.32** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Chloroform | **1.6** | | ug/m3 | 1.6 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1,1-Trichloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1,1-Trichloroethane | ND | | ug/m3 | 1.7 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Carbon Tetrachloride | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Carbon Tetrachloride | ND | | ug/m3 | 2.0 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Benzene | **0.40** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Benzene | **1.3** | | ug/m3 | 1.0 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2-Dichloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2-Dichloroethane | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Trichloroethene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Trichloroethene | ND | | ug/m3 | 1.7 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2-Dichloropropane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2-Dichloropropane | ND | | ug/m3 | 1.5 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Bromodichloromethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Bromodichloromethane | ND | | ug/m3 | 2.1 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| cis-1,3-Dichloropropene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| cis-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 4-Methyl-2-Pentanone | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 4-Methyl-2-Pentanone | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Toluene | **0.32** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Toluene | **1.2** | | ug/m3 | 1.2 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| trans-1,3-Dichloropropene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| trans-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1,2-Trichloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1,2-Trichloroethane | ND | | ug/m3 | 1.7 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Tetrachloroethene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Tetrachloroethene | ND | | ug/m3 | 2.2 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 2-Hexanone | ND | | ppbv | 0.80 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 2-Hexanone | ND | | ug/m3 | 3.3 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Dibromochloromethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Dibromochloromethane | ND | | ug/m3 | 2.7 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2-Dibromoethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2-Dibromoethane | ND | | ug/m3 | 2.5 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Chlorobenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Chlorobenzene | ND | | ug/m3 | 1.5 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Ethylbenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Ethylbenzene | ND | | ug/m3 | 1.4 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| m,p-Xylenes | ND | | ppbv | 0.64 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| m,p-Xylenes | ND | | ug/m3 | 2.8 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| o-Xylene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| o-Xylene | ND | | ug/m3 | 1.4 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Styrene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Styrene | ND | | ug/m3 | 1.4 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Bromoform | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Bromoform | ND | | ug/m3 | 3.3 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| 450451-007 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1,2,2-Tetrachloroethane | ND | | ug/m3 | 2.2 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ug/m3 | 2.2 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 4-Ethyltoluene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 4-Ethyltoluene | ND | | ug/m3 | 1.6 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ug/m3 | 1.6 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ug/m3 | 1.6 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,3-Dichlorobenzene | ND | | ug/m3 | 1.9 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,4-Dichlorobenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,4-Dichlorobenzene | ND | | ug/m3 | 1.9 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Benzyl chloride | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Benzyl chloride | ND | | ug/m3 | 1.7 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2-Dichlorobenzene | ND | | ug/m3 | 1.9 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ug/m3 | 2.4 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Hexachlorobutadiene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Hexachlorobutadiene | ND | | ug/m3 | 3.4 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Xylene (total) | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| Xylene (total) | ND | | ug/m3 | 1.4 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| TIC:1,1-Difluoroethane | ND | | ppbv | | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| TIC:1,1-Difluoroethane | ND | | ug/m3 | | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |
| **Surrogates** | | | | **Limits** | | | | | |
| Bromofluorobenzene | 104% | | %REC | 60-140 | 1.6 | 273845 | 09/15/21 02:42 | 09/15/21 02:42 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| Sample ID: SV-5-5 | Lab ID: 450451-008 | Collected: 09/10/21 14:12 |
|---|---|---|
| | Matrix: Air | |

| 450451-008 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-15<br>Prep Method: METHOD | | | | | | | | | |
| Freon 12 | **0.53** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Freon 12 | **2.6** | | ug/m3 | 1.6 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Freon 114 | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Freon 114 | ND | | ug/m3 | 2.2 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Chloromethane | **0.57** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Chloromethane | **1.2** | | ug/m3 | 0.66 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Vinyl Chloride | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Vinyl Chloride | ND | | ug/m3 | 0.82 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Bromomethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Bromomethane | ND | | ug/m3 | 1.2 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Chloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Chloroethane | ND | | ug/m3 | 0.84 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Trichlorofluoromethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Trichlorofluoromethane | ND | | ug/m3 | 1.8 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1-Dichloroethene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1-Dichloroethene | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Freon 113 | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Freon 113 | ND | | ug/m3 | 2.5 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Acetone | **15** | | ppbv | 1.6 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Acetone | **35** | | ug/m3 | 3.8 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Carbon Disulfide | **1.1** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Carbon Disulfide | **3.4** | | ug/m3 | 1.0 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Isopropanol (IPA) | **2.3** | | ppbv | 1.6 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Isopropanol (IPA) | **5.6** | | ug/m3 | 3.9 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Methylene Chloride | **2.3** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Methylene Chloride | **8.0** | | ug/m3 | 1.1 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| trans-1,2-Dichloroethene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| trans-1,2-Dichloroethene | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| MTBE | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| MTBE | ND | | ug/m3 | 1.2 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| n-Hexane | **12** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| n-Hexane | **41** | | ug/m3 | 1.1 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1-Dichloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1-Dichloroethane | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Vinyl Acetate | ND | | ppbv | 1.6 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Vinyl Acetate | ND | | ug/m3 | 5.6 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| cis-1,2-Dichloroethene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| cis-1,2-Dichloroethene | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 2-Butanone | **2.1** | | ppbv | 1.6 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 2-Butanone | **6.1** | | ug/m3 | 4.7 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

| 450451-008 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Chloroform | **0.41** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Chloroform | **2.0** | | ug/m3 | 1.6 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1,1-Trichloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1,1-Trichloroethane | ND | | ug/m3 | 1.7 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Carbon Tetrachloride | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Carbon Tetrachloride | ND | | ug/m3 | 2.0 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Benzene | **0.57** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Benzene | **1.8** | | ug/m3 | 1.0 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2-Dichloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2-Dichloroethane | ND | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Trichloroethene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Trichloroethene | ND | | ug/m3 | 1.7 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2-Dichloropropane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2-Dichloropropane | ND | | ug/m3 | 1.5 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Bromodichloromethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Bromodichloromethane | ND | | ug/m3 | 2.1 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| cis-1,3-Dichloropropene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| cis-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 4-Methyl-2-Pentanone | **0.42** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 4-Methyl-2-Pentanone | **1.7** | | ug/m3 | 1.3 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Toluene | **0.54** | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Toluene | **2.0** | | ug/m3 | 1.2 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| trans-1,3-Dichloropropene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| trans-1,3-Dichloropropene | ND | | ug/m3 | 1.5 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1,2-Trichloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1,2-Trichloroethane | ND | | ug/m3 | 1.7 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Tetrachloroethene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Tetrachloroethene | ND | | ug/m3 | 2.2 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 2-Hexanone | ND | | ppbv | 0.80 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 2-Hexanone | ND | | ug/m3 | 3.3 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Dibromochloromethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Dibromochloromethane | ND | | ug/m3 | 2.7 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2-Dibromoethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2-Dibromoethane | ND | | ug/m3 | 2.5 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Chlorobenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Chlorobenzene | ND | | ug/m3 | 1.5 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Ethylbenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Ethylbenzene | ND | | ug/m3 | 1.4 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| m,p-Xylenes | ND | | ppbv | 0.64 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| m,p-Xylenes | ND | | ug/m3 | 2.8 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| o-Xylene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| o-Xylene | ND | | ug/m3 | 1.4 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Styrene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Styrene | ND | | ug/m3 | 1.4 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Bromoform | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Bromoform | ND | | ug/m3 | 3.3 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |



Results for any subcontracted analyses are not included in this section.

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# Analysis Results for 450451

| 450451-008 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1,2,2-Tetrachloroethane | ND | | ug/m3 | 2.2 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,1,1,2-Tetrachloroethane | ND | | ug/m3 | 2.2 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 4-Ethyltoluene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 4-Ethyltoluene | ND | | ug/m3 | 1.6 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,3,5-Trimethylbenzene | ND | | ug/m3 | 1.6 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2,4-Trimethylbenzene | ND | | ug/m3 | 1.6 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,3-Dichlorobenzene | ND | | ug/m3 | 1.9 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,4-Dichlorobenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,4-Dichlorobenzene | ND | | ug/m3 | 1.9 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Benzyl chloride | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Benzyl chloride | ND | | ug/m3 | 1.7 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2-Dichlorobenzene | ND | | ug/m3 | 1.9 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| 1,2,4-Trichlorobenzene | ND | | ug/m3 | 2.4 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Hexachlorobutadiene | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Hexachlorobutadiene | ND | | ug/m3 | 3.4 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Xylene (total) | ND | | ppbv | 0.32 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Xylene (total) | ND | | ug/m3 | 1.4 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| TIC:1,1-Difluoroethane | ND | | ppbv | | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| TIC:1,1-Difluoroethane | ND | | ug/m3 | | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| **Surrogates** | | | | **Limits** | | | | | |
| Bromofluorobenzene | 102% | | %REC | 60-140 | 1.6 | 273845 | 09/15/21 03:34 | 09/15/21 03:34 | GSG |
| Method: EPA TO-3M | | | | | | | | | |
| Methane | **3.7** | | ppmv | 0.80 | 1.6 | 273991 | 09/16/21 | 09/16/21 | MPD |
| Methane | **2,400** | | ug/m3 | 520 | 1.6 | 273991 | 09/16/21 | 09/16/21 | MPD |

**Sample ID: SV-6-5** **Lab ID: 450451-009** **Collected: 09/10/21 15:55**
**Matrix: Air**

| 450451-009 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-3M | | | | | | | | | |
| Methane | **2.7** | | ppmv | 0.75 | 1.5 | 273991 | 09/16/21 | 09/16/21 | MPD |
| Methane | **1,800** | | ug/m3 | 490 | 1.5 | 273991 | 09/16/21 | 09/16/21 | MPD |



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Analysis Results for 450451

**Sample ID: SV-7-5** **Lab ID: 450451-010** **Collected: 09/10/21 16:09**
**Matrix: Air**

| 450451-010 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-3M | | | | | | | | | |
| Methane | **2.6** | | ppmv | 0.85 | 1.7 | 273991 | 09/16/21 | 09/16/21 | MPD |
| Methane | **1,700** | | ug/m3 | 560 | 1.7 | 273991 | 09/16/21 | 09/16/21 | MPD |

**Sample ID: SV-8-5** **Lab ID: 450451-011** **Collected: 09/10/21 16:48**
**Matrix: Air**

| 450451-011 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-3M | | | | | | | | | |
| Methane | **2.8** | | ppmv | 0.75 | 1.5 | 273991 | 09/16/21 | 09/16/21 | MPD |
| Methane | **1,900** | | ug/m3 | 490 | 1.5 | 273991 | 09/16/21 | 09/16/21 | MPD |

**Sample ID: SV-9-5** **Lab ID: 450451-012** **Collected: 09/10/21 17:42**
**Matrix: Air**

| 450451-012 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-3M | | | | | | | | | |
| Methane | **2.3** | | ppmv | 0.75 | 1.5 | 273991 | 09/16/21 | 09/16/21 | MPD |
| Methane | **1,500** | | ug/m3 | 490 | 1.5 | 273991 | 09/16/21 | 09/16/21 | MPD |

**Sample ID: SV-9-5-DUP** **Lab ID: 450451-013** **Collected: 09/10/21 17:53**
**Matrix: Air**

| 450451-013 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-3M | | | | | | | | | |
| Methane | **2.3** | | ppmv | 0.75 | 1.5 | 273991 | 09/16/21 | 09/16/21 | MPD |
| Methane | **1,500** | | ug/m3 | 490 | 1.5 | 273991 | 09/16/21 | 09/16/21 | MPD |

**Sample ID: SV-10** **Lab ID: 450451-014** **Collected: 09/10/21 16:56**
**Matrix: Air**

| 450451-014 Analyte | Result | Qual | Units | RL | DF | Batch | Prepared | Analyzed | Chemist |
|---|---|---|---|---|---|---|---|---|---|
| Method: EPA TO-3M | | | | | | | | | |
| Methane | **2.4** | | ppmv | 0.75 | 1.5 | 273991 | 09/16/21 | 09/16/21 | MPD |
| Methane | **1,600** | | ug/m3 | 490 | 1.5 | 273991 | 09/16/21 | 09/16/21 | MPD |

ND Not Detected



Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Lab Control Sample** | **Lab ID:** | **QC943547** | **Batch:** | **273845** |
| **Matrix:** | **Air** | **Method:** | **EPA TO-15** | **Prep Method:** | **METHOD** |

| QC943547 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Freon 12 | 10.45 | 10.00 | ppbv | 104% | | 70-130 |
| Freon 114 | 9.963 | 10.00 | ppbv | 100% | | 70-130 |
| Chloromethane | 11.60 | 10.00 | ppbv | 116% | | 70-130 |
| Vinyl Chloride | 9.581 | 10.00 | ppbv | 96% | | 70-130 |
| Bromomethane | 9.128 | 10.00 | ppbv | 91% | | 70-130 |
| Chloroethane | 9.239 | 10.00 | ppbv | 92% | | 70-130 |
| Trichlorofluoromethane | 9.625 | 10.00 | ppbv | 96% | | 70-130 |
| 1,1-Dichloroethene | 9.659 | 10.00 | ppbv | 97% | | 70-130 |
| Freon 113 | 9.718 | 10.00 | ppbv | 97% | | 70-130 |
| Acetone | 9.080 | 10.00 | ppbv | 91% | | 70-130 |
| Carbon Disulfide | 9.839 | 10.00 | ppbv | 98% | | 70-130 |
| Isopropanol (IPA) | 9.057 | 10.00 | ppbv | 91% | | 70-130 |
| Methylene Chloride | 9.131 | 10.00 | ppbv | 91% | | 70-130 |
| trans-1,2-Dichloroethene | 9.560 | 10.00 | ppbv | 96% | | 70-130 |
| MTBE | 9.948 | 10.00 | ppbv | 99% | | 70-130 |
| n-Hexane | 9.675 | 10.00 | ppbv | 97% | | 70-130 |
| 1,1-Dichloroethane | 9.729 | 10.00 | ppbv | 97% | | 70-130 |
| Vinyl Acetate | 9.784 | 10.00 | ppbv | 98% | | 70-130 |
| cis-1,2-Dichloroethene | 9.542 | 10.00 | ppbv | 95% | | 70-130 |
| 2-Butanone | 9.093 | 10.00 | ppbv | 91% | | 70-130 |
| Chloroform | 9.613 | 10.00 | ppbv | 96% | | 70-130 |
| 1,1,1-Trichloroethane | 11.52 | 10.00 | ppbv | 115% | | 70-130 |
| Carbon Tetrachloride | 11.99 | 10.00 | ppbv | 120% | | 70-130 |
| Benzene | 11.25 | 10.00 | ppbv | 112% | | 70-130 |
| 1,2-Dichloroethane | 10.52 | 10.00 | ppbv | 105% | | 70-130 |
| Trichloroethene | 9.636 | 10.00 | ppbv | 96% | | 70-130 |
| 1,2-Dichloropropane | 9.727 | 10.00 | ppbv | 97% | | 70-130 |
| Bromodichloromethane | 10.11 | 10.00 | ppbv | 101% | | 70-130 |
| cis-1,3-Dichloropropene | 10.06 | 10.00 | ppbv | 101% | | 70-130 |
| 4-Methyl-2-Pentanone | 9.589 | 10.00 | ppbv | 96% | | 70-130 |
| Toluene | 9.566 | 10.00 | ppbv | 96% | | 70-130 |
| trans-1,3-Dichloropropene | 10.36 | 10.00 | ppbv | 104% | | 70-130 |
| 1,1,2-Trichloroethane | 9.921 | 10.00 | ppbv | 99% | | 70-130 |
| Tetrachloroethene | 8.274 | 10.00 | ppbv | 83% | | 70-130 |
| 2-Hexanone | 9.580 | 10.00 | ppbv | 96% | | 70-130 |
| Dibromochloromethane | 9.181 | 10.00 | ppbv | 92% | | 70-130 |
| 1,2-Dibromoethane | 8.452 | 10.00 | ppbv | 85% | | 70-130 |
| Chlorobenzene | 9.565 | 10.00 | ppbv | 96% | | 70-130 |
| Ethylbenzene | 9.652 | 10.00 | ppbv | 97% | | 70-130 |
| m,p-Xylenes | 19.18 | 20.00 | ppbv | 96% | | 70-130 |
| o-Xylene | 9.522 | 10.00 | ppbv | 95% | | 70-130 |
| Styrene | 9.725 | 10.00 | ppbv | 97% | | 70-130 |

ENTHALPY ANALYTICAL

## Batch QC

| QC943547 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Bromoform | 10.39 | 10.00 | ppbv | 104% | | 70-130 |
| 1,1,2,2-Tetrachloroethane | 9.576 | 10.00 | ppbv | 96% | | 70-130 |
| 1,1,1,2-Tetrachloroethane | 9.911 | 10.00 | ppbv | 99% | | 70-130 |
| 4-Ethyltoluene | 9.706 | 10.00 | ppbv | 97% | | 70-130 |
| 1,3,5-Trimethylbenzene | 9.473 | 10.00 | ppbv | 95% | | 70-130 |
| 1,2,4-Trimethylbenzene | 9.351 | 10.00 | ppbv | 94% | | 70-130 |
| 1,3-Dichlorobenzene | 8.638 | 10.00 | ppbv | 86% | | 70-130 |
| 1,4-Dichlorobenzene | 8.631 | 10.00 | ppbv | 86% | | 70-130 |
| Benzyl chloride | 10.63 | 10.00 | ppbv | 106% | b | 70-130 |
| 1,2-Dichlorobenzene | 8.796 | 10.00 | ppbv | 88% | | 70-130 |
| 1,2,4-Trichlorobenzene | 8.502 | 10.00 | ppbv | 85% | b | 70-130 |
| Hexachlorobutadiene | 9.855 | 10.00 | ppbv | 99% | | 70-130 |
| **Surrogates** | | | | | | |
| Bromofluorobenzene | 10.09 | 10.00 | ppbv | 101% | | 60-140 |

ENTHALPY ANALYTICAL

# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Lab Control Sample Duplicate** | **Lab ID:** | **QC943548** | **Batch:** | **273845** |
| **Matrix:** | **Air** | **Method:** | **EPA TO-15** | **Prep Method:** | **METHOD** |

| QC943548 Analyte | Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim |
|---|---|---|---|---|---|---|---|---|
| Freon 12 | 9.629 | 10.00 | ppbv | 96% | | 70-130 | 8 | 30 |
| Freon 114 | 9.948 | 10.00 | ppbv | 99% | | 70-130 | 0 | 30 |
| Chloromethane | 9.070 | 10.00 | ppbv | 91% | | 70-130 | 25 | 30 |
| Vinyl Chloride | 9.343 | 10.00 | ppbv | 93% | | 70-130 | 3 | 30 |
| Bromomethane | 9.418 | 10.00 | ppbv | 94% | | 70-130 | 3 | 30 |
| Chloroethane | 8.708 | 10.00 | ppbv | 87% | | 70-130 | 6 | 30 |
| Trichlorofluoromethane | 9.703 | 10.00 | ppbv | 97% | | 70-130 | 1 | 30 |
| 1,1-Dichloroethene | 9.660 | 10.00 | ppbv | 97% | | 70-130 | 0 | 30 |
| Freon 113 | 9.810 | 10.00 | ppbv | 98% | | 70-130 | 1 | 30 |
| Acetone | 9.164 | 10.00 | ppbv | 92% | | 70-130 | 1 | 30 |
| Carbon Disulfide | 9.966 | 10.00 | ppbv | 100% | | 70-130 | 1 | 30 |
| Isopropanol (IPA) | 9.305 | 10.00 | ppbv | 93% | | 70-130 | 3 | 30 |
| Methylene Chloride | 9.229 | 10.00 | ppbv | 92% | | 70-130 | 1 | 30 |
| trans-1,2-Dichloroethene | 9.648 | 10.00 | ppbv | 96% | | 70-130 | 1 | 30 |
| MTBE | 10.10 | 10.00 | ppbv | 101% | | 70-130 | 2 | 30 |
| n-Hexane | 9.657 | 10.00 | ppbv | 97% | | 70-130 | 0 | 30 |
| 1,1-Dichloroethane | 9.736 | 10.00 | ppbv | 97% | | 70-130 | 0 | 30 |
| Vinyl Acetate | 9.934 | 10.00 | ppbv | 99% | | 70-130 | 2 | 30 |
| cis-1,2-Dichloroethene | 9.609 | 10.00 | ppbv | 96% | | 70-130 | 1 | 30 |
| 2-Butanone | 9.144 | 10.00 | ppbv | 91% | | 70-130 | 1 | 30 |
| Chloroform | 9.702 | 10.00 | ppbv | 97% | | 70-130 | 1 | 30 |
| 1,1,1-Trichloroethane | 10.00 | 10.00 | ppbv | 100% | | 70-130 | 14 | 30 |
| Carbon Tetrachloride | 9.916 | 10.00 | ppbv | 99% | | 70-130 | 19 | 30 |
| Benzene | 9.848 | 10.00 | ppbv | 98% | | 70-130 | 13 | 30 |
| 1,2-Dichloroethane | 9.444 | 10.00 | ppbv | 94% | | 70-130 | 11 | 30 |
| Trichloroethene | 9.779 | 10.00 | ppbv | 98% | | 70-130 | 1 | 30 |
| 1,2-Dichloropropane | 9.696 | 10.00 | ppbv | 97% | | 70-130 | 0 | 30 |
| Bromodichloromethane | 9.916 | 10.00 | ppbv | 99% | | 70-130 | 2 | 30 |
| cis-1,3-Dichloropropene | 10.43 | 10.00 | ppbv | 104% | | 70-130 | 4 | 30 |
| 4-Methyl-2-Pentanone | 9.615 | 10.00 | ppbv | 96% | | 70-130 | 0 | 30 |
| Toluene | 9.747 | 10.00 | ppbv | 97% | | 70-130 | 2 | 30 |
| trans-1,3-Dichloropropene | 10.52 | 10.00 | ppbv | 105% | | 70-130 | 2 | 30 |
| 1,1,2-Trichloroethane | 9.748 | 10.00 | ppbv | 97% | | 70-130 | 2 | 30 |
| Tetrachloroethene | 9.624 | 10.00 | ppbv | 96% | | 70-130 | 15 | 30 |
| 2-Hexanone | 9.911 | 10.00 | ppbv | 99% | | 70-130 | 3 | 30 |
| Dibromochloromethane | 10.19 | 10.00 | ppbv | 102% | | 70-130 | 10 | 30 |
| 1,2-Dibromoethane | 9.829 | 10.00 | ppbv | 98% | | 70-130 | 15 | 30 |
| Chlorobenzene | 9.613 | 10.00 | ppbv | 96% | | 70-130 | 1 | 30 |
| Ethylbenzene | 9.766 | 10.00 | ppbv | 98% | | 70-130 | 1 | 30 |
| m,p-Xylenes | 19.47 | 20.00 | ppbv | 97% | | 70-130 | 2 | 30 |
| o-Xylene | 9.601 | 10.00 | ppbv | 96% | | 70-130 | 1 | 30 |

ENTHALPY ANALYTICAL

# Batch QC

| QC943548 Analyte | Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim |
|---|---|---|---|---|---|---|---|---|
| Styrene | 9.864 | 10.00 | ppbv | 99% | | 70-130 | 1 | 30 |
| Bromoform | 10.56 | 10.00 | ppbv | 106% | | 70-130 | 2 | 30 |
| 1,1,2,2-Tetrachloroethane | 9.638 | 10.00 | ppbv | 96% | | 70-130 | 1 | 30 |
| 1,1,1,2-Tetrachloroethane | 10.02 | 10.00 | ppbv | 100% | | 70-130 | 1 | 30 |
| 4-Ethyltoluene | 9.826 | 10.00 | ppbv | 98% | | 70-130 | 1 | 30 |
| 1,3,5-Trimethylbenzene | 9.618 | 10.00 | ppbv | 96% | | 70-130 | 2 | 30 |
| 1,2,4-Trimethylbenzene | 9.520 | 10.00 | ppbv | 95% | | 70-130 | 2 | 30 |
| 1,3-Dichlorobenzene | 8.760 | 10.00 | ppbv | 88% | | 70-130 | 1 | 30 |
| 1,4-Dichlorobenzene | 8.685 | 10.00 | ppbv | 87% | | 70-130 | 1 | 30 |
| Benzyl chloride | 10.94 | 10.00 | ppbv | 109% | b | 70-130 | 3 | 30 |
| 1,2-Dichlorobenzene | 10.47 | 10.00 | ppbv | 105% | | 70-130 | 17 | 30 |
| 1,2,4-Trichlorobenzene | 8.879 | 10.00 | ppbv | 89% | b | 70-130 | 4 | 30 |
| Hexachlorobutadiene | 9.452 | 10.00 | ppbv | 95% | | 70-130 | 4 | 30 |
| **Surrogates** | | | | | | | | |
| Bromofluorobenzene | 10.09 | 10.00 | ppbv | 101% | | 60-140 | | |

ENTHALPY ANALYTICAL

# Batch QC

| | | | | | |
|---|---|---|---|---|---|
| **Type:** | **Blank** | **Lab ID:** | **QC943549** | **Batch:** | **273845** |
| **Matrix:** | **Air** | **Method:** | **EPA TO-15** | **Prep Method:** | **METHOD** |

| QC943549 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Freon 12 | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Freon 114 | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Chloromethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Vinyl Chloride | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Bromomethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Chloroethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Trichlorofluoromethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,1-Dichloroethene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Freon 113 | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Acetone | ND | | ppbv | 1.0 | 09/14/21 14:48 | 09/14/21 14:48 |
| Carbon Disulfide | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Isopropanol (IPA) | ND | | ppbv | 1.0 | 09/14/21 14:48 | 09/14/21 14:48 |
| Methylene Chloride | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| trans-1,2-Dichloroethene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| MTBE | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| n-Hexane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,1-Dichloroethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Vinyl Acetate | ND | | ppbv | 1.0 | 09/14/21 14:48 | 09/14/21 14:48 |
| cis-1,2-Dichloroethene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 2-Butanone | ND | | ppbv | 1.0 | 09/14/21 14:48 | 09/14/21 14:48 |
| Chloroform | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,1,1-Trichloroethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Carbon Tetrachloride | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Benzene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,2-Dichloroethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Trichloroethene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,2-Dichloropropane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Bromodichloromethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| cis-1,3-Dichloropropene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 4-Methyl-2-Pentanone | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Toluene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| trans-1,3-Dichloropropene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,1,2-Trichloroethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Tetrachloroethene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 2-Hexanone | ND | | ppbv | 0.50 | 09/14/21 14:48 | 09/14/21 14:48 |
| Dibromochloromethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,2-Dibromoethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Chlorobenzene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Ethylbenzene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| m,p-Xylenes | ND | | ppbv | 0.40 | 09/14/21 14:48 | 09/14/21 14:48 |
| o-Xylene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Styrene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |

ENTHALPY ANALYTICAL

# Batch QC

| QC943549 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Bromoform | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,1,1,2-Tetrachloroethane | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 4-Ethyltoluene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,2,4-Trimethylbenzene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,4-Dichlorobenzene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Benzyl chloride | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Hexachlorobutadiene | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| Xylene (total) | ND | | ppbv | 0.20 | 09/14/21 14:48 | 09/14/21 14:48 |
| TIC:1,1-Difluoroethane | ND | | ppbv | | 09/14/21 14:48 | 09/14/21 14:48 |
| **Surrogates** | | | | **Limits** | | |
| Bromofluorobenzene | 104% | | %REC | 60-140 | 09/14/21 14:48 | 09/14/21 14:48 |

**Type: Lab Control Sample** **Lab ID: QC943900** **Batch: 273991**
**Matrix: Air** **Method: EPA TO-3M**

| QC943900 Analyte | Result | Spiked | Units | Recovery | Qual | Limits |
|---|---|---|---|---|---|---|
| Methane | 100.5 | 100.0 | ppmv | 101% | | 85-115 |

**Type: Lab Control Sample Duplicate** **Lab ID: QC943901** **Batch: 273991**
**Matrix: Air** **Method: EPA TO-3M**

| QC943901 Analyte | Result | Spiked | Units | Recovery | Qual | Limits | RPD | RPD Lim |
|---|---|---|---|---|---|---|---|---|
| Methane | 99.40 | 100.0 | ppmv | 99% | | 85-115 | 1 | 10 |

**Type: Blank** **Lab ID: QC943902** **Batch: 273991**
**Matrix: Air** **Method: EPA TO-3M**

| QC943902 Analyte | Result | Qual | Units | RL | Prepared | Analyzed |
|---|---|---|---|---|---|---|
| Methane | ND | | ppmv | 0.50 | 09/16/21 | 09/16/21 |

**Type: Sample Duplicate** **Lab ID: QC943903** **Batch: 273991**
**Matrix (Source ID): Air (450451-009)** **Method: EPA TO-3M**

| QC943903 Analyte | Result | Source Sample Result | Units | Qual | RPD | RPD Lim | DF |
|---|---|---|---|---|---|---|---|
| Methane | 2.610 | 2.670 | ppmv | | 2 | 25 | 1.5 |

# Batch QC

ND Not Detected
b See narrative

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October 12, 2021

Rocio Quinones
Roux Associates, Inc.
5150 E. Pacific Coast Highway, Suite 450
Long Beach, CA 90804

Dear Rocio:

This letter presents the results of the soil vapor investigation conducted by Optimal Technology (Optimal), for Roux Associates, Inc. on October 11, 2021. The study was performed at 870 N. Sanderson Ave., San Jacinto, California.

Optimal was contracted to perform a soil vapor survey at this site to screen for possible chlorinated solvents and aromatic hydrocarbons. The primary objective of this soil vapor investigation was to determine if soil vapor contamination is present in the subsurface soil.

**Gas Sampling Method**

At each sampling location, an electric vacuum pump set to draw 0.2 liters per minute (L/min) of soil vapor was attached to the existing well and purged prior to sample collection. Vapor samples were obtained in gas-tight syringes by drawing the sample through a luer-lock connection which connects the sampling probe and the vacuum pump. Samples were immediately injected into the gas chromatograph/purge and trap after collection. New tubing was used at each sampling point to prevent cross contamination.

All analyses were performed on a laboratory grade Agilent model 6890N gas chromatograph equipped with an Agilent model 5973N Mass Spectra Detector and Tekmar LSC 3100 Purge and Trap. A Restek column using helium as the carrier gas was used to perform all analysis. All results were collected on a personal computer utilizing Agilent's MS and chromatographic data collection and handling system.

**Quality Assurance**

*5-Point Calibration*
The initial five-point calibration consisted of 20, 50, 100, 200 and 500 ul injections of the calibration standard. A calibration factor on each analyte was generated using a best fit line method using the Agilent data system. If the $r^2$ factor generated from this line was not greater

than 0.990, an additional five-point calibration would have been performed. Method reporting limits were calculated to be 1-1000 micrograms per cubic meter (ug/$m^3$) for the individual compounds.

A daily calibration check was performed using a pre-mixed standard supplied by Scotty Analyzed Gases. The standard contained common halogenated solvents and aromatic hydrocarbons (see Table 1). The individual compound concentrations in the standards ranged between 0.025 nanograms per microliter (ng/ul) and 0.25 ng/ul.

**TABLE 1**

| | | | |
|---|---|---|---|
| Acetone | Benzene | Bromobenzene | Bromochloromethane |
| Bromodichloromethane | Bromoform | Bromomethane | 2-Butanone (MEK) |
| n-Butylbenzene | sec-Butylbenzene | tert-Butylbenzene | Carbon Tetrachloride |
| Chlorobenzene | Chloroethane | Chloroform | Chloromethane |
| 2-Chlorotoluene | 4-Chlorotoluene | Cyclohexane | Dibromochloromethane |
| 1,2-Dibromo-3-chloropropane | 1,2-Dibromoethane | Dibromomethane | 1,2-Dichlorobenzene |
| 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | Dichlorodifluoromethane | 1,2-Dichloroethane |
| 1,1-Dichloroethane | 1,1-Dichloroethene | cis-1,2-Dichloroethene | trans-1,2-Dichloroethene |
| 1,2-Dichloropropane | 2,2-Dichloropropane | 1,3-Dichloropropane | 1,1-Dichloropropene |
| Ethylbenzene | Freon 113 | Hexachlorobutadiene | Isopropylbenzene |
| p-Isopropyltoluene | Methylene Chloride | 4-Methyl-2-Pentanone | Naphthalene |
| n-Propylbenzene | Styrene | 1,1,1,2-Tetrachloroethane | 1,1,2,2-Tetrachloroethane |
| Tetrachloroethene | Toluene | 1,2,3-Trichlorobenzene | 1,2,4-Trichlorobenzene |
| 1,1,1-Trichloroethane | 1,1,2-Trichloroethane | Trichloroethene | Trichlorofluoromethane |
| 1,2,3-Trichloropropane | 1,2,4-Trimethylbenzene | 1,3,5-Trimethylbenzene | Vinyl Chloride |
| m/p-Xylene | o-Xylene | Diisopropyl Ether | Ethyl Tert Butyl Ether |
| MTBE | Tert-Amyl Methyl Ether | Tertiary Butyl Alcohol | Isobutane |

*Sample Replicates*
A replicate analysis (duplicate) was run to evaluate the reproducibility of the sampling system and instrument. The difference between samples did not vary more than 20%.

*Equipment Blanks*
Blanks were run at the beginning of each workday and after calibrations. The blanks were collected using an ambient air sample. These blanks checked the septum, syringe, GC column, GC detector and the ambient air. Contamination was not found in any of the blanks analyzed during this investigation. Blank results are given along with the sample results.

*Purge Volume*
The standard purge volume of three volumes was purged in accordance with the July 2015 DTSC/RWQCB Advisory for Active Soil Gas Investigations.

*Tracer Gas Leak Test*
A tracer gas was applied to the soil gas probes at each point of connection in which ambient air could enter the sampling system. These points include the top of the sampling probe where the tubing meets the probe connection and the surface bentonite seals. Isobutane was used as the tracer gas. No Isobutane was found in any of the samples collected.

*Shut-in Test*
A shut-in test was conducted prior to purging or sampling each location to check for leaks in the above-ground sampling system. The system was evaluated to a minimum measured vacuum of 100 inches of water. The vacuum gauge was calibrated and sensitive enough to indicate a water pressure change of at least 0.5 inches.

**Scope of Work**

To achieve the objective of this investigation a total of 20 vapor samples were collected from 7 locations at the site. Sampling depths, vacuum readings, purge volume and sampling volumes are given on the analytical results page. All the collected vapor samples were analyzed on-site using Optimal's mobile laboratory.

**Subsurface Conditions**

Subsurface soil conditions offered sampling flows at 0" water vacuum.

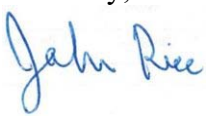
**Results**

During this vapor investigation, two samples contained levels of Chloroform ranging from 13 $ug/m^3$ to 17 $ug/m^3$. One sample contained 16 $ug/m^3$ of Tetrachloroethene (PCE). One sample contained 5 $ug/m^3$ of Benzene. None of the other compounds listed in Table 1 above were detected above the listed reporting limits. A complete table of analytical results is included with this report.

**Disclaimer**

All conclusions presented in this letter are based solely on the information collected by the soil vapor survey conducted by Optimal Technology. Soil vapor testing is only a subsurface screening tool and does not represent actual contaminant concentrations in either the soil and/or groundwater. We enjoyed working with you on this project and look forward to future projects. If you have any questions, please contact me at (877) 764-5427.

Sincerely,



John Rice
Project Manager

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# SOIL VAPOR RESULTS

**Site Name:** 870 N. Sanderson Ave., San Jacinto, CA **Lab Name:** Optimal Technology **Date:** 10/11/21
**Analyst:** J. Rice **Collector:** J. Rice **Inst. ID:** Agilent 6890N
**Method:** Modified EPA 8260B **Detector:** Agilent 5973N Mass Spectrometer **Page:** 1 of 6

| SAMPLE ID | BLANK-1 | SV-12-5 | SV-12-15 | SV-12-25 | SV-1A-25 | SV-13-5 | SV-13-15 | SV-13-25 |
|---|---|---|---|---|---|---|---|---|
| Sampling Depth (Ft.) | N/A | 5.0 | 15.0 | 25.0 | 25.0 | 5.0 | 15.0 | 25.0 |
| Purge Volume (ml) | N/A | 3,226 | 2,329 | 2,474 | 2,474 | 3,226 | 2,329 | 2,474 |
| Vacuum (in. of Water) | N/A | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Injection Volume (ul) | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| COMPOUND | REP. LIMIT | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| **Benzene** | 3 | ND | ND | ND | ND | ND | ND | ND | **5** |
| Bromobenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromochloromethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromodichloromethane | 2 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromoform | 80 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromomethane | 150 | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| n-Butylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| sec-Butylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| tert-Butylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Tetrachloride | 2 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorobenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroform | 4 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloromethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Chlorotoluene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Chlorotoluene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Cyclohexane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibromochloromethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dibromo-3-chloropropane | 1 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dibromoethane | 1 | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibromomethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorobenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dichlorobenzene | 8 | ND | ND | ND | ND | ND | ND | ND | ND |
| Dichlorodifluoromethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloroethane | 3 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 50 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| cis-1,2-Dichloroethene | 200 | ND | ND | ND | ND | ND | ND | ND | ND |
| trans-1,2-Dichloroethene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloropropane | 9 | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,2-Dichloropropane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichloropropane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |

**Note:** ND = Below Listed Reporting Limit

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## SOIL VAPOR RESULTS

**Site Name:** 870 N. Sanderson Ave., San Jacinto, CA **Lab Name:** Optimal Technology **Date:** 10/11/21
**Analyst:** J. Rice **Collector:** J. Rice **Inst. ID:** Agilent 6890N
**Method:** Modified EPA 8260B **Detector:** Agilent 5973N Mass Spectrometer **Page:** 2 of 6

| SAMPLE ID | BLANK-1 | SV-12-5 | SV-12-15 | SV-12-25 | SV-1A-25 | SV-13-5 | SV-13-15 | SV-13-25 |
|---|---|---|---|---|---|---|---|---|
| Sampling Depth (Ft.) | N/A | 5.0 | 15.0 | 25.0 | 25.0 | 5.0 | 15.0 | 25.0 |
| Purge Volume (ml) | N/A | 3,226 | 2,329 | 2,474 | 2,474 | 3,226 | 2,329 | 2,474 |
| Vacuum (in. of Water) | N/A | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Injection Volume (ul) | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| COMPOUND | REP. LIMIT | CONC (ug/m$^3$) | CONC (ug/m$^3$) | CONC (ug/m$^3$) | CONC (ug/m$^3$) | CONC (ug/m$^3$) | CONC (ug/m$^3$) | CONC (ug/m$^3$) | CONC (ug/m$^3$) |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloropropene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 30 | ND | ND | ND | ND | ND | ND | ND | ND |
| Freon 113 | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexachlorobutadiene | 4 | ND | ND | ND | ND | ND | ND | ND | ND |
| Isopropylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| p-Isopropyltoluene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 30 | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 2 | ND | ND | ND | ND | ND | ND | ND | ND |
| n-Propylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Styrene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1,2-Tetrachloroethane | 10 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 1 | ND | ND | ND | ND | ND | ND | ND | ND |
| Tetrachloroethene (PCE) | 10 | ND | ND | ND | ND | ND | ND | ND | ND |
| Toluene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,3-Trichlorobenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trichlorobenzene | 60 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2-Trichloroethane | 5 | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichloroethene (TCE) | 10 | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichlorofluoromethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,3-Trichloropropane | 10 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3,5-Trimethylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Chloride | 1 | ND | ND | ND | ND | ND | ND | ND | ND |
| m/p-Xylene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| o-Xylene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Diisopropyl Ether (DIPE) | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Ethyl Tert Butyl Ether | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| MTBE | 350 | ND | ND | ND | ND | ND | ND | ND | ND |
| Tert-Amyl Methyl Ether (TAME) | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Tertiary Butyl Alcohol | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Isobutane (Tracer Gas) | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| **SURROGATE** | **QC LIMITS** | **Recovery %** | **Recovery %** | **Recovery %** | **Recovery %** | **Recovery %** | **Recovery %** | **Recovery %** | **Recovery %** |
| Dibromofluoromethane | 70-130% | N/A | 89% | 99% | 93% | 105% | 117% | 114% | 108% |
| 4-Bromofluorobenzene | 70-130% | N/A | 105% | 115% | 110% | 125% | 123% | 118% | 119% |

**Note:** ND = Below Listed Reporting Limit

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## SOIL VAPOR RESULTS

**Site Name:** 870 N. Sanderson Ave., San Jacinto, CA **Lab Name:** Optimal Technology **Date:** 10/11/21
**Analyst:** J. Rice **Collector:** J. Rice **Inst. ID:** Agilent 6890N
**Method:** Modified EPA 8260B **Detector:** Agilent 5973N Mass Spectrometer 

| SAMPLE ID | SV-14-5 | SV-14-15 | SV-14-25 | SV-14-25 Dup | SV-15-5 | SV-15-15 | SV-15-25 | SV-3A-15 |
|---|---|---|---|---|---|---|---|---|
| Sampling Depth (Ft.) | 5.0 | 15.0 | 25.0 | 25.0 | 5.0 | 15.0 | 25.0 | 15.0 |
| Purge Volume (ml) | 3,226 | 2,329 | 2,474 | 2,474 | 3,226 | 2,329 | 2,474 | 2,329 |
| Vacuum (in. of Water) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Injection Volume (ul) | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| COMPOUND | REP. LIMIT | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzene | 3 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromobenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromochloromethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromodichloromethane | 2 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromoform | 80 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromomethane | 150 | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| n-Butylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| sec-Butylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| tert-Butylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Tetrachloride | 2 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorobenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| **Chloroform** | 4 | **17** | **13** | ND | ND | ND | ND | ND | ND |
| Chloromethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Chlorotoluene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Chlorotoluene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Cyclohexane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibromochloromethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dibromo-3-chloropropane | 1 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dibromoethane | 1 | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibromomethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorobenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dichlorobenzene | 8 | ND | ND | ND | ND | ND | ND | ND | ND |
| Dichlorodifluoromethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloroethane | 3 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 50 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| cis-1,2-Dichloroethene | 200 | ND | ND | ND | ND | ND | ND | ND | ND |
| trans-1,2-Dichloroethene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloropropane | 9 | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,2-Dichloropropane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichloropropane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |

**Note:** ND = Below Listed Reporting Limit

**OPTIMAL TECHNOLOGY**
Specializing in Environmental Field Services

# SOIL VAPOR RESULTS

**Site Name:** 870 N. Sanderson Ave., San Jacinto, CA **Lab Name:** Optimal Technology **Date:** 10/11/21
**Analyst:** J. Rice **Collector:** J. Rice **Inst. ID:** Agilent 6890N
**Method:** Modified EPA 8260B **Detector:** Agilent 5973N Mass Spectrometer 

| SAMPLE ID | SV-14-5 | SV-14-15 | SV-14-25 | SV-14-25 Dup | SV-15-5 | SV-15-15 | SV-15-25 | SV-3A-15 |
|---|---|---|---|---|---|---|---|---|
| Sampling Depth (Ft.) | 5.0 | 15.0 | 25.0 | 25.0 | 5.0 | 15.0 | 25.0 | 15.0 |
| Purge Volume (ml) | 3,226 | 2,329 | 2,474 | 2,474 | 3,226 | 2,329 | 2,474 | 2,329 |
| Vacuum (in. of Water) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Injection Volume (ul) | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| COMPOUND | REP. LIMIT | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloropropene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 30 | ND | ND | ND | ND | ND | ND | ND | ND |
| Freon 113 | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexachlorobutadiene | 4 | ND | ND | ND | ND | ND | ND | ND | ND |
| Isopropylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| p-Isopropyltoluene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 30 | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 2 | ND | ND | ND | ND | ND | ND | ND | ND |
| n-Propylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Styrene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1,2-Tetrachloroethane | 10 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 1 | ND | ND | ND | ND | ND | ND | ND | ND |
| Tetrachloroethene (PCE) | 10 | ND | ND | ND | ND | ND | ND | ND | ND |
| Toluene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,3-Trichlorobenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trichlorobenzene | 60 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2-Trichloroethane | 5 | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichloroethene (TCE) | 10 | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichlorofluoromethane | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,3-Trichloropropane | 10 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3,5-Trimethylbenzene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Chloride | 1 | ND | ND | ND | ND | ND | ND | ND | ND |
| m/p-Xylene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| o-Xylene | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Diisopropyl Ether (DIPE) | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Ethyl Tert Butyl Ether | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| MTBE | 350 | ND | ND | ND | ND | ND | ND | ND | ND |
| Tert-Amyl Methyl Ether (TAME) | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Tertiary Butyl Alcohol | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Isobutane (Tracer Gas) | 1000 | ND | ND | ND | ND | ND | ND | ND | ND |
| **SURROGATE** | **QC LIMITS** | Recovery % | Recovery % | Recovery % | Recovery % | Recovery % | Recovery % | Recovery % | Recovery % |
| Dibromofluoromethane | 70-130% | 96% | 101% | 99% | 90% | 87% | 98% | 109% | 114% |
| 4-Bromofluorobenzene | 70-130% | 106% | 117% | 105% | 104% | 106% | 113% | 116% | 111% |

**Note:** ND = Below Listed Reporting Limit

**OPTIMAL TECHNOLOGY**
Specializing in Environmental Field Services

## SOIL VAPOR RESULTS

**Site Name:** 870 N. Sanderson Ave., San Jacinto, CA **Lab Name:** Optimal Technology **Date:** 10/11/21
**Analyst:** J. Rice **Collector:** J. Rice **Inst. ID:** Agilent 6890N
**Method:** Modified EPA 8260B **Detector:** Agilent 5973N Mass Spectrometer 

| SAMPLE ID | SV-3A-25 | SV-11-5 | SV-11-15 | SV-11-25 | SV-11-25 Dup | | | |
|---|---|---|---|---|---|---|---|---|
| Sampling Depth (Ft.) | 25.0 | 5.0 | 15.0 | 25.0 | 25.0 | | | |
| Purge Volume (ml) | 2,474 | 3,226 | 2,329 | 2,474 | 2,474 | | | |
| Vacuum (in. of Water) | 0 | 0 | 0 | 0 | 0 | | | |
| Injection Volume (ul) | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | | | |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 | | | |

| COMPOUND | REP. LIMIT | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | CONC ($ug/m^3$) | | | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 1000 | ND | ND | ND | ND | ND | | | |
| Benzene | 3 | ND | ND | ND | ND | ND | | | |
| Bromobenzene | 1000 | ND | ND | ND | ND | ND | | | |
| Bromochloromethane | 1000 | ND | ND | ND | ND | ND | | | |
| Bromodichloromethane | 2 | ND | ND | ND | ND | ND | | | |
| Bromoform | 80 | ND | ND | ND | ND | ND | | | |
| Bromomethane | 150 | ND | ND | ND | ND | ND | | | |
| 2-Butanone (MEK) | 1000 | ND | ND | ND | ND | ND | | | |
| n-Butylbenzene | 1000 | ND | ND | ND | ND | ND | | | |
| sec-Butylbenzene | 1000 | ND | ND | ND | ND | ND | | | |
| tert-Butylbenzene | 1000 | ND | ND | ND | ND | ND | | | |
| Carbon Tetrachloride | 2 | ND | ND | ND | ND | ND | | | |
| Chlorobenzene | 1000 | ND | ND | ND | ND | ND | | | |
| Chloroethane | 1000 | ND | ND | ND | ND | ND | | | |
| Chloroform | 4 | ND | ND | ND | ND | ND | | | |
| Chloromethane | 1000 | ND | ND | ND | ND | ND | | | |
| 2-Chlorotoluene | 1000 | ND | ND | ND | ND | ND | | | |
| 4-Chlorotoluene | 1000 | ND | ND | ND | ND | ND | | | |
| Cyclohexane | 1000 | ND | ND | ND | ND | ND | | | |
| Dibromochloromethane | 1000 | ND | ND | ND | ND | ND | | | |
| 1,2-Dibromo-3-chloropropane | 1 | ND | ND | ND | ND | ND | | | |
| 1,2-Dibromoethane | 1 | ND | ND | ND | ND | ND | | | |
| Dibromomethane | 1000 | ND | ND | ND | ND | ND | | | |
| 1,2-Dichlorobenzene | 1000 | ND | ND | ND | ND | ND | | | |
| 1,3-Dichlorobenzene | 1000 | ND | ND | ND | ND | ND | | | |
| 1,4-Dichlorobenzene | 8 | ND | ND | ND | ND | ND | | | |
| Dichlorodifluoromethane | 1000 | ND | ND | ND | ND | ND | | | |
| 1,2-Dichloroethane | 3 | ND | ND | ND | ND | ND | | | |
| 1,1-Dichloroethane | 50 | ND | ND | ND | ND | ND | | | |
| 1,1-Dichloroethene | 1000 | ND | ND | ND | ND | ND | | | |
| cis-1,2-Dichloroethene | 200 | ND | ND | ND | ND | ND | | | |
| trans-1,2-Dichloroethene | 1000 | ND | ND | ND | ND | ND | | | |
| 1,2-Dichloropropane | 9 | ND | ND | ND | ND | ND | | | |
| 2,2-Dichloropropane | 1000 | ND | ND | ND | ND | ND | | | |
| 1,3-Dichloropropane | 1000 | ND | ND | ND | ND | ND | | | |

**Note:** ND = Below Listed Reporting Limit

**OPTIMAL TECHNOLOGY**
Specializing in Environmental Field Services

# SOIL VAPOR RESULTS

**Site Name:** 870 N. Sanderson Ave., San Jacinto, CA **Lab Name:** Optimal Technology **Date:** 10/11/21
**Analyst:** J. Rice **Collector:** J. Rice **Inst. ID:** Agilent 6890N
**Method:** Modified EPA 8260B **Detector:** Agilent 5973N Mass Spectrometer **Page:** 6 of 6

| SAMPLE ID | SV-3A-25 | SV-11-5 | SV-11-15 | SV-11-25 | SV-11-25 Dup | | | |
|---|---|---|---|---|---|---|---|---|
| Sampling Depth (Ft.) | 25.0 | 5.0 | 15.0 | 25.0 | 25.0 | | | |
| Purge Volume (ml) | 2,474 | 3,226 | 2,329 | 2,474 | 2,474 | | | |
| Vacuum (in. of Water) | 0 | 0 | 0 | 0 | 0 | | | |
| Injection Volume (ul) | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | | | |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 | | | |

| COMPOUND | REP. LIMIT | CONC (ug/m$^3$) | CONC (ug/m$^3$) | CONC (ug/m$^3$) | CONC (ug/m$^3$) | CONC (ug/m$^3$) | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloropropene | 1000 | ND | ND | ND | ND | ND | | | |
| Ethylbenzene | 30 | ND | ND | ND | ND | ND | | | |
| Freon 113 | 1000 | ND | ND | ND | ND | ND | | | |
| Hexachlorobutadiene | 4 | ND | ND | ND | ND | ND | | | |
| Isopropylbenzene | 1000 | ND | ND | ND | ND | ND | | | |
| p-Isopropyltoluene | 1000 | ND | ND | ND | ND | ND | | | |
| Methylene Chloride | 30 | ND | ND | ND | ND | ND | | | |
| 4-Methyl-2-Pentanone | 1000 | ND | ND | ND | ND | ND | | | |
| Naphthalene | 2 | ND | ND | ND | ND | ND | | | |
| n-Propylbenzene | 1000 | ND | ND | ND | ND | ND | | | |
| Styrene | 1000 | ND | ND | ND | ND | ND | | | |
| 1,1,1,2-Tetrachloroethane | 10 | ND | ND | ND | ND | ND | | | |
| 1,1,2,2-Tetrachloroethane | 1 | ND | ND | ND | ND | ND | | | |
| **Tetrachloroethene (PCE)** | 10 | ND | **16** | ND | ND | ND | | | |
| Toluene | 1000 | ND | ND | ND | ND | ND | | | |
| 1,2,3-Trichlorobenzene | 1000 | ND | ND | ND | ND | ND | | | |
| 1,2,4-Trichlorobenzene | 60 | ND | ND | ND | ND | ND | | | |
| 1,1,1-Trichloroethane | 1000 | ND | ND | ND | ND | ND | | | |
| 1,1,2-Trichloroethane | 5 | ND | ND | ND | ND | ND | | | |
| Trichloroethene (TCE) | 10 | ND | ND | ND | ND | ND | | | |
| Trichlorofluoromethane | 1000 | ND | ND | ND | ND | ND | | | |
| 1,2,3-Trichloropropane | 10 | ND | ND | ND | ND | ND | | | |
| 1,2,4-Trimethylbenzene | 1000 | ND | ND | ND | ND | ND | | | |
| 1,3,5-Trimethylbenzene | 1000 | ND | ND | ND | ND | ND | | | |
| Vinyl Chloride | 1 | ND | ND | ND | ND | ND | | | |
| m/p-Xylene | 1000 | ND | ND | ND | ND | ND | | | |
| o-Xylene | 1000 | ND | ND | ND | ND | ND | | | |
| Diisopropyl Ether (DIPE) | 1000 | ND | ND | ND | ND | ND | | | |
| Ethyl Tert Butyl Ether | 1000 | ND | ND | ND | ND | ND | | | |
| MTBE | 350 | ND | ND | ND | ND | ND | | | |
| Tert-Amyl Methyl Ether (TAME) | 1000 | ND | ND | ND | ND | ND | | | |
| Tertiary Butyl Alcohol | 1000 | ND | ND | ND | ND | ND | | | |
| Isobutane (Tracer Gas) | 1000 | ND | ND | ND | ND | ND | | | |
| **SURROGATE** | **QC LIMITS** | Recovery % | Recovery % | Recovery % | Recovery % | Recovery % | | | |
| Dibromofluoromethane | 70-130% | 110% | 103% | 88% | 83% | 80% | | | |
| 4-Bromofluorobenzene | 70-130% | 94% | 105% | 97% | 99% | 89% | | | |

**Note:** ND = Below Listed Reporting Limit

**OPTIMAL TECHNOLOGY**
Specializing in Environmental Field Services

# CHAIN OF CUSTODY FORM



| | | | |
|---|---|---|---|
| Site Name/Number | | PO# / Project Ref# | |
| Site Address | **870 N. Sanderson Ave., San Jacinto, CA** | | |
| Company Name | | | |
| Contact Person(s): | | Phone# | Email: |
| Comments: | | | |

| | | | | TESTS REQUIRED (please mark with an "X") | | | |
|---|---|---|---|---|---|---|---|
| Sample Identification | Sampling Device | Date Collected | Time Collected | **Soil Gas Mod 8260B** | **Soil Gas Mod 8021B** | **Soil Gas Mod 8015** | **Notes** |
| BLANK-1 | Syringe | 10/11/21 | 9:00 AM | x | | | |
| SV-12-5 | Syringe | 10/11/21 | 9:27 AM | x | | | |
| SV-12-15 | Syringe | 10/11/21 | 9:47 AM | x | | | |
| SV-12-25 | Syringe | 10/11/21 | 10:08 AM | x | | | |
| SV-1A-25 | Syringe | 10/11/21 | 10:28 AM | x | | | |
| SV-13-5 | Syringe | 10/11/21 | 10:53 AM | x | | | |
| SV-13-15 | Syringe | 10/11/21 | 11:15 AM | x | | | |
| SV-13-25 | Syringe | 10/11/21 | 11:34 AM | x | | | |
| SV-14-5 | Syringe | 10/11/21 | 12:00 PM | x | | | |
| SV-14-15 | Syringe | 10/11/21 | 12:18 PM | x | | | |
| SV-14-25 | Syringe | 10/11/21 | 12:36 PM | x | | | |
| SV-14-25 Dup | Syringe | 10/11/21 | 12:36 PM | x | | | |
| SV-15-5 | Syringe | 10/11/21 | 1:00 PM | x | | | |
| SV-15-15 | Syringe | 10/11/21 | 1:19 PM | x | | | |
| SV-15-25 | Syringe | 10/11/21 | 1:37 PM | x | | | |
| SV-3A-15 | Syringe | 10/11/21 | 1:57 PM | x | | | |
| SV-3A-25 | Syringe | 10/11/21 | 2:16 PM | x | | | |
| SV-11-5 | Syringe | 10/11/21 | 2:35 PM | x | | | |
| SV-11-15 | Syringe | 10/11/21 | 2:58 PM | x | | | |
| SV-11-25 | Syringe | 10/11/21 | 3:17 PM | x | | | |
| SV-11-25 Dup | Syringe | 10/11/21 | 3:37 PM | x | | | |
| | | | | | | | |

Collected & Tested by:

John Rice

1667 Cross Bridge Place, Thousand Oaks, CA 91362 • Toll Free (877) SOIL GAS (764-5427) • (818) 734-6230 • Fax (818) 734-6235

# ATTACHMENT B

Boring Logs

ROUX ASSOCIATES, INC.
*Environmental Consulting & Management*

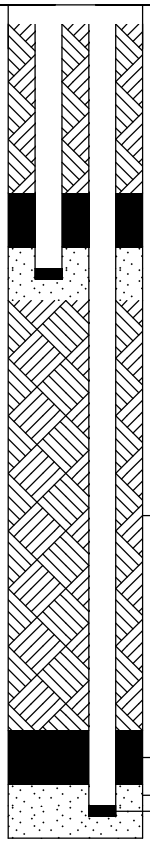
5150 E. Pacific Coast Highway, Suite 450
Long Beach, California 90804
Telephone: (310) 879 - 4900



# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO.<br>**SV-1** | NORTHING<br>**Not Measured** | EASTING<br>**Not Measured** | | |
| PROJECT NO./NAME<br>**2217.0025L / Shea San Jacinto** | | LOCATION<br>**870 North Sanderson Avenue**<br>**San Jacinto, California** | | |
| APPROVED BY<br>**D. Williams** | LOGGED BY<br>**D. Williams** | | | |
| DRILLING CONTRACTOR/DRILLER<br>**Strong Arm Environmental / Frank Rodriquez** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE<br>**2.25-in. Drive Sampler** | BOREHOLE DIAMETER<br>**2.25/2.75-in.** | DRILLING EQUIPMENT/METHOD<br>**Geoprobe 6620DT / DPT** | SAMPLING METHOD<br>**1.5" Large Bore** | START-FINISH DATE<br>**9/7/21-9/7/21** |
| CASING MAT./DIA.<br>**Nylaflow / 1/4"** | SCREEN:<br>TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: GROUND SURFACE<br>(Feet) | | | GRAVEL PACK SIZES<br>**#3 Sand** | |

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT with Sand (ML): grayish brown (10YR 5/2), dry, nonplastic, fine sand, trace angular gravel to 1/4", (fines: 85%, sand: 10%, gravel: 5%). | | | Hand augered to 5 ft below ground surface (bgs) |
| | | @ 3 feet bgs: As above, except brown (10YR 5/3), slightly moist, (fines: 75%, sand: 20%, gravel: 5%). | | | Temporary soil-vapor probes at 5 and 15 feet bgs |
| 5 | | Poorly-Graded SAND with Silt (SP-SM): dark gray (10YR 4/1), moist, fine to medium grained sand, few silt, (fines: 10%, sand: 90%, gravel: 0%). | | 1.6 | Soil Sample SV-1-5 @ 1108 |
| 10 | | SILT with Sand (ML): grayish brown (10YR 5/2), moist, nonplastic, fine sand, (fines: 85%, sand: 15%, gravel: 0%). | | 0.2 | Soil Sample SV-1-10 @ 1252 |
| 15 | | | | 0.2 | Soil Sample SV-1-15 @ 1256 |
| | | Silty SAND (SM): very dark gray (10YR 3/1), moist, fine to medium grained sand, trace fine calcitic gravel to 1/4", (fines: 20%, sand: 75%, gravel: 5%) | | | |
| 20 | | | | 0.1 | Soil Sample SV-1-20 @ 1307 |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 20' bgs.

BORING/FEET 2021_1220_SAN JACINTO.GPJ ROUX.GDT 12/20/21

ROUX ASSOCIATES, INC.
*Environmental Consulting & Management*

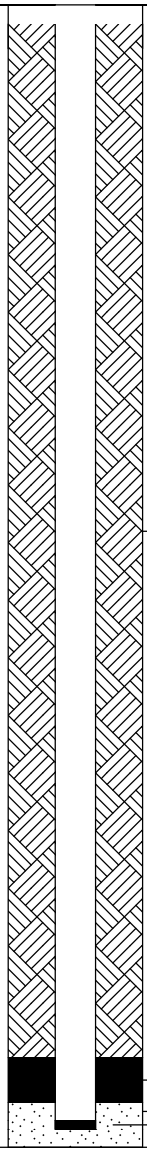
5150 E. Pacific Coast Highway, Suite 450
Long Beach, California 90804
Telephone: (310) 879 - 4900



# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO. **SV-1A** | NORTHING **Not Measured** | EASTING **Not Measured** | | |
| PROJECT NO./NAME **2217.0025L / Shea San Jacinto** | | LOCATION **870 North Sanderson Avenue** | | |
| APPROVED BY **D. Williams** | LOGGED BY **J. Knight** | **San Jacinto, California** | | |
| DRILLING CONTRACTOR/DRILLER **Strong Arm Environmental /** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE **2.25-in. Drive Sampler** | BOREHOLE DIAMETER **2.25-in.** | DRILLING EQUIPMENT/METHOD **Geoprobe 6620DT / DPT** | SAMPLING METHOD **1.5" Large Bore** | START-FINISH DATE **10/8/21-10/8/21** |
| CASING MAT./DIA. **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: GROUND SURFACE (Feet) | | | GRAVEL PACK SIZES **#3 Sand** | |

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT (ML): gray (10YR 5/1), dry, few fine Sand, trace angular gravel to 5mm (85% Silt, 10% Sand, 5% Gravel), non-plastic. | | 10.0 | Hand augered to 5 ft below ground surface (bgs) |
| 5 | | Silty SAND (SM): brown (10YR 5/3), slightly moist, fine Sand, little Silt, trace angular gravel, (70% Sand, 25% Silt, 5% Gravel), non-plastic. | | | |
| | | Poorly-Graded SAND with Silt (SP-SM): dark gray (10YR 5/1), moist, fine to medium Sand, few Silt, no Gravel (90% Sand, 10% Silt), non-plastic. | | 7.5 | |
| 10 | | SILT with Sand (ML): grayish brown (10YR 5/2), moist, little fine Sand, trace Clay, (85% Silt, 15% Sand, <5% Clay). | | 3.2 | |
| 15 | | | | 5.3 | |
| 20 | | | | 1.7 | |
| 25 | | | | 2.7 | Temporary 1" stainless steel soil vapor probe at 25' bgs |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 25.5' bgs

BORING/FEET 2021_1220_SAN JACINTO.GPJ ROUX.GDT 12/20/21

ROUX ASSOCIATES, INC.
*Environmental Consulting & Management*

5150 E. Pacific Coast Highway, Suite 450
Long Beach, California 90804
Telephone: (310) 879 - 4900



# BORING LOG

| WELL NO. | NORTHING | EASTING |
|---|---|---|
| **SV-2** | **Not Measured** | **Not Measured** |

| PROJECT NO./NAME | LOCATION |
|---|---|
| **2217.0025L / Shea San Jacinto** | **870 North Sanderson Avenue** |
| APPROVED BY: **D. Williams** / LOGGED BY: **D. Williams** | **San Jacinto, California** |
| DRILLING CONTRACTOR/DRILLER: **Strong Arm Environmental / Frank Rodriquez** | GEOGRAPHIC AREA |

| DRILL BIT DIAMETER/TYPE | BOREHOLE DIAMETER | DRILLING EQUIPMENT/METHOD | SAMPLING METHOD | START-FINISH DATE |
|---|---|---|---|---|
| **2.25-in. Drive Sampler** | **2.25/2.75-in.** | **Geoprobe 6620DT / DPT** | **1.5" Large Bore** | **9/7/21-9/7/21** |

CASING MAT./DIA.: **Nylaflow / 1/4"**
SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron**

ELEVATION OF: GROUND SURFACE (Feet)
GRAVEL PACK SIZES: **#3 Sand**

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT with Sand (ML): grayish brown (10YR 5/2), dry, nonplastic, fine sand, trace angular gravel to 1/4", (fines: 85%, sand: 10%, gravel: 5%). | | | Hand augered to 5 ft below ground surface (bgs) |
| | | @ 3 feet bgs: As above, except brown (10YR 5/3), slightly moist, fine to medium grained sand, angular calcitic gravel to 1/2", (fines: 75%, sand: 20%, gravel: 5%). | | | |
| 5 | | | | 0.2 | Soil Sample SV-2-5 @ 1238 |
| | | SILT (ML): gray (10YR 5/1), moist, nonplastic, trace fine sand, (fines: 95%, sand: 5%, gravel: 0%) | | | |
| 10 | | | | 0.0 | Soil Sample SV-2-10 @ 1355 |
| | | Sandy Lean CLAY (CL): very dark gray (10YR 3/1), moist, medium plasticity, fine to medium grained sand, (fines: 70%, sand: 30%, gravel: 0%) | | | |
| | | Silty SAND (SM): very dark gray (10YR 3/1), moist, fine to medium grained sand, (fines: 30%, sand: 70%, gravel: 0%) | | | |
| 15 | | @ 14 feet bgs: As above, except dark grey (10YR 4/1), fine sand, (fines: 20%, sand: 80%, gravel: 0%) | | 0.0 | Soil Sample SV-2-15 @ 1402 |
| | | | | | Temporary soil-vapor probes at 5 and 15 feet bgs |
| 20 | | | | | Soil Sample SV-2-20 @ 1409 |

Hydrated Bentonite
Dry Bentonite
#3 Sand
1" Stainless Steel Probe

NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 20 bgs.

BORING/FEET 2021_1220_SAN JACINTO.GPJ ROUX.GDT 12/20/21

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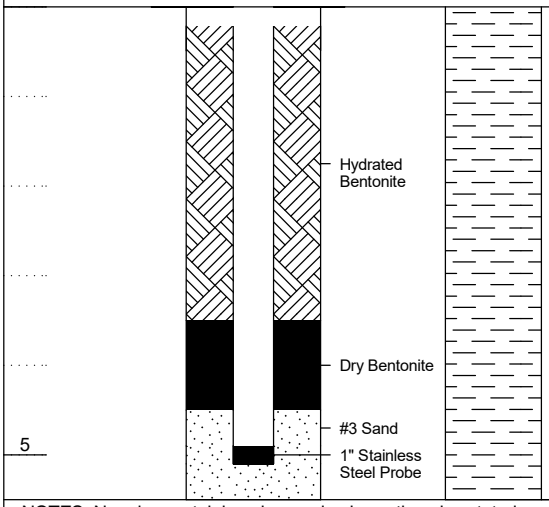
# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO.<br>**SV-3** | NORTHING<br>**Not Measured** | EASTING<br>**Not Measured** | | |
| PROJECT NO./NAME<br>**2217.0025L / Shea San Jacinto** | | LOCATION<br>**870 North Sanderson Avenue**<br>**San Jacinto, California** | | |
| APPROVED BY<br>**D. Williams** | LOGGED BY<br>**D. Williams** | | | |
| DRILLING CONTRACTOR/DRILLER<br>**Strong Arm Environmental / Frank Rodriquez** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE<br>**NA** | BOREHOLE DIAMETER<br>**2.75-in.** | DRILLING EQUIPMENT/METHOD<br>**Hand Auger / HA** | SAMPLING METHOD<br>**Hand Auger** | START-FINISH DATE<br>**9/7/21-9/7/21** |
| CASING MAT./DIA.<br>**Nylaflow / 1/4"** | SCREEN:<br>TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: GROUND SURFACE<br>(Feet) | | | GRAVEL PACK SIZES<br>**#3 Sand** | |

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT with Sand (ML): grayish brown (10YR 5/2), fine Sand, trace angular Gravel to 1/4", (fines: 85%, sand: 10%, gravel: 5%), non-plastic. | | | Hand augered to 5 ft below ground surface (bgs) |
| | | Sandy SILT (ML): brown (10YR 5/3), slightly moist, fine to medium Sand (fines: 70%, sand: 25%, gravel: 5%), non-plastic. | | | |
| 5 | | | | 0.0 | Soil Sample SV-3-5 @ 1100 5<br>Temporary soil-vapor probe at 5 feet bgs |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 5.5' bgs

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# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO. **SV-3A** | NORTHING **Not Measured** | EASTING **Not Measured** | | |
| PROJECT NO./NAME **2217.0025L / Shea San Jacinto** | | LOCATION **870 North Sanderson Avenue, San Jacinto, California** | | |
| APPROVED BY **D. Williams** | LOGGED BY **J. Knight** | | | |
| DRILLING CONTRACTOR/DRILLER **Strong Arm Environmental /** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE **2.25-in. Drive Sampler** | BOREHOLE DIAMETER **2.25-in.** | DRILLING EQUIPMENT/METHOD **Geoprobe 6620DT / DPT** | SAMPLING METHOD **1.5" Large Bore** | START-FINISH DATE **10/8/21-10/8/21** |
| CASING MAT./DIA. **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: (Feet) GROUND SURFACE | | | GRAVEL PACK SIZES **#3 Sand** | |

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| 0 | | SILT with Sand (ML): grayish brown (10YR 5/2), dry, few fine Sand, trace angular Gravel to 5mm, (85% Silt, 10% Sand, 5% Gravel), non-plastic | | | Hand augered to 5 ft below ground surface (bgs) |
| 5 | | | | 2.0 | |
| 10 | | Poorly-graded SAND with Silt (SP-SM): brown (10YR 5/3), moist, few Gravel to 5mm, few Silt, (80% Sand, 10% Gravel, 10% Silt). | | 3.1 | |
| 15 | | Silty SAND (SM): grayish brown (10YR 5/2), fine to medium Sand, little Silt (80% Sand, 20% Silt). | | 1.7 | |
| 20 | | | | | |
| 25 | | Silty SAND (SM): very dark gray (10YR 3/1), moist, fine to medium Sand, some Silt, trace Gravel to 1/4" (70% Sand, 30% Silt, <5% Gravel). | | 1.0 | Temporary soil vapor probes at 15' and 25' bgs |

Hydrated Bentonite
Dry Bentonite
#3 Sand
1" Stainless Steel Probe
Hydrated Bentonite
Dry Bentonite
#3 Sand
1" Probe

NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 25.5' bgs

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# BORING LOG

| WELL NO. | NORTHING | EASTING |
|---|---|---|
| **SV-4** | **Not Measured** | **Not Measured** |

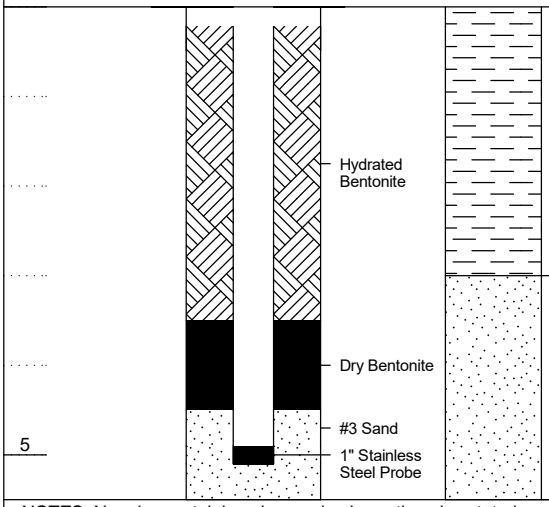
| PROJECT NO./NAME | LOCATION |
|---|---|
| **2217.0025L / Shea San Jacinto** | **870 North Sanderson Avenue** |
| APPROVED BY: **D. Williams** / LOGGED BY: **D. Williams** | **San Jacinto, California** |
| DRILLING CONTRACTOR/DRILLER: **Strong Arm Environmental / Frank Rodriquez** | GEOGRAPHIC AREA |

| DRILL BIT DIAMETER/TYPE | BOREHOLE DIAMETER | DRILLING EQUIPMENT/METHOD | SAMPLING METHOD | START-FINISH DATE |
|---|---|---|---|---|
| **NA** | **3.25-in.** | **Hand Auger / HA** | **Hand Auger** | **9/7/21-9/7/21** |

CASING MAT./DIA.: **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron**

ELEVATION OF: GROUND SURFACE (Feet) | GRAVEL PACK SIZES: **#3 Sand**

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT with Sand (ML): grayish brown (10YR 5/2), dry, fine Sand, trace angular gravel to 1/2", (fines: 85%, sand: 10%, gravel: 5%), medium plasticity, no odor or staining. | | | Hand augered to 5 ft below ground surface (bgs) |
| | | Poorly-Graded SAND (SP): brown (10YR 5/3), slightly moist, fine to medium Sand, (fines: 5%, sand: 95%, gravel: 0%). | | | |
| 5 | | | | 0.1 | Soil Sample SV-4-5 @ 1119 5<br>Temporary soil-vapor probe at 5 feet bgs |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 5.5' bgs

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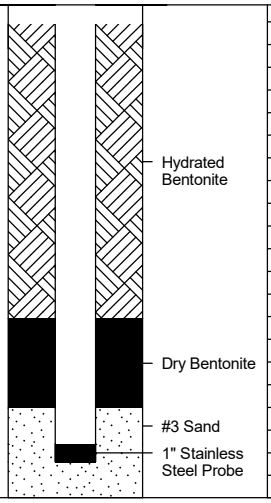
# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO. **SV-5** | NORTHING **Not Measured** | EASTING **Not Measured** | | |
| PROJECT NO./NAME **2217.0025L / Shea San Jacinto** | | LOCATION **870 North Sanderson Avenue San Jacinto, California** | | |
| APPROVED BY **D. Williams** | LOGGED BY **D. Williams** | | | |
| DRILLING CONTRACTOR/DRILLER **Strong Arm Environmental / Frank Rodriquez** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE **NA** | BOREHOLE DIAMETER **3.25-in.** | DRILLING EQUIPMENT/METHOD **Hand Auger / HA** | SAMPLING METHOD **Hand Auger** | START-FINISH DATE **9/7/21-9/7/21** |
| CASING MAT./DIA. **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: GROUND SURFACE (Feet) | | | GRAVEL PACK SIZES **#3 Sand** | |

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT with Sand (ML): grayish brown (10YR 5/2), dry, little fine Sand, trace fine Gravel to 1/4" (fines: 85%, sand: 10%, gravel: 5%). | | | Hand augered to 5 ft below ground surface (bgs)<br>Soil Sample SV-5-0.5 @ 1147 |
| | | @ 3 feet bgs: Same as above, except angular calcite Gravel to 1/3". | | | |
| 5 | | | | 0.0 | Soil Sample SV-5-5 @ 1158 5<br>Temporary soil-vapor probe at 5 feet bgs |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 5.5' bgs

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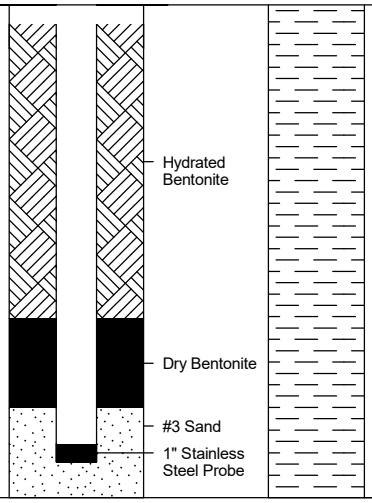
# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO. **SV-6** | NORTHING **Not Measured** | EASTING **Not Measured** | | |
| PROJECT NO./NAME **2217.0025L / Shea San Jacinto** | | LOCATION **870 North Sanderson Avenue, San Jacinto, California** | | |
| APPROVED BY **D. Williams** | LOGGED BY **D. Williams** | | | |
| DRILLING CONTRACTOR/DRILLER **Strong Arm Environmental / Frank Rodriquez** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE **NA** | BOREHOLE DIAMETER **2.75-in.** | DRILLING EQUIPMENT/METHOD **Hand Auger / HA** | SAMPLING METHOD **Hand Auger** | START-FINISH DATE **9/7/21-9/7/21** |
| CASING MAT./DIA. **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: GROUND SURFACE (Feet) | | GRAVEL PACK SIZES **#3 Sand** | | |

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT with Sand (ML): pale brown (10YR 6/3), dry, fine Sand, angular Gravel to 1/2" (fines: 70%, sand: 20%, gravel: 10%), non-plastic. | | | Hand augered to 5 ft below ground surface (bgs) |
| | | SILT (ML): grayish brown (10YR 5/2), slighly moist, fine sand, trace angular gravel to 1/4", non-plastic | | | |
| 5 | | | | 0.1 | Temporary soil-vapor probe at 5 feet bgs |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 5.5' bgs

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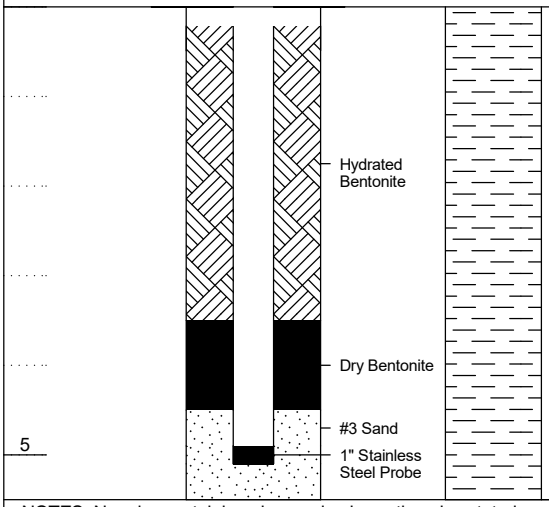
# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO.<br>**SV-7** | NORTHING<br>**Not Measured** | EASTING<br>**Not Measured** | | |
| PROJECT NO./NAME<br>**2217.0025L / Shea San Jacinto** | | LOCATION<br>**870 North Sanderson Avenue**<br>**San Jacinto, California** | | |
| APPROVED BY<br>**D. Williams** | LOGGED BY<br>**D. Williams** | | | |
| DRILLING CONTRACTOR/DRILLER<br>**Strong Arm Environmental / Frank Rodriquez** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE<br>**NA** | BOREHOLE DIAMETER<br>**2.75-in.** | DRILLING EQUIPMENT/METHOD<br>**Hand Auger / HA** | SAMPLING METHOD<br>**Hand Auger** | START-FINISH DATE<br>**9/7/21-9/7/21** |
| CASING MAT./DIA.<br>**Nylaflow / 1/4"** | SCREEN:<br>TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: GROUND SURFACE<br>(Feet) | | | GRAVEL PACK SIZES<br>**#3 Sand** | |

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | Sandy SILT (ML): pale brown (10YR 6/3), dry, fine Sand, angular Gravel to 1/2" (fines: 70%, sand: 20%, gravel: 10%), non-plastic. | | | Hand augered to 5 ft below ground surface (bgs) |
| | | SILT with Sand (ML): grayish brown (10YR 5/2), slighly moist, trace fine Gravel (fines: 85%, sand: 10%, gravel: 5%), non-plastic. | | | |
| 5 | | | | 0.1 | Temporary soil-vapor probe at 5 feet bgs |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 5.5' bgs

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# BORING LOG

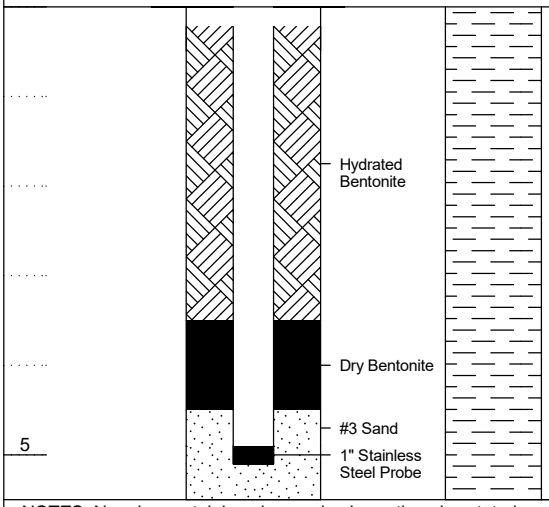
| WELL NO. | NORTHING | EASTING |
|---|---|---|
| **SV-8** | **Not Measured** | **Not Measured** |

| PROJECT NO./NAME | LOCATION |
|---|---|
| **2217.0025L / Shea San Jacinto** | **870 North Sanderson Avenue** |
| APPROVED BY: **D. Williams** / LOGGED BY: **D. Williams** | **San Jacinto, California** |
| DRILLING CONTRACTOR/DRILLER: **Strong Arm Environmental / Frank Rodriquez** | GEOGRAPHIC AREA |

| DRILL BIT DIAMETER/TYPE | BOREHOLE DIAMETER | DRILLING EQUIPMENT/METHOD | SAMPLING METHOD | START-FINISH DATE |
|---|---|---|---|---|
| **NA** | **2.75-in.** | **Hand Auger / HA** | **Hand Auger** | **9/7/21-9/7/21** |

CASING MAT./DIA.: **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron**

ELEVATION OF: GROUND SURFACE (Feet) | GRAVEL PACK SIZES: **#3 Sand**

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| |  | Sandy SILT (ML): pale brown (10YR 6/3), dry, fine Sand, angular gravel to 1/2" (fines: 70%, sand: 20%, gravel: 10%), non-plastic. | | | Hand augered to 5 ft below ground surface (bgs) |
| | | SILT with Sand (ML): grayish brown (10YR 5/2), slighly moist, trace fine Gravel (fines: 85%, sand: 10%, gravel: 5%), non-plastic. | | | |
| 5 | | | | 0.0 | Temporary soil-vapor probe at 5 feet bgs |



NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 5.5' bgs

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# BORING LOG

| WELL NO. | NORTHING | EASTING |
|---|---|---|
| **SV-9** | **Not Measured** | **Not Measured** |

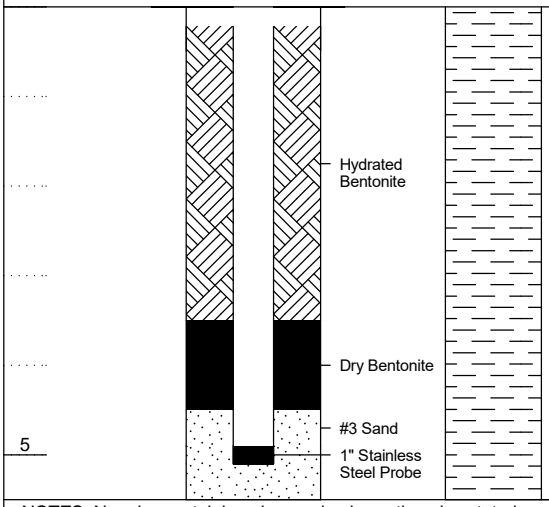
| PROJECT NO./NAME | LOCATION |
|---|---|
| **2217.0025L / Shea San Jacinto** | **870 North Sanderson Avenue** |
| APPROVED BY: **D. Williams** / LOGGED BY: **D. Williams** | **San Jacinto, California** |
| DRILLING CONTRACTOR/DRILLER: **Strong Arm Environmental / Frank Rodriquez** | GEOGRAPHIC AREA |

| DRILL BIT DIAMETER/TYPE | BOREHOLE DIAMETER | DRILLING EQUIPMENT/METHOD | SAMPLING METHOD | START-FINISH DATE |
|---|---|---|---|---|
| **NA** | **2.75-in.** | **Hand Auger / HA** | **Hand Auger** | **9/7/21-9/7/21** |

CASING MAT./DIA.: **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron**

ELEVATION OF: GROUND SURFACE (Feet) | GRAVEL PACK SIZES: **#3 Sand**

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | Sandy SILT (ML): pale brown (10YR 6/3), dry, fine Sand, angular gravel to 1/2" (fines: 70%, sand: 20%, gravel: 10%), non-plastic. | | | Hand augered to 5 ft below ground surface (bgs) |
| | | SILT with Sand (ML): grayish brown (10YR 5/2), slighly moist, trace fine Gravel to 1/4" (fines: 85%, sand: 10%, gravel: 5%), non-plastic. | | | |
| 5 | | | | 0.1 | Temporary soil-vapor probe at 5 feet bgs |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 5.5' bgs

BORING/FEET 2021_1220_SAN JACINTO.GPJ ROUX.GDT 12/20/21

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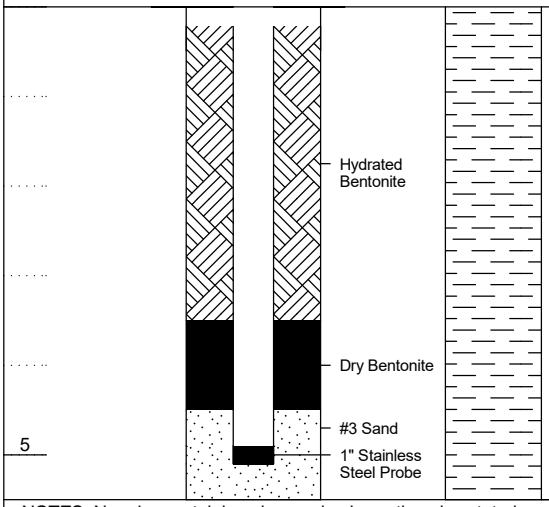
# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO. **SV-10** | NORTHING **Not Measured** | EASTING **Not Measured** | | |
| PROJECT NO./NAME **2217.0025L / Shea San Jacinto** | | LOCATION **870 North Sanderson Avenue San Jacinto, California** | | |
| APPROVED BY **D. Williams** | LOGGED BY **D. Williams** | | | |
| DRILLING CONTRACTOR/DRILLER **Strong Arm Environmental / Frank Rodriquez** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE **NA** | BOREHOLE DIAMETER **2.75-in.** | DRILLING EQUIPMENT/METHOD **Hand Auger / HA** | SAMPLING METHOD **Hand Auger** | START-FINISH DATE **9/7/21-9/7/21** |
| CASING MAT./DIA. **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: (Feet) GROUND SURFACE | | | GRAVEL PACK SIZES **#3 Sand** | |

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | Sandy SILT (ML): pale brown (10YR 6/3), dry, fine Sand, angular gravel to 1/2" (fines: 70%, sand: 20%, gravel: 10%), non-plastic. | | | Hand augered to 5 ft below ground surface (bgs) |
| | | SILT with Sand (ML): grayish brown (10YR 5/2), slighly moist, trace fine Gravel (fines: 85%, sand: 10%, gravel: 5%), non-plastic. | | | |
| 5 | | | | 0.0 | Temporary soil-vapor probe at 5 feet bgs |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 5.5' bgs

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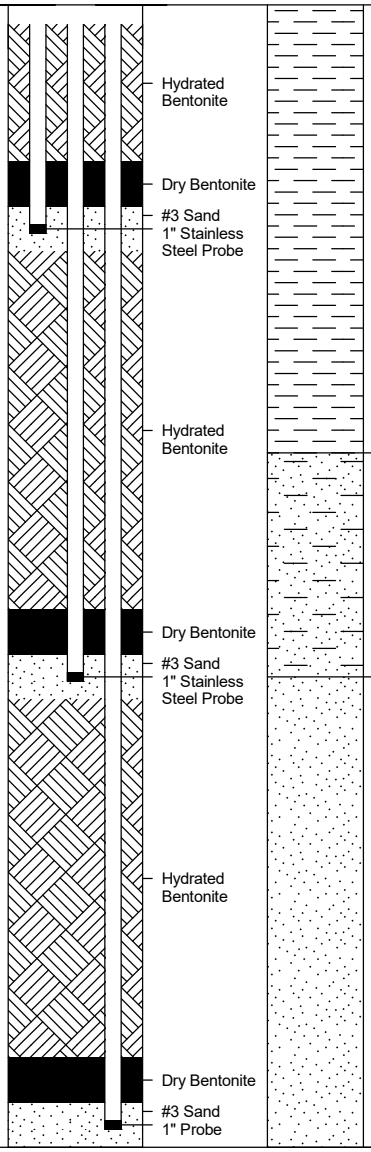
# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO. **SV-11** | NORTHING **Not Measured** | EASTING **Not Measured** | | |
| PROJECT NO./NAME **2217.0025L / Shea San Jacinto** | | LOCATION **870 North Sanderson Avenue San Jacinto, California** | | |
| APPROVED BY **D. Williams** | LOGGED BY **J. Knight** | | | |
| DRILLING CONTRACTOR/DRILLER **Strong Arm Environmental /** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE **2.25-in. Drive Sampler** | BOREHOLE DIAMETER **2.25-in.** | DRILLING EQUIPMENT/METHOD **Geoprobe 6620DT / DPT** | SAMPLING METHOD **1.5" Large Bore** | START-FINISH DATE **10/8/21-10/8/21** |
| CASING MAT./DIA. **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: (Feet) GROUND SURFACE | | | GRAVEL PACK SIZES **#3 Sand** | |

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT with Sand (ML): grayish brown (10YR 5/2), dry, fine Sand, little Silt, trace angular gravel to 1cm (80% Silt, 15% Sand, 5% Gravel), non-plastic. | | | Hand augered to 5 ft below ground surface (bgs) |
| 5 | | SILT (ML): gray (10YR 5/1), moist, few fine Sand (90% Silt, 10% Sand, 0% Gravel), non-plastic. | | 1.3 | |
| 10 | | Silty SAND (SM): very dark gray (10YR 3/1), moist, medium to fine Sand, some Silt, trace Clay, (70% Sand, 30% Silt, <5% Clay), non-plastic. | | 1.0 | |
| 15 | | Poorly-Graded SAND (SP): dark gray (10YR 4/1), moist, fine Sand, few Silt (90% Sand, 10% Silt). | | 3.2 | |
| 20 | | | | 3.1 | |
| 25 | | | | 1.5 | Temporary soil vapor probes at 5', 15', and 25' bgs |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 25.5' bgs

BORING/FEET 2021_1220_SAN JACINTO.GPJ ROUX.GDT 12/20/21

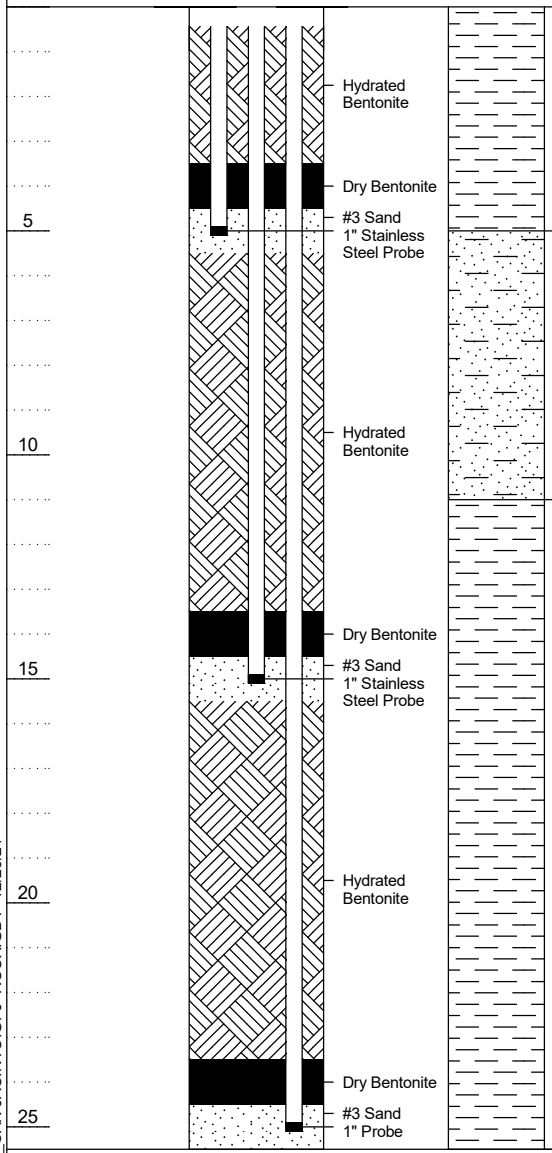
ROUX ASSOCIATES, INC.
*Environmental Consulting & Management*

5150 E. Pacific Coast Highway, Suite 450
Long Beach, California 90804
Telephone: (310) 879 - 4900



# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO. **SV-12** | NORTHING **Not Measured** | EASTING **Not Measured** | | |
| PROJECT NO./NAME **2217.0025L / Shea San Jacinto** | | LOCATION **870 North Sanderson Avenue, San Jacinto, California** | | |
| APPROVED BY **D. Williams** | LOGGED BY **J. Knight** | | | |
| DRILLING CONTRACTOR/DRILLER **Strong Arm Environmental /** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE **2.25-in. Drive Sampler** | BOREHOLE DIAMETER **2.25-in.** | DRILLING EQUIPMENT/METHOD **Geoprobe 6620DT / DPT** | SAMPLING METHOD **1.5" Large Bore** | START-FINISH DATE **10/8/21-10/8/21** |
| CASING MAT./DIA. **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: GROUND SURFACE (Feet) | | | GRAVEL PACK SIZES **#3 Sand** | |




| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT (ML): grayish brown (10YR 5/2), few fine Sand, trace angular gravel, non-plastic. | | | Hand augered to 5 ft below ground surface (bgs) |
| 5 | | Silty SAND (SM): brown (10YR 5/3), fine Sand, little Silt, trace angular Gravel (80% Sand, 15% Silt, 5% Gravel), non-plastic. | | 1.2 | 5 |
| 10 | | SILT with Sand (ML): grayish brown (10YR 5/2), moist, litltle Sand, (85% Silt, 15% Sand). | | 2.3 | 10 |
| 15 | | | | 5.5 | 15 |
| 20 | | | | 3.3 | 20 |
| 25 | | | | 4.0 | Temporary soil vapor probes at 5', 15', and 25' bgs 25 |

NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 25.5' bgs

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# BORING LOG

| WELL NO. | NORTHING | EASTING |
|---|---|---|
| **SV-13** | **Not Measured** | **Not Measured** |

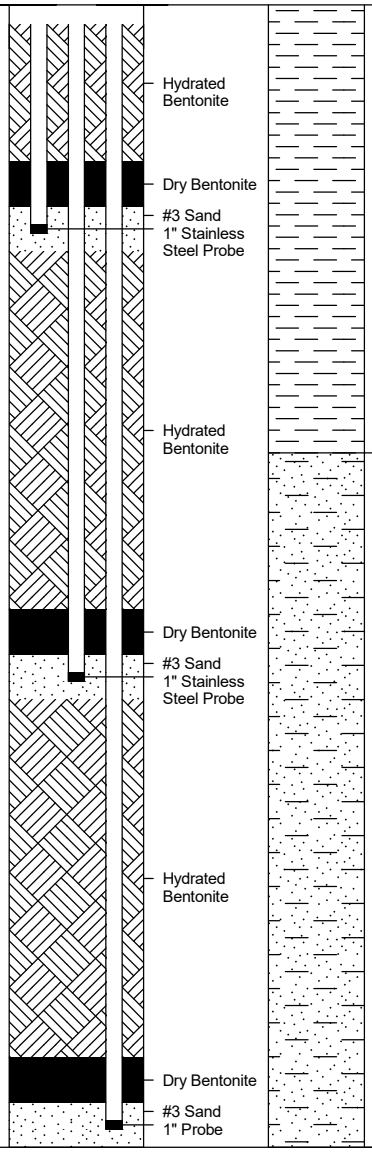
| PROJECT NO./NAME | LOCATION |
|---|---|
| **2217.0025L / Shea San Jacinto** | **870 North Sanderson Avenue** |
| APPROVED BY: **D. Williams** / LOGGED BY: **J. Knight** | **San Jacinto, California** |
| DRILLING CONTRACTOR/DRILLER: **Strong Arm Environmental /** | GEOGRAPHIC AREA |

| DRILL BIT DIAMETER/TYPE | BOREHOLE DIAMETER | DRILLING EQUIPMENT/METHOD | SAMPLING METHOD | START-FINISH DATE |
|---|---|---|---|---|
| **2.25-in. Drive Sampler** | **2.25-in.** | **Geoprobe 6620DT / DPT** | **1.5" Large Bore** | **10/8/21-10/8/21** |

CASING MAT./DIA.: **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron**

ELEVATION OF: GROUND SURFACE (Feet) | GRAVEL PACK SIZES: **#3 Sand**

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT with Sand (ML): grayish brown (10YR 5/2), dry, few fine Sand, trace angular Gravel to 1cm (85% Silt, 10% Sand, 5% Gravel). | | | Hand augered to 5 ft below ground surface (bgs) |
| 5 | | SILT (ML): gray (10YR 5/1), moist, trace fine Sand (95% Silt, 5% Sand), non-plastic. | | 1.1 | |
| 10 | | Silty SAND (SM): very dark gray (10YR 3/1), moist, fine to medium Sand, little Silt, trace Clay (75% Sand, 20% Silt, 5% Clay). | | 2.5 | |
| 15 | | @15' bgs: As above, except dark gray (10YR 4/1), no Clay, (80% Sand, 20% Silt). | | 3.0 | |
| 20 | | | | 1.5 | |
| 25 | | | | 1.3 | Temporary soil vapor probes at 5', 15', and 25' bgs |




NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 25.5' bgs

BORING/FEET 2021_1220_SAN JACINTO.GPJ ROUX.GDT 12/20/21

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*Environmental Consulting & Management*

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Telephone: (310) 879 - 4900



# BORING LOG

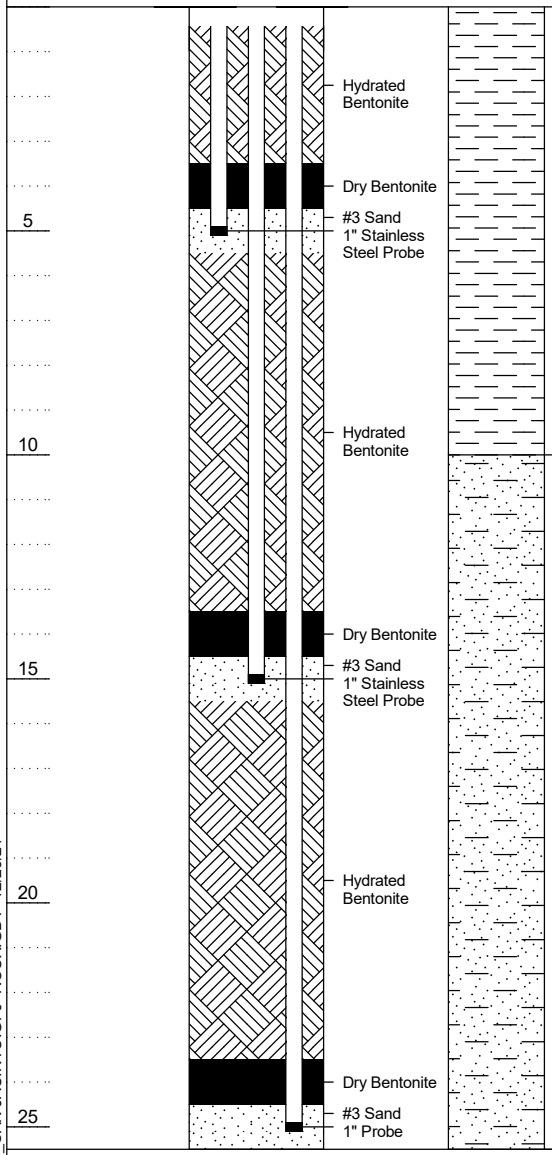
| WELL NO. | NORTHING | EASTING |
|---|---|---|
| **SV-14** | **Not Measured** | **Not Measured** |

| PROJECT NO./NAME | LOCATION |
|---|---|
| **2217.0025L / Shea San Jacinto** | **870 North Sanderson Avenue** |
| APPROVED BY: **D. Williams** / LOGGED BY: **J. Knight** | **San Jacinto, California** |
| DRILLING CONTRACTOR/DRILLER: **Strong Arm Environmental /** | GEOGRAPHIC AREA |

| DRILL BIT DIAMETER/TYPE | BOREHOLE DIAMETER | DRILLING EQUIPMENT/METHOD | SAMPLING METHOD | START-FINISH DATE |
|---|---|---|---|---|
| **2.25-in. Drive Sampler** | **2.25-in.** | **Geoprobe 6620DT / DPT** | **1.5" Large Bore** | **10/8/21-10/8/21** |

CASING MAT./DIA.: **Nylaflow / 1/4"** | SCREEN: TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron**

ELEVATION OF: GROUND SURFACE (Feet) | GRAVEL PACK SIZES: **#3 Sand**




| Depth, feet | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|
| | SILT (ML): grayish brown (10YR 5/2), dry, few fine Sand, trace angular gravel to 5mm, (85% Silt, 10% Sand, 5% Gravel), non-plastic. | | | Hand augered to 5 ft below ground surface (bgs) |
| 5 | @ 5' bgs: moist, trace fine Sand, no Gravel (95% Silt, 5% Sand). | | 3.7 | |
| 10 | Silty SAND (SM): very dark gray (10YR 3/1), moist, fine to medium sand, some Silt, trace Clay, (70% Sand, 30% Silt, <5% Clay), non-plastic. | | 0.0 | |
| 15 | @ 15' bgs: As above, except dark gray (10YR 4/1), moist, fine Sand, little Silt, (80% Sand, 20% Silt). | | 3.1 | |
| 20 | | | | |
| 25 | | | | Temporary soil vapor probes at 5', 15', and 25' bgs |

NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 25.5' bgs

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Long Beach, California 90804
Telephone: (310) 879 - 4900



# BORING LOG

| | | | | |
|---|---|---|---|---|
| WELL NO.<br>**SV-15** | NORTHING<br>**Not Measured** | EASTING<br>**Not Measured** | | |
| PROJECT NO./NAME<br>**2217.0025L / Shea San Jacinto** | | LOCATION<br>**870 North Sanderson Avenue**<br>**San Jacinto, California** | | |
| APPROVED BY<br>**D. Williams** | LOGGED BY<br>**J. Knight** | | | |
| DRILLING CONTRACTOR/DRILLER<br>**Strong Arm Environmental /** | | GEOGRAPHIC AREA | | |
| DRILL BIT DIAMETER/TYPE<br>**2.25-in. Drive Sampler** | BOREHOLE DIAMETER<br>**2.25-in.** | DRILLING EQUIPMENT/METHOD<br>**Geoprobe 6620DT / DPT** | SAMPLING METHOD<br>**1.5" Large Bore** | START-FINISH DATE<br>**10/8/21-10/8/21** |
| CASING MAT./DIA.<br>**Nylaflow / 1/4"** | SCREEN:<br>TYPE **Porous Filter** MAT. **S. Steel** TOTAL LENGTH **0.1** ft DIA. **1/4"** SLOT SIZE **150 micron** | | | |
| ELEVATION OF: GROUND SURFACE<br>(Feet) | | | GRAVEL PACK SIZES<br>**#3 Sand** | |

| Depth, feet | Graphic Log | Visual Description | Blow Counts per 6" | PID Values (ppm) | REMARKS |
|---|---|---|---|---|---|
| | | SILT with Sand and Gravel (ML): brown (10YR 5/3), dry, few fine Sand, few angular Gravel (80% Silt, 10% Sand, 10% Gravel), non-plastic. | | | Hand augered to 5 ft below ground surface (bgs) |
| | | SILT with Sand (ML): brown (10YR 5/3), slightly moist, little fine Sand, no Gravel (80% Silt, 20% Sand), non-plastic. | | | |
| 5 | | | | 3.5 | 5 |
| | | Poorly-Graded SAND with Silt(SP-SM): grayish brown (10YR 5/2), moist, fine to medium Sand, few Silt (90% Sand, 10% Silt). | | | |
| 10 | | | | 2.1 | 10 |
| | | Silty SAND (SM): very dark gray (10YR 3/1), moist, fine to medium Sand, some Silt, trace Gravel to 1/4", (70% Sand, 30% Silt, <5% Gravel). | | | |
| 15 | | | | 1.7 | 15 |
| 20 | | | | 2.1 | 20 |
| 25 | | | | 1.5 | Temporary soil vapor probes at 5', 15', and 25' bgs 25 |

Hydrated Bentonite
Dry Bentonite
#3 Sand
1" Stainless Steel Probe
Hydrated Bentonite
Dry Bentonite
#3 Sand
1" Stainless Steel Probe
Hydrated Bentonite
Dry Bentonite
#3 Sand
1" Probe

NOTES: No odor or staining observed unless otherwise stated.

Terminal Depth: 25.5' bgs

BORING/FEET 2021_1220_SAN JACINTO.GPJ ROUX.GDT 12/20/21

# Phase I Environmental Site Assessment

South-Southwest of North Sanderson Avenue and North Ramona Boulevard
San Jacinto, California

August 30, 2023

Prepared for:

**Shea Properties**

Prepared by:
**Roux Associates, Inc.**
5150 E. Pacific Coast Highway, Suite 450
Long Beach, California, 90804

2217.0030L.100/R

Environmental Consulting
& Management
+1.800.322.ROUX
rouxinc.com

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# Executive Summary

Shea Properties (User) retained Roux Associates, Inc. (Roux) to perform a Phase I Environmental Site Assessment (ESA) of the property located approximately 1,800 feet south-southwest of the corner of North Sanderson Avenue and North Ramona Boulevard in the City of San Jacinto, Riverside County, California (the Subject Property). Roux performed this Phase I ESA in general accordance with the American Society for Testing Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-21) in an effort to identify, to the extent feasible, the presence of recognized environmental conditions (RECs) with respect to the Subject Property as defined in ASTM E1527-21. Exceptions to, or deletions from, this practice are described in Section 9.1 of this report.

The Subject Property consists of one approximately 38-acre parcel, identified by Assessor's Parcel Number (APN, 432-030-012), located on the west side of North Sanderson Avenue in an agricultural area of San Jacinto, California. The Subject Property is currently used for agricultural production (unknown row crop). According to historical sources, the Subject Property was vacant land as early as 1901. By at least 1949, agricultural operations began at the Subject Property and are currently present. Since initial agricultural development of the Subject Property, a rotation of row crops, feed crops for livestock, and fallow land have been present at the Subject Property.

On July 28, 2023, Roux visually assessed the Subject Property during the site reconnaissance for potential RECs, including, but not limited to, potential underground storage tanks (USTs), aboveground storage tanks (ASTs), polychlorinated biphenyl (PCB)-containing equipment, hazardous materials storage or handling areas, containerized or bulk wastes, and visual indications of impacted soil.

Roux also performed a records review in an effort to identify RECs in connection with the Subject Property. This records review addressed the Subject Property and surrounding properties. Roux reviewed commercially available records associated with the Subject Property and nearby properties to assess potential concerns associated with the migration of hazardous substances. The records review also included reasonably ascertainable historical data, which can be helpful in identifying the past uses of the Subject Property and surrounding areas, as it may relate to the environmental condition of the Subject Property.

Roux performed interviews and/or file reviews with various government agencies and other parties with possible knowledge of the Subject Property and surrounding properties in an effort to identify current and past uses of the Subject Property and surrounding areas, as they may relate to the environmental condition of the Subject Property.

ASTM E 1527-21 defines a Recognized Environmental Condition (REC) as:

> "The presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on or at the Subject Property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on or at the Subject Property under conditions that pose a material threat of a future release to the environment. A de minimis condition is not a recognized environmental condition."

A Controlled Recognized Environmental Condition (cREC) as:

> "A recognized environmental condition affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or

petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations and other property use limitations."

And a Historical Recognized Environmental Condition (hREC) as:

> "A previous release of hazardous substances or petroleum products affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the Subject Property to any controls (for example, activity and use limitations and other property use limitations."

The term recognized environmental condition is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

This Executive Summary provides a brief overview of the findings of this Phase I ESA. Although the Executive Summary is an integral part of a report, it does not substitute for reading the entire report or the appended or referenced documents in order to fully understand the findings and potential environmental concerns associated with the Subject Property.

**Recognized Environmental Conditions (RECs)**

Based on the information obtained through the performance of this Phase I ESA, Roux identified the following RECs in connection with the current and historical operations at the Subject Property or adjoining properties. To the extent possible, the locations of the RECs are shown in Figure 2. To avoid confusion, all RECs, cRECs, hRECs, and OEFs are numbered sequentially.

> **REC 1 - Former Agricultural Applied Pesticide Area**. Based on a review of historical sources, the Subject Property was developed for agricultural use (row crops and feed crops) as early as 1949, with increased agricultural development noted from at least 1978 to 2016. During the site reconnaissance, row crops were observed on the Subject Property. Agricultural production history at the Subject Property is not currently known. Based on the long term agricultural use, it is likely that agricultural chemicals, such as pesticides, herbicides, and fertilizers, have been used on-site, and the potential for impacts from agricultural chemicals to on-site soils is considered a REC.

**Controlled Recognized Environmental Conditions (cRECs)**

Roux did not identify known or suspected cRECs in connection with the current and historical operations at the Subject Property or adjoining properties.

**Historical Recognized Environmental Conditions (hRECs)**

Roux did not identify known or suspected hRECs in connection with the current and historical operations at the Subject Property or adjoining properties.

**Other Environmental Features (OEFs)**

Roux did not identify known or suspected OEFs in connection with the current and historical operations at the Subject Property or adjoining properties.

# 1. Introduction

Roux Associates, Inc. (Roux) completed this Phase I Environmental Site Assessment (ESA) of the property located approximately 1,800 feet south-southwest of the corner of North Sanderson Avenue and North Ramona Boulevard in the City of San Jacinto, Riverside County, California (the Subject Property). The Subject Property location is shown in Figure 1 and the Subject Property and vicinity is shown in Figure 2. Roux performed this Phase I ESA in compliance with the scope and limitations of American Society for Testing Materials (ASTM) E1527-21 and the terms and conditions of Roux' proposal dated May 24, 2023. Roux conducted this Phase I ESA for the benefit of Shea Properties (the User).

The following sections of this report present our Phase I ESA findings and conclusions. A glossary containing terms and definitions presented in ASTM E1527-21 is included in Appendix A – Glossary of Terms. Other appendices presented at the end of the report include historical topographic maps, historical aerial photographs, regulatory records review documentation, applicable historical records, and personnel qualifications.

## 1.1 Purpose

The purpose of this Phase I ESA is to identify and report, to the extent feasible, recognized environmental conditions (RECs) with respect to the Subject Property. Performing a Phase I ESA in general compliance with ASTM E 1527-21 may enable a User to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability. That is, the practice that constitutes one of the requirements for "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC Section 9601(35) (B).

## 1.2 Scope of Services

The scope of services for this Phase I ESA included, but was not limited to, the activities listed below.

- A review of reasonably ascertainable and practicably reviewable topographic maps, historical aerial photographs, and city directories, if available, to investigate current and past uses of the Subject Property and surrounding properties;
- A review of specific government lists pursuant to ASTM Standard E 1527-21 regarding environmental activities for the Subject Property and local area properties;
- A review of recorded land title records, building, assessors, and fire department records, for permits, citations, and reports connected to the Subject Property that were reasonably ascertainable, practicably reviewable, and publicly available within reasonable time and cost;
- An inspection by an environmental professional to investigate the current use of the Subject Property and to identify environmental concerns including but not limited to, the presence of hazardous substances or petroleum products, wastes, underground storage tanks (USTs), aboveground storage tanks (ASTs), or other environmental concerns;
- Interviews with available representatives of the owner of the Subject Property, occupants, and local government officials by an environmental professional; and
- Preparation of this Phase I ESA report.

Roux initiated this Phase I ESA pursuant to receipt of written authorization to proceed on May 24, 2023.

## 1.3 Standard of Care

Roux conducted this Phase I ESA using a defined scope of services considered appropriate and agreed upon by all parties on the date the service was authorized, unless the scope of services or the methods used were later modified, in writing, and accepted by all parties prior to performance. Roux conducted this Phase I ESA in accordance with generally accepted practices in a manner consistent with that level of care exercised by other members of our profession in the same locality and under similar conditions of time and accessibility of improvements and information. No other representations, expressed or implied, and no warranty or guarantee is included or intended to be part of this Phase I ESA.

Please note that the scope of services performed in execution of this assessment may not be appropriate to satisfy the needs of other parties. We, therefore, are not responsible for independent conclusions, opinions, or recommendations of others based on our assessment. Furthermore, this Phase I ESA relates to the environmental conditions of the Subject Property and does not address issues raised in transactions such as business risk, purchase of business entities, or interests therein, or of their assets, that may well involve environmental liabilities pertaining to properties previously owned or operated or other off-site liabilities.

Additionally, the findings of this Phase I ESA are based on Roux' observations, inquiries, and historical research using reasonably ascertainable and practically reviewable information obtained within reasonable time and cost constraints. Roux does not represent that this Phase I ESA is an exhaustive investigation that reflects the findings of all of the information available for the Subject Property, nor is it representative of future Subject Property conditions. If additional information is generated from the Subject Property, it should be provided to Roux so that we may evaluate its impact on our conclusions. As such, activities or episodes that transpire subsequent to this Phase I ESA are not considered in this assessment. It is not intended that a Phase I ESA in accordance with ASTM E1527-21 be an exhaustive assessment of a property nor can it wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a property.

## 1.4 Assumptions

This Phase I ESA Report, including the exhibits attached hereto, describes the results of Roux' investigation to identify the presence of *recognized environmental conditions* connected with the Subject Property in accordance with ASTM E1527-21, as allowed by and consistent with the regulatory requirements of the All Appropriate Inquiry Rule, 40 CFR Part 312, Amendment to Standards and Practices for All Appropriate Inquires Under CERCLA, Final Rule, published December 30, 2013 (AAI Rule). Specifically, the preamble to the amended AAI Rule states:

> *The Environmental Protection Agency (EPA) today is taking final action to amend the standards and practices for conducting all appropriate inquiries under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to reference a standard practice recently made available by ASTM International, a widely recognized standards development organization. Specifically, this final rule amends the "All Appropriate Inquiries Rule" at 40 CFR Part 312 to reference ASTM International's E1527–13 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" and make clear that persons conducting all appropriate inquiries may use the procedures included in this standard to comply with the All Appropriate Inquiries Rule*[1].

[1] Federal Register: December 30, 2013 (Volume 78, Number 250) Page 79319

As of February 13, 2023, the EPA indicated that the updated standard ASTM E1527-21 is now AAI compliant. While ASTM E1527-21 is now the current standard, the previous standard (ASTM E1527-13) is still AAI compliant until February 13, 2024.

One of the requirements that a person acquiring real property must meet in order to qualify for either the innocent landowner, contiguous owner, or bona fide prospective purchaser (collectively hereinafter "Prospective Purchaser") defense to liability under the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, and the Small Business Liability Relief and Brownfields' Revitalization Act of 2002, 42 U.S.C. 9601-9675 (collectively referred to hereafter as "CERCLA") is that person must conduct all appropriate inquiries into the previous ownership and uses of the property in conformance with the AAI Rule (or the ASTM E1527-21) prior to acquisition of the property. The User has acknowledged that, under the AAI Rule, Roux' performance of this Phase I ESA in accordance with ASTM E1527-21 will not alone result in the User satisfying all requirements of the AAI Rule and will not in itself provide a defense to CERCLA liability. The User has acknowledged that the AAI Rule also requires that the Prospective Purchaser undertake certain additional inquiries and post-acquisition activities to satisfy the CERCLA AAI requirements. Accordingly, Roux makes no guarantees or warranties, expressed or implied, regarding this Phase I ESA, including without limitation, that this Phase I ESA will qualify the User for a defense to CERCLA liability.

Roux has performed this Phase I ESA in a professional manner using that degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants. Professional judgments expressed herein are based on the facts currently available to Roux.

The AAI Rule requires, and the conclusions and recommendations stated herein represent, the application of a variety of engineering and technical disciplines to material facts and conditions associated with the Subject Property. As such, these conclusions and recommendations are based on subjective interpretations and the exercise of discretion based on the facts available to Roux and conditions at the time of the performance of this Phase I ESA. Many of these facts and conditions are subject to change over time. Accordingly, the conclusions and recommendations must be considered within this context.

The User has agreed that Roux shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time this Phase I ESA was performed. To the extent practicable, Roux has identified data gaps, and has evaluated the potential significance of such data gaps. Recommendations to address those data gaps are presented herein and are based on the data available at the time of the performance of this Phase I ESA. Implementation of the recommendations may not fully address the data gaps, and the information obtained from execution of those recommendations may alter and/or modify the interpretation of the Subject Property conditions and conclusions, herein. This Phase I ESA does not include consideration of matters specifically excluded by ASTM E1527-21, including but not limited to, asbestos-containing building materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, and mold unless specifically identified herein. Emerging contaminants that are not defined as hazardous substances under CERCLA including, but not limited to per- and polyfluoroalkyl substances (PFAS) are outside the scope of the Phase I ESA. This Phase I ESA does not include the completion of searches for recorded environmental liens.

Roux has not collected any soil and/or groundwater samples on the Subject Property for Phase I purposes, and is relying on information presented by others, often in preliminary, draft, or verbal form. By referencing

this information, Roux does not accept responsibility for the accuracy of the underlying data, sampling methods, laboratory analysis, or documentation.

This Phase I ESA Report should not be considered a legal interpretation of existing environmental laws and regulations. This Phase I ESA was conducted with a reasonable degree of inquiry to identify *recognized environmental conditions*, but uncertainty is not eliminated. No Phase I ESA can wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a property. The Phase I ESA process is intended to reduce, but not eliminate, the uncertainty involved with identifying *recognized environmental conditions*.

This Phase I ESA Report is not an appraisal or value judgment of the Subject Property. The User has agreed that Roux shall not be liable for any use of this Phase I ESA Report as an appraisal or value judgment of the Subject Property.

This Phase I ESA Report has been prepared for the exclusive use of the User for specific application to the Subject Property covered by this Phase I ESA Report. The User has agreed that any third-party use of this Phase I ESA Report, upon disclosure by the User, is the sole responsibility and at the sole liability of the User.

## 1.5 User Reliance

No additional parties may use the information contained in this report without obtaining the written permission of Roux or the User. Roux' duties and obligations extend to the User and to no other party. Roux' duties and obligations to the User are not transferable to persons, corporations, or organizations without the express written consent of the User and Roux. The User may rely upon the information provided in this Phase I ESA report for a period of 180 days from the earliest of the previously listed components. After 180 days, this Phase I ESA should be updated in accordance with ASTM E1527-21 guidance. Roux will not be liable for any consequential damages arising from the use of this report for other than its intended purpose, for use of this report beyond 180 days of its issue date, or from unauthorized use by third parties. Dates components used in the preparation of this Phase I ESA were obtained are summarized below:

| Phase ESA Component Dates | | |
|---|---|---|
| **Component** | **Date Obtained** | **Expiration Date** |
| Radius Report | May 31, 2023 | November 27, 2023 |
| Knowledgeable Person Interview | August 10, 2023 | February 6, 2024 |
| Site Reconnaissance | July 28, 2023 | January 24, 2023 |

This Phase I ESA report must be read and interpreted as a whole and can only be considered representative of the conditions of the Subject Property as of the date of our site reconnaissance described herein. Roux makes no representation whatsoever concerning the condition of the Subject Property beyond the date of our site reconnaissance described herein. Individual sections and appendices of this report are dependent on the balance of this report, and on the terms, conditions, and stipulations contained in the proposal and written amendments accepted by Roux.

# 2. Subject Property Description

## 2.1 Subject Property Location and Description

| Subject Property Information | |
|---|---|
| Legal Description | Lot 128 MB 008/357 SD San Jacinto Rancho |
| Address | No assigned addresses currently exist |
| City | City of San Jacinto |
| County | Riverside |
| State | California |
| Location | Approximately 1,800 feet south-southwest of the corner of North Sanderson Avenue and North Ramona Boulevard |
| Assessor's Parcel Number (APN) | 432-030-012 |
| Site Acreage (per Los Angeles County Assessor Website) | 38.15 acres |
| Site Occupant(s) | None |
| On-site Operations | Agricultural production (unknown row crops) |
| Description of On-site Structures | No structures currently occupy the Subject Property |
| Site Paving | Unpaved |
| Site Vicinity | Agricultural (dry farming, animal grazing pastures, dairies), commercial, and residential use |

Refer to Section 5.0 for a detailed description of the current condition of the Subject Property and operations.

## 2.2 Vicinity General Characteristics

The facilities and improvements which are adjoining to the Subject Property are provided in the following table. Selected adjoining and nearby properties are shown in Figure 2.

| Direction from Subject Property | Improvements / Use (Addresses) |
|---|---|
| North | Agricultural land |
| East | North Sanderson Avenue followed by a single-family residential dwelling (1727 North Sanderson Avenue) and agricultural land |
| South | Agricultural land |
| West | Agricultural land |

## 2.3 Past Use of the Subject Property

The Subject Property was vacant land as early as 1901. By at least 1949, agricultural operations began at the Subject Property. Since initial agricultural development of the Subject Property, a rotation of row crops,

feed crops for livestock, and fallow land have been present at the Subject Property. At the time of site reconnaissance, row crops were present at the Subject Property.

## 2.4 Physical Setting

Roux obtained and reviewed published, reasonably ascertainable information concerning the physical setting of the Subject Property. The following is a summary of the information reviewed from those physical setting sources.

| Physical Setting Summary | |
|---|---|
| United States Geological Survey (USGS) Topographic Map | Lakeview, California Quadrangle |
| Approximate Subject Property Elevation / Source | 1,465 feet above mean sea level (msl) / Lakewood, California (2018) 7.5-minute quadrangle topographic map published by the USGS |
| Nearest Surface Water Features / Approximate Distance | A pond associated with the California Equine Retirement Foundation is located approximately 4,500 feet south-southeast, reclamation ponds associated with the San Jacinto Valley Regional Reclamation Facility are located approximately 5,100 feet to the south and south-southwest, the San Jacinto Reservoir is located approximately 6,050 feet to the southeast, and the San Jacinto River is located approximately 7,000 feet to the north of the Subject Property. |
| Regional Geology / Source | Quaternary deposits: alluvium, lake, playa and terrace, consolidated and semi-consolidated / California Department of Conservation, 2010 Geologic Map of California |
| Subject Property Topography / Source | Generally flat with a gradual slope to the north / Site observation and USGS topographic map |
| Hydrogeological Region / Source | Located along the eastern portion of the San Jacinto Groundwater Basin / *California Department of Water Resources Bulletin 118, Update 2003 and Interim Update 2016* |
| Depth to Groundwater / Source | Perched groundwater zones in the site vicinity were reported to be approximately 11 to 13 feet below ground surface (bgs) / Monitoring well installation report for a facility approximately 2,600 feet north-northeast of the Subject Property (Leighton, 2009) |
| Groundwater Gradient Direction / Source | Groundwater in the site vicinity is reported to flow to the southwest with a hydraulic gradient of approximately 0.004 feet per foot / Monitoring well installation report for a facility approximately 2,600 feet north-northeast of the Subject Property (Leighton, 2009) |
| On-site or Nearby Soils | Soils in the site vicinity are reported to be silty sands to a depth of approximately 16 feet bgs, fine-grained sand from 16 to 20 feet bgs, and silty sand from 20 feet bgs to a total depth explored of 22 feet bgs / Monitoring well installation report for a facility approximately 2,600 feet north-northeast of the Subject Property (Leighton, 2009) |

# 3. Sources of Information

Sources of information utilized in preparing this Phase I ESA report included historical topographic maps; historical aerial photographs; a walkover survey of the Subject Property and adjoining properties; in-person discussions with User and tenant personnel; a review of records available at selected local and state regulatory agencies; a review of databases maintained by local, state, and federal government agencies; and other records available from commercial and online sources.

## 3.1 Historical Sources

To help understand the history of the Subject Property and adjoining properties, historical sources were obtained from Environmental Data Resources, Inc. (EDR), of Shelton, Connecticut. The sources and locations within the Appendices are provided in the table below.

| EDR Historical Sources | | |
|---|---|---|
| **Historical Range** | **Source** | **Appendix** |
| 1901 – 2018 | U.S. Geological Survey Topographic Maps | B |
| 1938 – 2020 | EDR Aerial Photographs "Decade Package" | C |
| No Available Coverage | EDR "Certified Sanborn® Map Report" | D |
| 1971 – 2020 | EDR "City Directory Image Report" | E |

## 3.2 Government Databases

To document potential sources of contamination at or near the Subject Property, a government records search was conducted by EDR. The search included local, state, and federal records for the Subject Property and for other properties within ASTM-standard distances of the Subject Property. The records search is summarized in Section 8.0 and a copy of "The EDR Radius Map™ Report with GeoCheck®," dated May 31, 2023, is included in its entirety as Appendix F. As recommended by ASTM, all but a few of the databases searched were "current," i.e., had been updated within 90 days prior to the search date.

## 3.3 Site Reconnaissance

On July 28, 2023, Roux personnel conducted a reconnaissance of the Subject Property. During the site reconnaissance, Roux representative Ms. Audrey Clark was able to access all areas of the Subject Property, which was used for agricultural production at the time of the reconnaissance. The observations made during the site reconnaissance are discussed in Section 5.0 and throughout the report. A photographic log of the site reconnaissance is included as Appendix G.

## 3.4 Interviews

On August 10, 2023, Roux contacted Mr. Jay Pierce, a representative of the Subject Property ownership, via telephone for an interview regarding the history of the Subject Property. Mr. Pierce has been associated with the Subject Property since approximately 2001 and was not aware of the current type of crop being grown on-site. Mr. Pierce confirmed that crop production has varied over the years and has included watermelon

and grain for animal feed. Mr. Pierce referred to a previous Phase I ESA report which is discussed below in Section 6.0.

No previous Subject Property owners/operators were available for an interview. This data gap is not considered significant due to sufficient information regarding Subject Property history available from EDR historical documents and public records requests.

## 3.5 User Provided Information

ASTM E1527-21 provides an optional User Questionnaire to present select User-provided information that can assist in identifying possible RECs in connection with the Subject Property. According to ASTM E1527-21, these tasks do not require the technical expertise of an environmental professional and the environmental professional generally does not perform these tasks. Roux administered the optional questionnaire to the User at the beginning of this Phase I ESA to assist them with these tasks; however, the completed questionnaire has not been returned to Roux as of this report date.

## 3.6 Regulatory Agencies

Roux contacted governmental agencies for reasonably ascertainable information concerning environmental conditions at the Subject Property. Roux contacted or reviewed information from the agencies provided in the following table. Refer to Appendix H – Pertinent Historical Documentation for copies of the records reviewed. A summary of the information gathered from the regulatory agencies is provided in the table and details regarding the records were incorporated into applicable sections as noted.

| Agency | Date Requested / Accessed | Response Date | Description of Records | Section Discussed |
|---|---|---|---|---|
| **Federal** | | | | |
| U.S. Environmental Protection Agency (EPA) – FOIAonline | 5/30/2023 | Pending | A response has not been received as of this report date. | N/A |
| National Pipeline Mapping System (NPMS) Online Database | 5/31/2023 | N/A | No pipelines were found within 1,000 feet of the Subject Property. | N/A |
| **State** | | | | |
| State Water Resources Control Board (SWRCB): GeoTracker Online Database | 5/31/2023 | N/A | No records were associated with the Subject Property and no records were identified within 1,000 feet of the Subject Property. | N/A |
| SWRCB: Storm Water Multiple Application and Report Tracking System (SMARTS) Online Database | 5/31/2023 | N/A | No records were associated with the Subject Property. | N/A |
| Department of Toxic Substances Control (DTSC) Sacramento Office | 5/30/2023 | 6/1/2023 | No records were associated with the Subject Property. | N/A |
| DTSC Chatsworth Office | 5/30/2023 | 5/31/2023 | No records were associated with the Subject Property. | N/A |
| DTSC Cypress Office | 5/30/2023 | 6/6/2023 | No records were associated with the Subject Property. | N/A |
| DTSC: EnviroStor Online Database | 5/31/2023 | N/A | No records were associated with the Subject Property.<br>One EnviroStor record was listed on an adjoining property west of the Subject Property. The Proposed High School at the Villages of San Jacinto facility is listed as a DTSC Site Cleanup Program and discussed below in Section 7.1.2. | 7.1.2 |
| DTSC: Hazardous Waste Tracking System (HWTS) Online Database | 5/31/2023 | N/A | No records were associated with the Subject Property. | N/A |

| Agency | Date Requested / Accessed | Response Date | Description of Records | Section Discussed |
|---|---|---|---|---|
| California Air Resources Board (CARB) | 5/30/2023 | 5/31/2023 | No records were associated with the Subject Property. | N/A |
| California Office of Environmental Health Hazard Assessment (OEHHA) | 5/30/2023 | Pending | A response has not been received as of this report date. | N/A |
| CalEPA CalRecycle | 5/30/2023 | 6/23/2023 | No records were associated with the Subject Property. | N/A |
| CalEPA CalRecycle Solid Waste Information System (SWIS) Online Database | 5/31/2023 | N/A | No records were associated with the Subject Property. | N/A |
| State of California Department of Conservation: Geological Energy Management (CalGEM) Online Database | 5/31/2023 | N/A | No on-site and nearby oil well records. | N/A |
| **County / Regional** | | | | |
| Santa Ana Regional Water Quality Control Board (SARWQCB) | 5/31/2023 | 6/5/2023 | No records were associated with the Subject Property as the SARWQCB does not store records by APN. | N/A |
| South Coast Air Quality Management District (SCAQMD) | 5/30/2023 | 5/30/2023 | No records were associated with the Subject Property. | N/A |
| SCAQMD Facility Information Detail (FIND) Online Database | 5/31/2023 | N/A | No records were associated with the Subject Property. | N/A |
| Riverside County Department of Environmental Health (RCDEH) Land Use and Water Resources | 5/30/2023 | 6/14/2023 | No records were associated with the Subject Property as the RCDEH does not store records by APN. | N/A |
| RCDEH Hazardous Materials and Underground Storage Tanks (USTs) | 5/30/2023 | 5/31/2023 | No records were associated with the Subject Property. | N/A |
| Riverside County Building and Safety Department (RCBSD) | 5/30/2023 | 5/30/2023 | No records were associated with the Subject Property. | N/A |
| RCBSD Online Database | 5/30/2032 | N/A | No records were associated with the Subject Property. | N/A |
| **City / Local** | | | | |
| City of San Jacinto City Clerk | 5/30/2023 | 6/15/2023 | No records were associated with the Subject Property. | N/A |

# 4. Subject Property History

This section documents the history of the Subject Property and adjoining properties and describes current conditions and existing or former environmental features.

## 4.1 Subject Property History

The history of the Subject Property and, to a lesser extent, the surrounding area, including previous land use, has been compiled based on information from the exhaustive list of sources provided in Section 3.

| Summary of Historical Sources | | | | |
|---|---|---|---|---|
| **Decade** | **Year** | **Source** | **Subject Property Description** | **Vicinity Description** |
| Predevelopment History | | | | |
| 1900s | 1901 | Historical Topographic Map: Elsinore / San Jacinto (30-minute) | The Subject Property appear to be undeveloped vacant land. | Adjoining properties appear as vacant land. Roads are depicted to the north (currently Ramona Expressway) and east (currently Ramona Boulevard). Minor homesteads or residential dwellings are depicted during this period. |
| 1920s | No sources available. | | | |
| 1930s | 1938 | EDR Aerial Photograph | The Subject Property is depicted as undeveloped vacant land. | The Colorado River Aqueduct is depicted to the north of the Subject Property. |
| Early Agricultural Use | | | | |
| 1940s | 1943 | Historical Topographic Map: Perris / Banning (15-minute) | No significant changes from prior topographic maps. | No significant changes from prior Subject Property history except for some additional residential dwellings to the north and east and the appearance of a dirt road in the Subject Property's vicinity on the west. |
| | 1948 | Historical Topographic Map: Banning (15-minute) | The Subject Property is located in an unmapped region of the topographic map. | No significant changes from prior topographic maps. |

| Summary of Historical Sources | | | | |
|---|---|---|---|---|
| **Decade** | **Year** | **Source** | **Subject Property Description** | **Vicinity Description** |
| | 1949 | EDR Aerial Photograph | The Subject Property is depicted as developed by agricultural related activities (row crops). An unpaved road is depicted along the eastern boundary of the Subject Property. | Adjoining properties are depicted as developed by row crops. |
| 1950s | 1953 | Historical Topographic Map: Lakeview / San Jacinto (7.5-minute) | The Subject Property is depicted as vacant land (identified as developed by row crops in aerial photos). A dirt road is depicted to run along the eastern boundary of the of the Subject Property's parcel. | The Colorado River Aqueduct is present to the north of the Subject Property. The San Jacinto Reservoir is depicted approximately 1-mile southeast of the Subject Property. |
| | | EDR Aerial Photograph | No significant changes from prior aerial photographs. | No significant changes from prior aerial photographs. |
| | 1956 | Historical Topographic Map: Lakeview / San Jacinto (7.5-minute) | The Subject Property is located in an unmapped region of the topographic map. | No significant changes from prior topographic maps. |
| 1960s | 1961 | EDR Aerial Photograph | No significant changes from prior aerial photographs. | Adjoining properties during this period are depicted as being developed by duck ponds to the north and east of the Subject Property. No other configurational changes were noted. |
| | 1967 | EDR Aerial Photograph | No significant changes from prior aerial photographs. | No significant changes from prior aerial photographs. |
| 1970s | 1967 / 1972 | Historical Topographic Map: Lakeview / San Jacinto (15-minute) | No significant changes from prior topographic maps. | No significant changes from prior topographic maps. |
| | 1975 | EDR Aerial Photograph | No significant changes from prior aerial photographs. | No significant changes from prior aerial photographs. |
| | 1978 | EDR Aerial Photograph | No significant changes from prior aerial photographs. | No significant changes from prior aerial photographs. |
| | 1979 | Historical Topographic Map: Lakeview / San Jacinto (7.5-minute) | No significant changes from prior topographic maps. | Asphalt surfacing of the former identified unpaved road on the eastern elevation of the Subject Property (North Sanderson Avenue). |

| Summary of Historical Sources | | | | |
|---|---|---|---|---|
| **Decade** | **Year** | **Source** | **Subject Property Description** | **Vicinity Description** |
| 1980s | 1985 | EDR Aerial Photograph | No significant changes from prior aerial photographs. | Adjoining properties to the north and to the east following North Sanderson Avenue appear to be vacant land covered in native vegetation. Adjoining properties to the west and south appear to be agriculturally developed by row crops as identified previously. |
| | 1989 | EDR Aerial Photograph | No agricultural activities appear to be present. The Subject Property is vacant. | Limited row crops appear to the east following North Sanderson Avenue. The other adjoining properties have had no significant changes from what has been identified previously. |
| 1990s | 1996 | EDR Aerial Photograph | Agricultural activities resume with row crops. | Agricultural fields to the east following North Sanderson Avenue appear to be dormant as well as to the west. Row crops are developed on the northern and southern adjoining properties. Potential construction is noted to the northeast across from North Sanderson Avenue. |
| | | Historical Topographic Map: San Jacinto (7.5-minute) | The Subject Property is located in an unmapped region of the topographic map. | No significant changes from prior topographic maps. |
| 2000s | 2002 | EDR Aerial Photograph | No agricultural activities appear to be present. The Subject Property is vacant. | Agricultural fields to the east following North Sanderson Avenue have had no significant changes. Adjoining properties to the north, south and appear to be fallow land. Limited row crops are depicted on the western adjoining property. |
| | 2006 | EDR Aerial Photograph | No significant changes from prior aerial photographs. | No significant changes from prior history except the western adjoining property, which appears to be dormant. |
| | 2009 | EDR Aerial Photograph | No significant changes from prior aerial photographs. | No significant changes from prior aerial photographs. |

| Summary of Historical Sources | | | | |
|---|---|---|---|---|
| **Decade** | **Year** | **Source** | **Subject Property Description** | **Vicinity Description** |
| 2010s | 2012 | Historical Topographic Map: Lakeview / Sab Jacinto (7.5-minute) | No significant changes from prior topographic maps. | No significant changes from prior topographic maps. |
| | 2012 | EDR Aerial Photograph | No significant changes from prior aerial photographs. | No significant changes from prior aerial photographs. |
| | 2015 | Historical Topographic Map: Lakeview / San Jacinto (7.5-minute) | No significant changes from prior topographic maps. | No significant changes from prior topographic maps. |
| | 2016 | EDR Aerial Photograph | No significant changes from prior aerial photographs. | No significant changes from prior aerial photographs. |
| | 2018 | Historical Topographic Map: Lakeview / San Jacinto (7.5-minute) | No significant changes from prior topographic maps. | No significant changes from prior topographic maps. |
| 2020s | 2020 | EDR Aerial Photograph | No significant changes from prior aerial photographs; however, the Subject Property appears to have active agricultural growth. | No significant changes from prior aerial photographs. |

The Subject Property continued to be used for agricultural purposes (row crops). Environmental concerns associated with historical and current agricultural operations are discussed below in Section 5.2.

# 5. Current Subject Property Conditions

A Roux representative conducted a reconnaissance of the Subject Property and surrounding areas on July 28, 2023. During the Subject Property visit, Roux representative, Ms. Audrey Clark, observed the Subject Property and adjoining properties from reasonably accessible locations on the Subject Property and public thoroughfares. During the site reconnaissance, the weather was clear, and the temperature was approximately 100° Fahrenheit. The following sections summarize observations during the inspection. Roux documented the site reconnaissance with photographs which are provided in Appendix G.

## 5.1 Site Reconnaissance

The Subject Property is currently agricultural land used for growing row crops. Roux observed a PVC-piping irrigation system used at the Subject property and surrounding properties. North Sanderson Avenue is located immediately east of the Subject Property. The adjoining properties to the north, east, south, and west are mainly agricultural and/or fallow land. To the east, there is a single-family residence and agricultural land.

## 5.2 Phase I ESA Observations

During the site reconnaissance, Roux personnel attempted to identify any environmental features that may be relevant in the context of the Phase I ESA. The features identified are summarized in the table below. Any such features are discussed in the following subsections.

| Feature | Observed on the Subject Property | Observed on an Adjoining Property |
|---|---|---|
| Areas of stressed vegetation | | |
| Areas which receive flood or storm water from potentially contaminated areas | | |
| Air Compressor Vent Discharges | | |
| Chemical Storage and/or Use | | |
| Drainage Swales and Culverts | | |
| Discharge Areas | | |
| Discolored or Spill Areas | | |
| Drums (55 Gallons or Larger) | | |
| Electrical Transformers | | |
| Former Agricultural Applied Pesticide Area | X | X |
| Hydraulic Lifts | | |
| Incinerators | | |
| Landfills or Landfarms | | |

| Feature | Observed on the Subject Property | Observed on an Adjoining Property |
|---|---|---|
| Loading and Unloading Areas | | |
| Non-Contact Cooling Water Discharge | | |
| Oil-Water Separator(s) | | |
| Open Areas Away from Production Areas | | |
| Process Area Sinks and Piping | | |
| Rail Cars/Railroad Spurs | | |
| Septic Systems Leach Fields or Seepage Pits | | |
| Silos | | |
| Sprayfields | | |
| Storm Sewer and Spill Containment Collection System | | |
| Storm Water Detention Pond | | |
| Surface Impoundments and Lagoons | | |
| Underground / Aboveground Storage Tanks and Associated Piping | | |
| Waste Piles | | |

### 5.2.1 Former Agricultural Applied Pesticide Area

The Subject Property has been primarily developed for agricultural purposes (row crops and feed crops) since 1949. At the time of Roux's site reconnaissance, the Subject Property was primarily developed with row crops (unknown crop). According to a representative of the Subject Property owner, agricultural production at the site has included watermelon and grain (likely wheat). Agricultural production history at the Subject Property is not currently known. Based on the long term agricultural use, it is likely that agricultural chemicals, such as pesticides, herbicides, and fertilizers, have been used on-site, and the potential for impacts from agricultural chemicals to on-site soils is considered a REC.

# 6. Summary of Key Previous Investigations

The following sections provide a summary of previous environmental investigations at the Subject Property. Previous environmental investigation reports are included in Appendix H.

Roux conducted previous investigations at the southwest adjoining property in 2021. The off-site investigations were prepared under separate covers and no environmental issues were identified that would be considered a REC to the Subject Property in the context of this Phase I ESA.

## 6.1 Phase I ESA (South Shore, 2021)

South Shore Testing and Environmental (South Shore) conducted a Phase I ESA of the Subject Property in 2021 on behalf of the current property owner, J.D. Pierce Company, Inc. At the time of the assessment, the Subject Property was vacant agricultural land and proposed to be redeveloped for residential use. South Shore identified the potential presence of pesticides in soil from historical agricultural use as a REC and recommended further investigation.

According to Mr. Pierce, while the previous site assessment recommended further investigation into the presence of pesticides in shallow soil, no such subsurface investigations have been conducted to date.

# 7. Database Records Review

## 7.1 Standard Environmental Record Sources

According to ASTM Standard E1527-21, the purpose of reviewing regulatory records is to obtain and review records that will help identify *recognized environmental conditions* in connection with the Subject Property. In addition, some records to be reviewed pertain not only to the Subject Property, but also to properties within an additional "approximate minimum search distance" in order to help assess the likelihood of problems from migrating hazardous substances or petroleum products. The basis of the "approximate minimum search distance" is the Subject Property boundary.

Roux retained EDR of Shelton, Connecticut to provide an ASTM Radius Map Report (EDR Report) for this Subject Property. This report is a computerized search of select state and federal environmental databases that identify various properties with a record of environmental activity. Roux reviewed the report and summarized the relevant findings in the following sections. A copy of the compiled EDR Report has been included as Appendix F. The EDR report includes a detailed description of each of the databases searched, providing a summary of the type of information provided by each. A summary of Roux' review of the EDR Report listings is provided in Table 1.

The following section describes the findings of the database search. Roux used professional judgement in determining which EDR-listed sites to include in the narrative of this report. Facilities adjoining the Subject Property were included due to their proximity to the Subject Property and the potential for surface water discharges (e.g., storm water runoff, surface water effluent discharges) to enter the Subject Property or through the migration of groundwater. Sites with listings indicative of a release (e.g., SHWS, LUST, RELEASE) are likewise discussed below. Non-adjoining facilities with database listings not necessarily indicative of a release (hazardous waste generator, FINDS, ECHO, NPDES, HAZNET, AST, or UST) will not be discussed unless considered potentially relevant in context of the Phase I ESA.

### 7.1.1 Subject Property (Target Property)

No listings for the Subject Property were identified in the EDR Report.

### 7.1.2 Adjoining and Nearby Properties

Discussions of adjoining and nearby properties of potential environmental concern as noted in Table 1 are provided below.

- **Proposed High School at the Villages of San Jacinto (Ramona Boulevard and Cawston Avenue).** The Proposed High School at the Villages of San Jacinto (Proposed High School) was located approximately 0.15 mile west of the Subject Property and is listed on the ENVIROSTOR and SCH databases. The ENVIROSTOR listing indicates soil samples, composite surface soil samples, and discrete soil samples were collected from the property to determine potential threat to public health and/or the environment related to former agricultural use of the site. A letter of "No Further Action" was given on September 24, 2008. Based on the "No Further Action" letter and the lack of additional investigation, the Proposed High School property is not considered an environmental concern in the context of the Phase I ESA.

- **San Jacinto Mobil (2070 North Sanderson Avenue).** The San Jacinto Mobil facility is located approximately 0.5 mile northeast of the Subject Property and is listed on the LUST (Leaking Underground Storage Tank), CORTESE, and CERS databases. The LUST database indicates there is a cleanup case for diesel, gasoline, waste oil, motor oil, hydraulic oil, and lubricating oil in

groundwater. According to groundwater monitoring reports, samples collected towards the direction of the Subject Property were non-detectable or had low detections of chemicals of concern (Leighton, 2009). On May 27, 2010, the facility was granted case closure by RCDEH. Due to the closure status and low detections, the San Jacinto Mobil facility is not considered an environmental concern in the context of the Phase I ESA.

### 7.1.3 Orphan Subject Properties

The EDR Report includes a section addressing "Orphan" sites. Orphan listings are sites, which, due to incomplete geographic location data, incomplete address information or incorrect address information, cannot be plotted correctly. The database report identified no unmapped facilities.

# 8. Findings

Roux has performed this Phase I ESA in general compliance with the scope and limitations of ASTM Standard Practice E1527-21. Roux separated the findings of this assessment into the following four categories: *recognized environmental conditions*, *controlled recognized environmental conditions*, *historical recognized environmental conditions* and *other environmental features*.

## 8.1 Data Gaps

During conduct of this ESA, the following data gaps, as defined in ASTM Standard E1527-21 were identified:

- The timing of the report did not allow for all contacted agencies to respond to the records requests issued. This data gap is not considered significant due to sufficient information available from previous environmental reports, the EDR report, and city, county, and state websites.
- Previous Subject Property owners/operators were not available for an interview. This data gap is not considered significant due to sufficient information regarding Subject Property history available from EDR historical documents and FOIA requests.

## 8.2 Recognized Environmental Conditions

Based on the information obtained through the performance of this ESA, Roux identified the following RECs in connection with the current and historical operations at the Subject Property or adjoining properties. To the extent possible, the locations of the RECs are shown in Figure 2. To avoid confusion, all RECs, cRECs, hRECs, and OEFs are numbered sequentially.

**REC 1 - Former Agricultural Applied Pesticide Area**. Based on a review of historical sources, the Subject Property was developed for agricultural use (row crops and feed crops) as early as 1949, with increased agricultural development noted from at least 1978 to 2016. During the site reconnaissance in July 2023, row crops were observed on the Subject Property. Agricultural production history at the Subject Property is not currently known. Based on the long term agricultural use, it is likely that agricultural chemicals, such as pesticides, herbicides, and fertilizers, have been used on-site, and the potential for impacts from agricultural chemicals to on-site soils is considered a REC.

## 8.3 Controlled Recognized Environmental Conditions

Roux did not identify known or suspected cRECs in connection with the current and historical operations at the Subject Property or adjoining properties.

## 8.4 Historical Recognized Environmental Conditions

Roux did not identify known or suspected hRECs in connection with the current and historical operations at the Subject Property or adjoining properties.

## 8.5 Other Environmental Features

Roux did not identify known or suspected OEFs in connection with the current and historical operations at the Subject Property or adjoining properties.

# 9. References


American Society for Testing Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-21)

EDR, *The EDR Radius Map™ Report with GeoCheck®*, May 31, 2023

EDR, *The EDR Aerial Photo Decade Package*, May 31, 2023

EDR, *EDR Historical Topo Map Report*, May 31, 2023

EDR, *Certified Sanborn Map Report*, May 31, 2023

EDR, *The EDR-City Directory Abstract*, June 2, 2023

Leighton Consulting, Inc. (Leighton), *Groundwater Monitoring Well Installation Report and Results of Groundwater Monitoring, Former San Jacinto Mobil, Site No. 200824216, 2070 North Sanderson Avenue, San Jacinto, California*, August 24, 2009

South Shore Testing and Environmental (South Shore), *Phase I Environmental Site Assessment, Undeveloped Agricultural Land, Tentative Tract Map No. 38107, APN 432-030-012, San Jacinto, California,* June 28, 2021.

# 10. Signature of Environmental Professional

Roux performed this assessment in accordance with the generally accepted practices for environmental assessments at the time of implementation. Roux made a reasonable effort to ensure that the information presented in this report is materially complete and accurate.

Roux completed a Phase I ESA in general compliance with the scope and limitations of ASTM Practice E1527-21 of the property located along North Sanderson Avenue, approximately 1,800 feet south-southwest of the corner of North Sanderson Avenue and North Ramona Boulevard, San Jacinto, Riverside County, California.

“We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental professional as defined in §312.10 of 40 CFR 312” and,

“We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.”

Roux performed this Phase I ESA by, or under direct supervision of, the undersigned environmental professionals. Copies of professional profiles for the undersigned environmental professionals and report preparers are included in Appendix I.

Respectfully Submitted,

**ROUX ASSOCIATES, INC.**

Rocio Quinones
Project Scientist

Mauricio Escobar, P.G.
Vice President / Principal Geologist

# TABLES

1. Standard Environmental Record Sources (EDR Report) Summary

Table 1: Standard Environmental Record Sources (EDR Report) Summary
Avenue and Ramona Boulevard, San Jacinto, California

| Site Name | Address | Database Listings | Distance (Miles) | Direction | Discussed in Report Text |
|---|---|---|---|---|---|
| PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINT | RAMONA BOULEVARD/CAWSTON AVENUE | ENVIROSTOR,SCH | 0.148 | WSW | No |
| BETTY GOEDHART | 2004 N. RAMONA BLVD. | RCRA NONGEN / NLR | 0.193 | NE | No |
| SAN JACINTO MOBIL | 2070 N SANDERSON AVE. | LUST,CORTESE,CERS | 0.493 | NNE | Yes |
| MOBIL SAN JACINTO | 2070 SANDERSON | LUST | 0.493 | NNE | Yes |

Notes

Blue: Facility does not have associated database listings indicative of a release or contamination

Green: Facility is hydraulically downgradient or crossgradient and/or is a closed release case

Orange: Facility has an associated release case impacting soil only and/or VOCs are not a potential contaminant of concern

# FIGURES

1. Site Location Map
2. Site Plan

QUADRANGLE LOCATION

N

1,000 0 1,000'

Title:

# SITE LOCATION MAP

SOUTH-SOUTHWEST OF NORTH SANDERSON AVENUE AND NORTH RAMONA BOULEVARD
SAN JACINTO, CALIFORNIA

Prepared for:

SHEA PROPERTIES

ROUX

| | | |
|---|---|---|
| Compiled by: O.B. | Date: 06/09/23 | FIGURE |
| Prepared by: O.B. | Scale: AS SHOWN | 1 |
| Project Mgr: R.Q. | Project: 2217.0030L | |
| File: Site Location.mxd | | |

\\SRVLACAFP1\LA SHARED\CLIENTS\2217.0030L SHEA SAN JACINTO SEC SANDERSON MHE\09GIS\SITE LOCATION.MXD

LEGEND

- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- (1) RECOGNIZED ENVIRONMENTAL CONDITION (REC)

N

200' 0' 200'

Aerial Image © Microsoft Corporation 2021

Title:

# SITE PLAN

SOUTH-SOUTHWEST OF NORTH SANDERSON AVENUE AND NORTH RAMONA AVENUE, SAN JACINTO, CALIFORNIA

Prepared for:

SHEA PROPERTIES

ROUX

| | | |
|---|---|---|
| Compiled by: C.J. | Date: 27 JULY 2023 | FIGURE |
| Prepared by: M.B. | Scale: AS SHOWN | |
| Project Mgr: R.Q. | Project: 2217.0025L | 2 |
| File: 001_2217.00XX_SITE PLAN.DWG | | |

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# APPENDICES

A. Glossary of Terms

B. Historical Topographic Maps

C. Historical Aerial Photographs

D. Certified Sanborn Report

E. EDR City Directory Image Report

F. EDR Radius Map Report with GeoCheck®

G. Photographic Log

H. Pertinent Historical Documentation

I. Professional Profiles

# APPENDIX A

Glossary of Terms

# GLOSSARY OF KEY TERMS

This appendix provides definitions, description of terms, and a list of acronyms for many of the words used in ASTM E 1527-21. These terms are an integral part of ASTM E 1527-21 and are critical to understanding ASTM E 1527-21 and its use.

***DEFINITIONS:***

***Abandoned Property*** – *property* that can be presumed to be deserted, or an intent to relinquish possession or control can be inferred from the general disrepair or lack of activity thereon such that a reasonable person could believe that there was an intent on the part of the current *owner* to surrender rights to the *property*.

***Activity and Use Limitations*** – Legal or physical restrictions or limitations on the use of, or access to, a site or facility: *(1)* to reduce or eliminate potential exposure to *hazardous substances* or *petroleum products* in the soil, soil vapor, groundwater, and/or surface water on the *property*, or *(2)* to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or *engineering controls*, are intended to prevent adverse impacts to individuals or populations that may be exposed to *hazardous substances* and *petroleum products* in the soil, soil vapor, groundwater, and/or surface water on a *property*.

***Construction debris, n*** – Concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvement to property.

***Contaminated public wells, n*** – Public wells used for drinking water that have been designated by a government entity as contaminated by toxic substances (for example, chlorinated solvents,) or petroleum products, or as having water unsafe to drink without treatment.

***Contiguous Property Owner [42 U.S.C. Section 9607 (q)], n***– a person may qualify for the *contiguous property owner liability protection* if, among other requirements, such person owns real *property* that is contiguous to, and that is or may be contaminated by *hazardous substances* from other real *property* that is not owned by that person. Furthermore, such person conducted *all appropriate inquiries* at the time of acquisition of the *subject property* and did not know or have reason to know that the *subject property* was or could be contaminated by a *release* or threatened *release* from the contiguous *property*. The *all appropriate inquiries* must not result in knowledge of contamination. If it does, then such person did “know” or “had reason to know” of contamination and would not be eligible for the *contiguous property owner liability protection*. See appendix C1 for the other necessary requirements that are beyond the scope of this practice.

***Controlled Recognized Environmental Condition, n*** – a *recognized environmental condition* affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with *hazardous substances* or *petroleum products* allowed to remain in place subject to implementation of required controls (for example, *activity and use limitations* or *other property use limitations*). For examples of *controlled recognized environmental conditions,* see Appendix X4.

***Data failure, n*** – failure to achieve the historical research objective in 8.3.1 even after reviewing the *standard historical resources* in 8.3.4.1 through 8.3.4.8 that are *reasonably ascertainable* and likely to be useful. *Data failure* is on type of *data gap*.

**Data gap, n** – a lack of or inability to obtain information required by this practice despite *good faith* efforts by the *environmental professional* to gather such information. *Data gaps* may result from incompleteness in

any of the activities required by this practice, including, but not limited to, *site reconnaissance* (for example, an inability to conduct the *site visit*), and *interviews* (for example. An inability to interview the *key site manager*, regulatory officials, etc.). See 12.6.

*de minimis condition, n* – a condition related to a *release* that generally does not present a threat to human health or the *environment* and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a *de minimis condition* is not a *recognized environmental condition* nor a *controlled recognized environmental condition*.

***Demolition debris, n*** – Concrete, brick, asphalt, and other such building materials discarded in the demolition of a building or other improvement to a property.

***Drum, n*** – A container (typically, but not necessarily, holding 55 gal (208 L) of liquid) that may be used to store *hazardous substances* or *petroleum products.*

***Dry wells, n*** – Underground areas where soil have been removed and replaced with pea gravel, coarse sand, or large rocks. Dry wells are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional), and wastewater disposal (often illegal).***Dwelling, n*** – Structure of portion thereof used for residential habitation.

***Engineering controls, n*** – Physical modifications to a site or facility (for example, capping, slurry walls, or point of use water treatment) to reduce or eliminate the potential for exposure to hazardous substances or petroleum products contaminants in the soil or groundwater on the property.

***Environment, n*** – *environment* shall have the same meaning as the definition of *environment* in CERCLA 42 U.S.C. Section 9601(8), For additional background information, see Legal Appendix (Appendix X1) to X1.1.1 “Releases.”

***Environmental Compliance audit, n –*** the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe this practice, although an *environmental compliance audit* may include an *environmental site assessment* or, if prior to audit are available, may be part of an *environmental site assessment*.

***Environmental lien, n*** – A charge, security, or encumbrance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*, including (but not limited to) liens imposed pursuant to CERCLA 42 USC § 9607(1) & 9607(r) and similar state or local laws.

***Environmental professional, n –*** a person meeting the education, training, and experience requirements as set forth in 40 C.F.R. § 312.10(b). For the convenience of the reader, this section is reprinted in Appendix X2. The person may be an independent contractor or an employee of the *user*.***ERNS list, n*** – EPA’s emergency response notification system list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such releases or spills are codified in 40 C.F.R. parts 302 and 355.

***Fire insurance maps, n*** – Maps originally produced for fire insurance purposes that indicate uses of properties at specified dates.

***Good faith, n –*** absence of any intention to seek an unfair advantage or to defraud another property; an honest and sincere intention to fulfill one's obligations in the conduct or transaction concerned.

***Hazardous substance, n*** – A substance defined as hazardous pursuant to CERCLA 42 USC § 9601(14), as interpreted by EPA regulations and the courts: "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Soil Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 USC § 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph; the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)." (See Appendix X1.)

***Hazardous waste*** – Any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Cat (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress). The Solid Waste Disposal Act of 1980 amended RCRA. RCRA defines hazardous waste, in 42 USC § 6903, as: "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may: (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness, or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

***Hazardous waste/contaminated sites, n –*** sites on which a *release* has occurred, or is suspected to have occurred, of any *hazardous substance, hazardous waste,* or *petroleum products*, and that *release* has been reported to a government agency.***Innocent landowner [42 U.S.C. § 9601(35) & 9607(b)(3), n –*** a person may qualify as one of three types of innocent landowners: (1) a person who "did not know and had no reason to know" that contamination existed on the subject property at the time the purchaser acquired the subject property; (2) a government entity which acquired the subject property by escheat, or through any other involuntary transfer or acquisition, or through the exercise of eminent domain authority by purchase or condemnation; (3) a person who "acquired the facility by inheritance or bequest." To qualify for the *innocent landowner* defense, such person must have made *all appropriate inquiries* on or before the date or purchase. Furthermore, the *all appropriate inquiries* must not have resulted in knowledge of the contamination. If it does, then such person did "known" or "had reason to know" of contamination and would not be eligible for the *innocent landowner defense*. See Appendix X1 for the other necessary requirements that are beyond the scope of this practice.

***Institutional controls (IC), n*** – A legal or administrative mechanism (e.g., deed restriction, restrictive zoning) on the use of, or access to, a site or facility to (1) reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the property, Of (2) to prevent activities that could interfere with the effectiveness of a response actions, in order to ensure maintenance of a condition of no significant risk to public health of the environment. An *institutional control* is a type of activity and use limitation (AUL).

***Land title records, n -*** records that affect the title of real estate, which may include, among other things, deeds, mortgages, leases, land contracts, court orders, easements, liens, and AULs recorded within the

recording systems or land registration systems created by state statute in every state and ordinarily administered in the local jurisdiction (usually the county) in which the subject property is located, and available by performing a title search. Such records are publicly accessible, through the process of performing a title search to find *land title records* often requires specialized expertise or knowledge of the local system. Information bout the title to the subject property that is filed or stored in any place other than where land title records are, by law or custom, recorded for the local jurisdiction in which the subject property is located, are not considered land title records.

***Landfill, n*** – A place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *solid waste disposal site* and is also known as a garbage dump, trash dump, or similar term.

***Landowner liability protections (LLPs), n –*** A defense to CERCLA available to bona fide prospective purchasers, contiguous property owners, and innocent landowners. See 42 U.S.C. § 9601(35)(A), 9601(40), 9607(q), and 9607(r).

***Local government agencies, n –*** Those agencies of municipal or county governments having jurisdiction over the subject property. Municipal and county government agencies include but are not limited to cities, parishes, townships, and similar entities.

***Local street directories, n*** – Directories published by private or government entities that list the occupant(s) of a specific address at the time the occupant data were collected, typically within a year of the publication date of the directory.

***Material safety data sheet (MSDS), n*** – See safety data sheet.

***Migrate/migration, v/n –*** For the purposes of this practice, “migrate” and “migration” refers to the movement of *hazardous substances* or *petroleum products* in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface.

***National Priorities List (NPL), n*** – List compiled by the EPA, pursuant to CERCLA 42 USC § 9605(a)(8)(B), of sites with the highest priority for cleanup pursuant to EPA’s Hazard Ranking System. See 40 CFR Part 300.

***Occupants, n*** – Those tenants, subtenants, or other persons or entities using a *property* or a portion of a *property.*

***Operator, n –*** Person responsible for the overall operation of a facility.

***Other historical resources, n –*** Any resource other than those designated that are credible to a reasonable person and that identify past uses of the properties.

***Owner, n*** – Generally the fee owner of record for a *property*.

***Petroleum exclusion, n*** – The exclusion from CERCLA liability provided in 42 USC § 9601(14), as interpreted by the courts and EPA: “The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).”

***Petroleum products, n*** – Those substances included within the meaning of the *petroleum exclusion* to CERCLA, 42 USC § 9601(14), as interpreted by the courts and EPA, that is: petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of 42 USC § 9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). (The word fraction refers to certain distillates of crude oil, including gasoline, kerosene, diesel oil, jet fuels, and fuel oil, pursuant to *Standard Definitions of Petroleum Statistics*[1]*.)*

***Phase I Environmental Site Assessment, n*** – The process described in this practice.

***Pits, ponds, or lagoons, n*** – Manmade or natural depressions in the ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

***Property, n*** – Real property including buildings and other fixtures and improvement located on and affixed to the land.

***Property use limitation, n –*** Limitation or restriction on current or future use of a *property* in connection with a response to a *release*, in accordance with the applicable regulatory authority or authorities that allows *hazardous substances* or *petroleum products* to remain in place at concentrations exceeding unrestricted use criteria.

***Property tax files, n*** – Files kept for property tax purposes by the local jurisdiction which may include records of past ownership, appraisals, maps, sketches, phtographs, or other information.

***RCRA generators, n*** – Those persons or entities that generate hazardous waste, as defined and regulated by RCRA.

***RCRA TSD facilities, n*** – Those facilities at which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

***Release, n/v –*** A *release* of any *hazardous substance* or *petroleum product* shall have the same meaning as the definition of "release" in CERCLA 42 U.S.C § 9601(22). There are a number of statutory exclusions from the definition of *release* that may impact the *environmental professional's* opinion and conclusions, such as the normal application of fertilizer. For additional background information, see Legal Appendix (Appendix X1) to X1.1.1 "*Releases* and Threatened *Releases*."

***Report, n*** – Written report prepared by the environmental professional and constituting part of a "Phase I Environmental Site Assessment," as required by this practice.

***Safety data sheets, n –*** Written or printed material that is prepared by chemical manufacturers and importers for distributors' and employers' use that provides comprehensive information regarding a hazardous chemical pursuant to OSHA's Hazard Communication Standard (HCS), 29 C.F.R. § 1910.1200.

***Significant data gap, n –*** A *data gap* that affects the ability of the *environmental professional* to identify a *recognized environmental condition*.

***Solid waste disposal site, n*** – A place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *landfill* and is also known as a garbage dump, trash dump, or similar term.

***Solvent, n*** – A chemical compound that is capable of dissolving another substance and may itself be a *hazardous substance,* used in a number of manufacturing/industrial processes including, but not limited to, the manufacture of paints and coatings for industrial and household purposes, equipment clean-up, and surface degreasing in metal fabricating industries.

***Subject property, n –*** The property that is the subject of the *environmental site assessment* described in this practice.

***Sump, n*** – Pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

***Topographic map, n –*** Graphic representation delineating natural and man-made features of an area or region in a way that shows their relative positions and elevations.

***TSD facility, n*** – Treatment, storage, or disposal facility (*see RCRA TSD facilities*).

***Underground injection, n –*** The emplacement or discharge of fluids into the subsurface by means of a well, improved sinkhole, sewage drain hole, subsurface fluid distribution system or other system, or groundwater point source.

***Underground storage tank (UST), n*** - Any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10% or more beneath the surface of the ground.

***USGS 7.5 Minute Topographic Map, n*** – USGS Topographic Map, including the current US Topo 7.5-Minute Series or the historical 7.5-Minute Topographic Series, which is available from the United States Geologic Survey and showing the subject property.

***Wastewater, n*** – Water that (1) is or has been used in an industrial or manufacturing process, (2) conveys or has conveyed sewage, or (3) is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. Wastewater does not include water originating on or passing through or adjacent to a site, such as storm water flows, that has not been used in industrial or manufacturing processes, has not been combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

***Zoning/land use records, n*** – Those records of the local government in which the *property* is located, indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps or written records.

***DEFINITIONS SPECIFIC TO ASTM E 1527-21:***

***Actual knowledge, n*** – The knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge that is knowledge imputed to an individual or entity.

***Adjoining properties*** – Any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them.

***Aerial photographs, n*** – Photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the property. Aerial photographs are often available from government agencies or private collections unique to a local area.

***Appropriate inquiry, n*** – That inquiry constituting "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in CERCLA, 42 USC § 9601(35)(B), that will give a party to a *commercial real estate* transaction the *innocent landowner defense* to the CERCLA liability (42 USC § 9601(A) and (B) and § 9607(b)(3)), assuming compliance with other elements of the defense. See Appendix X1.

***Approximate minimum search distance, n*** – The area for which records must be obtained and reviewed pursuant to Section 7 subject to the limitations provided in that section. This may include areas outside the *property* and shall be measured from the nearest *property* boundary. This term is used in lieu of radius to include irregularly-shaped properties.

***Building department records, n*** – Those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property. Often, building department records are located in the building department of a municipality or county.

***Business environmental risk, n*** – A risk which can have a material environmental or environmentally-driven financial impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of *business environmental risk* issues may necessitate that an *environmental professional* address one or more non-scope considerations, some of which are identified in Section 12.

***Commercial real estate, n –*** Any real property except a dwelling or property with no more than four dwelling units exclusively for residential use (except that a dwelling or property with no more than four dwelling units exclusively for residential use is included in this term when it has a commercial function, as in the building of such dwellings for profit). This term includes, but is not limited to, undeveloped real property and real property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes; property used for residential purposes that has more than four residential dwelling units; and any property with no more than four dwelling units for residential use when it has a commercial function, as in the building of such dwellings for profit.

***Commercial real estate transaction, n*** – A transfer of title to or possession of real property or receipt of a security interest in real property, except that it does not include transfer of title to or possession of real property or the receipt of a security interest in real property with respect to an individual dwelling or building containing fewer than five dwelling units, nor does it include the purchase of a lot or lots to construct a dwelling for occupancy by a purchaser, but a commercial real estate transaction does include real property purchased or leased by persons or entities in the business of building or developing dwelling units.

***Controlled Recognized Environmental Condition, n*** – a *recognized environmental condition* affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with *hazardous substances* or *petroleum products* allowed to remain in place subject to implementation of required controls (for example, *activity and use limitations* or *other property use limitations*). For examples of *controlled recognized environmental conditions,* see Appendix X4.

***Due diligence, n*** – the process of inquiring into the environmental characteristics of a *commercial real estate* or other conditions, usually in connection with a *commercial real estate* transaction. The degree and kind of *due diligence* vary for different *properties*, and differing purposes. See Appendix X1.

***Environmental audit, n*** – The investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe Practice E 1528 or this practice, although an environmental audit may include an *environmental site assessment* or, if prior audits are available, may be part of an environmental site assessment.

***Environmental professional, n*** – A person processing sufficient training and experience necessary to conduct a *site reconnaissance, interviews,* and other activities in accordance with this practice, and from the information generated by such activities, having the ability to develop opinions and conclusions regarding *recognized environmental conditions* in connection with the *property* in question. An individual's status as an environmental professional may be limited to the type of assessment to be performed or to specific segments of the assessment for which the professional is responsible. The person may be an independent contractor or an employee of the *user.*

***Environmental site assessment (ESA), n*** – the process by which a person or entity seeks to determine is a subject property is subject to *recognized environmental conditions*. At the option of the *user*, an *environmental site assessment* may include more inquiry than that constituting *all appropriate inquiries* or, if the *user* is not concerned about qualifying for the *LLPs*, less inquiry than that constituting *all appropriate inquiries*. An *environmental site assessment* is both different from and often less rigorous than an *environmental compliance audit*.

***Fill dirt, n*** – dirt, soil, sand, or other earth, that is obtained off-site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real *property*. It does not include material that is used in limited quantities for normal landscaping activities.

***Hazardous waste/contaminated sites, n*** – Sites on which a release has occurred, or is suspected to have occurred, of any *hazardous substance, hazardous waste,* or *petroleum products,* and that release or suspected release has been reported to a government entity.

***Historical Recognized Environmental Condition, n*** – a previous *release* of any *hazardous substances* or *petroleum products* affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations, or other property use limitations). A *historical recognized environmental condition* is not a *recognized environmental condition*. For examples of *historical recognized environmental conditions*, see Appendix X4.

***Innocent landowner defense*** – That defense to CERCLA liability provided in 42 USC § 9601(35) and § 9607(b)(3). One of the requirements to qualify for this defense is that the party make "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice." There are additional requirements to qualify for this defense.

***Interviews, n*** – those portions of this practice that are conducted to gather information from an individual or individuals in person, by telephone, in writing, or via other electronic media to meet the objectives of this practice.

***Key site manager, n*** – The person identified by the *owner* of a *property* as having good knowledge of the uses and physical characteristics of the property.

***Local government agencies, n*** – Those agencies of municipal or county government having jurisdiction over the *property.* Municipal and county government agencies include, but are not limited to, cities, parishes, townships, and similar entities.

***LUST sites, n*** – State lists of leaking underground storage tank sites. Section 9003 (h) of Subtitle I of RCRA gives EPA and states, under cooperative agreements with EPA, authority to clean up releases from UST systems or require owners and operators to do so.

***Major occupants, n*** – Those tenants, subtenants, or other persons or entities each of which uses at least 40% of the leasable area of the *property* or any anchor tenant when the *property* is a shopping center.

***Material threat, n*** – Obvious threat which is likely to lead to a release and that, in the opinion of the environmental professional, would likely result in impact to public health or the environment. An example might include an aboveground storage tank system that contains s *hazardous substance* and which shows evidence of damage. The damage would represent a *material threat* if it is deemed serious enough that it may cause or contribute to tank integrity failure with a release of contents to the environment.

***Obvious, adj*** – That which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while *visually* or *physically observing the property.*

***Other historical sources, n*** – Any source or sources other than those designated in 7.3.4.1-7.3.4.8 that are credible to a reasonable person and that identify past uses of the property. The term includes, but is not limited to, miscellaneous maps, newspaper archives, and records in the files and/or personal knowledge of the *property owner* and/or *occupants.*

***Physical setting sources, n*** – Resources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of the area that includes the subject property.

***Practically reviewable, adj*** – Information that is *practically reviewable* means that the information is provided by the source in a manner and in a form that, upon examination, yield information relevant to the subject property without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the *user* can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the subject property or a geographic area in which the subject property is located are not generally *practically reviewable*. Most databases of public records are practically reviewable if they can be obtained from the source agency by the county city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally *practically reviewable*. Listings in *publicly available* records which do not have adequate address information to be located geographically are not generally considered *practically reviewable*. For large databases with numerous records (such as RCRA hazardous waste generator and registered *underground storage tanks*), the records are not *practically reviewable* unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be identified within a given zip code. In these cases, it is not necessary to review the impact of all if the site that are likely to be listed in any given zip code because that information cannot be feasibly reviewed regarding its impact on the subject property, it is not *practically reviewable.*

***Preparer, n*** – The person preparing the *transaction screen questionnaire* pursuant to Practice E 1528, who may be either the user or the person to whom the user has delegated the preparation of the *transaction screen questionnaire.*

***Publicly available, adj*** – Information that is publicly available means that the source of the information allows access to the information by anyone upon request.

***Reasonably ascertainable, adj*** – Information that is (1) *publicly available*, (2) obtainable from its source within reasonable time and cost constraints, and (3) *practically reviewable*.

***Recognized Environmental Conditions, n*** – (1) the presence of *hazardous substances* or *petroleum products* in, on, or at the *subject property* due to a *release* to the *environment*; (2) the likely presence of *hazardous substances* or *petroleum products* in, on, or at the *subject property* due to a *release* or likely *release* to the *environment*; or (3) the presence of *hazardous substances* or *petroleum products* in, on, or at the *subject property* under conditions that pose a *material threat* of a future *release* to the *environment*.

***Records review, n*** – That part that is contained in Section 8 of this practice addresses which records shall or may be reviewed.

***Site reconnaissance, n*** – That part that is contained in Section 9 of this practice and addresses what should be done in connection with the *site visit*. The *site reconnaissance* includes, but is not limited to, the *site visit* done in connection with such a *Phase I Environmental Site Assessment*

***Site visit, n*** – The visit to the subject property during which observations are made constituting the *site reconnaissance* section of this practice.

***Standard environmental record sources, n*** – Those records specified in 8.2.2.

***Standard historical sources, n*** – Those sources of information about the history of uses of the property specified in 8.3.4.

***Standard physical setting source, n*** – A current USGS 7.5-minute topographic map (if any) showing the area on which the property is located.

***Standard practice(s), n*** – The activities set forth in either and both this practice and Practice E 1528.

***Standard sources, n*** – Sources of environmental, physical setting, or historical records specified in Section 7 of this practice.

***Transaction screen process, n*** – The process described in Practice E 1528.

***Transaction screen questionnaire, n*** – The questionnaire provided in Section 6 of Practice E 1528.

***User, n*** – The party seeking to use Practice E1527 to complete an *environmental site assessment* of the *subject property*.

***Visually and/or physically observed, v*** – During a *site visit* pursuant to this practice, this term means observations made by visual, auditory, or olfactory means while performing *site reconnaissance*.

***ACRONYMS:***

***AULs – Activity and Use Limitations***

***CERCLA*** – Comprehensive Environmental Response, Compensation and Liability Act of 1980 (as amended, 42 USC § 9601 *et seq.*)

***C.F.R.*** – Code of Federal Regulations

***CREC*** – Controlled Recognized Environmental Condition

**EC –** Engineering Control

***EPA*** – United States Environmental Protection Agency

***EPCRA*** – Emergency Planning and Community Right to Know Act (also known as SARA Title III), 42 USC § 11001 *et seq.*)

***ERNS*** – Emergency response notification system

***ESA*** – Environmental site assessment (different than an *environmental audit*)

***FR*** – Federal Register

***HREC –*** Historical Recognized Environmental Condition

***IC –*** Institutional Control

***LLP*** – Landowner Liability Protections under the *Brownfields Amendments*

***LUST*** – Leaking underground storage tank

***NCP*** – National Contingency Plan

***NFRAP –*** Sites were no further remedial action is planned under CERCLA

***NPDES –*** National Pollutant Discharge Elimination System

***NPL –*** National Priorities List

***PCBs –*** Polychlorinated biphenyls

***RCRA –*** Resource Conservation and Recovery Act (as amended, 42 U.S.C. § 9601 *et seq.*.)

***REC –*** Recognized Environmental Condition

***SARA –*** Superfund Amendments and Reauthorization Act of 1986 (amendment to CERCLA).

***TSDF –*** Hazardous waster treatment, storage, or disposal facility

***U.S.C. –*** United States Code

***USGS –*** United States Geological Survey

***UST –*** Underground Storage Tank

# APPENDIX B

Historical Topographic Maps

Not Reported

Not Reported

San Jacinto, CA 92582

Inquiry Number: 7351696.4

May 31, 2023

# EDR Historical Topo Map Report

## with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Historical Topo Map Report

05/31/23

**Site Name:**

Not Reported
Not Reported
San Jacinto, CA 92582
EDR Inquiry # 7351696.4

**Client Name:**

Roux Associates
5150 E Pacific Coast Highway
Long Beach, CA 90804
Contact: Richard Oneil

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Roux Associates were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

***Search Results:***

**P.O.#** 2217.00XXL
**Project:** Shea San Jacinto

***Coordinates:***

| | |
|---|---|
| **Latitude:** | 33.814521 33° 48' 52" North |
| **Longitude:** | -117.009228 -117° 0' 33" West |
| **UTM Zone:** | Zone 11 North |
| **UTM X Meters:** | 499145.97 |
| **UTM Y Meters:** | 3741590.78 |
| **Elevation:** | 1465.00' above sea level |

**Maps Provided:**

2018
2015
2012
1996
1979
1967, 1972
1956
1953
1948
1943
1901

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## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

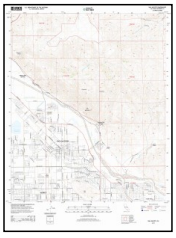
### 2018 Source Sheets

Lakeview
2018
7.5-minute, 24000

San Jacinto
2018
7.5-minute, 24000

### 2015 Source Sheets

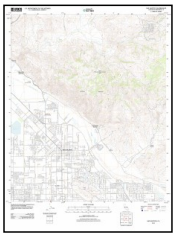
Lakeview
2015
7.5-minute, 24000



San Jacinto
2015
7.5-minute, 24000

### 2012 Source Sheets

Lakeview
2012
7.5-minute, 24000



San Jacinto
2012
7.5-minute, 24000

### 1996 Source Sheets

San Jacinto
1996
7.5-minute, 24000
Aerial Photo Revised 1994

## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1979 Source Sheets

Lakeview
1979
7.5-minute, 24000
Aerial Photo Revised 1976

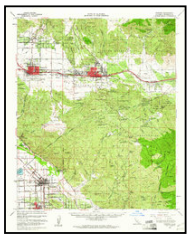
San Jacinto
1979
7.5-minute, 24000
Aerial Photo Revised 1978

### 1967, 1972 Source Sheets

Lakeview
1967
7.5-minute, 24000
Aerial Photo Revised 1966

San Jacinto
1972
7.5-minute, 24000
Aerial Photo Revised 1972

### 1956 Source Sheets



Banning
1956
15-minute, 62500
Aerial Photo Revised 1951

### 1953 Source Sheets

San Jacinto
1953
7.5-minute, 24000
Aerial Photo Revised 1949

Lakeview
1953
7.5-minute, 24000
Aerial Photo Revised 1951

## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1948 Source Sheets

BANNING
1948
15-minute, 50000

### 1943 Source Sheets

Banning
1943
15-minute, 62500
Aerial Photo Revised 1941

PERRIS
1943
15-minute, 62500

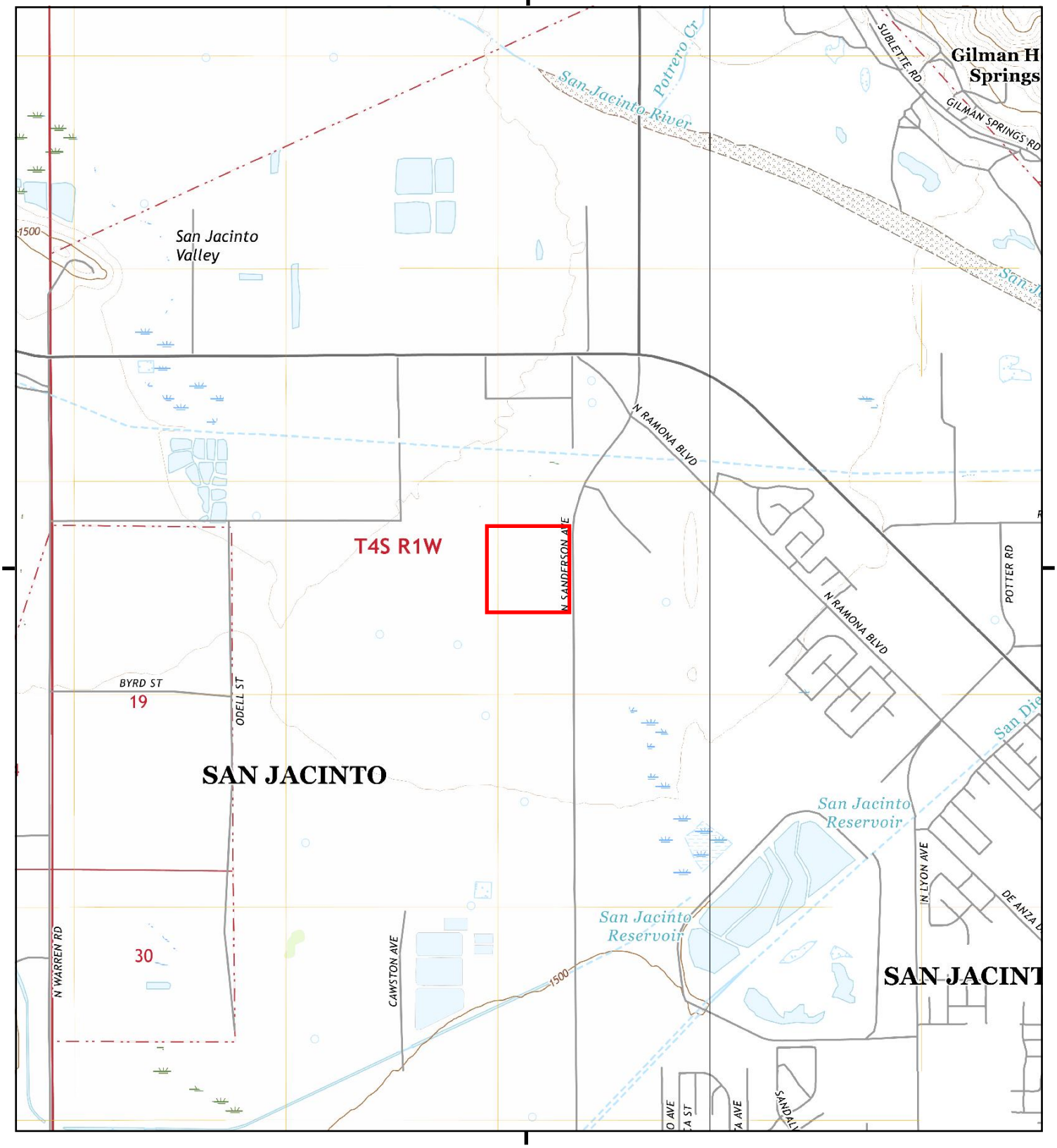
### 1901 Source Sheets

Elsinore
1901
30-minute, 125000

San Jacinto
1901
30-minute, 125000

# Historical Topo Map

2018




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

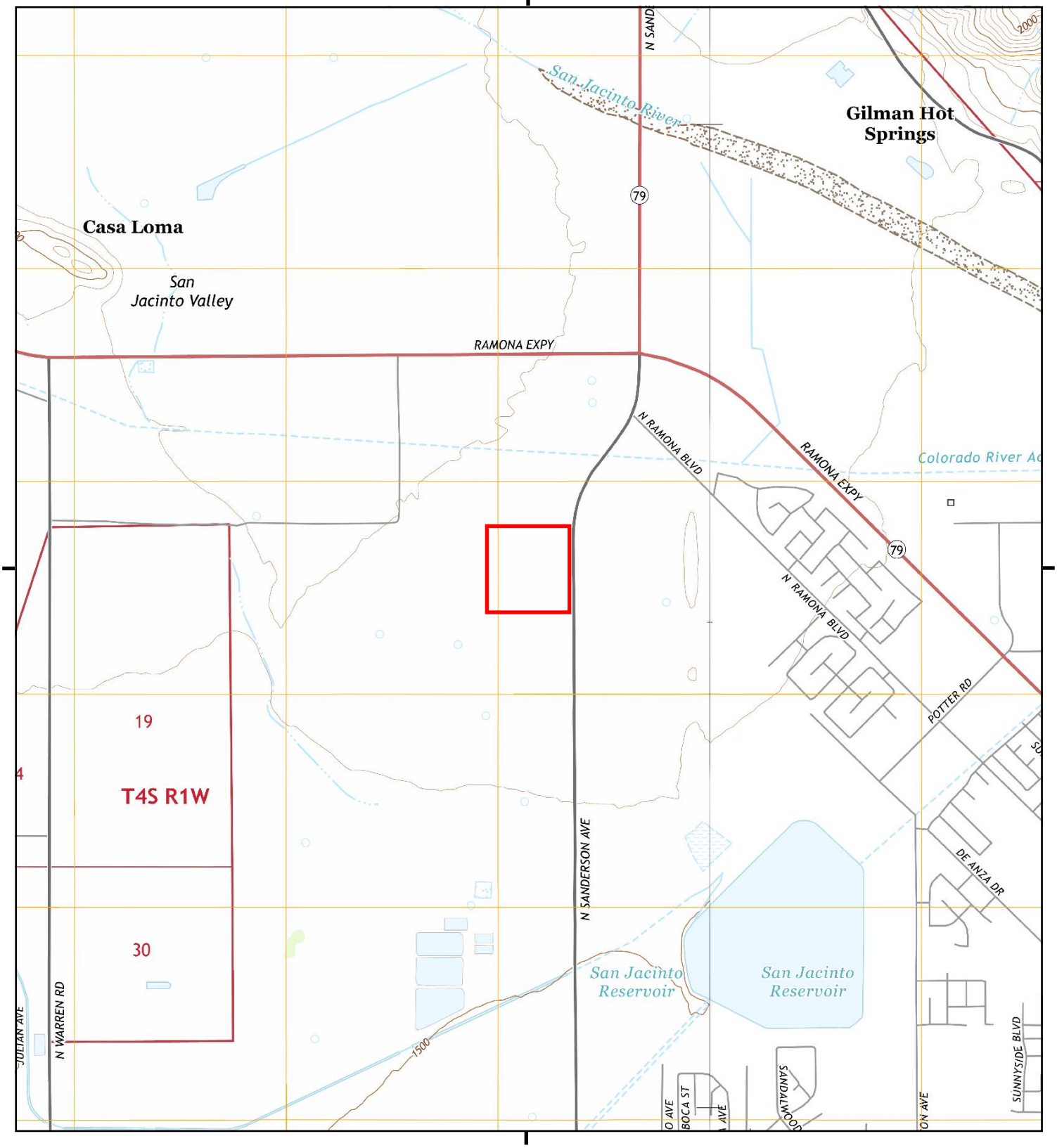
TP, Lakeview, 2018, 7.5-minute
E, San Jacinto, 2018, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N

# Historical Topo Map

2015




This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

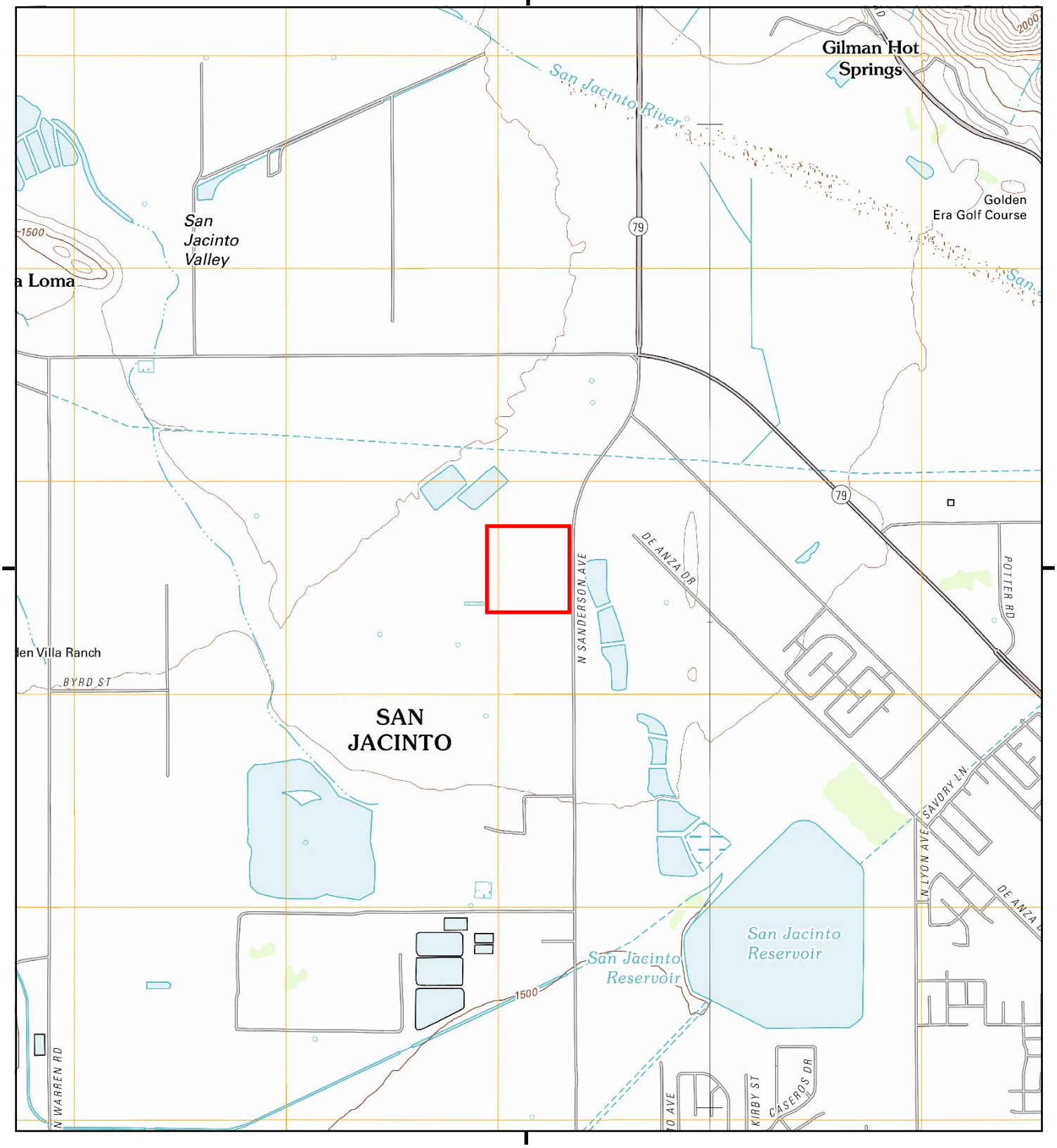
TP, Lakeview, 2015, 7.5-minute
E, San Jacinto, 2015, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N

# Historical Topo Map

2012




This report includes information from the following map sheet(s).

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W E
SW S SE

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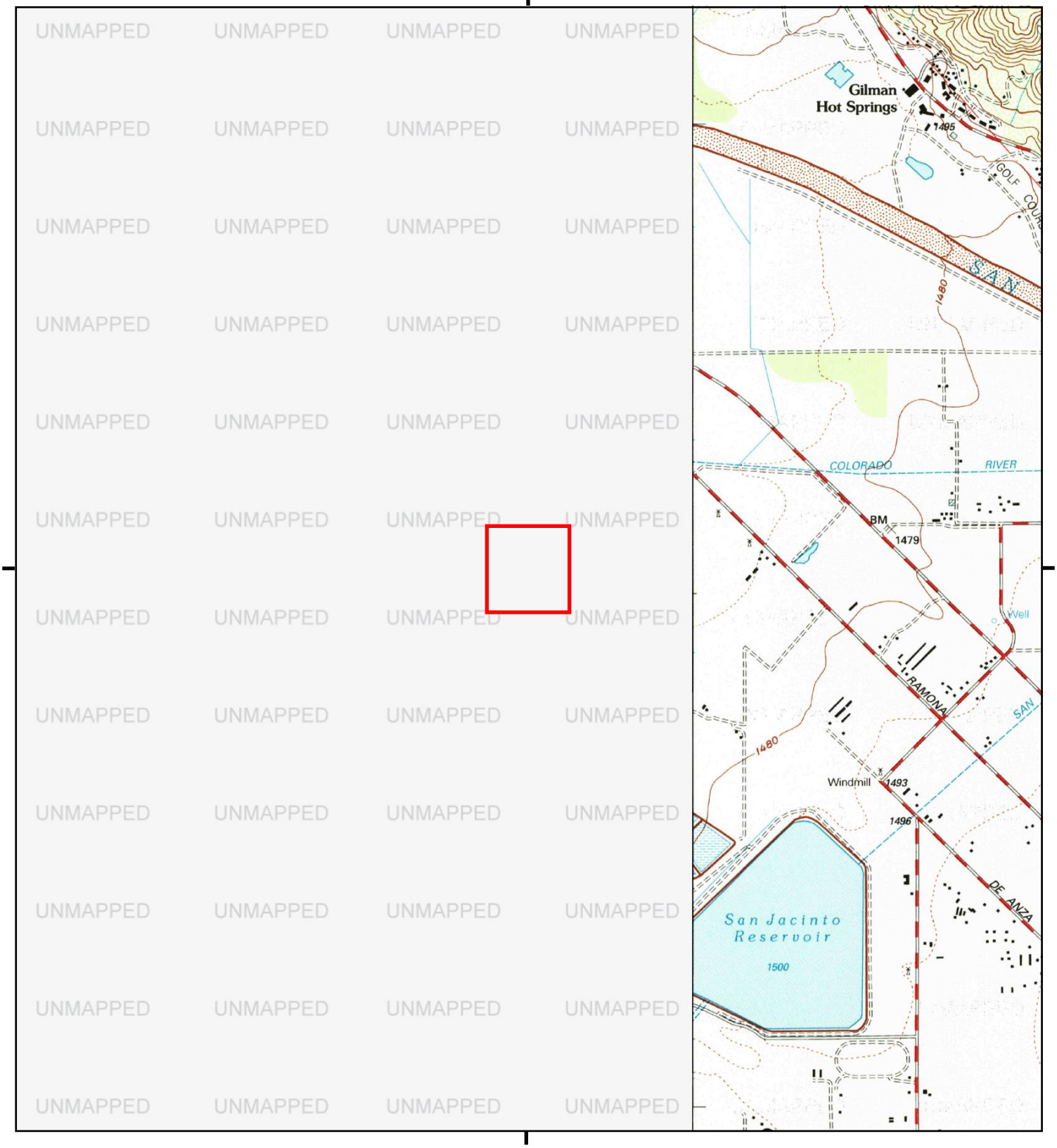
E, San Jacinto, 2012, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N




This report includes information from the following map sheet(s).

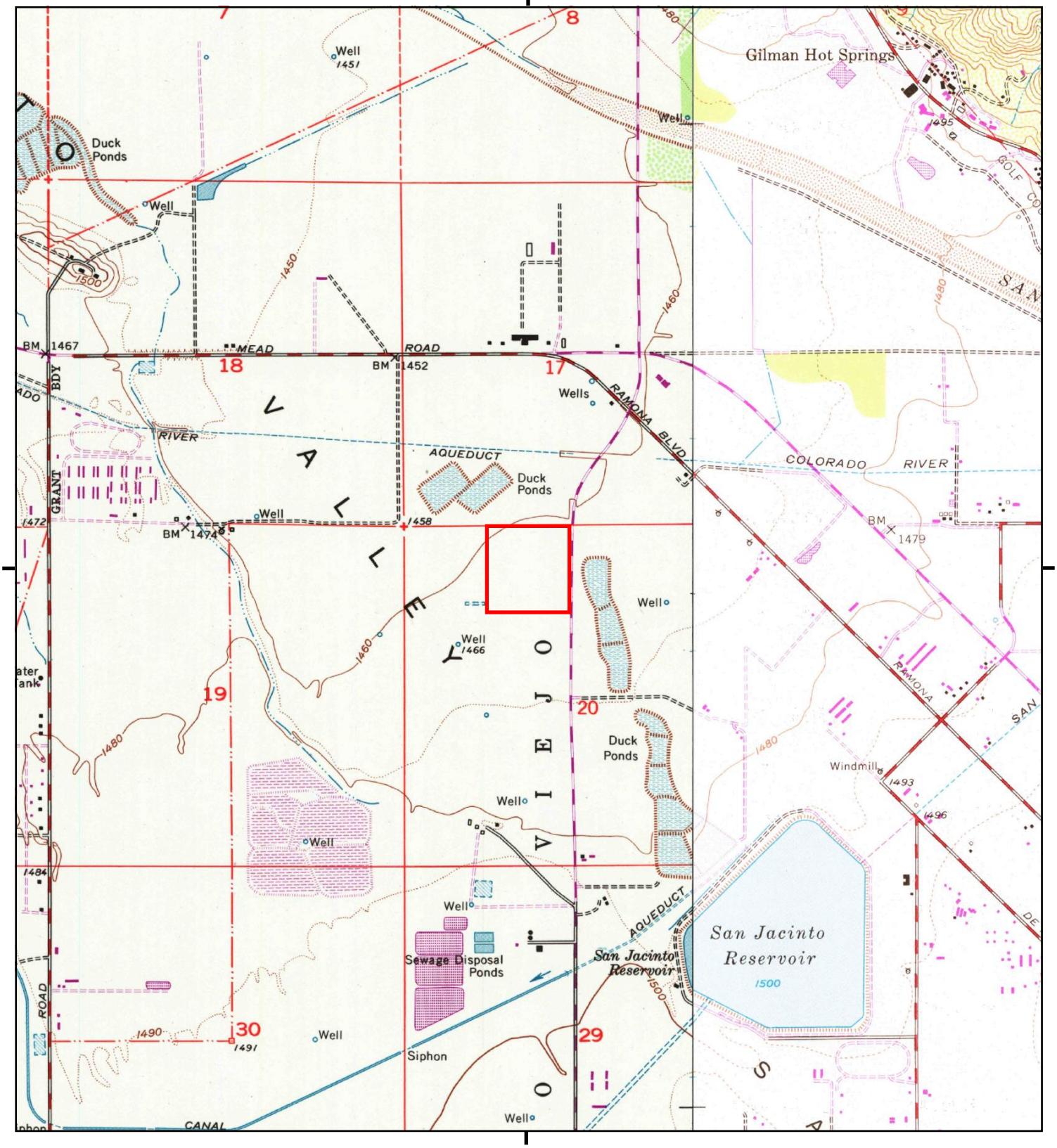
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

E, San Jacinto, 1996, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N




This report includes information from the following map sheet(s).

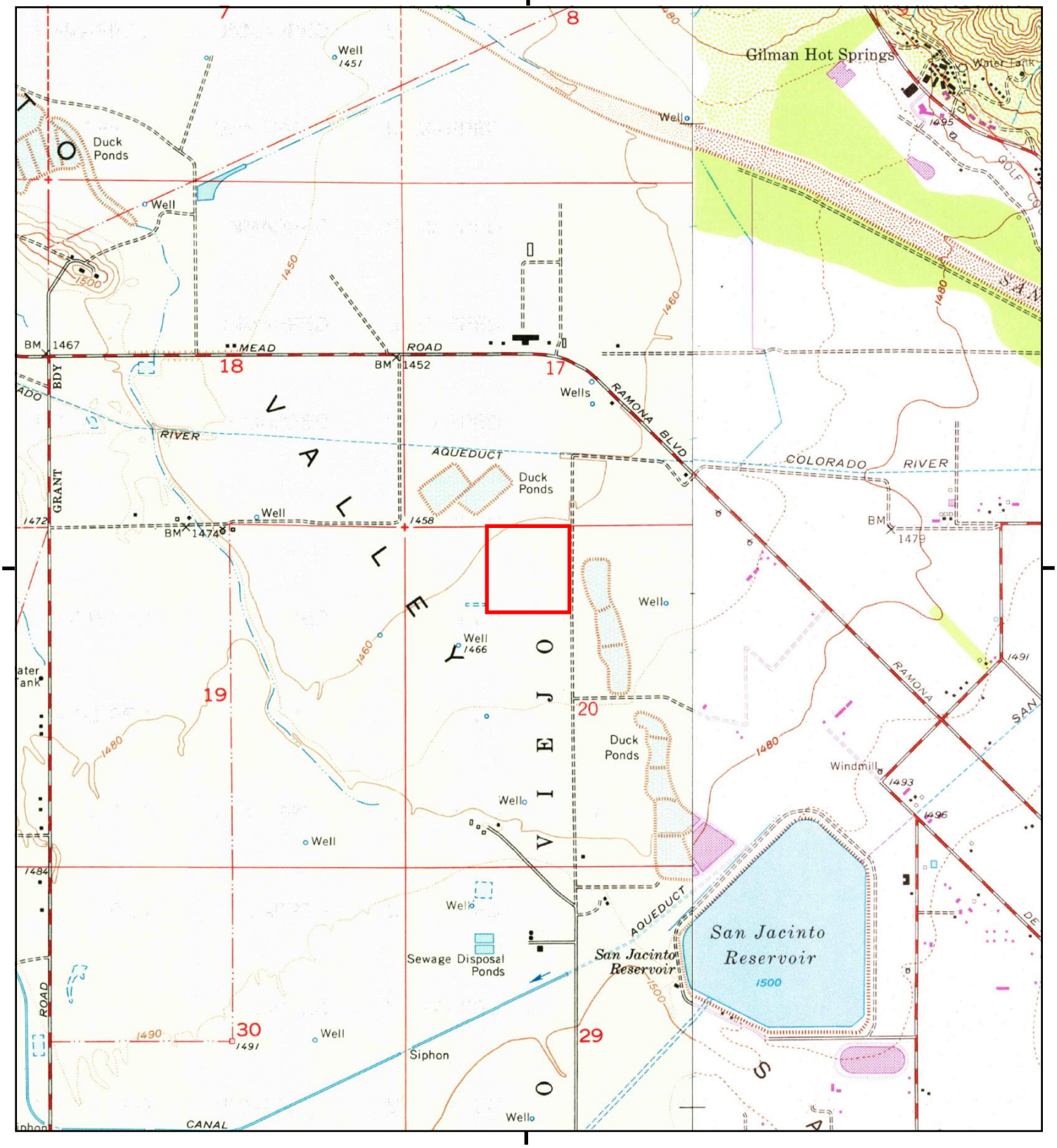
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lakeview, 1979, 7.5-minute
E, San Jacinto, 1979, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N




This report includes information from the following map sheet(s).

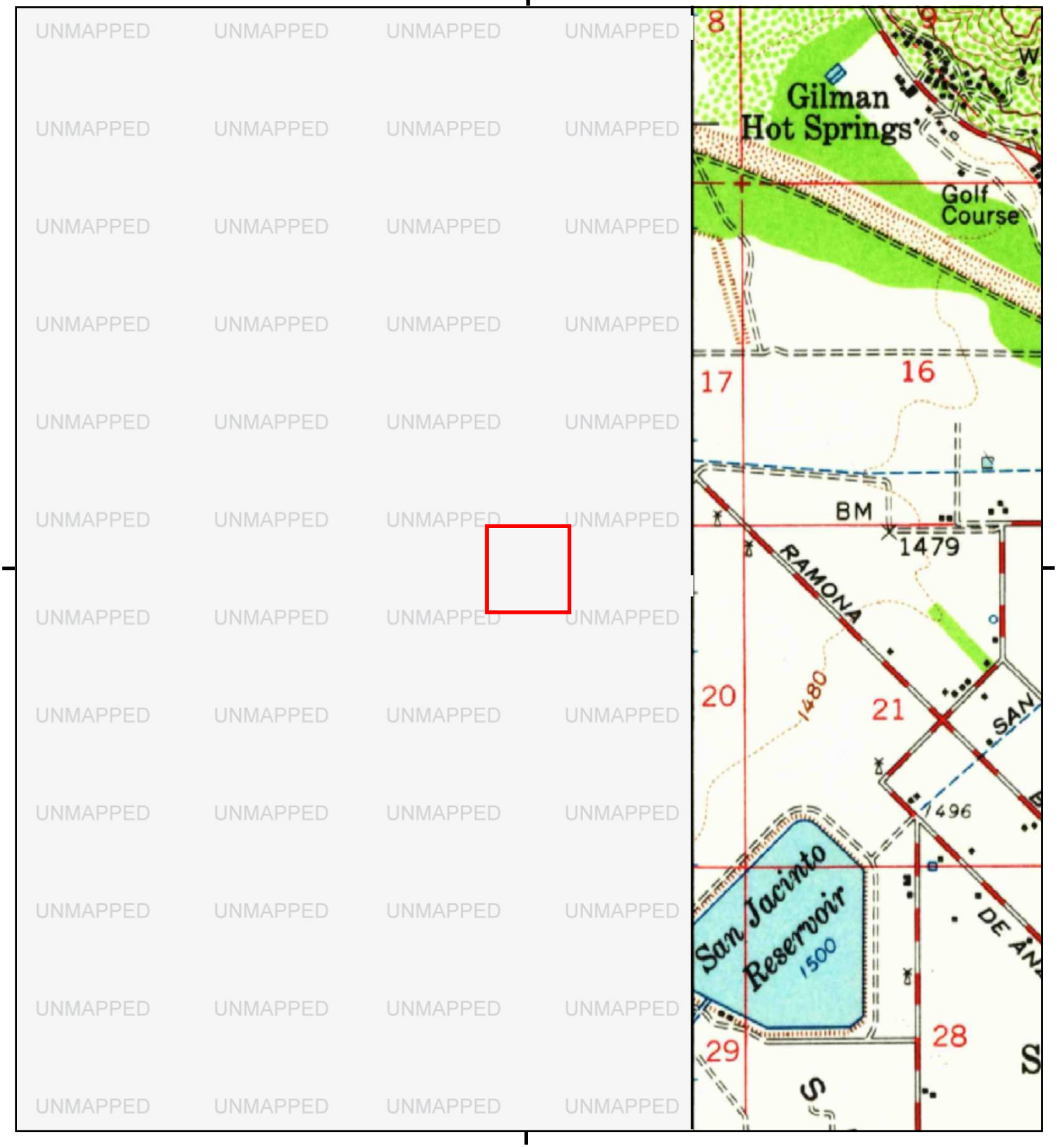
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lakeview, 1967, 7.5-minute
E, San Jacinto, 1972, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

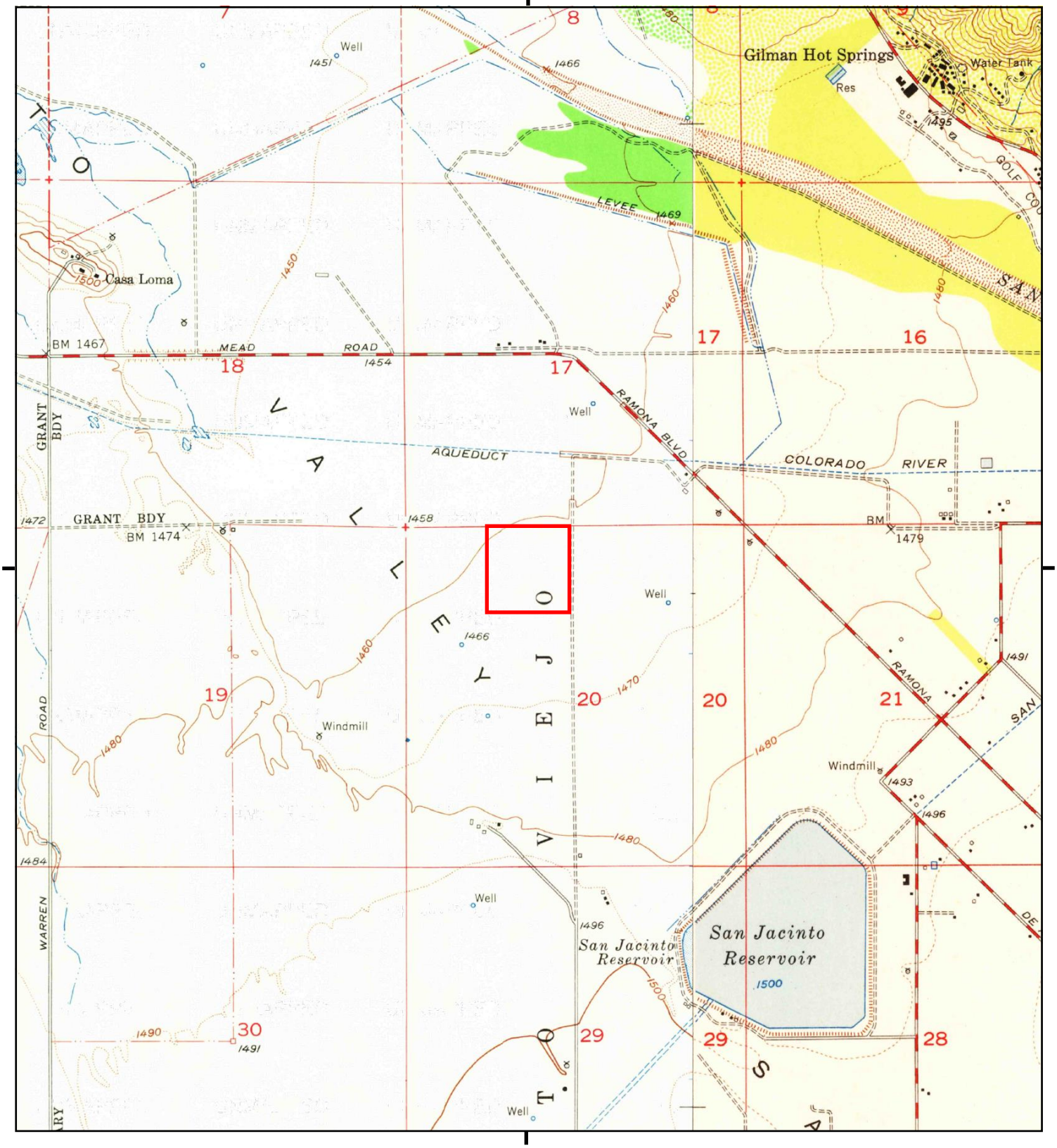
NE, Banning, 1956, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N

# Historical Topo Map

1953




This report includes information from the following map sheet(s).

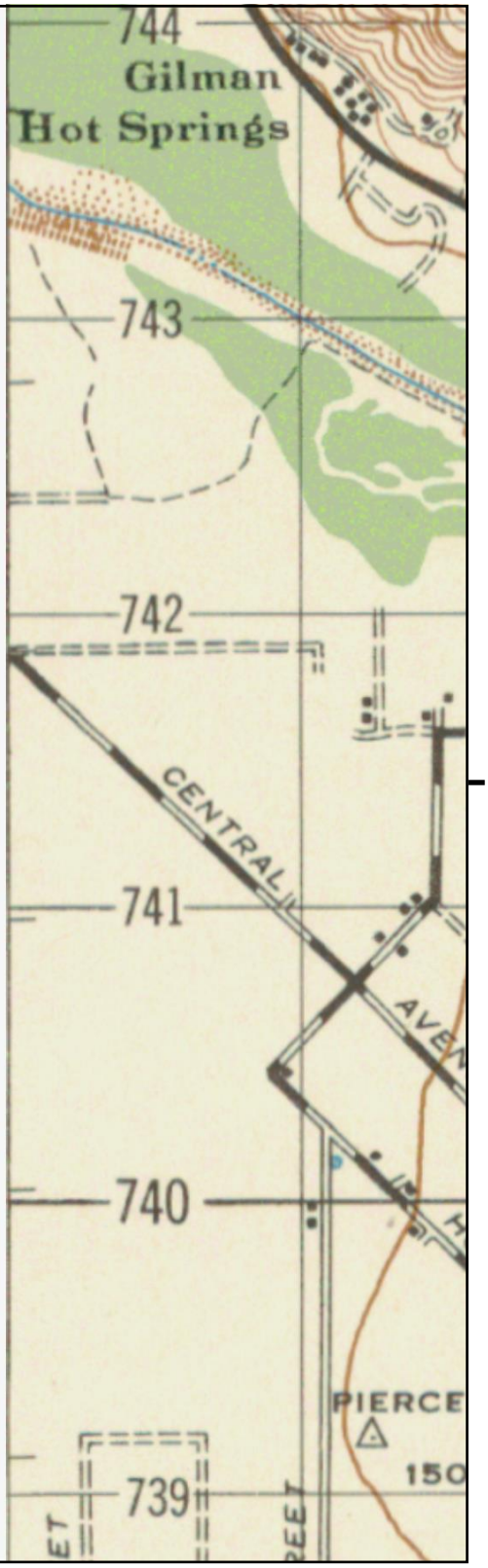
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lakeview, 1953, 7.5-minute
E, San Jacinto, 1953, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N




UNMAPPED

This report includes information from the following map sheet(s).

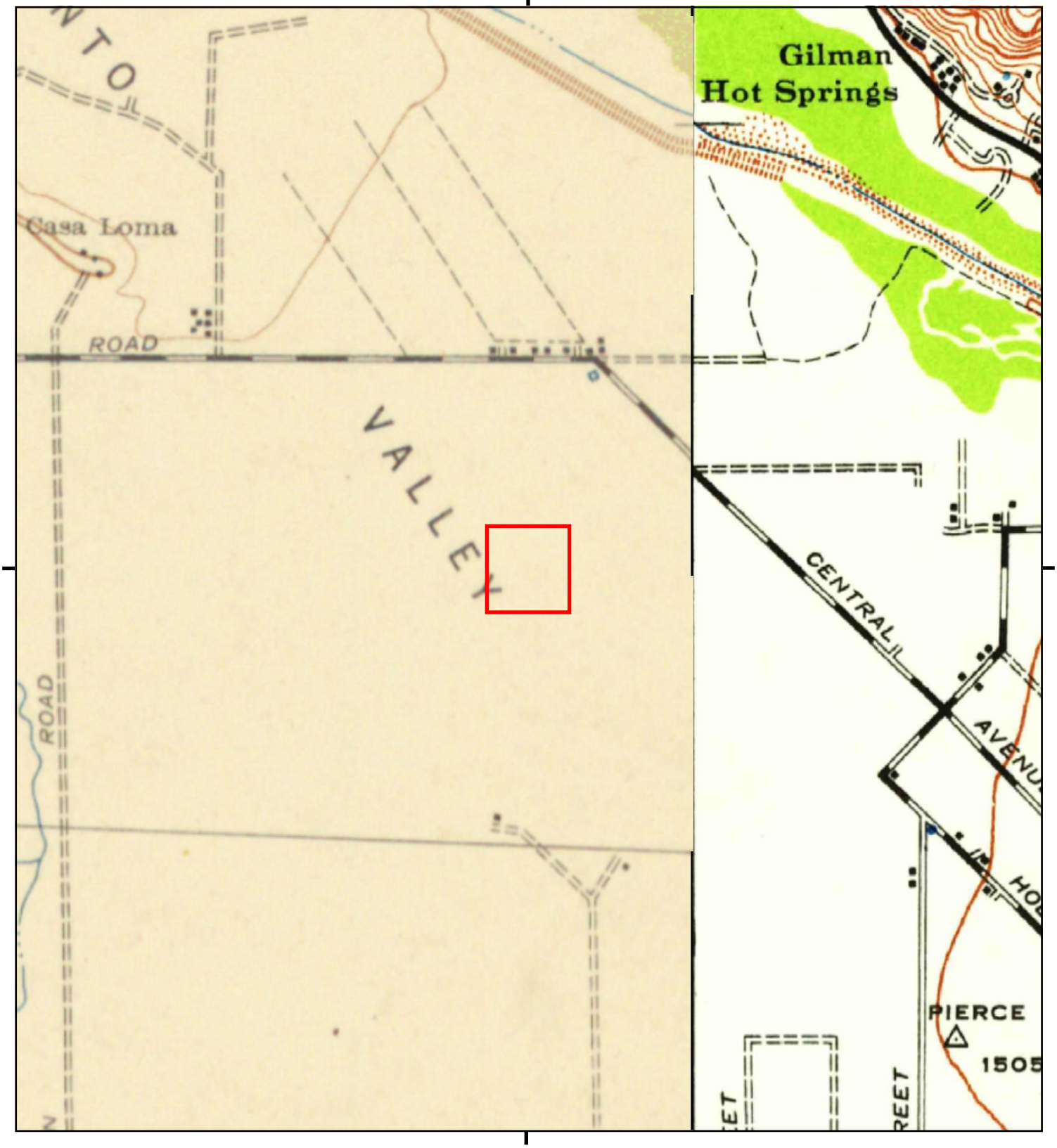
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

NE, BANNING, 1948, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N




This report includes information from the following map sheet(s).

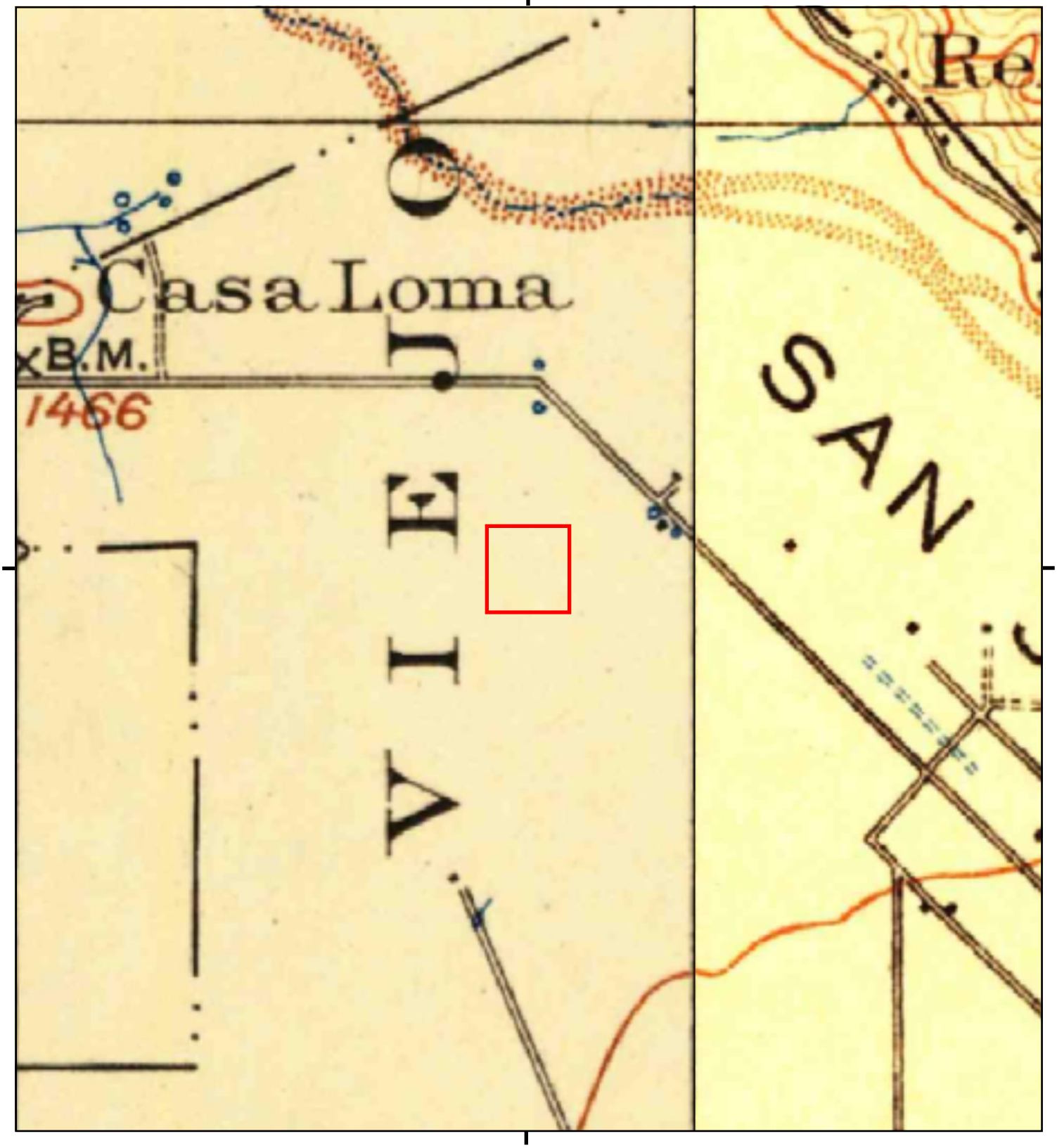
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, PERRIS, 1943, 15-minute
NE, Banning, 1943, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Elsinore, 1901, 30-minute
E, San Jacinto, 1901, 30-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
San Jacinto, CA 92582
CLIENT: Roux Associates

N

# APPENDIX C

Historical Aerial Photographs

**Not Reported**

Not Reported

San Jacinto, CA 92582

Inquiry Number: 7351696.8

May 31, 2023

# The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Aerial Photo Decade Package

05/31/23

**Site Name:**

Not Reported
Not Reported
San Jacinto, CA 92582
EDR Inquiry # 7351696.8

**Client Name:**

Roux Associates
5150 E Pacific Coast Highway
Long Beach, CA 90804
Contact: Richard Oneil

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

***Search Results:***

| Year | Scale | Details | Source |
|---|---|---|---|
| 2020 | 1"=500' | Flight Year: 2020 | USDA/NAIP |
| 2016 | 1"=500' | Flight Year: 2016 | USDA/NAIP |
| 2012 | 1"=500' | Flight Year: 2012 | USDA/NAIP |
| 2009 | 1"=500' | Flight Year: 2009 | USDA/NAIP |
| 2006 | 1"=500' | Flight Year: 2006 | USDA/NAIP |
| 2002 | 1"=500' | Acquisition Date: January 01, 2002 | USGS/DOQQ |
| 1996 | 1"=500' | Acquisition Date: September 30, 1996 | USGS/DOQQ |
| 1989 | 1"=500' | Flight Date: August 14, 1989 | USDA |
| 1985 | 1"=500' | Flight Date: February 24, 1985 | USDA |
| 1978 | 1"=500' | Flight Date: September 21, 1978 | USDA |
| 1975 | 1"=500' | Flight Date: September 18, 1975 | USGS |
| 1967 | 1"=500' | Flight Date: May 09, 1967 | USDA |
| 1961 | 1"=500' | Flight Date: June 16, 1961 | USDA |
| 1953 | 1"=500' | Flight Date: August 22, 1953 | USDA |
| 1949 | 1"=500' | Flight Date: May 25, 1949 | USDA |
| 1938 | 1"=500' | Flight Date: June 14, 1938 | USDA |

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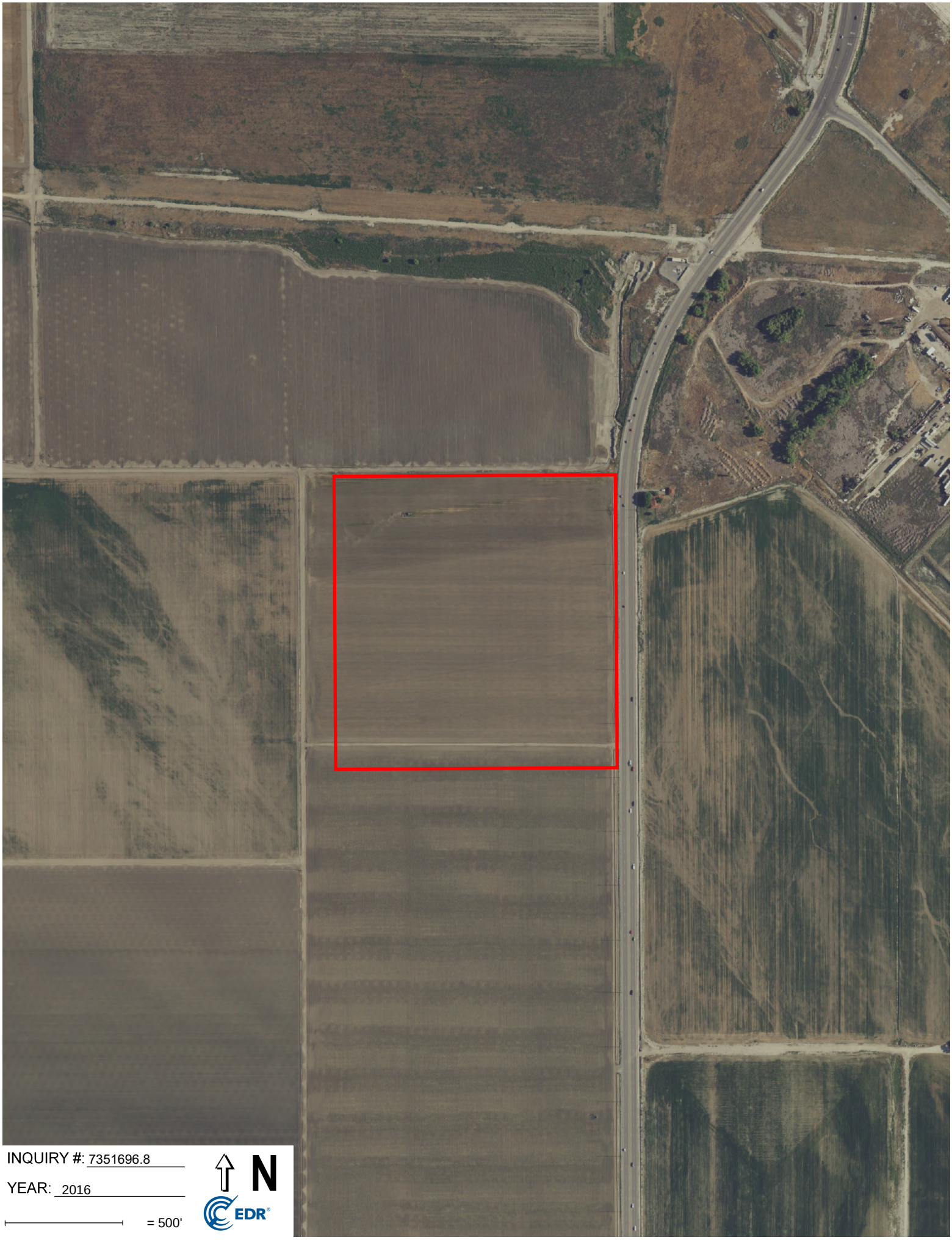
YEAR: 2020
= 500'
N
EDR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YEAR: 2016
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N
EDR

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= 500'
N
EDR

INQUIRY #: 7351696.8

YEAR: 2009

= 500'

N

EDR

INQUIRY #: 7351696.8
YEAR: 2006
= 500'
N
EDR

INQUIRY #: 7351696.8

YEAR: 2002

= 500'

N

EDR

INQUIRY #: 7351696.8

YEAR: 1996

= 500'

N

EDR

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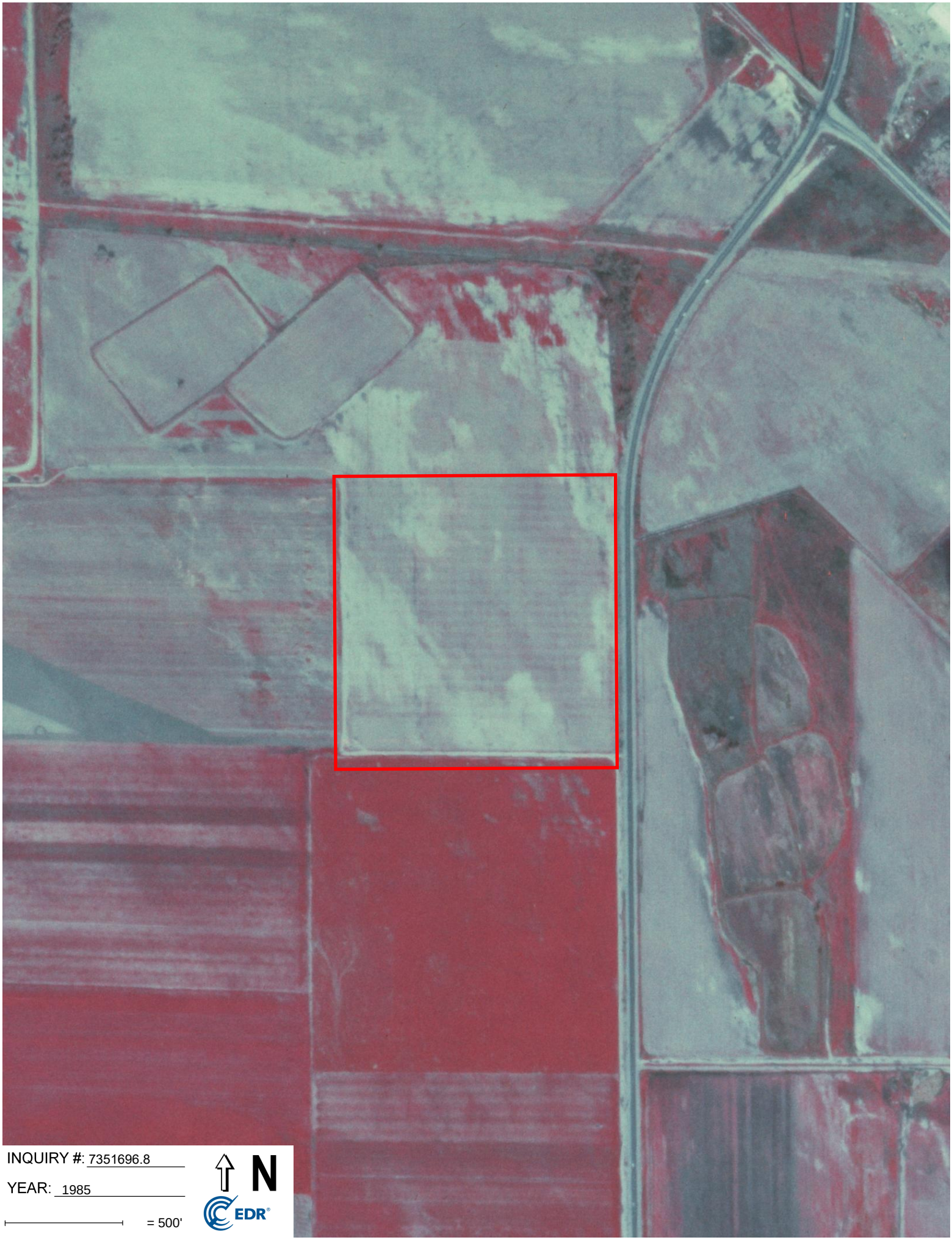
YEAR: 1989

= 500'

N

EDR



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YEAR: 1985

= 500'

N

EDR

INQUIRY #: 7351696.8

YEAR: 1978

= 500'

N

EDR

INQUIRY #: 7351696.8

YEAR: 1975

= 500'

N

EDR

INQUIRY #: 7351696.8

YEAR: 1967

= 500'

N

EDR

INQUIRY #: 7351696.8

YEAR: 1961

= 500'

N

EDR

INQUIRY #: 7351696.8
YEAR: 1953
= 500'
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EDR

INQUIRY #: 7351696.8
YEAR: 1949
= 500'
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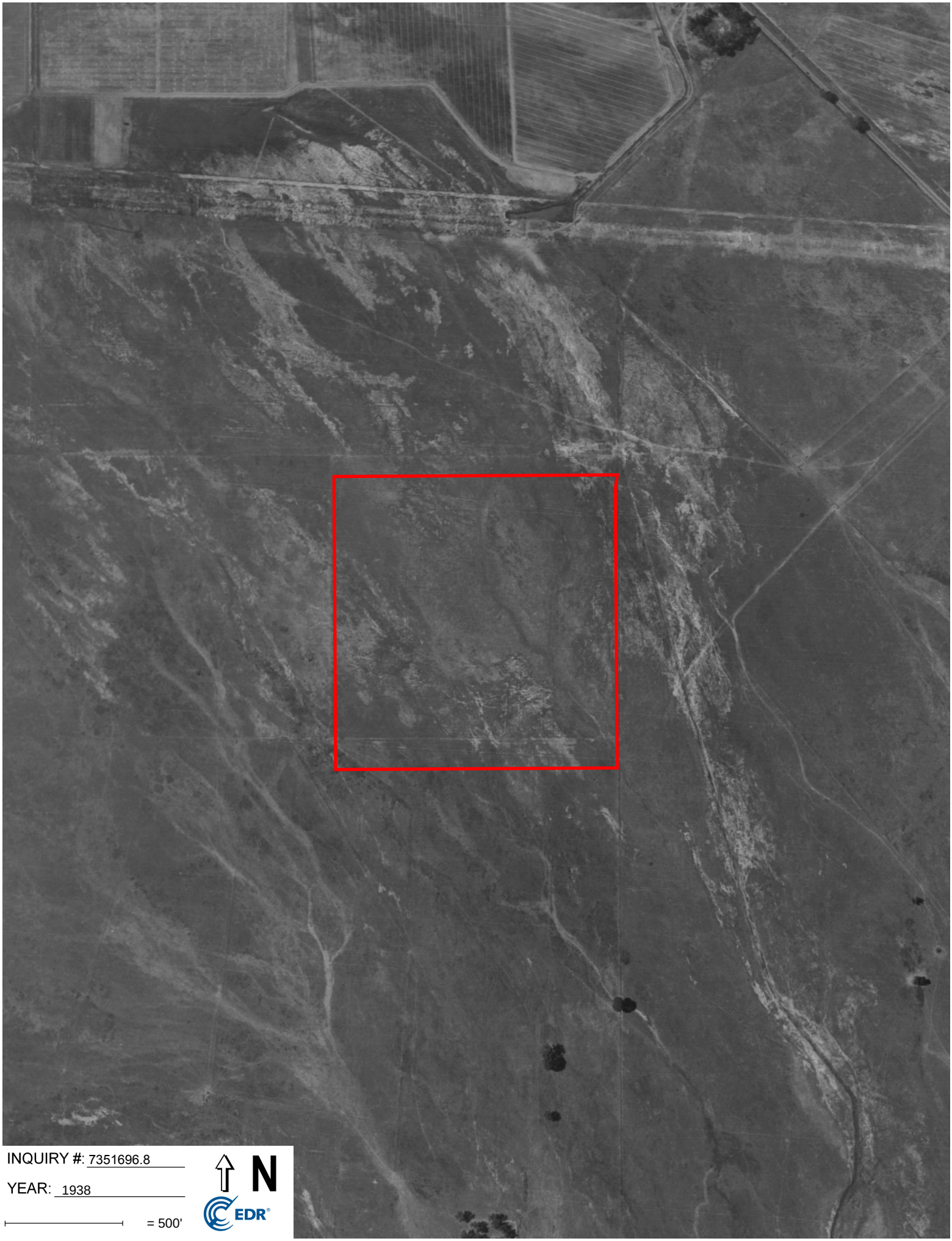
EDR



INQUIRY #: 7351696.8

YEAR: 1938

= 500'

N

EDR

# APPENDIX D

Certified Sanborn Report

Not Reported

Not Reported

San Jacinto, CA 92582

Inquiry Number: 7351696.3

May 31, 2023

# Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# Certified Sanborn® Map Report

05/31/23

**Site Name:**

Not Reported
Not Reported
San Jacinto, CA 92582
EDR Inquiry # 7351696.3

**Client Name:**

Roux Associates
5150 E Pacific Coast Highway
Long Beach, CA 90804
Contact: Richard Oneil

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Roux Associates were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## *Certified Sanborn Results:*

**Certification #** 7FC0-4E21-B52B

**PO #** 2217.00XXL

**Project** Shea San Jacinto

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 7FC0-4E21-B52B

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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# APPENDIX E

EDR City Directory Image Report

**Not Reported**
Not Reported
San Jacinto, CA 92582

Inquiry Number: 7351696.5
June 02, 2023

# The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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## SECTION

**Executive Summary**

**Findings**

**City Directory Images**

***Thank you for your business.***
Please contact EDR at 1-800-352-0050
with any questions or comments.

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# EXECUTIVE SUMMARY

## DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

## RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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## RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

| *Year* | *Target Street* | *Cross Street* | *Source* |
|---|---|---|---|
| 2020 | ☐ | ☑ | EDR Digital Archive |
| 2017 | ☐ | ☑ | Cole Information |
| 2014 | ☐ | ☑ | Cole Information |
| 2010 | ☐ | ☑ | Cole Information |
| 2005 | ☐ | ☑ | Cole Information |
| 2000 | ☐ | ☑ | Cole Information |
| 1995 | ☐ | ☑ | Cole Information |
| 1992 | ☐ | ☑ | Cole Information |
| 1990 | ☐ | ☑ | Haines Criss-Cross Directory |
| 1985 | ☐ | ☑ | Haines Criss-Cross Directory |
| 1980 | ☐ | ☐ | Haines Criss-Cross Directory |
| 1976 | ☐ | ☐ | Haines Criss-Cross Directory |
| 1971 | ☐ | ☐ | Haines Criss-Cross Directory |

# FINDINGS

**TARGET PROPERTY STREET**

Not Reported
San Jacinto, CA 92582

No Addresses Found

# FINDINGS

## CROSS STREETS

| *Year* | *CD Image* | *Source* | |
|---|---|---|---|
| **N SANDERSON AVE** | | | |
| 2020 | pg. A1 | EDR Digital Archive | |
| 2017 | pg. A3 | Cole Information | |
| 2014 | pg. A5 | Cole Information | |
| 2010 | pg. A7 | Cole Information | |
| 2005 | pg. A9 | Cole Information | |
| 2000 | pg. A11 | Cole Information | |
| 1995 | pg. A13 | Cole Information | |
| 1992 | - | Cole Information | Target and Adjoining not listed in Source |
| 1990 | - | Haines Criss-Cross Directory | Target and Adjoining not listed in Source |
| 1985 | - | Haines Criss-Cross Directory | Target and Adjoining not listed in Source |
| 1980 | - | Haines Criss-Cross Directory | Target and Adjoining not listed in Source |
| 1976 | - | Haines Criss-Cross Directory | Target and Adjoining not listed in Source |
| 1971 | - | Haines Criss-Cross Directory | Street not listed in Source |
| **RAMONA EXPY** | | | |
| 2020 | pg. A2 | EDR Digital Archive | |
| 2017 | pg. A4 | Cole Information | |
| 2014 | pg. A6 | Cole Information | |
| 2010 | pg. A8 | Cole Information | |
| 2005 | pg. A10 | Cole Information | |
| 2000 | pg. A12 | Cole Information | |
| 1995 | pg. A14 | Cole Information | |
| 1992 | pg. A15 | Cole Information | |
| 1990 | pg. A16 | Haines Criss-Cross Directory | |
| 1990 | pg. A17 | Haines Criss-Cross Directory | |
| 1985 | pg. A18 | Haines Criss-Cross Directory | |
| 1980 | - | Haines Criss-Cross Directory | Street not listed in Source |
| 1976 | - | Haines Criss-Cross Directory | Street not listed in Source |
| 1971 | - | Haines Criss-Cross Directory | Street not listed in Source |

# City Directory Images

| Target Street | Cross Street | Source |
| --- | --- | --- |
| - | ✓ | EDR Digital Archive |

# N SANDERSON AVE 2020

| | |
| --- | --- |
| 327 | HORTENCIA SANDOVAL |
| | TARI TORRES |
| | TARIACURI AVALOS |
| 775 | BOB IPARAGUIRRE |
| | JENNIE IPARAGUIRRE |
| 805 | CALIFORNIA EQUINE RETIRE FNDTN |
| 1727 | KAREN BROWNE |
| | KENNETH BROWNE |
| 2070 | ATM |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | EDR Digital Archive |

# RAMONA EXPY 2020

| | |
|---|---|
| 2441 | CHAD SPYKSMA |
| | RAMONA COMMODITIES INC |
| | YANITA SPYKSMA |
| 2451 | RAMONA DAIRY LLC |
| 2720 | QUALITY TURF |
| | RANDY SCHWEITZER |
| 4050 | BOERSMA DAIRY |
| 34450 | PASTIME LAKES HOLDING LLC |
| 35600 | HOLLANDIA FARMS NORTH |
| 35750 | BERTRAND LAUDA |
| | ERMA LAUDA |
| | RANCHO CASA LOMA |
| 36580 | HEIDI VANDERWOUDE |
| | TIFFANY VANDERWOUDE |
| | VANDERWOUDE DAIRY |
| | VANDERWOUDE VANESSA |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

# N SANDERSON AVE 2017

| | |
|---|---|
| 327 | AVALOS, TARIACURI T |
| 805 | ARD, CAROLINE L |
| | THE CALIFORNIA EQUINE RETIREMENT FOU |
| 1727 | BROWNE, KENNETH A |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

# RAMONA EXPY 2017

| | |
|---|---|
| 2451 | DEJONG, TENNIS J |
| | RAMONA COMMODITIES INC |
| 2720 | QUALITY TURF INC |
| 4050 | BOERSMA, DENA L |
| 34860 | JIMENEZ, SERGIO R |
| 35500 | MOUW, TRAVIS N |
| 35750 | LAUDA, BERT |
| 36580 | VANDERWOUDE, EDWARD D |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

## N SANDERSON AVE 2014

| | |
|---|---|
| 327 | SANDOVAL, HORTENCIA |
| 805 | MATOS, GERARDO |
| 1225 | OCCUPANT UNKNOWN, |
| 1315 | PEREZ, S |
| 1727 | BROWNE, KENNETH A |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

# RAMONA EXPY 2014

2397 GUTIERREZ, HECTOR
2441 RAMONA COMMODITIES INC
SPYKSMA, TRACEY
2720 QUALITY TURF
QUALITY TURF INC
VILLELA, EPIFANIO
4050 BOERSMA, DENA L
34450 PASTIME LAKES DAIRY
TEVELDE, MARIE G
34860 JIMENEZ, SERGIO R
PASTIME LAKES DAIRY 2
35500 MOUW, TRAVIS N
35550 MCINTURFF, PAT
35600 OCCUPANT UNKNOWN,
35750 LAUDA, BERT
RANCHO CASA LOMA
36580 VANDERWOUDE, EDWARD P
36620 VANDERWOUDE, EDWARD P

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

# N SANDERSON AVE 2010

| | |
|---|---|
| 327 | WILLIAMS, LINDA S |
| 775 | IPARAGUIRRE, BOB |
| | JO LAND & CATTLE CO |
| 805 | OCCUPANT UNKNOWN, |
| 981 | CARRERA, SJAC |
| | DUNCAN, KATHARINE R |
| 1225 | HENRY, RONDA S |
| 1315 | PEREZ, HILARIO |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

# RAMONA EXPY 2010

| | |
|---|---|
| 2397 | MAGANA, EUDORO M |
| 2441 | ZAMANO, CAROLINA |
| 2451 | CBJ DAIRY |
| | OCCUPANT UNKNOWN, |
| | RAMONA FARMS |
| 2720 | VILLELA, EPIFANIO |
| 4050 | BOERSMA, DENA L |
| 34860 | PASTIME LAKES DAIRY |
| 35500 | MOUW, TRAVIS N |
| 35550 | MCINTURFF, PAT |
| 35600 | HOLLANDIA FARMS NORTH |
| | OCCUPANT UNKNOWN, |
| 35750 | LAUDA, BERT |
| | RANCHO CASA LOMA |
| 36580 | OCCUPANT UNKNOWN, |
| 36620 | DEVRY, MARGIE |
| 36970 | RAMONA FARMS |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

# N SANDERSON AVE 2005

| | |
|---|---|
| 775 | OCCUPANT UNKNOWN, |
| 870 | WESTRA, JOHN J |
| 981 | CARRERA, MARIA M |
| | DUNCAN, KATHARINE R |
| 1225 | HENRY, RONDA S |
| 1315 | PEREZ, HILARIO |
| 1380 | WESTRA, JOHN J |
| 2070 | MIA VIA PIZZA |
| | MOBIL SUBWAY |
| | SANDERSON MOBIL |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

# RAMONA EXPY 2005

| | |
|---|---|
| 2397 | MAGANA, EUDORO M |
| 2441 | CBJ DAIRY |
| | RAMONA COMMODITIES INC |
| | ZAMANO, CAROLINA |
| 2451 | RAMONA FARMS |
| | SPYKSMAN, JOHN A |
| | STRUIKMANS, RAMONA |
| 2720 | OCCUPANT UNKNOWN, |
| 4050 | RANCHO, RAMONA |
| 34860 | SYBRANDY, SID |
| 34880 | OCCUPANT UNKNOWN, |
| 35500 | GALLARDO-PARAMO, JOSE A |
| 35750 | LAUDA BERT |
| | MUSTAIN, TEDDY L |
| | RANCHO CASA LOMA |
| 36580 | VANDERWOUDE DAIRY |
| | VANDERWOUDE, JANICE C |
| 36620 | DEVRY, DICK M |
| 36970 | SPYKSMA, JOHN A |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

## N SANDERSON AVE 2000

327 HURST, GORDON D
2070 MIA VIA PIZZA
SANDERSON MOBIL
SANDERSONS SUBWAY

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

## RAMONA EXPY 2000

| | |
|---|---|
| 2720 | SCHWEITZER, RANDY |
| 35750 | MUSTAIN, TEDDY L |
| 36580 | VANDERWOUDE, JANICE |
| 36620 | DEVRY, DICK |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

# N SANDERSON AVE 1995

327 HURST, CATHY
805 WIND MACHINE SALES & SVC

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

## RAMONA EXPY 1995

| | |
|---|---|
| 34450 | PASTIME DAIRY |
| | TEVELDE, JOHN H |
| 35500 | GALLARDOPARAMO, JOSE A |
| 35750 | LAUDA, BERT |
| | MUSTAIN, T L |
| | RANCHO CASA LOMA |
| 36580 | DEVRY, JOHN |
| 36620 | DEVRY, DICK |
| 36970 | SPYKSMA, JOHN |
| 36999 | SCHWEITZER, RANDY |
| 37300 | HOUTSMA, JAY |
| 37320 | GONZALEZ, ENRIQUE |

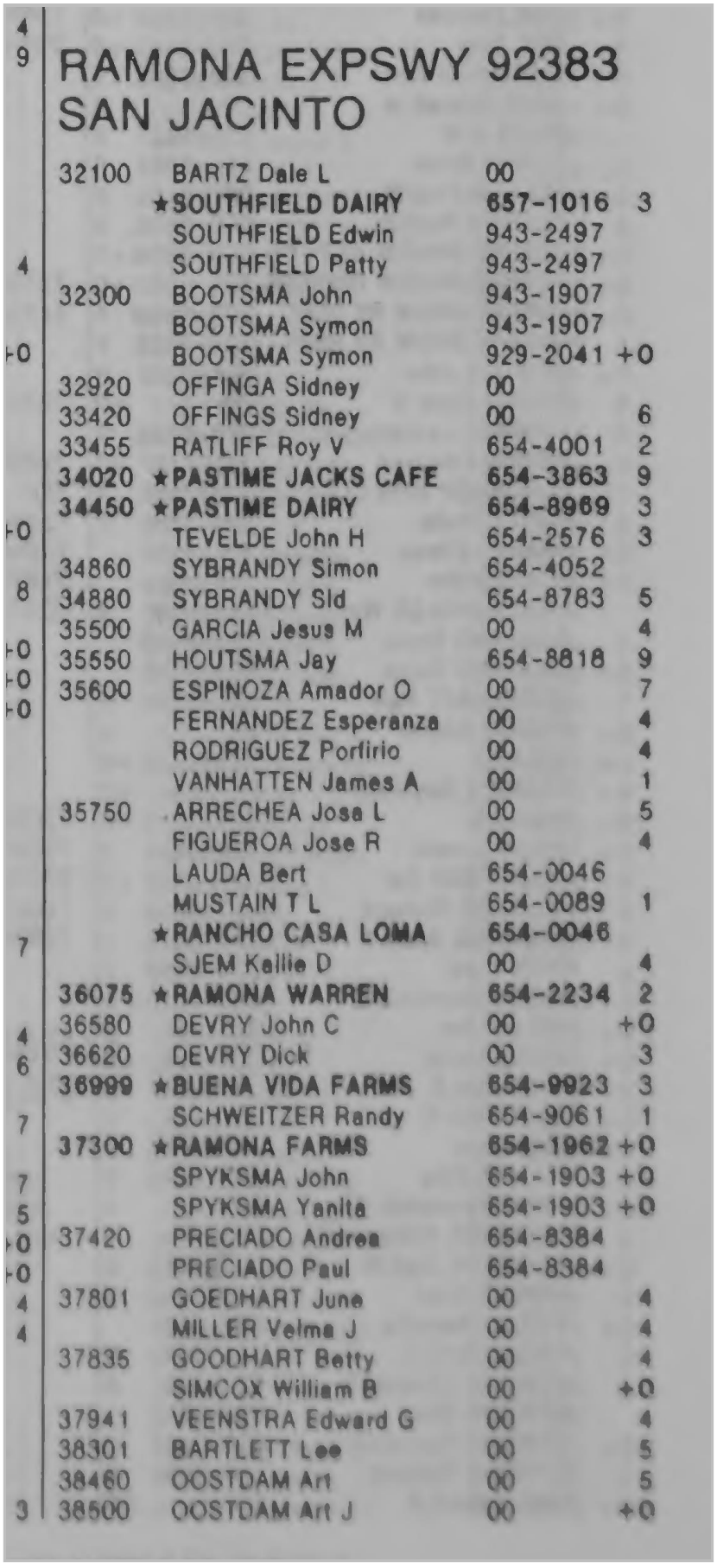
| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information |

# RAMONA EXPY 1992

35750 LAUDA, BERT
MUSTAIN, V
36580 DEVRY, JOHN
36620 DEVRY, DICK
36999 SCHWEITZER, RANDY
37300 HOUTSMA, JAY

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Haines Criss-Cross Directory |

## RAMONA EXPY 1990

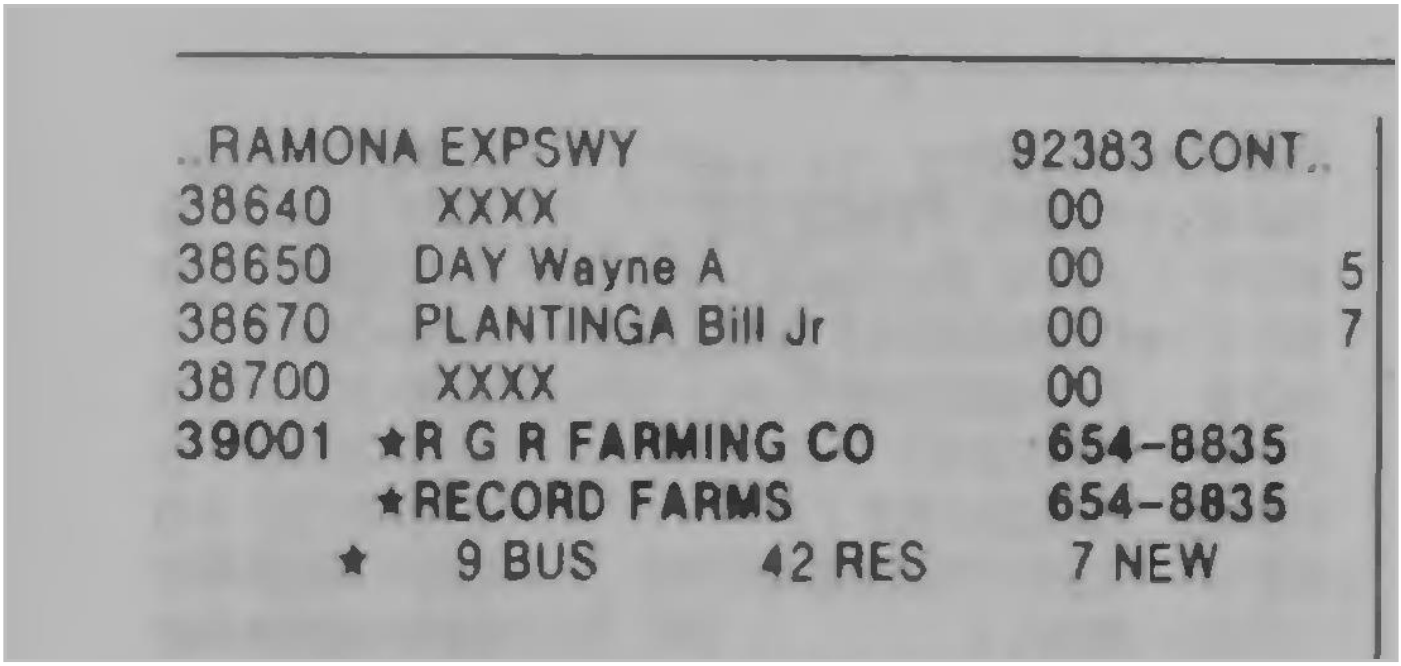


# RAMONA EXPSWY 92383
# SAN JACINTO

| | | | | |
|---|---|---|---|---|
| 4 | 32100 | BARTZ Dale L | 00 | |
| 9 | | ★SOUTHFIELD DAIRY | 657-1016 | 3 |
| | | SOUTHFIELD Edwin | 943-2497 | |
| 4 | | SOUTHFIELD Patty | 943-2497 | |
| | 32300 | BOOTSMA John | 943-1907 | |
| | | BOOTSMA Symon | 943-1907 | |
| +0 | | BOOTSMA Symon | 929-2041 | +0 |
| | 32920 | OFFINGA Sidney | 00 | |
| | 33420 | OFFINGS Sidney | 00 | 6 |
| | 33455 | RATLIFF Roy V | 654-4001 | 2 |
| | 34020 | ★PASTIME JACKS CAFE | 654-3863 | 9 |
| | 34450 | ★PASTIME DAIRY | 654-8969 | 3 |
| +0 | | TEVELDE John H | 654-2576 | 3 |
| | 34860 | SYBRANDY Simon | 654-4052 | |
| 8 | 34880 | SYBRANDY Sid | 654-8783 | 5 |
| | 35500 | GARCIA Jesus M | 00 | 4 |
| +0 | 35550 | HOUTSMA Jay | 654-8818 | 9 |
| +0 | 35600 | ESPINOZA Amador O | 00 | 7 |
| +0 | | FERNANDEZ Esperanza | 00 | 4 |
| | | RODRIGUEZ Porfirio | 00 | 4 |
| | | VANHATTEN James A | 00 | 1 |
| | 35750 | ARRECHEA Josa L | 00 | 5 |
| | | FIGUEROA Jose R | 00 | 4 |
| | | LAUDA Bert | 654-0046 | |
| | | MUSTAIN T L | 654-0089 | 1 |
| 7 | | ★RANCHO CASA LOMA | 654-0046 | |
| | | SJEM Kellie D | 00 | 4 |
| | 36075 | ★RAMONA WARREN | 654-2234 | 2 |
| 4 | 36580 | DEVRY John C | 00 | +0 |
| 6 | 36620 | DEVRY Dick | 00 | 3 |
| | 36999 | ★BUENA VIDA FARMS | 654-9923 | 3 |
| 7 | | SCHWEITZER Randy | 654-9061 | 1 |
| | 37300 | ★RAMONA FARMS | 654-1962 | +0 |
| 7 | | SPYKSMA John | 654-1903 | +0 |
| 5 | | SPYKSMA Yanita | 654-1903 | +0 |
| +0 | 37420 | PRECIADO Andrea | 654-8384 | |
| +0 | | PRECIADO Paul | 654-8384 | |
| 4 | 37801 | GOEDHART June | 00 | 4 |
| 4 | | MILLER Velma J | 00 | 4 |
| | 37835 | GOODHART Betty | 00 | 4 |
| | | SIMCOX William B | 00 | +0 |
| | 37941 | VEENSTRA Edward G | 00 | 4 |
| | 38301 | BARTLETT Lee | 00 | 5 |
| | 38460 | OOSTDAM Art | 00 | 5 |
| 3 | 38500 | OOSTDAM Art J | 00 | +0 |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Haines Criss-Cross Directory |

## RAMONA EXPY 1990



..RAMONA EXPSWY 92383 CONT..

| | | | |
|---|---|---|---|
| 38640 | XXXX | 00 | |
| 38650 | DAY Wayne A | 00 | 5 |
| 38670 | PLANTINGA Bill Jr | 00 | 7 |
| 38700 | XXXX | 00 | |
| 39001 | ★R G R FARMING CO | 654-8835 | |
| | ★RECORD FARMS | 654-8835 | |

★ 9 BUS 42 RES 7 NEW

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Haines Criss-Cross Directory |

## RAMONA EXPY 1985

RAMONA EXPSWY 92383
SAN JACINTO

| | | | |
|---|---|---|---|
| 32100 | SOUTHFIELD DAIRY | 657-1016 | 3 |
| 32300 | BOOTSMA JOHN | 943-1907 | +5 |
| | BOOTSMA SYMON | 943-1907 | +5 |
| 33455 | RATLIFF ROY V | 654-4001 | 2 |
| 33751 | SONOMA VLG TRVL | 654-9691 | +5 |
| 34450 | PASTIME DAIRY | 654-8969 | 3 |
| | TEVELDE JOHN H | 654-2576 | 3 |
| 34860 | SYBRANDY SIMON | 654-4052 | 0 |
| 34880 | SYBRANDY SID | 654-8783 | +5 |
| 35750 | LAUDA BERT | 654-0046 | 0 |
| | MUSTAIN T L | 654-0089 | 1 |
| | RANCHO CASA LOMA | 654-0046 | 0 |
| 36075 | RAMONA WARREN | 654-2234 | 2 |
| 36999 | BUENA VIDA FARMS | 654-9923 | 3 |
| | SCHWEITZER RANDY | 654-9061 | 1 |
| 37300 | PRECIADO ROBT | 654-3507 | +5 |
| 37420 | PRECIADO PAUL | 654-8384 | 3 |
| 38640 | HEMET VLY FEED | 654-1161 | +5 |
| 38670 | PLANTIGA B JR | 654-8225 | 1 |
| 39001 | R G R FARMING CO | 654-8835 | 4 |
| | RECORD FARMS | 654-8835 | |

* 9 BUS 12 RES 6 NEW

# APPENDIX F

EDR Radius Map Report with GeoCheck®

**Not Reported**
Not Reported
San Jacinto, CA  92582

Inquiry Number: 7351696.2s
May 31, 2023

# The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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**GEOCHECK ADDENDUM**

| | |
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***Thank you for your business.***
Please contact EDR at 1-800-352-0050
with any questions or comments.


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# EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

## TARGET PROPERTY INFORMATION

### ADDRESS

NOT REPORTED
SAN JACINTO, CA 92582

### COORDINATES

| | |
|---|---|
| Latitude (North): | 33.8145210 - 33° 48' 52.27'' |
| Longitude (West): | 117.0092280 - 117° 0' 33.22'' |
| Universal Tranverse Mercator: | Zone 11 |
| UTM X (Meters): | 499145.9 |
| UTM Y (Meters): | 3741397.0 |
| Elevation: | 1465 ft. above sea level |

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

| | |
|---|---|
| Target Property Map: | 12015891 LAKEVIEW, CA |
| Version Date: | 2018 |
| East Map: | 12002892 SAN JACINTO, CA |
| Version Date: | 2018 |

### AERIAL PHOTOGRAPHY IN THIS REPORT

| | |
|---|---|
| Portions of Photo from: | 20140530 |
| Source: | USDA |

# MAPPED SITES SUMMARY

Target Property Address:
NOT REPORTED
SAN JACINTO, CA 92582

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| 1 | PROPOSED HIGH SCHOOL | RAMONA BOULEVARD/CAW | ENVIROSTOR, SCH | Lower | 782, 0.148, WSW |
| 2 | BETTY GOEDHART | 2004 N. RAMONA BLVD. | RCRA NonGen / NLR | Lower | 1021, 0.193, NE |
| A3 | SAN JACINTO MOBIL | 2070 N SANDERSON AVE | LUST, Cortese, CERS | Lower | 2603, 0.493, NNE |
| A4 | MOBIL SAN JACINTO | 2070 SANDERSON | LUST | Lower | 2603, 0.493, NNE |

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### *Lists of Federal NPL (Superfund) sites*

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

### *Lists of Federal Delisted NPL sites*

Delisted NPL ---------- National Priority List Deletions

### *Lists of Federal sites subject to CERCLA removals and CERCLA orders*

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

### *Lists of Federal CERCLA sites with NFRAP*

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

### *Lists of Federal RCRA facilities undergoing Corrective Action*

CORRACTS ---------- Corrective Action Report

### *Lists of Federal RCRA TSD facilities*

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

### *Lists of Federal RCRA generators*

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

### *Federal institutional controls / engineering controls registries*

LUCIS ---------- Land Use Control Information System

US ENG CONTROLS Engineering Controls Sites List
US INST CONTROLS Institutional Controls Sites List

***Federal ERNS list***

ERNS Emergency Response Notification System

***Lists of state- and tribal (Superfund) equivalent sites***

RESPONSE State Response Sites

***Lists of state and tribal landfills and solid waste disposal facilities***

SWF/LF Solid Waste Information System

***Lists of state and tribal leaking storage tanks***

INDIAN LUST Leaking Underground Storage Tanks on Indian Land
CPS-SLIC Statewide SLIC Cases

***Lists of state and tribal registered storage tanks***

FEMA UST Underground Storage Tank Listing
UST Active UST Facilities
AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land

***Lists of state and tribal voluntary cleanup sites***

VCP Voluntary Cleanup Program Properties
INDIAN VCP Voluntary Cleanup Priority Listing

***Lists of state and tribal brownfield sites***

BROWNFIELDS Considered Brownfieds Sites Listing

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS A Listing of Brownfields Sites

***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
ODI Open Dump Inventory
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS Open Dumps on Indian Land

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL Delisted National Clandestine Laboratory Register

| | |
|---|---|
| HIST Cal-Sites | Historical Calsites Database |
| CDL | Clandestine Drug Labs |
| CERS HAZ WASTE | CERS HAZ WASTE |
| Toxic Pits | Toxic Pits Cleanup Act Sites |
| US CDL | National Clandestine Laboratory Register |

***Local Lists of Registered Storage Tanks***

| | |
|---|---|
| SWEEPS UST | SWEEPS UST Listing |
| HIST UST | Hazardous Substance Storage Container Database |
| CA FID UST | Facility Inventory Database |
| CERS TANKS | California Environmental Reporting System (CERS) Tanks |

***Local Land Records***

| | |
|---|---|
| LIENS | Environmental Liens Listing |
| LIENS 2 | CERCLA Lien Information |
| DEED | Deed Restriction Listing |

***Records of Emergency Release Reports***

| | |
|---|---|
| HMIRS | Hazardous Materials Information Reporting System |
| CHMIRS | California Hazardous Material Incident Report System |
| LDS | Land Disposal Sites Listing |
| MCS | Military Cleanup Sites Listing |
| SPILLS 90 | SPILLS 90 data from FirstSearch |

***Other Ascertainable Records***

| | |
|---|---|
| FUDS | Formerly Used Defense Sites |
| DOD | Department of Defense Sites |
| SCRD DRYCLEANERS | State Coalition for Remediation of Drycleaners Listing |
| US FIN ASSUR | Financial Assurance Information |
| EPA WATCH LIST | EPA WATCH LIST |
| 2020 COR ACTION | 2020 Corrective Action Program List |
| TSCA | Toxic Substances Control Act |
| TRIS | Toxic Chemical Release Inventory System |
| SSTS | Section 7 Tracking Systems |
| ROD | Records Of Decision |
| RMP | Risk Management Plans |
| RAATS | RCRA Administrative Action Tracking System |
| PRP | Potentially Responsible Parties |
| PADS | PCB Activity Database System |
| ICIS | Integrated Compliance Information System |
| FTTS | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) |
| MLTS | Material Licensing Tracking System |
| COAL ASH DOE | Steam-Electric Plant Operation Data |
| COAL ASH EPA | Coal Combustion Residues Surface Impoundments List |
| PCB TRANSFORMER | PCB Transformer Registration Database |
| RADINFO | Radiation Information Database |
| HIST FTTS | FIFRA/TSCA Tracking System Administrative Case Listing |
| DOT OPS | Incident and Accident Data |
| CONSENT | Superfund (CERCLA) Consent Decrees |
| INDIAN RESERV | Indian Reservations |

# EXECUTIVE SUMMARY

| | |
|---|---|
| FUSRAP | Formerly Utilized Sites Remedial Action Program |
| UMTRA | Uranium Mill Tailings Sites |
| LEAD SMELTERS | Lead Smelter Sites |
| US AIRS | Aerometric Information Retrieval System Facility Subsystem |
| US MINES | Mines Master Index File |
| ABANDONED MINES | Abandoned Mines |
| FINDS | Facility Index System/Facility Registry System |
| ECHO | Enforcement & Compliance History Information |
| UXO | Unexploded Ordnance Sites |
| DOCKET HWC | Hazardous Waste Compliance Docket Listing |
| FUELS PROGRAM | EPA Fuels Program Registered Listing |
| PFAS NPL | Superfund Sites with PFAS Detections Information |
| PFAS FEDERAL SITES | Federal Sites PFAS Information |
| PFAS TSCA | PFAS Manufacture and Imports Information |
| PFAS RCRA MANIFEST | PFAS Transfers Identified In the RCRA Database Listing |
| PFAS ATSDR | PFAS Contamination Site Location Listing |
| PFAS WQP | Ambient Environmental Sampling for PFAS |
| PFAS NPDES | Clean Water Act Discharge Monitoring Information |
| PFAS ECHO | Facilities in Industries that May Be Handling PFAS Listing |
| PFAS ECHO FIRE TRAINING | Facilities in Industries that May Be Handling PFAS Listing |
| PFAS PART 139 AIRPORT | All Certified Part 139 Airports PFAS Information Listing |
| AQUEOUS FOAM NRC | Aqueous Foam Related Incidents Listing |
| PFAS | PFAS Contamination Site Location Listing |
| AQUEOUS FOAM | Former Fire Training Facility Assessments Listing |
| CA BOND EXP. PLAN | Bond Expenditure Plan |
| CUPA Listings | CUPA Resources List |
| DRYCLEANERS | Cleaner Facilities |
| EMI | Emissions Inventory Data |
| ENF | Enforcement Action Listing |
| Financial Assurance | Financial Assurance Information Listing |
| ICE | ICE |
| HIST CORTESE | Hazardous Waste & Substance Site List |
| HWP | EnviroStor Permitted Facilities Listing |
| HWT | Registered Hazardous Waste Transporter Database |
| HAZNET | Facility and Manifest Data |
| MINES | Mines Site Location Listing |
| MWMP | Medical Waste Management Program Listing |
| NPDES | NPDES Permits Listing |
| PEST LIC | Pesticide Regulation Licenses Listing |
| PROC | Certified Processors Database |
| Notify 65 | Proposition 65 Records |
| HAZMAT | Hazardous Material Facilities |
| UIC | UIC Listing |
| UIC GEO | UIC GEO (GEOTRACKER) |
| WASTEWATER PITS | Oil Wastewater Pits Listing |
| WDS | Waste Discharge System |
| WIP | Well Investigation Program Case List |
| MILITARY PRIV SITES | MILITARY PRIV SITES (GEOTRACKER) |
| PROJECT | PROJECT (GEOTRACKER) |
| WDR | Waste Discharge Requirements Listing |
| CIWQS | California Integrated Water Quality System |
| CERS | CERS |
| NON-CASE INFO | NON-CASE INFO (GEOTRACKER) |
| OTHER OIL GAS | OTHER OIL & GAS (GEOTRACKER) |
| PROD WATER PONDS | PROD WATER PONDS (GEOTRACKER) |

# EXECUTIVE SUMMARY

SAMPLING POINT ---------- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---------- Well Stimulation Project (GEOTRACKER)
PFAS TRIS ---------- List of PFAS Added to the TRI
MINES MRDS ---------- Mineral Resources Data System
HWTS ---------- Hazardous Waste Tracking System

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---------- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---------- EDR Exclusive Historical Cleaners

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

**SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

**STANDARD ENVIRONMENTAL RECORDS**

***Lists of state- and tribal hazardous waste facilities***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/23/2023 has revealed that there is

1 ENVIROSTOR site within approximately 1 of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***PROPOSED HIGH SCHOOL*** | ***RAMONA BOULEVARD/CAW*** | ***WSW 1/8 - 1/4 (0.148 mi.)*** | ***1*** | ***9*** |
| Facility Id: 60000906 | | | | |
| Status: No Further Action | | | | |

***Lists of state and tribal leaking storage tanks***

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 2 LUST sites within approximately 1 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SAN JACINTO MOBIL*** | ***2070 N SANDERSON AVE*** | ***NNE 1/4 - 1/2 (0.493 mi.)*** | ***A3*** | ***14*** |
| Database: LUST, Date of Government Version: 03/06/2023 | | | | |
| Status: Completed - Case Closed | | | | |
| Global Id: T0606559384 | | | | |
| MOBIL SAN JACINTO | 2070 SANDERSON | NNE 1/4 - 1/2 (0.493 mi.) | A4 | 18 |
| Database: RIVERSIDE CO. LUST, Date of Government Version: 01/18/2023 | | | | |
| Facility Id: 200824216 | | | | |
| Facility Status: 9 | | | | |

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Lists of Hazardous waste / Contaminated Sites***

SCH: This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category. depending on the level of threat to public health and safety or the. environment they pose.

A review of the SCH list, as provided by EDR, and dated 01/23/2023 has revealed that there is 1 SCH site within approximately 1 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***PROPOSED HIGH SCHOOL*** | ***RAMONA BOULEVARD/CAW*** | ***WSW 1/8 - 1/4 (0.148 mi.)*** | ***1*** | ***9*** |
| Facility Id: 60000906 | | | | |
| Status: No Further Action | | | | |

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/06/2023 has revealed that there is 1 RCRA NonGen / NLR site within approximately 1 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| BETTY GOEDHART<br>EPA ID:: CAC003186284 | 2004 N. RAMONA BLVD. | NE 1/8 - 1/4 (0.193 mi.) | 2 | 12 |

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

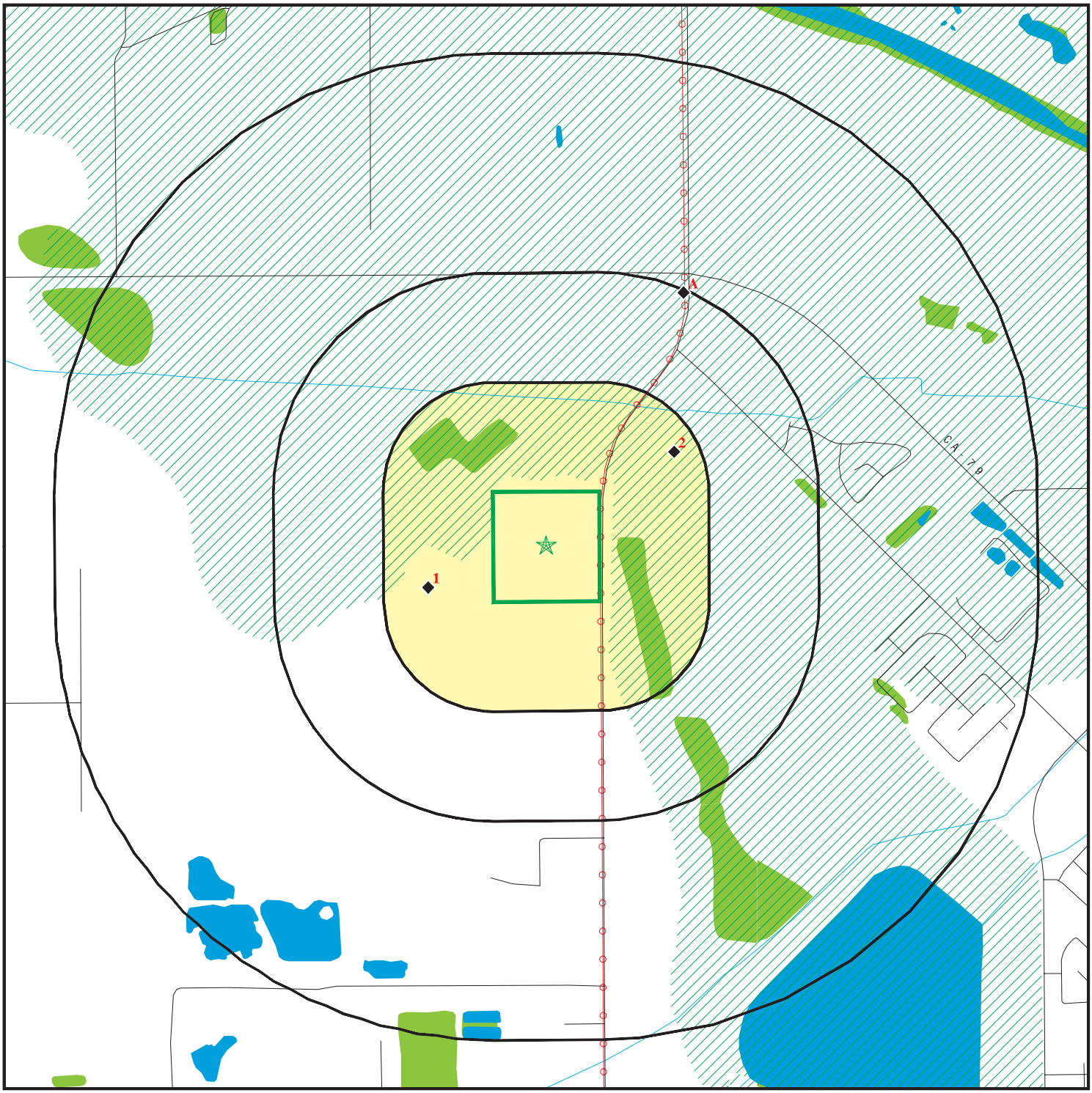
A review of the Cortese list, as provided by EDR, and dated 12/14/2022 has revealed that there is 1 Cortese site within approximately 1 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SAN JACINTO MOBIL***<br>Cleanup Status: COMPLETED - CASE CLOSED | ***2070 N SANDERSON AVE*** | ***NNE 1/4 - 1/2 (0.493 mi.)*** | ***A3*** | ***14*** |

# EXECUTIVE SUMMARY

There were no unmapped sites in this report.

# OVERVIEW MAP - 7351696.2S




- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | | | |
|---|---|---|---|
| SITE NAME: | Not Reported | CLIENT: | Roux Associates |
| ADDRESS: | Not Reported<br>San Jacinto CA 92582 | CONTACT: | Richard Oneil |
| | | INQUIRY #: | 7351696.2s |
| LAT/LONG: | 33.814521 / 117.009228 | DATE: | May 31, 2023 1:08 pm |

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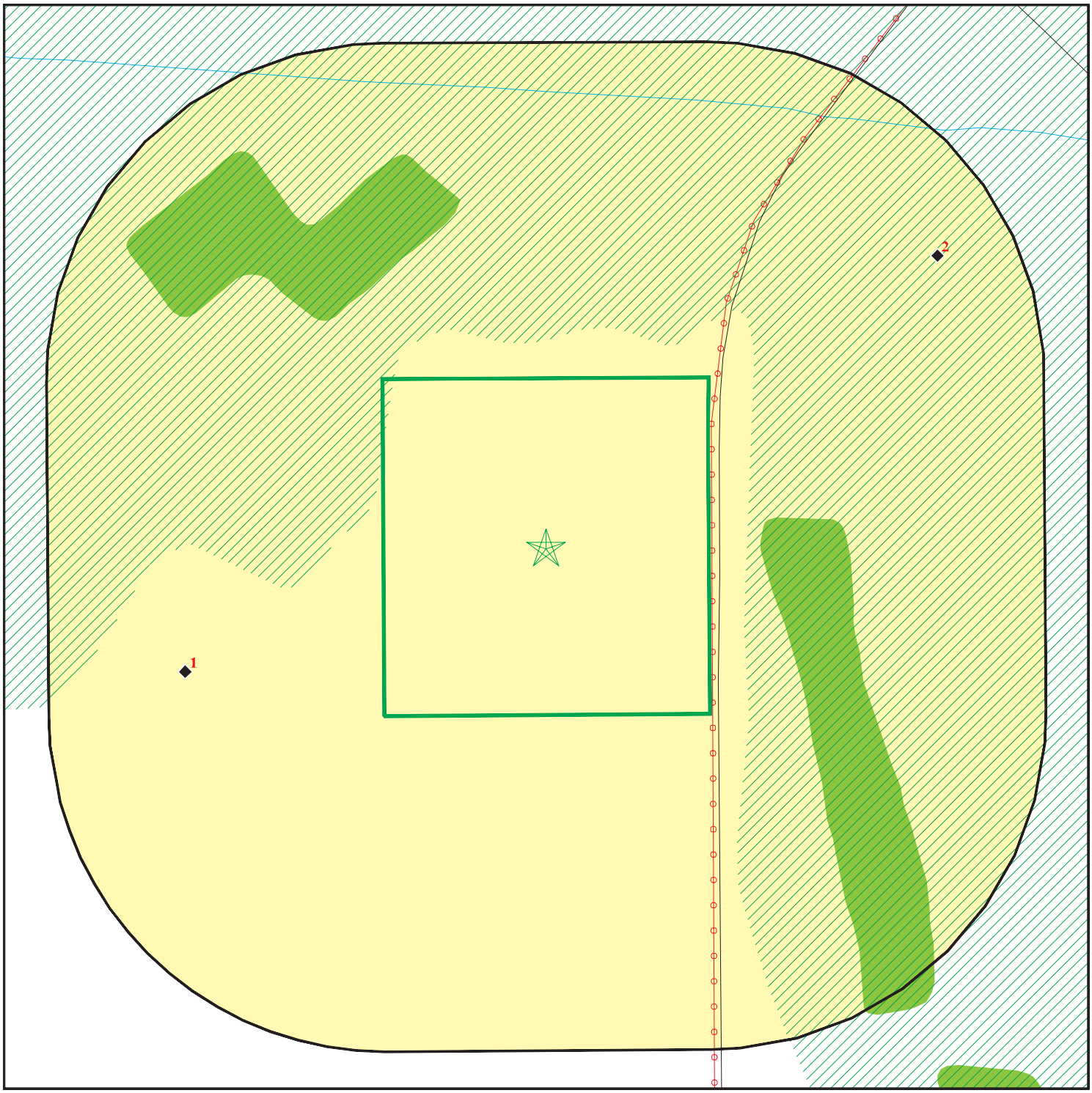
# DETAIL MAP - 7351696.2S




Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
Sensitive Receptors
National Priority List Sites
Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA
Power transmission lines
Special Flood Hazard Area (1%)
0.2% Annual Chance Flood Hazard
National Wetland Inventory
State Wetlands

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | | | |
|---|---|---|---|
| SITE NAME: | Not Reported | CLIENT: | Roux Associates |
| ADDRESS: | Not Reported<br>San Jacinto CA 92582 | CONTACT: | Richard Oneil |
| | | INQUIRY #: | 7351696.2s |
| LAT/LONG: | 33.814521 / 117.009228 | DATE: | May 31, 2023 1:11 pm |

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# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| **STANDARD ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Lists of Federal NPL (Superfund) sites*** | | | | | | | | |
| NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Proposed NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| NPL LIENS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal Delisted NPL sites*** | | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal sites subject to CERCLA removals and CERCLA orders*** | | | | | | | | |
| FEDERAL FACILITY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SEMS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal CERCLA sites with NFRAP*** | | | | | | | | |
| SEMS-ARCHIVE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal RCRA facilities undergoing Corrective Action*** | | | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal RCRA TSD facilities*** | | | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal RCRA generators*** | | | | | | | | |
| RCRA-LQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-SQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-VSQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***Federal institutional controls / engineering controls registries*** | | | | | | | | |
| LUCIS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US INST CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal ERNS list*** | | | | | | | | |
| ERNS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Lists of state- and tribal (Superfund) equivalent sites*** | | | | | | | | |
| RESPONSE | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of state- and tribal hazardous waste facilities*** | | | | | | | | |
| ENVIROSTOR | 1.000 | | 0 | 1 | 0 | 0 | NR | 1 |
| ***Lists of state and tribal landfills and solid waste disposal facilities*** | | | | | | | | |
| SWF/LF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| ***Lists of state and tribal leaking storage tanks*** | | | | | | | | |
| LUST | 0.500 | | 0 | 0 | 2 | NR | NR | 2 |
| INDIAN LUST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| CPS-SLIC | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of state and tribal registered storage tanks*** | | | | | | | | |
| FEMA UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| AST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| INDIAN UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***Lists of state and tribal voluntary cleanup sites*** | | | | | | | | |
| VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of state and tribal brownfield sites*** | | | | | | | | |
| BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| **ADDITIONAL ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Local Brownfield lists*** | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Landfill / Solid Waste Disposal Sites*** | | | | | | | | |
| WMUDS/SWAT | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SWRCY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| HAULERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| INDIAN ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| DEBRIS REGION 9 | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| IHS OPEN DUMPS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Hazardous waste / Contaminated Sites*** | | | | | | | | |
| US HIST CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST Cal-Sites | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCH | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CERS HAZ WASTE | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| Toxic Pits | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| US CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Local Lists of Registered Storage Tanks*** | | | | | | | | |
| SWEEPS UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| HIST UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| CA FID UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| CERS TANKS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***Local Land Records*** | | | | | | | | |
| LIENS | 0.001 | | 0 | NR | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| LIENS 2 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DEED | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Records of Emergency Release Reports*** | | | | | | | | |
| HMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CHMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| LDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MCS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SPILLS 90 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Other Ascertainable Records*** | | | | | | | | |
| RCRA NonGen / NLR | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| FUDS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCRD DRYCLEANERS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US FIN ASSUR | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| EPA WATCH LIST | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| 2020 COR ACTION | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| TSCA | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| TRIS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SSTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ROD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| RMP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RAATS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PRP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PADS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ICIS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MLTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| COAL ASH DOE | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| COAL ASH EPA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| PCB TRANSFORMER | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RADINFO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DOT OPS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CONSENT | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| INDIAN RESERV | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| FUSRAP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| UMTRA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| LEAD SMELTERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US AIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ABANDONED MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| FINDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ECHO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| UXO | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOCKET HWC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FUELS PROGRAM | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS NPL | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS FEDERAL SITES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS TSCA | 0.250 | | 0 | 0 | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| PFAS RCRA MANIFEST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS ATSDR | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS WQP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS NPDES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS ECHO | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS ECHO FIRE TRAINING | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS PART 139 AIRPORT | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| AQUEOUS FOAM NRC | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| AQUEOUS FOAM | TP | | NR | NR | NR | NR | NR | 0 |
| CA BOND EXP. PLAN | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Cortese | 0.500 | | 0 | 0 | 1 | NR | NR | 1 |
| CUPA Listings | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| DRYCLEANERS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| EMI | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ENF | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| Financial Assurance | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ICE | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST CORTESE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| HWP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| HWT | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| HAZNET | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MWMP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NPDES | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PEST LIC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PROC | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| Notify 65 | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| HAZMAT | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| UIC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| UIC GEO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WASTEWATER PITS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| WDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WIP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MILITARY PRIV SITES | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PROJECT | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WDR | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CIWQS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| NON-CASE INFO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| OTHER OIL GAS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PROD WATER PONDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SAMPLING POINT | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WELL STIM PROJ | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PFAS TRIS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MINES MRDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HWTS | TP | | NR | NR | NR | NR | NR | 0 |

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| EDR MGP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| EDR Hist Auto | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| EDR Hist Cleaner | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| **EDR RECOVERED GOVERNMENT ARCHIVES** | | | | | | | | |
| ***Exclusive Recovered Govt. Archives*** | | | | | | | | |
| RGA LF | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RGA LUST | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| - Totals -- | | 0 | 0 | 3 | 3 | 0 | 0 | 6 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

**1**
**WSW**
**1/8-1/4**
**0.148 mi.**
**782 ft.**

**PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINT**
**RAMONA BOULEVARD/CAWSTON AVENUE**
**SAN JACINTO, CA 92582**

**ENVIROSTOR**
**SCH**

**S109149563**
**N/A**

**Relative:**
**Lower**

**Actual:**
**1463 ft.**

ENVIROSTOR:

| | |
|---|---|
| Name: | PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINTO |
| Address: | RAMONA BOULEVARD/CAWSTON AVENUE |
| City,State,Zip: | SAN JACINTO, CA 92582 |
| Facility ID: | 60000906 |
| Status: | No Further Action |
| Status Date: | 09/24/2008 |
| Site Code: | 404801 |
| Site Type: | School Investigation |
| Site Type Detailed: | School |
| Acres: | 61 |
| NPL: | NO |
| Regulatory Agencies: | SMBRP |
| Lead Agency: | SMBRP |
| Program Manager: | Not reported |
| Supervisor: | Shahir Haddad |
| Division Branch: | Southern California Schools & Brownfields Outreach |
| Assembly: | 42 |
| Senate: | 23 |
| Special Program: | Not reported |
| Restricted Use: | NO |
| Site Mgmt Req: | NONE SPECIFIED |
| Funding: | School District |
| Latitude: | 33.81317 |
| Longitude: | -117.0139 |
| APN: | 432-030-006, 432-030-010, 432030006, 432030010 |
| Past Use: | AGRICULTURAL - ROW CROPS |
| Potential COC: | Under Investigation |
| Confirmed COC: | NONE SPECIFIED |
| Potential Description: | UE |
| Alias Name: | 432-030-006 |
| Alias Type: | APN |
| Alias Name: | 432-030-010 |
| Alias Type: | APN |
| Alias Name: | 432030006 |
| Alias Type: | APN |
| Alias Name: | 432030010 |
| Alias Type: | APN |
| Alias Name: | 404801 |
| Alias Type: | Project Code (Site Code) |
| Alias Name: | 60000906 |
| Alias Type: | Envirostor ID Number |

Completed Info:

| | |
|---|---|
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Preliminary Endangerment Assessment Workplan |
| Completed Date: | 07/02/2008 |
| Comments: | DTSC approved the Workplan for implementation provided DTSC comments are incorporated in future work/reports. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Preliminary Endangerment Assessment Report |

**PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINTO (Continued)** **S109149563**

| | |
|---|---|
| Completed Date: | 09/17/2008 |
| Comments: | DTSC approved the PEA with a No Further Action determination |
| | |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Cost Recovery Closeout Memo |
| Completed Date: | 09/18/2008 |
| Comments: | Not reported |
| | |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Environmental Oversight Agreement |
| Completed Date: | 06/09/2008 |
| Comments: | Signed agreement sent (FedEx) to District. |
| | |
| Future Area Name: | Not reported |
| Future Sub Area Name: | Not reported |
| Future Document Type: | Not reported |
| Future Due Date: | Not reported |
| Schedule Area Name: | Not reported |
| Schedule Sub Area Name: | Not reported |
| Schedule Document Type: | Not reported |
| Schedule Due Date: | Not reported |
| Schedule Revised Date: | Not reported |

SCH:

| | |
|---|---|
| Name: | PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINTO |
| Address: | RAMONA BOULEVARD/CAWSTON AVENUE |
| City,State,Zip: | SAN JACINTO, CA 92582 |
| Facility ID: | 60000906 |
| Site Type: | School Investigation |
| Site Type Detail: | School |
| Site Mgmt. Req.: | NONE SPECIFIED |
| Acres: | 61 |
| National Priorities List: | NO |
| Cleanup Oversight Agencies: | SMBRP |
| Lead Agency: | SMBRP |
| Lead Agency Description: | DTSC - Site Cleanup Program |
| Project Manager: | Not reported |
| Supervisor: | Shahir Haddad |
| Division Branch: | Southern California Schools & Brownfields Outreach |
| Site Code: | 404801 |
| Assembly: | 42 |
| Senate: | 23 |
| Special Program Status: | Not reported |
| Status: | No Further Action |
| Status Date: | 09/24/2008 |
| Restricted Use: | NO |
| Funding: | School District |
| Latitude: | 33.81317 |
| Longitude: | -117.0139 |
| APN: | 432-030-006, 432-030-010, 432030006, 432030010 |
| Past Use: | AGRICULTURAL - ROW CROPS |
| Potential COC: | Under Investigation |
| Confirmed COC: | NONE SPECIFIED |
| Potential Description: | UE |

**PROPOSED HIGH SCHOOL AT THE VILLAGES OF SAN JACINTO (Continued)** **S109149563**

Alias Name: 432-030-006
Alias Type: APN
Alias Name: 432-030-010
Alias Type: APN
Alias Name: 432030006
Alias Type: APN
Alias Name: 432030010
Alias Type: APN
Alias Name: 404801
Alias Type: Project Code (Site Code)
Alias Name: 60000906
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 07/02/2008
Comments: DTSC approved the Workplan for implementation provided DTSC comments are incorporated in future work/reports.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 09/17/2008
Comments: DTSC approved the PEA with a No Further Action determination

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 09/18/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 06/09/2008
Comments: Signed agreement sent (FedEx) to District.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

**2**
**NE**
**1/8-1/4**
**0.193 mi.**
**1021 ft.**

**BETTY GOEDHART**
**2004 N. RAMONA BLVD.**
**SAN JACINTO, CA 92582**

**RCRA NonGen / NLR**

**1027448559**
**CAC003186284**

**Relative:**
**Lower**

**Actual:**
**1464 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20220720 |
| Handler Name: | Betty Goedhart |
| Handler Address: | 2004 N. RAMONA BLVD. |
| Handler City,State,Zip: | SAN JACINTO, CA 92582 |
| EPA ID: | CAC003186284 |
| Contact Name: | ALEX RENE CASTELLANO |
| Contact Address: | P.O.BOX 1351 |
| Contact City,State,Zip: | SAN JACINTO, CA 92581 |
| Contact Telephone: | 951-502-5853 |
| Contact Fax: | Not reported |
| Contact Email: | LITTLETOWMAN@VERIZON.NET |
| Contact Title: | Not reported |
| EPA Region: | 09 |
| Land Type: | Not reported |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Not reported |
| State District: | Not reported |
| Mailing Address: | 1996 N. RAMONA BLVD. |
| Mailing City,State,Zip: | SAN JACINTO, CA 92582 |
| Owner Name: | Betty Goedhart |
| Owner Type: | Other |
| Operator Name: | Alex Rene Castellano |
| Operator Type: | Other |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |

**BETTY GOEDHART (Continued)** **1027448559**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20220721 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: BETTY GOEDHART | |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 1996 N. RAMONA BLVD. |
| Owner/Operator City,State,Zip: | SAN JACINTO, CA 92582 |
| Owner/Operator Telephone: | 951-502-5853 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: ALEX RENE CASTELLANO | |
| Legal Status: | Other |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | P.O.BOX 1351 |
| Owner/Operator City,State,Zip: | SAN JACINTO, CA 92581 |
| Owner/Operator Telephone: | 951-502-5853 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20220720 |
| Handler Name: BETTY GOEDHART | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Not reported |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | No |
| Electronic Manifest Broker: | No |

**BETTY GOEDHART (Continued)** **1027448559**

List of NAICS Codes and Descriptions:
NAICS Code: 336212
NAICS Description: TRUCK TRAILER MANUFACTURING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

---

**A3** **SAN JACINTO MOBIL** **LUST** **S108754562**
**NNE** **2070 N SANDERSON AVE.** **Cortese** **N/A**
**1/4-1/2** **SAN JACINTO, CA 92582** **CERS**
**0.493 mi.**
**2603 ft.** **Site 1 of 2 in cluster A**

**Relative:**
**Lower**

**Actual:**
**1463 ft.**

LUST:
Name: SAN JACINTO MOBIL
Address: 2070 N SANDERSON AVE.
City,State,Zip: SAN JACINTO, CA 92582
Lead Agency: RIVERSIDE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606559384
Global Id: T0606559384
Latitude: 33.823151
Longitude: -117.003994
Status: Completed - Case Closed
Status Date: 05/27/2010
Case Worker: Not reported
RB Case Number: Not reported
Local Agency: Not reported
File Location: Local Agency Warehouse
Local Case Number: 200824216
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline, Diesel, Waste Oil / Motor / Hydraulic / Lubricating
EPA Region: 9
Coordinate Source: Google Geocode
Cuf Case: NO
Quantity Released Gallons: Not reported
Begin Date: 02/15/2008
Leak Reported Date: 02/15/2008
How Discovered: Tank Closure
How Discovered Description: Not reported
Discharge Source: Other
Discharge Cause: Unknown
Stop Method: Close and Remove Tank
Stop Description: Not reported
No Further Action Date: 05/27/2010
CA Water Watershed Name: San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
Dwr Groundwater Subbasin Name: San Jacinto (8-005)
Disadvantaged Community: Not reported
CA Enviroscreen 3 Score: 76-80%
CA Enviroscreen 4 Score: 65-70%
Military DOD Site: No
Facility Project Subtype: Not reported

**SAN JACINTO MOBIL (Continued)** **S108754562**

RWQCB Region: SANTA ANA RWQCB (REGION 8)
Site History: A phase II environmental assessment was completed September 20-21, 2007, for the sale of the property to the County Dept. of Transportation in order to widen the road. 11 borings were geoprobed to 20 . Groundwater was encountered at 13 . 2 grab samples were taken from B-4 near the UST s and B-11 near the dispenser islands. TPHg was detected in 4 borings. B1 at 5 had 203 ppm TPH in the C11-C22 range and 74 ppm in the C-23 to C35 range. B4 at 5 had 47.3J ppm TPH in the C23-C35 range. B6 at 5 had 33.4J ppm TPH in the C23-C35 range. B8 at 5 had 77.3 ppm TPH in the C23-C35 range. No TPH or BTEX was detected in the grab water samples. 2 gasoline and 1 diesel tank were removed January 25, 2008. MTBE was detected under 4 of the dispensers and piping at 2 and 4 at 6.5, 5.5, 8.6 and 7.2 ppb and at 6 under the tank at 6.5 ppb. On July 31, 2008, 7 boreholes were advanced using geoprobes. Soil samples were taken at 10, 13 and 15 . Groundwater was encountered at 13 . Groundwater samples were taken. 3 additional borings were advanced with no soil sampling; only groundwater samples were taken. No TPHg or TPHd was detected in any of the soil samples. One sample showed 0.9 ppm MTBE. TPHg was detected in 3 of the 11 g.w. samples at 42.2J, 259, and 19.0 ppb. No benzene or TPHd was detected in the g.w. Toluene was detected in 2 g.w. samples at 0.82 and 2.12 ppb. Ethylbenzene was detected in 3 samples at 0.64, 4.88, and 0.43J ppb. Xylenes were detected at 3,93, 20.48 and 2.04 ppb. MTBE was detected in 4 samples from 0.57J to 1.99 ppb. Naphthalene was detected a6t 7.93 ppb, 124-TMB was detected at 32.6 and 135-TMB was detected at 8.39 ppb. The only chemical which exceeded the MCL were naphthalene with a MCL of 0.14 ppb and 1,2,4-TMB with a MCL of 15 ppb. The RCDEH and SARWQCB both required permanent wells be installed. Ken Williams of the SARWQCB agree to two groundwater sampling events before closure could be considered. Three wells were installed June 30, 2009 to 20 . Groundwater was encountered at ~10 . The wells were screened from 5-20 . No TPHg, VOC s or oxygenates were detected in the soils. The wells were sampled July 13, 2009 and again on September 16, 2009. No TPHg, VOC s or oxygenates were detected in either sampling event. The case was closed on 5/6/2010. No further action required.

LUST:

Global Id: T0606559384
Action Type: ENFORCEMENT
Date: 05/06/2010
Action: Closure/No Further Action Letter - #RCDEH Closure

Global Id: T0606559384
Action Type: ENFORCEMENT
Date: 12/21/2009
Action: Staff Letter - #RCDEH 122109

Global Id: T0606559384
Action Type: ENFORCEMENT
Date: 08/05/2009
Action: Staff Letter - #Riv Co 080509

Global Id: T0606559384
Action Type: RESPONSE
Date: 04/15/2008
Action: Preliminary Site Assessment Report

**SAN JACINTO MOBIL (Continued)** **S108754562**

Global Id: T0606559384
Action Type: ENFORCEMENT
Date: 02/15/2008
Action: Staff Letter - #021508

Global Id: T0606559384
Action Type: ENFORCEMENT
Date: 05/04/2009
Action: Staff Letter - #Riv Co 050409

Global Id: T0606559384
Action Type: ENFORCEMENT
Date: 01/28/2008
Action: Other Report - #Soil analytical results

Global Id: T0606559384
Action Type: Other
Date: 02/15/2008
Action: Leak Reported

Global Id: T0606559384
Action Type: RESPONSE
Date: 02/01/2009
Action: Well Installation Report

Global Id: T0606559384
Action Type: RESPONSE
Date: 10/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0606559384
Action Type: RESPONSE
Date: 07/03/2009
Action: Well Installation Report

Global Id: T0606559384
Action Type: RESPONSE
Date: 03/01/2010
Action: Well Destruction Report

Global Id: T0606559384
Action Type: ENFORCEMENT
Date: 09/17/2008
Action: Staff Letter

Global Id: T0606559384
Action Type: ENFORCEMENT
Date: 12/11/2008
Action: Staff Letter - #RCDEH121108

Global Id: T0606559384
Action Type: Other
Date: 02/15/2008
Action: Leak Discovery

Global Id: T0606559384
Action Type: Other

**SAN JACINTO MOBIL (Continued)** **S108754562**

Date: 01/25/2008
Action: Leak Stopped

LUST:
Global Id: T0606559384
Status: Open - Case Begin Date
Status Date: 02/15/2008

Global Id: T0606559384
Status: Open - Site Assessment
Status Date: 02/15/2008

Global Id: T0606559384
Status: Open - Site Assessment
Status Date: 04/25/2008

Global Id: T0606559384
Status: Completed - Case Closed
Status Date: 05/27/2010

CORTESE:
Name: SAN JACINTO MOBIL
Address: 2070 N SANDERSON AVE.
City,State,Zip: SAN JACINTO, CA 92582
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0606559384
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

CERS:
Name: SAN JACINTO MOBIL
Address: 2070 N SANDERSON AVE.
City,State,Zip: SAN JACINTO, CA 92582
Site ID: 252301
CERS ID: T0606559384
CERS Description: Leaking Underground Storage Tank Cleanup Site

**A4**
**NNE**
**1/4-1/2**
**0.493 mi.**
**2603 ft.**

**MOBIL SAN JACINTO**
**2070 SANDERSON**
**SAN JACINTO, CA**

**Site 2 of 2 in cluster A**

**LUST** **S109117798**
**N/A**

**Relative:**
**Lower**

**Actual:**
**1463 ft.**

RIVERSIDE CO. LUST:

| | |
|---|---|
| Name: | MOBIL SAN JACINTO |
| Address: | 2070 SANDERSON |
| City,State,Zip: | SAN JACINTO, CA |
| Region: | RIVERSIDE |
| Facility ID: | 200824216 |
| Employee: | Shurlow-LOP |
| Site Closed: | Yes |
| Case Type: | Soil only |
| Facility Status: | closed/action completed |
| Casetype Decode: | Soil only is impacted |
| Fstatus Decode: | Closed/Action completed |

Count: 0 records. ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---|---|---|---|---|---|
| | | NO SITES FOUND | | | |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

**STANDARD ENVIRONMENTAL RECORDS**

***Lists of Federal NPL (Superfund) sites***

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: N/A
Last EDR Contact: 05/02/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: N/A
Last EDR Contact: 05/02/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

***Lists of Federal Delisted NPL sites***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: N/A
Last EDR Contact: 05/02/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

***Lists of Federal sites subject to CERCLA removals and CERCLA orders***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2023
Date Data Arrived at EDR: 03/28/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/28/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/02/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

***Lists of Federal CERCLA sites with NFRAP***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/02/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

***Lists of Federal RCRA facilities undergoing Corrective Action***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

***Lists of Federal RCRA TSD facilities***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

***Lists of Federal RCRA generators***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

***Federal institutional controls / engineering controls registries***

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/08/2023
Date Data Arrived at EDR: 02/09/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 82

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/20/2023
Date Data Arrived at EDR: 02/21/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/20/2023
Date Data Arrived at EDR: 02/21/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

***Lists of state- and tribal (Superfund) equivalent sites***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/23/2023
Date Data Arrived at EDR: 01/24/2023
Date Made Active in Reports: 04/10/2023
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Quarterly

***Lists of state- and tribal hazardous waste facilities***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/23/2023
Date Data Arrived at EDR: 01/24/2023
Date Made Active in Reports: 04/10/2023
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Quarterly

***Lists of state and tribal landfills and solid waste disposal facilities***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/06/2023
Date Data Arrived at EDR: 02/07/2023
Date Made Active in Reports: 04/26/2023
Number of Days to Update: 78

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/08/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Quarterly

***Lists of state and tribal leaking storage tanks***

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/30/2023
Number of Days to Update: 23

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/26/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/08/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 134
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/19/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22
Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

***Lists of state and tribal registered storage tanks***

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 82
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 05/24/2023
Number of Days to Update: 78

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 02/23/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 05/26/2023
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 134

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/19/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

***Lists of state and tribal voluntary cleanup sites***

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/17/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/23/2023
Date Data Arrived at EDR: 01/24/2023
Date Made Active in Reports: 04/10/2023
Number of Days to Update: 76
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Quarterly

***Lists of state and tribal brownfield sites***

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/14/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/07/2023
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 04/06/2023
Date Data Arrived at EDR: 04/13/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Semi-Annually

***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/19/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 05/24/2023
Number of Days to Update: 78

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 83

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/19/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 01/06/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 8

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/23/2023
Date Data Arrived at EDR: 01/24/2023
Date Made Active in Reports: 04/10/2023
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 71

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/05/2023
Date Data Arrived at EDR: 01/06/2023
Date Made Active in Reports: 01/11/2023
Number of Days to Update: 5

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/18/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 01/06/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 8

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Quarterly

***Local Lists of Registered Storage Tanks***

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 02/03/2023
Date Data Arrived at EDR: 02/07/2023
Date Made Active in Reports: 04/25/2023
Number of Days to Update: 77

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/06/2023
Date Data Arrived at EDR: 01/06/2023
Date Made Active in Reports: 01/11/2023
Number of Days to Update: 5

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/18/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Local Land Records***

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/23/2023
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 03/23/2023
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/02/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 02/28/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 78

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Semi-Annually

***Records of Emergency Release Reports***

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/19/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 08/02/2022
Date Data Arrived at EDR: 10/17/2022
Date Made Active in Reports: 01/04/2023
Number of Days to Update: 79

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/20/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/30/2023
Number of Days to Update: 23

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 02/01/2023
Date Data Arrived at EDR: 02/14/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 77

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/16/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/11/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/13/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/01/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/04/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/13/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 02/16/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 75

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/19/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/17/2023
Date Data Arrived at EDR: 01/18/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 91

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/18/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/02/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/13/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/02/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/03/2022
Date Data Arrived at EDR: 01/04/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 89

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/15/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/13/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/04/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/23/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 85

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/02/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 03/01/2023
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 23

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/02/2023
Date Data Arrived at EDR: 02/22/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/17/2023
Date Data Arrived at EDR: 03/17/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 74

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/02/2023
Date Data Arrived at EDR: 02/28/2023
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 24

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 10/20/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 82

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/01/2023
Date Data Arrived at EDR: 01/04/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/31/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/13/2023
Date Data Arrived at EDR: 02/14/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 64

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 07/08/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 123

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 04/20/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 05/05/2023
Number of Days to Update: 59

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 05/23/2023
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/14/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/07/2023
Number of Days to Update: 83
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 12/07/2021
Date Data Arrived at EDR: 05/09/2022
Date Made Active in Reports: 05/17/2022
Number of Days to Update: 8
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/08/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Varies

DRYCLEAN NO SONOMA CO DIST: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN PLACER CO DIST: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473
Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA DIST: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432
Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN BUTTE CO DIST: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1469
Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN CALAVERAS CO DIST: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412
Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN EAST KERN DIST: Eastern Kern Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN GLENN CO DIST: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 04/16/2019
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 816
Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL CO DIST: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 05/14/2019
Date Data Arrived at EDR: 05/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1445
Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN LAKE CO DIST: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455
Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN MENDO CO DIST: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1441
Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN MOJAVE DESERT DIST: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN MONTEREY BAY DIST: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN NO COAST UNIFIED DIST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473
Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN NO SIERRA DIST: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 05/07/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455
Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO CO DIST: San Diego County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 02/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1461
Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO METO DIST: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1467
Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB CO DIST: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQ VAL DIST: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/03/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1459
Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB CO DIST: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 04/23/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1467
Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA CO DIST: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473
Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA CO DIST: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468
Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO DIST: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 05/31/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1425
Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Annually

DRYCLEAN VENTURA CO DIST: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 04/16/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 02/17/2023
Date Data Arrived at EDR: 02/17/2023
Date Made Active in Reports: 05/09/2023
Number of Days to Update: 81

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/23/2023
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/15/2023
Number of Days to Update: 80

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/30/2022
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/10/2023
Date Data Arrived at EDR: 01/18/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 76

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/18/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/11/2023
Date Data Arrived at EDR: 01/17/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/06/2023
Date Data Arrived at EDR: 02/15/2023
Date Made Active in Reports: 05/09/2023
Number of Days to Update: 83

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Varies

ICE: ICE
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/13/2023
Date Data Arrived at EDR: 02/14/2023
Date Made Active in Reports: 05/08/2023
Number of Days to Update: 83

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/16/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/13/2023
Date Data Arrived at EDR: 02/14/2023
Date Made Active in Reports: 05/08/2023
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/16/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/03/2023
Date Data Arrived at EDR: 01/04/2023
Date Made Active in Reports: 03/21/2023
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Quarterly

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 07/05/2022
Date Made Active in Reports: 09/19/2022
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 05/23/2023
Number of Days to Update: 77

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 02/28/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 02/06/2023
Date Data Arrived at EDR: 02/07/2023
Date Made Active in Reports: 04/28/2023
Number of Days to Update: 80
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/08/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 02/28/2023
Date Made Active in Reports: 05/22/2023
Number of Days to Update: 83
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/09/2023
Date Data Arrived at EDR: 03/10/2023
Date Made Active in Reports: 05/24/2023
Number of Days to Update: 75
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82
Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Annually

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 05/24/2023
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 02/28/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/05/2023
Date Data Arrived at EDR: 01/06/2023
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 4

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/18/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/05/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 04/26/2022
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/13/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 03/07/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: No Update Planned

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**COUNTY RECORDS**

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 12/28/2022
Date Data Arrived at EDR: 12/28/2022
Date Made Active in Reports: 03/17/2023
Number of Days to Update: 79

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 01/31/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 76

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/13/2022
Date Data Arrived at EDR: 12/15/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 6

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 12/28/2022
Date Data Arrived at EDR: 01/24/2023
Date Made Active in Reports: 04/10/2023
Number of Days to Update: 76

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/19/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 02/13/2023
Date Data Arrived at EDR: 02/14/2023
Date Made Active in Reports: 05/08/2023
Number of Days to Update: 83

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/19/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/13/2023
Date Data Arrived at EDR: 01/17/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 77

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 01/30/2023
Date Data Arrived at EDR: 02/01/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 77

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/30/2023
Date Data Arrived at EDR: 02/01/2023
Date Made Active in Reports: 04/21/2023
Number of Days to Update: 79

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 11/04/2022
Date Data Arrived at EDR: 11/07/2022
Date Made Active in Reports: 01/25/2023
Number of Days to Update: 79

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/05/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/10/2023
Date Made Active in Reports: 03/23/2023
Number of Days to Update: 72

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/11/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/05/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/12/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 82

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/05/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 11/01/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/07/2023
Number of Days to Update: 83

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/24/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 11/01/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/07/2023
Number of Days to Update: 83

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/24/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/18/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/05/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/18/2022
Date Data Arrived at EDR: 10/19/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 83

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/22/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/11/2022
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 03/22/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 01/23/2023
Date Data Arrived at EDR: 01/25/2023
Date Made Active in Reports: 04/10/2023
Number of Days to Update: 75

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/02/2023
Date Data Arrived at EDR: 02/09/2023
Date Made Active in Reports: 05/09/2023
Number of Days to Update: 89

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/02/2023
Date Data Arrived at EDR: 02/09/2023
Date Made Active in Reports: 05/04/2023
Number of Days to Update: 84

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/06/2023
Date Data Arrived at EDR: 02/09/2023
Date Made Active in Reports: 05/03/2023
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/26/2022
Date Data Arrived at EDR: 08/29/2022
Date Made Active in Reports: 11/15/2022
Number of Days to Update: 78

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/08/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/18/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/18/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2023
Date Data Arrived at EDR: 02/09/2023
Date Made Active in Reports: 05/04/2023
Number of Days to Update: 84

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 02/15/2023
Date Data Arrived at EDR: 02/15/2023
Date Made Active in Reports: 05/09/2023
Number of Days to Update: 83

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 02/28/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 78

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/27/2021
Date Data Arrived at EDR: 03/04/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 88

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/03/2023
Date Data Arrived at EDR: 02/07/2023
Date Made Active in Reports: 04/26/2023
Number of Days to Update: 78

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 04/28/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 05/03/2023
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 10/11/2022
Date Data Arrived at EDR: 10/14/2022
Date Made Active in Reports: 01/04/2023
Number of Days to Update: 82

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 04/13/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/09/2023
Date Data Arrived at EDR: 02/10/2023
Date Made Active in Reports: 05/05/2023
Number of Days to Update: 84

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/10/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/02/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/10/2023
Date Data Arrived at EDR: 02/10/2023
Date Made Active in Reports: 05/05/2023
Number of Days to Update: 84

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/28/2021
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/05/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 08/03/2022
Date Data Arrived at EDR: 08/25/2022
Date Made Active in Reports: 11/14/2022
Number of Days to Update: 81

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 11/17/2022
Date Data Arrived at EDR: 11/21/2022
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 81

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/13/2023
Date Data Arrived at EDR: 01/17/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2022
Date Data Arrived at EDR: 01/26/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 83
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/17/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/22/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/27/2022
Date Data Arrived at EDR: 01/26/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 83
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/17/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 05/24/2023
Number of Days to Update: 78
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/19/2022
Date Data Arrived at EDR: 12/27/2022
Date Made Active in Reports: 03/17/2023
Number of Days to Update: 80
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/22/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/26/2023
Date Data Arrived at EDR: 01/27/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 82

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

**OTHER DATABASE(S)**

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/16/2022
Date Made Active in Reports: 02/06/2023
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/10/2022
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/06/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

**STREET AND ADDRESS INFORMATION**

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# GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

**TARGET PROPERTY ADDRESS**

NOT REPORTED
NOT REPORTED
SAN JACINTO, CA 92582

**TARGET PROPERTY COORDINATES**

| | |
|---|---|
| Latitude (North): | 33.814521 - 33° 48' 52.28'' |
| Longitude (West): | 117.009228 - 117° 0' 33.22'' |
| Universal Tranverse Mercator: | Zone 11 |
| UTM X (Meters): | 499145.9 |
| UTM Y (Meters): | 3741397.0 |
| Elevation: | 1465 ft. above sea level |

**USGS TOPOGRAPHIC MAP**

| | |
|---|---|
| Target Property Map: | 12015891 LAKEVIEW, CA |
| Version Date: | 2018 |
| | |
| East Map: | 12002892 SAN JACINTO, CA |
| Version Date: | 2018 |

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

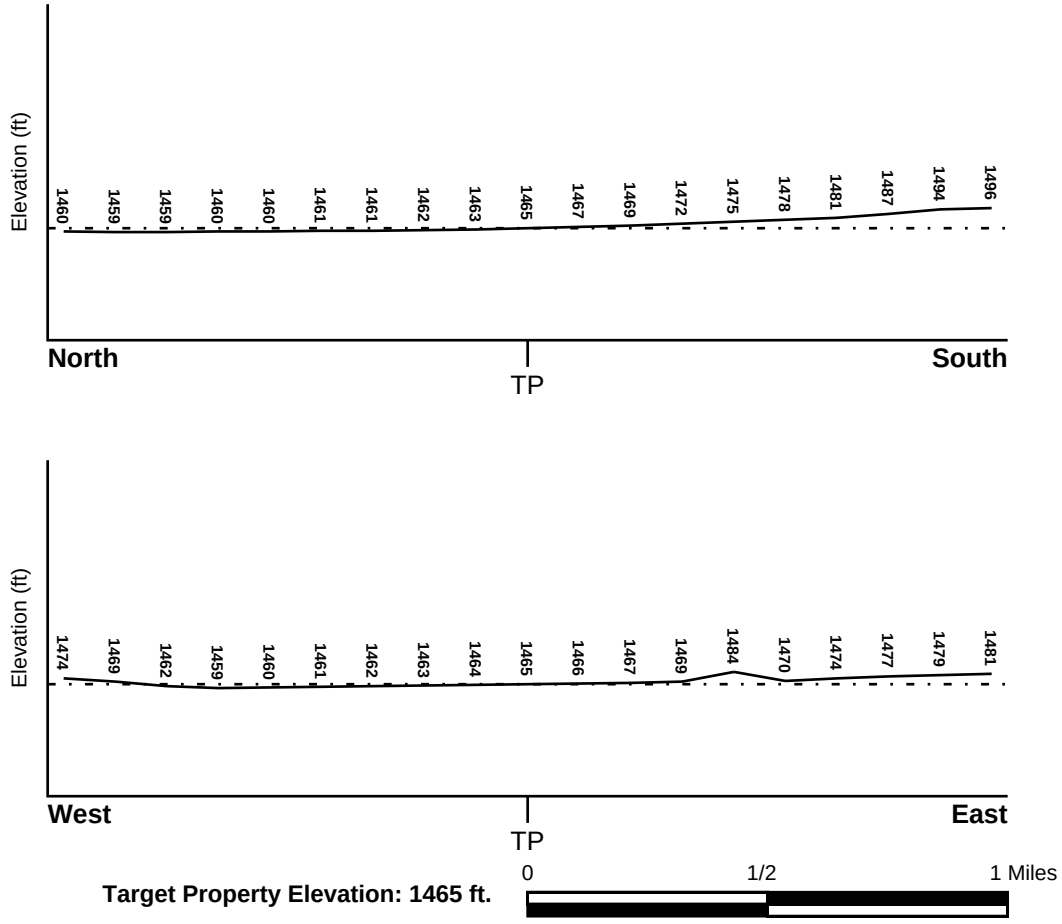
**TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

**TARGET PROPERTY TOPOGRAPHY**

General Topographic Gradient: General NNW

**SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**




**Target Property Elevation: 1465 ft.**

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE**

| Flood Plain Panel at Target Property | FEMA Source Type |
|---|---|
| 06065C1460H | FEMA FIRM Flood data |

| Additional Panels in search area: | FEMA Source Type |
|---|---|
| 06065C1480G | FEMA FIRM Flood data |
| 06065C1470G | FEMA FIRM Flood data |
| 06065C1490G | FEMA FIRM Flood data |

**NATIONAL WETLAND INVENTORY**

| NWI Quad at Target Property | NWI Electronic Data Coverage |
|---|---|
| LAKEVIEW | YES - refer to the Overview Map and Detail Map |

**HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

***Site-Specific Hydrogeological Data*:***

| | |
|---|---|
| Search Radius: | 1.25 miles |
| Status: | Not found |

**AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| MAP ID | LOCATION FROM TP | GENERAL DIRECTION GROUNDWATER FLOW |
|---|---|---|
| Not Reported | | |

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

**GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

**ROCK STRATIGRAPHIC UNIT**

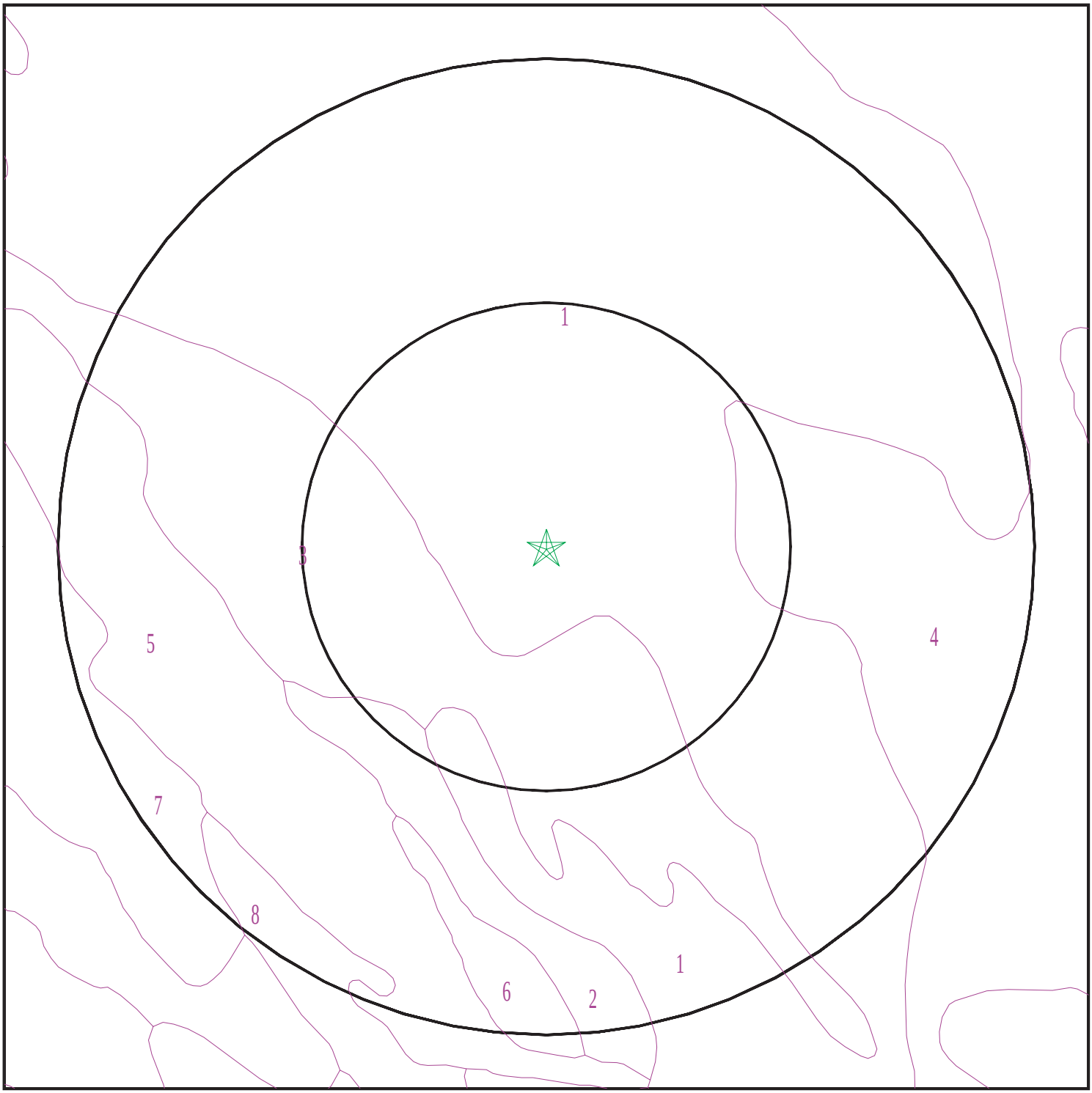
| | |
|---|---|
| Era: | Cenozoic |
| System: | Tertiary |
| Series: | Pliocene |
| Code: | Tpc *(decoded above as Era, System & Series)* |

**GEOLOGIC AGE IDENTIFICATION**

Category: Continental Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 7351696.2s




Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

| | | | |
|---|---|---|---|
| SITE NAME: | Not Reported | CLIENT: | Roux Associates |
| ADDRESS: | Not Reported<br>San Jacinto CA 92582 | CONTACT: | Richard Oneil |
| LAT/LONG: | 33.814521 / 117.009228 | INQUIRY #: | 7351696.2s |
| | | DATE: | May 31, 2023 1:11 pm |

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# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

---

**Soil Map ID: 1**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 16 inches | fine sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14 Min: 4 | Max: 9 Min: 7.4 |
| 2 | 16 inches | 59 inches | sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14 Min: 4 | Max: 9 Min: 7.4 |

---

**Soil Map ID: 2**

Soil Component Name: DELLO

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 7 inches | loamy fine sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 8.4<br>Min: 7.4 |
| 2 | 7 inches | 61 inches | sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 8.4<br>Min: 7.4 |

---

**Soil Map ID: 3**

Soil Component Name: CHINO

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 14 inches | silt loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 4<br>Min: 1.4 | Max: 8.4<br>Min: 7.9 |
| 2 | 14 inches | 27 inches | silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 4<br>Min: 1.4 | Max: 8.4<br>Min: 7.9 |
| 3 | 27 inches | 59 inches | silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 4<br>Min: 1.4 | Max: 8.4<br>Min: 7.9 |

---

**Soil Map ID: 4**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 16 inches | fine sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14 Min: 4 | Max: 9 Min: 7.4 |
| 2 | 16 inches | 59 inches | sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 14 Min: 4 | Max: 9 Min: 7.4 |

---

**Soil Map ID: 5**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 35 inches | fine sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42 Min: 14 | Max: 9 Min: 7.4 |

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 2 | 35 inches | 59 inches | sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42 Min: 14 | Max: 9 Min: 7.4 |

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**Soil Map ID: 6**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 16 inches | loamy fine sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42 Min: 14 | Max: 8.4 Min: 6.6 |
| 2 | 16 inches | 59 inches | sandy loam | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42 Min: 14 | Max: 8.4 Min: 6.6 |

**Soil Map ID: 7**

Soil Component Name: DELLO

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 14 inches | loamy fine sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 8.4<br>Min: 7.4 |
| 2 | 14 inches | 61 inches | sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42 | Max: 8.4<br>Min: 7.4 |

**Soil Map ID: 8**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 35 inches | sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42 Min: 14 | Max: 9 Min: 7.4 |
| 2 | 35 inches | 59 inches | sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42 Min: 14 | Max: 9 Min: 7.4 |

**LOCAL / REGIONAL WATER AGENCY RECORDS**

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

**WELL SEARCH DISTANCE INFORMATION**

| DATABASE | SEARCH DISTANCE (miles) |
|---|---|
| Federal USGS | 1.000 |
| Federal FRDS PWS | Nearest PWS within 1 mile |
| State Database | 1.000 |

**FEDERAL USGS WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| A7 | USGS40000138440 | 1/2 - 1 Mile NNE |
| C17 | USGS40000138457 | 1/2 - 1 Mile NNW |
| E23 | USGS40000138464 | 1/2 - 1 Mile North |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

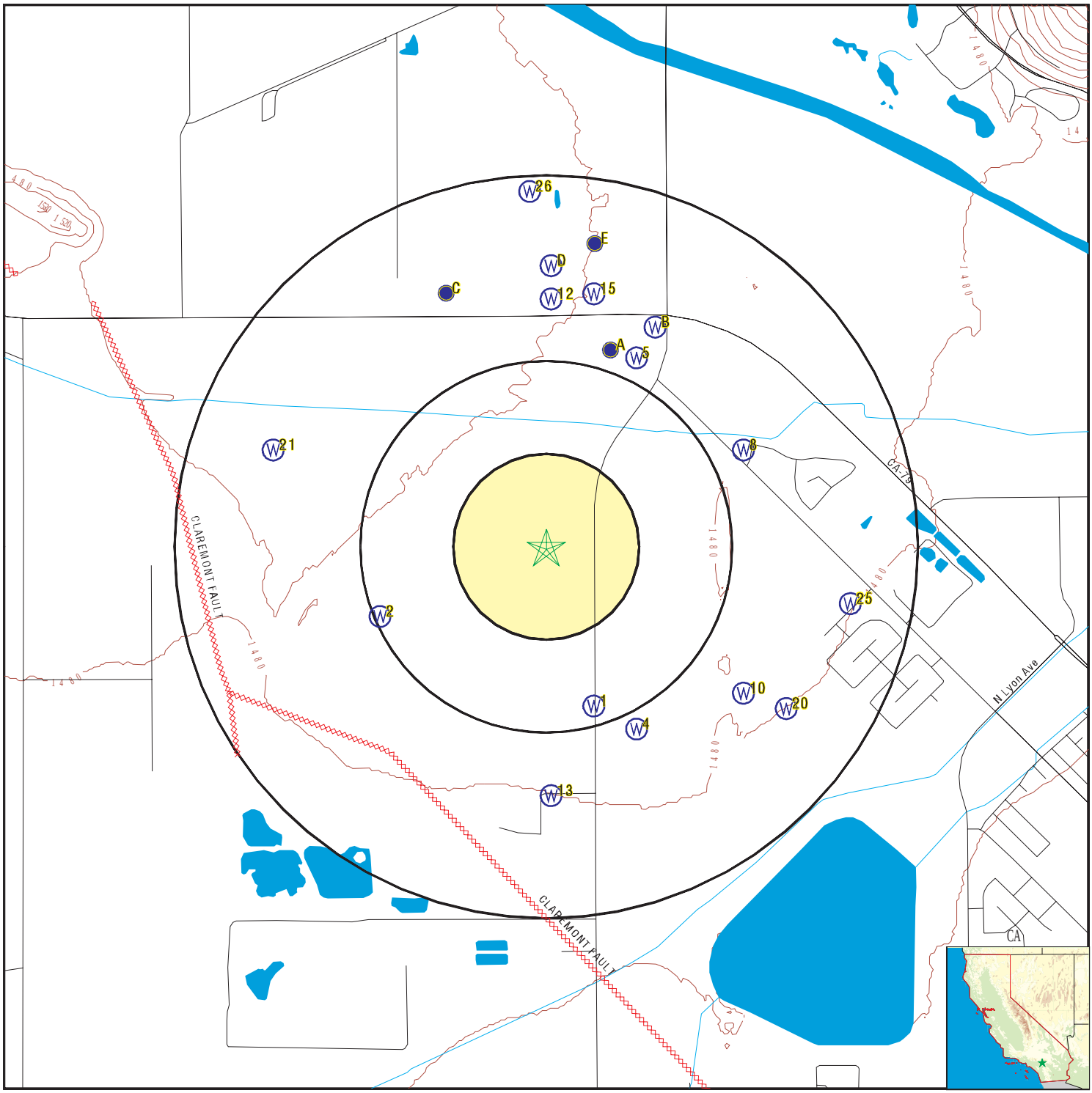
| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| No PWS System Found | | |

Note: PWS System location is not always the same as well location.

**STATE DATABASE WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 1 | CADWR9000005642 | 1/4 - 1/2 Mile SSE |
| 2 | CADWR9000005661 | 1/4 - 1/2 Mile WSW |
| A3 | CADWR9000005711 | 1/2 - 1 Mile NNE |
| 4 | CADWR0000025057 | 1/2 - 1 Mile SSE |
| 5 | CADWR0000008822 | 1/2 - 1 Mile NNE |
| A6 | CAUSGSN00001816 | 1/2 - 1 Mile NNE |
| 8 | CADWR0000009017 | 1/2 - 1 Mile ENE |
| B9 | CAEDF0000088530 | 1/2 - 1 Mile NNE |
| 10 | CADWR9000005644 | 1/2 - 1 Mile SE |
| B11 | CAEDF0000111400 | 1/2 - 1 Mile NNE |
| 12 | CADWR9000005727 | 1/2 - 1 Mile North |
| 13 | CADWR9000005624 | 1/2 - 1 Mile South |
| B14 | CAEDF0000098708 | 1/2 - 1 Mile NNE |
| 15 | CADWR9000005729 | 1/2 - 1 Mile North |
| C16 | CAUSGSN00013137 | 1/2 - 1 Mile NNW |
| D18 | CADWR0000017962 | 1/2 - 1 Mile North |
| D19 | CADWR0000018715 | 1/2 - 1 Mile North |
| 20 | CADWR9000005641 | 1/2 - 1 Mile SE |
| 21 | CADWR0000027004 | 1/2 - 1 Mile WNW |
| E22 | CADWR9000005740 | 1/2 - 1 Mile North |
| E24 | CAUSGSN00000846 | 1/2 - 1 Mile North |
| 25 | CADWR9000005663 | 1/2 - 1 Mile East |
| 26 | CADWR9000005751 | 1/2 - 1 Mile North |

# PHYSICAL SETTING SOURCE MAP - 7351696.2s




- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

| | | | |
|---|---|---|---|
| SITE NAME: | Not Reported | CLIENT: | Roux Associates |
| ADDRESS: | Not Reported<br>San Jacinto CA 92582 | CONTACT: | Richard Oneil |
| LAT/LONG: | 33.814521 / 117.009228 | INQUIRY #: | 7351696.2s |
| | | DATE: | May 31, 2023 1:11 pm |

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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**1**
**SSE**
**1/4 - 1/2 Mile**
**Higher**

**CA WELLS** **CADWR9000005642**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48161 |
| Well Name: | EMWD10243 | Basin Name: | San Jacinto |
| Well Use: | Observation | Well Type: | Single Well |
| Well Depth: | 824 | Well Completion Rpt #: | Not Reported |

---

**2**
**WSW**
**1/4 - 1/2 Mile**
**Lower**

**CA WELLS** **CADWR9000005661**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48160 |
| Well Name: | EMWD10194 | Basin Name: | San Jacinto |
| Well Use: | Observation | Well Type: | Single Well |
| Well Depth: | 824 | Well Completion Rpt #: | Not Reported |

---

**A3**
**NNE**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000005711**

| | | | |
|---|---|---|---|
| State Well #: | 04S01W17K003S | Station ID: | 28905 |
| Well Name: | Not Reported | Basin Name: | San Jacinto |
| Well Use: | Unknown | Well Type: | Unknown |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

---

**4**
**SSE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR0000025057**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W20K001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W20K001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W20K001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**5**
**NNE**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR0000008822**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W17K002S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W17K002S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W17K002S&store_num= | | |

GeoTracker Data: Not Reported

---

**A6**
**NNE** **CA WELLS** **CAUSGSN00001816**
**1/2 - 1 Mile**
**Lower**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334920117001801 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334920117001801 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334920117001801&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**A7**
**NNE** **FED USGS** **USGS40000138440**
**1/2 - 1 Mile**
**Lower**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W17K003S | Type: | Well |
| Description: | Not Reported | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 640 |
| Well Depth Units: | ft | Well Hole Depth: | Not Reported |
| Well Hole Depth Units: | Not Reported | | |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 1 | Level reading date: | 1991-06-27 |
| Feet below surface: | 64.94 | Feet to sea level: | Not Reported |
| Note: | Not Reported | | |

---

**8**
**ENE** **CA WELLS** **CADWR0000009017**
**1/2 - 1 Mile**
**Lower**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W17R002S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W17R002S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W17R002S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**B9**
**NNE** **CA WELLS** **CAEDF0000088530**
**1/2 - 1 Mile**
**Lower**

| | | | |
|---|---|---|---|
| Well ID: | T0606559384-MW3 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW3 |

GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606559384&assigned_name=MW3&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606559384&assigned_name=MW3

---

**10**
**SE**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000005644**

State Well #: Not Reported
Well Name: EMWD10242
Well Use: Irrigation
Well Depth: 402
Station ID: 48158
Basin Name: San Jacinto
Well Type: Single Well
Well Completion Rpt #: Not Reported

---

**B11**
**NNE**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000111400**

Well ID: T0606559384-MW1
Source: EDF
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606559384&assigned_name=MW1&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606559384&assigned_name=MW1
Well Type: MONITORING
Other Name: MW1

---

**12**
**North**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000005727**

State Well #: Not Reported
Well Name: EMWD14441
Well Use: Observation
Well Depth: 253
Station ID: 48150
Basin Name: San Jacinto
Well Type: Single Well
Well Completion Rpt #: Not Reported

---

**13**
**South**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005624**

State Well #: Not Reported
Well Name: EMWD12161
Well Use: Observation
Well Depth: 442
Station ID: 48162
Basin Name: San Jacinto
Well Type: Single Well
Well Completion Rpt #: Not Reported

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**B14**
**NNE**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAEDF0000098708**

| | | | |
|---|---|---|---|
| Well ID: | T0606559384-MW2 | Well Type: | MONITORING |
| Source: | EDF | Other Name: | MW2 |
| GAMA PFAS Testing: | Not Reported | | |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606559384&assigned_name=MW2&store_num= | | |
| GeoTracker Data: | https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606559384&assigned_name=MW2 | | |

---

**15**
**North**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000005729**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48149 |
| Well Name: | EMWD25382 | Basin Name: | San Jacinto |
| Well Use: | Observation | Well Type: | Single Well |
| Well Depth: | 0 | Well Completion Rpt #: | Not Reported |

---

**C16**
**NNW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAUSGSN00013137**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334928117004701 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334928117004701 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334928117004701&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**C17**
**NNW**
**1/2 - 1 Mile**
**Lower**

**FED USGS** **USGS40000138457**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W17E001S | Type: | Well |
| Description: | Not Reported | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | Not Reported |
| Well Depth Units: | Not Reported | Well Hole Depth: | Not Reported |
| Well Hole Depth Units: | Not Reported | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**D18**
**North**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR0000017962**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W17F006S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W17F006S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W17F006S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**D19**
**North**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR0000018715**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W17F003S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W17F003S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W17F003S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**20**
**SE**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005641**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48159 |
| Well Name: | EMWD14491 | Basin Name: | San Jacinto |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 401 | Well Completion Rpt #: | Not Reported |

---

**21**
**WNW**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR0000027004**

| | | | |
|---|---|---|---|
| Well ID: | 04S01W18Q001S | Well Type: | UNK |
| Source: | Department of Water Resources | | |
| Other Name: | 04S01W18Q001S | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S01W18Q001S&store_num= | | |
| GeoTracker Data: | Not Reported | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**E22**
**North**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CADWR9000005740**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48148 |
| Well Name: | EMWD10220 | Basin Name: | San Jacinto |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 580 | Well Completion Rpt #: | Not Reported |

---

**E23**
**North**
**1/2 - 1 Mile**
**Lower**

**FED USGS** **USGS40000138464**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-CA | | |
| Organization Name: | USGS California Water Science Center | | |
| Monitor Location: | 004S001W17F001S | Type: | Well |
| Description: | Not Reported | HUC: | 18070202 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | California Coastal Basin aquifers | | |
| Formation Type: | Not Reported | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 450 |
| Well Depth Units: | ft | Well Hole Depth: | Not Reported |
| Well Hole Depth Units: | Not Reported | | |

---

**E24**
**North**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **CAUSGSN00000846**

| | | | |
|---|---|---|---|
| Well ID: | USGS-334935117002201 | Well Type: | UNK |
| Source: | United States Geological Survey | | |
| Other Name: | USGS-334935117002201 | GAMA PFAS Testing: | Not Reported |
| Groundwater Quality Data: | https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-334935117002201&store_num= | | |
| GeoTracker Data: | Not Reported | | |

---

**25**
**East**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **CADWR9000005663**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48164 |
| Well Name: | EMWD13502 | Basin Name: | San Jacinto |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 247 | Well Completion Rpt #: | Not Reported |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

| Database | EDR ID Number |
|---|---|
| **CA WELLS** | **CADWR9000005751** |

**26**
**North**
**1/2 - 1 Mile**
**Lower**

| | | | |
|---|---|---|---|
| State Well #: | Not Reported | Station ID: | 48147 |
| Well Name: | EMWD10221 | Basin Name: | San Jacinto |
| Well Use: | Irrigation | Well Type: | Single Well |
| Well Depth: | 600 | Well Completion Rpt #: | Not Reported |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
# RADON

**AREA RADON INFORMATION**

State Database: CA Radon

Radon Test Results

| Zipcode | Num Tests | > 4 pCi/L |
|---|---|---|
| 92582 | 9 | 2 |

Federal EPA Radon Zone for RIVERSIDE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

---

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|---|---|---|---|---|
| Living Area - 1st Floor | 0.117 pCi/L | 100% | 0% | 0% |
| Living Area - 2nd Floor | 0.450 pCi/L | 100% | 0% | 0% |
| Basement | 1.700 pCi/L | 100% | 0% | 0% |

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

AQUIFLOW$^{R}$ Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

## OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

**STREET AND ADDRESS INFORMATION**

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# APPENDIX G

Photographic Log

**Photo 1** View of Subject Property facing northwest from North Sanderson Avenue

**Photo 2** View of North Sanderson Road and eastern adjoining property

**Photo 3** Agricultural crops

**Photo 4** Southern property boundary

**Photo 5** Southern adjoining property

**Photo 6** View of Subject Property facing west

**Photo 7** View of northern adjoining property

**Photo 8** Adjoining residence to the east

**Photo 9** Adjoining property to the east

**Photo 10** View of southern adjoining property

**Photo 11** Irrigation system

**Photo 12** Piping along southern edge of Subject Property

**Photo 13** Irrigation water delivery

**Photo 14** View of Subject Property facing northeast

**Photo 15** View of Subject Property facing east

**Photo 16** View of western adjoining property

**Photo 17** View of western property boundary

**Photo 18** Irrigation water delivery system

**Photo 19** View of northwestern area of Subject Property

**Photo 20** Northern adjoining property

**Photo 21** Northern property boundary

**Photo 22** View of Subject Property facing south

**Photo 23** View of Subject Property facing

# APPENDIX H

Pertinent Historical Documentation

# PHASE I ENVIRONMENTAL SITE ASSESSMENT

**of**

**UNDEVELOPED AGRICULTURAL LAND**
**TENTATIVE TRACT MAP NO. 38107**
**APN 432-030-012**
**SAN JACINTO, CA 92582**

---

Prepared for:

**J.D. PIERCE COMPANY, INC.**
**2222 MARTIN STREET, SUITE 200**
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---

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South Shore Testing and Environmental Project #1372101.40

**Issue Date: June 28, 2021**

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| PHASE I ESA EXECUTIVE SUMMARY OVERVIEW<br>Undeveloped Agricultural Property<br>Tentative Tract Map No. 38107, APN 432-030-012, San Jacinto, CA | | | | | |
|---|---|---|---|---|---|
| **Section Topic** | **No RECs Identified** | **Non-REC Issue Identified** | **RECs Identified** | **Phase II Recommended** | **Comments** |
| Historical Usage | ✔ | | ✔ | ✔ | South Shore concludes that the subject property was undeveloped agricultural land from at least 1938 until the present. |
| Regulatory Database Review (on-site) | ✔ | | | | |
| Regulatory Database Review (nearby sites) | ✔ | | | | |
| On-site Operations | | | ✔ | ✔ | South Shore's historical review indicates the subject property was utilized for agricultural purposes from at least 1938 until the present. Agricultural chemicals in use today are applied in dilute concentrations and, when used properly, degrade relatively quickly. However, environmentally persistent pesticides commonly applied prior to the 1980s can linger in the soil for many years. It is not known if environmentally persistent pesticides have been applied to the subject site in the past. Based upon the apparent length of time that has elapsed since agricultural usage has occurred; the fact that significant surface grading will likely occur upon proposed residential development in 2021/2022 (diluting/aerating/mixing potential surficial pesticide residues); it is possible the potential former usage of pesticides has environmentally impacted the subject property or would require remedial actions. Should the need arise (e.g., significant soil disturbance), confirmatory pesticide testing should be performed at the subject property. |
| Haz. Mat. Handling | ✔ | | | | |
| Haz. Waste Handling | ✔ | | | | |
| USTs/ ASTs | ✔ | | | | |

| | | | | | |
|---|---|---|---|---|---|
| ACMs | ✔ | | | | |
| LBP/<br>Lead in H2O | ✔ | | | | |
| PCBs | ✔ | | | | |
| Radon | ✔ | | | | |
| Other | ✔ | | | | |

## SECTION I.
## EXECUTIVE SUMMARY & RECOMMENDATIONS

South Shore Testing and Environmental (South Shore) was retained by J.D. Pierce Company, Inc. to perform a Phase I Environmental Site Assessment (Phase I ESA or Assessment) of a site located approximately 1,875 feet southwest of the southeast corner of N. Sanderson Avenue and N. Ramona Boulevard in San Jacinto, California. The site visit was performed by the person whose signature appears in first position on the signature page (Section X of this report). At the time of the May 23, 2021 site visit, the subject property consisted of an approximate 38.15-acre parcel of undeveloped agricultural land known as Tentative Tract Map No. 38107 and APN 432-030-012.

This Phase I ESA was performed in general accordance with the scope and limitations of the *American Society for Testing and Materials (ASTM) Phase I ESA Standard E1527-2013* (equivalent to the USEPA's All Appropriate Inquiry [AAI] Standard), the scope of work defined in this report, as well as the signed service agreement. Exceptions or deviations from the standard are typically expressed as data gaps, data failure or limitations, which are primarily discussed in Sections II and IV-H. The following summarizes South Shore's independent conclusions and best professional judgment based upon information available to us during the course of this Assessment.

- South Shore's historical review indicates the subject property was utilized for agricultural purposes from at least 1938 until the present. Agricultural chemicals in use today are applied in dilute concentrations and, when used properly, degrade relatively quickly. However, environmentally persistent pesticides commonly applied prior to the 1980s can linger in the soil for many years. It is not known if environmentally persistent pesticides have been applied to the subject site in the past. Based upon the apparent length of time that has elapsed since agricultural usage has occurred; the fact that significant surface grading will likely occur upon proposed residential development in 2021/2022 (diluting/aerating/mixing potential surficial pesticide residues); it is possible the potential former usage of pesticides has environmentally impacted the subject property or would require remedial actions. Should the need arise (e.g., significant soil disturbance), confirmatory pesticide testing should be performed at the subject property.

An Executive Summary Overview is also included in the previous section. However, when making any decisions concerning the findings of this Assessment, please also refer to the remainder of this report, which may present other items of interest that are not discussed in the Executive Summary, or further details regarding the above items. In addition, please refer to the Data Gaps section (IV-H) of this report regarding information that may have been unavailable or incomplete which may have a bearing on the findings or usage of this report.

## SECTION II.
## SCOPE OF WORK & LIMITATIONS

### PURPOSE

This Phase I Environmental Site Assessment is intended to assist the client regarding one of the requirements for the "innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability" (42 U.S.C.§9601 et seq). Qualification for these limitations is predicated on the assumption that "...the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability...." However, no warranty is made that this report constitutes all appropriate inquiry since numerous other factors, including user responsibilities, are required.

### PROTOCOL

The *American Society for Testing and Materials (ASTM) Phase I ESA Standard E1527-2013* is the most current method used in attempting to perform the due diligence required to achieve the above purpose. The E1527-2013 Standard Practice was created by the ASTM "...in an effort to define good commercial and customary practice in the United States of America for conducting an environmental site assessment...." and is equivalent to the USEPA's All Appropriate Inquiry [AAI] Standard issued November 1, 2005. The ASTM Standard E1527-2013 is intended to identify recognized environmental conditions (RECs) in connection with a given property. The term recognized environmental conditions is not intended to include "*de minimus*" conditions that generally do not present a material risk of harm and that are unlikely to be the subject of enforcement actions by governmental agencies.

### SCOPE OF WORK

Generally utilizing ASTM Standard Practice E1527-2013, as well as the scope of work discussed below and in the signed work authorization document (including all conditions and limitations therein), this Assessment involved: A site reconnaissance of the subject property, limited observations of adjoining properties, a review of the historical usage of the subject property, and a review of readily available relevant documentation provided by various public and private sources (including the client and/or owner of the subject property) to identify conditions indicative of releases or threatened releases of hazardous substances, as defined in CERCLA Section 101 (14) U.S.C. § 312.1(c) to evaluate the presence or likely existence of:

- Recognized environmental conditions, specified by ASTM E1527-2013 as: "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to a release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."

- A brief and general evaluation of limited other potential environmental issues, including: suspect asbestos-containing materials, lead-based paint, polychlorinated bi-phenyls, and radon gas. No lab analyses, quantification, or in-depth observations or discussion will be performed.

## LIMITATIONS

In addition to the limitations described in this report, it is also subject to the terms and conditions of the service agreement with the Client, and related engagement or subsequently provided information, if applicable. As discussed in ASTM E1527-2013, no Phase I ESA can eliminate uncertainty regarding the potential for RECs in connection with a property. This investigation is intended to reduce uncertainty within reasonable limits of time and cost.

Refer to Section VI-A for a brief discussion of some (but not necessarily all) specific limitations to South Shore's subject property observations at the time of the site visit. The observations contained within this Assessment are based upon conditions readily observable during the site visit. These observations are typically unable to address conditions of areas not inspected, hidden from view, subsurface soil, groundwater, soil vapor, USTs, neighboring properties, and the like, unless specifically mentioned. It is not the purpose of this Assessment to determine the actual presence, or extent of contamination (if any) at the subject property. Unless specifically noted within this report, this Assessment does not include evaluation, observations, testing, or sampling to address groundwater, soil, or extraneous materials contamination (including mold and/or bio-hazardous/medical waste issues) in or on the subject property. South Shore is not providing geological interpretations or recommendations. Potential Vapor Intrusion issues from on or off-site sources are not evaluated. Electromagnetic issues (e.g., high-voltage power lines) or radiologic issues (e.g., X-ray usage, other radiation emitting items) are also not included. This Assessment does not include or address reasonably ascertainable environmental liens recorded against the subject property, unless stated. A regulatory compliance audit or health and safety review are not included.

South Shore makes no warranties or guarantees as to the accuracy or completeness of information obtained from or compiled by others. Information may also exist which was beyond the scope of this investigation, or was not provided to South Shore that may have an impact on the conclusions of this Assessment. This Assessment does not attempt to address past or forecast future site conditions. South Shore also cannot forecast or be responsible for changes in regulatory guidelines or protocols, industry standards or the like, which may affect the conclusions and/or future usage of this report.

This Assessment has been conducted and prepared in accordance with generally accepted practices and procedures exercised by reputable professionals under similar circumstances. South Shore makes no other warranties or guarantees, either expressed or implied, as to the findings, opinions, or recommendations contained in the report, or as to the existence or non-existence of RECs or other issues at the subject property.

## SECTION III.
## GENERAL SITE DESCRIPTION

South Shore was retained by J.D. Pierce Company, Inc. to perform a Phase I Environmental Site Assessment (Phase I ESA or Assessment) of a site located approximately 1,875 feet southwest of the southeast corner of N. Sanderson Avenue and N. Ramona Boulevard in San Jacinto, California. The site visit was performed by the person whose signature appears in first position on the signature page (Section X of this report).

At the time of the May 23, 2021 site visit, the subject property consisted of an approximate 38.15-acre parcel of undeveloped agricultural land known as Tentative Tract Map No. 38107 and APN 432-030-012, in an agricultural area.

During the site visit, which was performed by public access methods, the South Shore Assessor was unaccompanied. However, the Key Site Manager was notified in advance of the visit and permission for site access was granted to South Shore.

Mr. Pete Kulmaticki, Project Manager with J.D. Pierce Company, Inc., was identified as the "Key Site Manager." As defined by ASTM E1527-2013, the Key Site Manager is that person having good knowledge of the uses and physical characteristics of the subject property, and in a position to provide reasonably accurate information for the Key Site Manager Environmental Questionnaire (and this person may or may not be the property owner). Mr. Kulmaticki completed the Key Site Manager Environmental Questionnaire subsequent to the site visit. A copy of the questionnaire is included in the appendix of this report. No RECs were identified as a result of the questionnaire review.

### A. CLIENT AND/OR KEY SITE MANAGER PROVIDED INFORMATION

As discussed in ASTM E1527-2013, the User (e.g., Client) is required to perform certain tasks or provide certain information to South Shore in order to identify potential RECs. Tasks or information to be provided or performed by the Client/User include: 1) review of judicial and title records for environmental liens, environmental deed restrictions or activity and use limitations (AULs); 2) provide specialized, actual, commonly known or reasonably ascertainable knowledge regarding the property; and, 3) identify reasons for a significantly lower purchase price (if applicable).

The Client or Key Site Manager (as applicable) has not provided or reported to South Shore any information which indicates the subject property is being sold, purchased or valued at a significantly reduced price due to outstanding environmental issues. Nor has the Client or Key Site Manager provided or reported to South Shore information indicating a specific knowledge of RECs, historic RECs, Environmental Liens, Activity and Use Limitations, or Environmental Deed Restrictions related to the subject property.

However, South Shore was not privy to the original purchase price versus valuation metrics of the property by the current owner or seller (as applicable), and therefore cannot evaluate this parameter. The Client/User of this report may wish to perform such an evaluation.

The Client provided South Shore with an undated Tentative Tract Map No. 38107. This information is augmented or superseded by the research performed for this Phase I report and therefore will not be discussed in detail herein.

In addition, no previous environmental documentation (Phase I ESAs, Phase II ESAs, etc.) concerning the subject property was provided to South Shore or reported to exist by the Client or Key Site Manager. It is possible information contained in prior reports (if any) could change South Shore's conclusions or recommendations herein. If previous environmental documentation becomes available to the Client or subject property owner, a copy should be provided to South Shore for review. South Shore reserves the right to alter its conclusions herein based upon such new information.

### B. Adjoining and Adjacent Properties

As discussed in ASTM E1527-2013, an adjoining property is any real property whose border is contiguous or partially contiguous with the subject property, or would be if the properties were not separated by a roadway, street or other public thoroughfare.

Specifically, the subject property is bordered by the following:

| | |
|---|---|
| North | Immediately by undeveloped agricultural land, then by an unimproved road followed by Ramona Expressway (Highway 79). |
| East | Immediately by N. Sanderson Avenue, then by a single-family residential-use property and agricultural land. |
| South | Immediately by an unimproved road, then by agricultural land. |
| West | Immediately by an unimproved road, then by agricultural land. |

### C. USGS Topographic Map

The subject property's physical setting was researched employing a United States Geological Survey (USGS) 7.5 Minute Topographic Quadrangle (Quad) Map relevant to the subject property. The USGS 7.5 Minute Quad Map has an approximate scale of 1 inch to 2,000 feet, and shows physical features such as wetlands, roadways, mines, and buildings. The USGS 7.5 Minute Quad Map was used as the Standard Physical Setting Source, and is sufficient as a single reference. A copy is included in the appendix.

The Lakeview, California Quad Map (dated 2012) shows no physical features that are likely to environmentally impact the subject property. The subject property is identified as

undeveloped land. No mines, wells, aboveground storage tanks, or wetlands were depicted in the immediate area of the subject property. The elevation of the subject property is approximately 1,465 feet above mean sea level with a slight topographic gradient to the west.

## D. General Hydrogeologic Characteristics

The general area of the subject property is located within the San Jacinto Valley, a relatively flat-lying depositional surface surrounded by hills and mountains. The San Jacinto Valley is comprised on the east by an alluvial-filled, down-dropped fault bounded graben (trough), and on the west by a broad, gently sloping (to the east) alluvial mesa. The graben is bounded on the east by the main trace of the San Jacinto fault and on the west by the Casa-Loma segment of the San Jacinto fault. Each fault is a portion of the San Jacinto Fault Zone complex. Sediments derived from the San Jacinto River have been deposited across the valley.

Although site-specific groundwater information for the subject property was unavailable, according to information obtained from the State Water Resources Control Board's on-line GeoTracker database (www.geotracker.swrcb.ca.gov), the closest LUST site with available on-line groundwater data (Former San Jacinto Mobil Service Station at 2070 N. Sanderson Avenue, located approximately ½-mile northeast of the subject property) indicates a reported depth to first groundwater of approximately 11.2 to 12.7 feet below ground surface. The available on-line data also indicates a general southwesterly direction of groundwater flow at that site. However, local groundwater can be influenced by several factors, and may not conform to the reported nearby pattern. Shallower groundwater zones may also occur. Please note that South Shore is not providing geological interpretation or recommendations in this Assessment.

## SECTION IV.
## HISTORICAL REVIEW

The site historical review is used to develop an understanding of the previous uses of the subject property and surrounding area in an effort to identify the likelihood of past uses, or activities having environmentally impacted, the subject property. The historical review consisted of a search of various public and private Standard Historical Sources, as detailed in the sections below.

As defined by ASTM E1527-2013, a Standard Historical Source is considered complete if the information contained within the source identifies all uses of the subject property from the time the property was first used for residential, agricultural, commercial, industrial or governmental purposes. Ideally, the information should be available in either five-year intervals or site milestone events (i.e., initial construction activities, demolition activities, etc.). However, available public and private historical sources do not always fulfill this goal, in which case, the closest approximation is made based upon the sources readily available at the time of historical review.

***Historical Review Summary***: From the historical information review discussed below, South Shore concludes that the subject property was undeveloped agricultural land from at least 1938 until at least 2016. Prior to 2016, most of the neighboring properties were undeveloped agricultural land. No dry cleaners, gasoline stations, major landfills, military bases, manufacturing facilities, or heavy industrial businesses were identified on the subject property.

### A. AERIAL PHOTOGRAPH REVIEW

Aerial photographs were reviewed to evaluate past land-use patterns of the subject property and vicinity. The photos were supplied by Environmental Data Resources, Inc. Copies of representative aerial photographs are included in the Site Maps appendix. This review revealed the following:

1938: The subject property is undeveloped agricultural land. The surrounding land usage also consists of primarily agricultural land. North: immediately by agricultural-use land, then by a power line easement and unimproved road. East: immediately and further agricultural-se land. South: immediately and further by agricultural-use land. West: immediately and further by agricultural-use land.

1949: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph with the exception that N. Sanderson Avenue adjoins the subject property to the east.

1953: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph.

1961: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph.

1967: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph.

1975: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph.

1978: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph.

1985: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph.

1989: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph, with the exception that a residence and detached garage now adjoin the northeastern corner of the subject property to the east across N. Sanderson Avenue at 1727 N. Sanderson Avenue.

1996: The subject property is undeveloped agricultural land. The surrounding land usage also consists of primarily agricultural land. North: immediately by agricultural-use land, then by a power line easement and unimproved road. East: immediately by N. Sanderson Avenue, then by a residence and detached garage at 1727 N. Sanderson Avenue and agricultural-use land. South: immediately by an unimproved road, then by agricultural-use land. West: immediately by an unimproved road, then by agricultural-use land.

2002: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph, with the exception of somewhat greater development in the general area.

2006: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph, with the exception that some equipment (5 pieces) is parked along the northern property line and an unimproved road trends from the northwest property corner to the southeast property corner across the site.

2009: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph.

2012: Conditions at the subject property and the adjoining properties appear similar to those observed in the previous aerial photograph.

2016: The subject property is occupied by undeveloped agricultural land similar to that observed during the site visit. The surrounding land usage is also similar to that observed during the site visit.

### B. Building Permit Review

At the time of the visit, the subject property consisted of undeveloped agricultural land. Buildings and/or structures were not observed at the subject property during the site visit.

### C. Sanborn Fire Insurance Map Review

South Shore attempted to review Sanborn Fire Insurance Maps for the area of the subject property as provided by EDR. Sanborn Maps are detailed drawings that show the location and use of structures on a given property during specific years. These maps were originally utilized by insurance companies to assess fire risk, but are now utilized as a valuable source of historical and environmental-risk information. However, according to EDR, no maps were available for the subject property.

### D. City Street Directory Review

Based upon the other historical sources available, the current undeveloped agricultural nature of the subject property, and the confirmed previous undeveloped agricultural usage city street directories were not reviewed for the subject property.

### E. Historical Topographic Map Review

Based upon the other historical sources available, the current undeveloped agricultural nature of the subject property, and the confirmed previous undeveloped agricultural usage historical topographic maps were not reviewed for the subject property.

### F. Interviews

As specified in ASTM E1527-2013, interviews will be conducted with parties including present land owners and occupants, past land owners and occupants, and adjoining property owners, as appropriate and as available. South Shore interviewed the following parties during the course of this Assessment:

Mr. Pete Kulmaticki, Project Manager with J.D. Pierce Company, Inc.

South Shore interviewed Mr. Pete Kulmaticki, Project Manager with J.D. Pierce Company, Inc., in an effort to obtain information regarding the current and former uses of the subject property via the Key Site Manager Environmental Questionnaire. Mr. Pete Kulmaticki reported that the subject property was vacant land and that J.D. Pierce Company, Inc. acquired the subject property in 2003. Mr. Pete Kulmaticki was

unaware of any hazardous material contamination from the current operations or from past subject property usage.

## G. Recorded Land Title Records

As specified in ASTM E1527-2013, recorded land titles are records usually maintained by the municipal or county recorder of deeds which detail ownership fees, leases, land contracts, easements, and other encumbrances attached to or recorded against the subject property. Due to state land trust regulations and laws, land-title records typically only provide trust names, owner's names, or easement holders, and not information concerning previous uses or occupants of the subject property. Therefore, this Assessment has relied upon other standard historical information sources which are typically more informative than recorded land titles.

The Client also has not provided an environmental liens/activity usage limitation search for South Shore's review, or requested that such a search be performed by South Shore. According to the ASTM E1527-2013 guidelines, it is the responsibility of the User of this report to perform such a review.

## H. Data Gaps

As specified in ASTM E1527-2013, data gaps are defined as "a lack or inability to obtain information required by the standards and practices listed in the regulation despite good faith efforts by the Environmental Professional or prospective landowner to gather such information". Data failure is one form of a data gap and occurs when historical research does not identify standard historical sources that are "reasonably ascertainable" and "likely to provide useful information to identify prior uses of the property". Per ASTM E1527-13, the assessment must document data failure and give reasons why historical sources were not available or excluded (if applicable).

Based on South Shore's research, the following data gap(s) and/or data failure was/were identified:

Information relative to prior investigations, deed restrictions and environmental liens, a title search, and completion of a pre-survey questionnaire from the report User were not provided by the Client. Based on the other information reviewed as part of this assessment, it appears unlikely this data gap will significantly affect South Shore's report conclusions.

South Shore contacted the RCDEH in an effort to evaluate whether hazardous materials usage, hazardous waste generation, hazardous material incidents, USTs, and/or LUSTs have been reported at the subject property. Based on the lack of a site address, the RCDEH was unable to conduct any research for the subject property. However, it is not expected the file information (if any) will alter the conclusions of this report.

As discussed in Section VI-A, and other sections of this report, changes to the property over time, and/or conditions at the time of the site visit, limited South Shore's observations of historical (and possibly current) conditions at the subject property. These changes included, but are not necessarily limited to: Based on the lack of a site address, research in some instances could not be conducted based solely on an APN number. In addition, South Shore was limited to review of available regulatory records and interviews of third-parties, since the prior business owners are unknown. However, it is not expected this data gap will alter the conclusions of this report.

Building permits were unavailable for the subject property.

Historical data was not available in five-year increments. However, based on the sources reviewed, and the previously structurally undeveloped status of the subject property and neighboring properties as observed in the aerial photographs reviewed, it is unlikely this data gap will impact the findings and conclusions of this assessment.

## SECTION V.
## AGENCY RECORDS REVIEW

In an effort to evaluate whether the subject property and/or nearby sites have reported USTs, hazardous waste generation, or hazardous material releases, regulatory information from the federal, state, and local agencies listed below were reviewed. The database report was compiled by a third-party database provider and is reportedly the most recent database information available from each agency. A copy of the database report is included in the appendix. According to the database provider, their search of the various databases conforms to ASTM E1527-2013 Standards. However, the accuracy of the information provided by the agencies is not without error or omission, and the information listed is limited to that which was reported to or gathered by that agency. A limited discussion of the number of sites identified, and of their potential impact to the subject property, follows the database descriptions. In addition, South Shore may request state and/or local regulatory agency information for the subject property, targeting those agencies most likely to provide information useful for this Assessment. The primary databases reviewed and their general search range criteria are below:

| **Federal Database** | **Search Range** |
|---|---|
| USEPA NPL/Superfund databases: | Target Property to 1.0 mile |
| USEPA SEMS databases: | Target Property to 0.5 mile |
| USEPA RCRIS facilities databases<br>Corrective Action Sites:<br>TSD Facilities:<br>Generators: | <br>1.0 mile<br>0.5 mile<br>0.25 mile |
| USEPA ERNS database: | Target Property |
| US Engineering Controls:<br>US Institutional Controls: | 0.5 mile<br>0.5 mile |
| US DOD/FUDS databases: | 1.0 mile |
| US Brownfields: | 0.5 mile |
| **State/Local Database** | **Search Range** |
| State Superfund databases:<br>EnviroStor/Response databases:<br>Hist Cal-Sites:<br>CA Bond Exp. Plan | <br><br><br>1.0 mile |
| State Landfills database: | 0.5 mile |
| State Cortese | 0.5 mile |
| State/Local LUST databases: | 0.5 mile |
| State Spills databases:<br>SLIC:<br>CHMIRS: | <br>0.5 mile<br>Target Property |

| | |
|---|---|
| State/Local UST/AST databases: | 0.25 mile |
| State Liens database: | Target Property |
| State Deed database: | 0.5 mile |
| State VCP database: | 0.5 mile |
| State HAZNET database: | Target Property |
| Local Haz-Mat/Cleanup databases: | Target Property |

## A. Review of Federally Reported Environmental Data

The review of the federal environmental databases listed below attempts to identify environmental problem sites, activities, and occurrences from the records of the U.S. Environmental Protection Agency (USEPA). The detailed listing, and a map showing the location of the sites relative to the subject property, is included in the appendix.

### National Priorities List (NPL) of Superfund Sites:

The NPL is the USEPA's database of hazardous waste sites currently identified and targeted for priority cleanup action under the Superfund program. This search includes Proposed NPL sites, Delisted NPL sites, and NPL Recovery sites. NPL sites may encompass relatively large areas. As such, polygon coverage for the site boundaries (for a majority of the NPL sites), as produced by the EPA may be provided.

### National Priorities List Liens (NPL Liens):

The NPL Liens database contains a list of filed notices of Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability.

### Superfund Enterprise Management System (SEMS):

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

### Superfund Enterprise Management System (SEMS) - Archive

SEMS-ARCHIVE tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS

sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; only that based upon available information, the location is not judged to be potential NPL site.

**RCRIS Corrective Action (RCRIS-CA) Sites:**

The RCRIS-CA report contains information pertaining to hazardous waste handling facilities which have conducted, or are currently conducting corrective actions, as regulated by the Resource Conservation and Recovery Act.

**Resource Conservation and Recovery Act Information System (RCRIS) Treatment, Storage, and Disposal (TSD) Facilities:**

The RCRA program identifies and tracks hazardous waste from generation source to the point of ultimate disposal. The RCRIS-TSD facilities database is the composite of reporting facilities that transport, store, or dispose of controlled or hazardous waste. Identification on this list does not indicate that a site has impacted the environment.

**RCRIS Generator Facilities:**

The RCRIS program identifies and tracks hazardous waste from generation source to the point of ultimate disposal. The RCRIS generator facilities database (large and small quantity generators and various derivations) is the composite of reporting facilities that generate hazardous waste. Identification on these lists does not indicate that a site has impacted the environment.

**Emergency Response Notification System (ERNS):**

The ERNS database is the historical record of releases of hazardous substances reported to the USEPA.

**EPA Engineering and Institutional Controls (US ENG/INST CONTROL) Sites:**

These databases include listings of sites with engineering or institutional controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health. Institutional controls include administrative measures, such as groundwater use

restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are required as part of the institutional controls.

**Department of Defense (DOD) Sites:**

The Unites States Geological Survey (USGS) maintains the DOD database, which consists of federally owned or administered lands, administered by the DOD, that have an area equal to or greater than 640 acres of the United States, Puerto Rico, and the US Virgin Islands. Identification on this database does not necessarily indicate that a site has impacted the environment.

**Formerly Used Defense Sites (FUDS):**

The U.S. Army Corps of Engineers database contains a listing of locations of Formerly Used Defense Sites (FUDS) where the U.S. Army Corps of Engineers is actively working or will take necessary cleanup actions. Identification on this database does not indicate that a site has impacted the environment.

**US Brownfields Sites (Brownfields):**

The US Brownfields site includes brownfields properties addressed by Cooperative Agreement Recipients (CAR) and brownfields properties addressed by Targeted Brownfields Assessments (TBA). EPA's TBA program is designed to help states, tribes, and municipalities minimize the uncertainties of contamination often associated with brownfields. Cooperative Agreement Recipients (states, political subdivisions, territories, and Indian tribes) become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the USEPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

**CERCLA Lien Information (LIENS 2):**

A Federal Superfund Lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

**Facility Index System (FINDS) sites:**

The FINDS Report is a computerized inventory of all facilities that are regulated or tracked by the U.S. Environmental Protection Agency. These facilities are assigned a unique identification number that serves as a cross-reference for databases in the EPA's program system. Identification on this database does not indicate that a site has impacted the environment.

## B. Review of State-Reported Environmental Data

A general description of the databases searched and the corresponding responsible state or local agency. The detailed listing, and a map showing the location of the sites relative to the subject property, is included in the appendix.

### State Hazardous Waste Site (SHWS) Databases:

State Hazardous Waste Site records are the states' equivalent to CERCLIS (refer to CERCLIS discussion).

### California EnviroStor Databases:

The Department of Toxic Substances Control's (DTSC's) Cal-Sites database contains potential or confirmed hazardous substance release properties. The CalSites database was created by the DTSC, but DTSC no longer up-dates the CalSites database. The CalSites database was replaced by the EnviroStor database. The DTSC's RESPONSE database identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk at the time of listing. The DTSC's Site Mitigation and Brownfields Reuse Program's (SMBRPs) EnviroStor database identifies sites that have reported contamination or sites for which there may be reason to investigate further. The database includes the following site types: Federal Superfund Sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in Cal-Sites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

### Solid Waste Facilities, Landfills and Recycling Facilities:

The State Solid Waste Facilities and Landfills and Recycling databases include an inventory of active, closed, and inactive solid waste disposal facilities, landfills, refuse transfer stations, and recycling facilities (non-landfill sites).

**Historical Cortese Database:**

The Historical Cortese list contains hazardous waste and substance sites compiled pursuant to Assembly Bill 3750 (Cortese, Chapter 1048, Statutes of 1986). The information included in this list was compiled with information from the California DTSC, the State Water Resources Control Board, and the California Waste Management Board. This database contains primarily LUST sites, although other types of sites may be included.

**Leaking Underground Storage Tanks (LUSTs):**

State and/or local agencies maintain inventories of LUSTs (also known as LTANKS) in a statewide database.

**State/Local Spills Databases:**

The Spills, Leaks, Investigations, and Cleanup (SLIC) Cost Recovery Listing program is designed to protect and restore water quality from spills, leaks, and similar discharges. The database(s) included in this section are the states' equivalent to the ERNS report and generally contain information for reported hazardous material/waste surface or groundwater contamination release investigations reported in that state or locality. The California Hazardous Material Incident Report System (CHMIRS) database contains information on reported hazardous waste material incidents (accidental releases or spills).

**Underground Storage Tanks (USTs)/Aboveground Storage Tanks (ASTs):**

USTs are regulated under Subtitle I of the RCRA (as well as various state regulations), and must be registered with the State Underground Storage Tank Program. These are registered USTs only, and identification on this list(s) does not necessarily indicate that the site has impacted the environment. This search includes review of the Active UST Facilities (UST) database, Facility Inventory Database (CA FID UST), Hazardous Substance Storage Container Database (HIST UST), and SWEEPS UST Listing database (SWEEPS UST). Also potentially included in this section are sites identified on historic UST databases that are no longer maintained. The AST database is the State Water Resources Control Board's Hazardous Substance Storage Container Database for registered ASTs. Note: The nature of this listing indicates a UST and/or AST has been reported at the respective address; however, the nature of the UST and/or AST listing does not indicate whether the presence of the UST(s) and/or AST(s) has resulted in an impact to the environment. UST/AST sites with reported releases are typically identified on other listed databases which indicate a reported release or environmental impact and are discussed accordingly.

**Environmental Liens Listing (LIENS):**

The Department of Toxic Substances Control's (DTSC) LIENS database includes a listing of property locations with environmental liens for California where DTSC is a lien holder.

**Deed Restriction Listing (DEED):**

The Department of Toxic Substances Control's (DTSC) DEED database includes a listing of Site Mitigation and Brownfields Reuse Program (SMBRP) Facility Sites with Deed Restrictions and Hazardous Waste Management Program Facility Sites with Deed/Land Use Restrictions. The SMBRP list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active, and some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

**Voluntary Cleanup Program (VCP):**

The DTSC's VCP database contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have requested that DTSC oversee the investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

**State and/or Local Agency Generators (HWTS/HAZNET):**

The Hazardous Waste Tracking System (HWTS or HAZNET) data is extracted from copies of hazardous waste manifests kept by the Cal-EPA-DTSC. These manifests track hazardous wastes from generation source to the point of ultimate disposal. Permit data is generally culled from local agency database(s) for hazardous material handlers and generators. Identification on these lists does not indicate that a site has impacted the environment and the data has not always been verified for accuracy by the DTSC or local agencies.

**National Pollutant Discharge Elimination System (NPDES) Database:**

The National Pollutant Discharge Elimination System (NPDES) includes sites that have had or have a permit for the discharge of wastewater or stormwater

issued by the Regional Water Quality Control Board or a local agency (e.g., Public Works Department). Identification on this database does not necessarily indicate that a site has impacted the environment, only that permitted discharge(s) have occurred.

**State and/or Local Agency Air Emissions Database (EMI):**

The EMI data is extracted from permits for air emissions kept by the state or local air resources agency. The nature of the EMI listings indicates the emission of volatile materials to the air; however, the nature of the EMI listings does not indicate whether the related activities resulted in an impact to the environment. Sites with reported releases are typically identified on other listed databases which indicate a reported release or reported impact to the environment (e.g., LUST, SLIC, Cortese) and are discussed accordingly.

**Drycleaners Database:**

The California Department of Toxic Substance Control (DTSC) maintains a listing of drycleaners and drycleaner related facilities that have EPA ID numbers. EPA ID numbers are assigned to facilities with certain SIC codes (power laundries; garment pressing and cleaner's agents; etc.). The nature of the Drycleaners listings indicates the facility has been given an EPA ID number due to a SIC code assignment; however, the nature of the Drycleaners listings does not indicate whether the related activities resulted in an impact to the environment. Sites with reported releases are typically identified on other listed databases which indicate a reported release or reported impact to the environment (e.g., LUST, SLIC, Cortese) and are discussed accordingly.

**Notify 65 Database:**

Notify 65 listings generally indicate that some type of release and/or groundwater impact have occurred which was required to be reported under Proposition 65 rules. These types of listings typically indicate groundwater has been impacted by the listed site; however, details are typically not provided in this type of database.

**EDR Historical Auto Stations, Historical Cleaners, & Manufactured Gas Plants Databases:**

These databases include former gas stations, auto repair shops, dry cleaners, Laundromats, and manufactured gas plants that are typically no longer active. Identification on these databases does not necessarily indicate that such activities actually occurred at that site or that a site has impacted the environment.

**Local Regulatory Databases:**

The County Environmental Health Department or equivalent local Certified Unified Program Agency (CUPA) typically maintains lists that may include some or all of the following: hazardous material handlers, hazardous waste generators, USTs, ASTs, LUST sites, and other potentially contaminated sites. Unless identified as a LUST or other contaminated site, identification on this database typically does not indicate whether or not a site has impacted the environment.

**Database Discussion** – Below is a brief discussion of those sites listed in the database as at or nearby the subject property, and potentially sites at a further distance that, in South Shore's experience, have an obvious potential to impact the subject property (e.g., NPL sites).

| SUBJECT PROPERTY Database Listings | | |
|---|---|---|
| **Listing Name/Address** | **Database(s)** | **Discussion** |
| No listings at subject property | n/a | n/a |

| Selected OFF-SITE Database Listings | | | | |
|---|---|---|---|---|
| **Site Name/Address** | **Distance (feet/direction)** | **Gradient Position** | **Database(s)** | **Status** |
| | | | | |
| Proposed High School at the Villages of San Jacinto<br>Ramona Boulevard/Cawston Avenue | 1,501 feet west-southwest | Down-gradient | ENVIROSTOR, SCH | No release reported |
| Discussion: This site is located 1,501 feet west-southwest of the subject property at a lower | | | | |

elevation. This site is listed on the EnviroStor and SCH databases with Facility ID #60000906. This site was formerly agricultural row crops on APNs 432-030-006 and 432-030-010. A Preliminary Endangerment Assessment Workplan was approved by the DTSC dated 7/2/2008 and a Preliminary Endangerment Assessment Report was approved by the DTSC dated 9/17/2008 with and a finding of No Further Action (NFA) dated 9/24/2008. Based on the distance and regulatory status (NFA dated 9/24/2008), these database listings are unlikely to indicate significant environmental impact to the subject property.

Based upon the distance, status, type of listing and/or down- to cross-gradient location, the above and remaining database listings appear unlikely to have significantly environmentally impacted the subject property.

**Unlocatable/Unplottable Sites**:
Unplottable "orphan" sites are those which could not be plotted by the database provider using conventional geo-coding methods, typically because the information provided in the original government database was unclear, incorrect or missing. A listing of orphan sites (if any) appears at the end of the database, immediately after the last plottable site description.

South Shore reviewed the orphan list for sites with the same name as the subject property (if applicable) and/or the same or similar property address. This review is inherently limited by the incomplete and/or possibly incorrect data reported in the orphan listings. For orphans apparently not related to the subject property, only those obviously located adjoining or within a short distance that may affect the property are discussed. Orphan sites which are also listed in the plotted section are not re-discussed.

> South Shore's review of the unlocatable/orphan list revealed no obvious sites of concern listed at or adjoining the subject property.

## C. Local Agency Records Search

The following is a discussion of the results of South Shore's written records requests, online regulatory database review, and/or personal/telephone contacts (as applicable) made to state and/or local government agencies in an effort to obtain potential information relevant to the subject property. Please note that, as discussed in the ASTM E1527-13 Standard, Section 8.1.5, records are considered available within a *reasonable time and cost*, only if available within 20 calendar days of the request and for a nominal cost (only covering the source's cost of retrieving and/or duplicating the information):

### Santa Ana Regional Water Quality Control Board (RWQCB):

South Shore contacted the SARWQCB in an effort to evaluate whether hazardous material incidents, USTs, and/or LUSTs have been reported at the subject property. However, the SARWQCB informed South Shore that such a search cannot be performed without a specific property address. Since no address is assigned to the subject property, such a search is

impractical. Based upon the historically undeveloped nature of the property and on South Shore's other research performed, this is unlikely to affect the conclusions of this report.

**Riverside County Department of Environmental Health (RCDEH):**

South Shore contacted the RCDEH in an effort to evaluate whether hazardous materials usage, hazardous waste generation, hazardous material incidents, USTs, and/or LUSTs have been reported at the subject property. However, the RCDEH informed South Shore that such a search cannot be performed without a specific property address. Since no address is assigned to the subject property, such a search is impractical. Based upon the historically undeveloped nature of the property and on South Shore's other research performed, this is unlikely to affect the conclusions of this report.

**South Coast Air Quality Management District (SCAQMD):**

South Shore contacted the SCAQMD in an effort to evaluate whether hazardous materials usage, hazardous waste generation, hazardous material incidents, USTs, and/or LUSTs have been reported at the subject property. However, the SCAQMD informed South Shore that such a search cannot be performed without a specific property address. Since no address is assigned to the subject property, such a search is impractical. Based upon the historically undeveloped nature of the property and on South Shore's other research performed, this is unlikely to affect the conclusions of this report.

**California EPA - Department of Toxic Substances Control (DTSC):**

South Shore contacted the DTSC in an effort to evaluate whether hazardous materials usage, hazardous waste generation, hazardous material incidents have been reported at the subject property. However, the DTSC informed South Shore that such a search cannot be performed without a specific property address. Since no address is assigned to the subject property, such a search is impractical. Based upon the historically undeveloped nature of the property and on South Shore's other research performed, this is unlikely to affect the conclusions of this report.

**California SWRCB GeoTracker & DTSC-EPA EnviroStor Databases:**

South Shore reviewed the online GeoTracker and EnviroStor databases in an effort to identify potential USTs, hazardous materials releases or similar issues associated with the subject property address. That search revealed no listings for the subject property. However, information was reviewed for a nearby site of interest as discussed in Section V-B above.

**California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR) Maps:**

South Shore reviewed DOGGR maps available on the DOGGR website in an effort to identify whether oil or gas wells have been reported in the vicinity of the subject property. According

to the DOGGR website mapping interface, no oil or gas wells are reported in the immediate subject property area (within 1/8-mile).

## D. VAPOR ENCROACHMENT SCREENING

South Shore has performed a limited Vapor Encroachment Screening (VES) for the subject property as mentioned in ASTM Standard Practice E2600-15. The purpose of this VES was to identify existing Vapor Encroachment Conditions (VECs), which is defined by ASTM E2600-15 as "the presence or likely presence of chemical of concern vapors in the subsurface of the target property caused by the release of vapors from contaminated soil and/or groundwater either on or near the target property." However, the review was general in nature and may not encompass all aspects of the E2600-15 guidelines. South Shore has reviewed known or reported releases of petroleum hydrocarbon or other constituents of concern (COCs, including volatile organic compounds - VOCs) to subsurface soils and/or groundwater within the vicinity of ASTM-specified distances from the subject property, as reported within the radius report. It should be noted that since this review only addresses sites with reported releases in the radius report, it does not address potential unreported impact from nearby sites, if any.

Based on the South Shore's review, the following is indicated about the sites with known releases relative to a potential vapor encroachment condition (VEC) at the subject property.

| -- | Number/Name of Sites | VEC Exists | VEC Does Not Exist |
|---|---|---|---|
| Petroleum Releases (<528 feet) | 0 | | X |
| VOC Release (<1,742 feet) | 0 | | X |

Based upon the above review, a VEC at the subject property from off-site database listings has not been identified.

## E. TRIBAL RECORDS SEARCH

According ASTM E1527-2013, records for local and tribal records shall be checked to satisfy all appropriate inquiry for this assessment. The following is a discussion of the results of South Shore's written records requests, online regulatory database review, and/or personal/telephone contacts (as applicable) made to tribal governmental agencies in an effort to obtain potential information relevant to the subject property:

> The subject property is not located on tribal property and therefore no inquiry was necessary.

## SECTION VI.
## SITE VISIT OBSERVATIONS

### A. SURFACE CHARACTERISTICS

At the time of the site visit, the subject property consisted of an approximate 38.15-acre parcel of undeveloped agricultural land. The undeveloped land appeared to be in good condition with no signs of unnatural or chemically induced stress. No pits, ponds, lagoons, swales, or surface impoundments potentially containing hazardous materials were observed on the subject property. Weather conditions at the time of the site visit consisted of clear skies, with temperatures in the 80s.

Specific observations of note from the site visit included: The subject property is comprised of approximately 38.15 acres of undeveloped agricultural land and the entrance to the subject property is located near the northeast property corner from the west side of N. Sanderson Avenue. A metal rope was observed by the South Shore Assessor to be on the ground surface during the site visit, which provided site access. Unimproved roads were located on the south and west sides of the subject property. Four manhole covers were located along the northern property line and metal stakes delineated their general location. Agricultural rows trended north to south on the subject property. Site access also appeared to be possible at the southeast property corner from the west side of N. Sanderson Avenue. Power poles adjoined the eastern side of the subject property on the west side of N. Sanderson Avenue. According to the undated Tentative Tract Map No. 38107 provided by the Client, 211 residential lots and three open space lots are proposed for the subject property including Lot A which is proposed to be a 0.87-acre, 2.5-foot deep emergency overflow retention basin located along the northern property line, Lot B which is proposed to be a pool recreation area located in the approximate middle of the subject property, and Lot C which is proposed to be an open space lot located in the south-central portion of the subject property.

### B. WASTEWATER AND STORMWATER MANAGEMENT

At the time of the site inspection, the subject property was undeveloped land, and no wastewater generating activities were observed.

### C. POTABLE WATER SUPPLY AND SEWER SERVICE

The subject property will utilize water and sewer service supplied by the Eastern Municipal Water District. During the course of the site visit, no obvious evidence of active or abandoned water supply wells or septic systems was observed.

### D. STRUCTURE CONSTRUCTION

The subject property was undeveloped land at the time of the site inspection. No structures or evidence of past structures (e.g., foundations, etc.) were noted.

## E. BUSINESS OPERATIONS DESCRIPTION

At the time of the site visit, the subject property was undeveloped land. No businesses currently operate on the subject property.

South Shore's historical review indicates the subject property was utilized for agricultural purposes from at least 1938 until the present. Agricultural chemicals in use today are applied in dilute concentrations and, when used properly, degrade relatively quickly. However, environmentally persistent pesticides commonly applied prior to the 1980s can linger in the soil for many years. It is not known if environmentally persistent pesticides have been applied to the subject site in the past. Based upon the apparent length of time that has elapsed since agricultural usage has occurred; the fact that significant surface grading will likely occur upon proposed residential development in 2021/2022 (diluting/aerating/mixing potential surficial pesticide residues); it is possible the potential former usage of pesticides has environmentally impacted the subject property or would require remedial actions. **Should the need arise (e.g., significant soil disturbance), confirmatory pesticide testing should be performed at the subject property**.

## SECTION VII.
## HAZARDOUS MATERIAL/WASTE OBSERVATIONS

### A. HAZARDOUS MATERIALS HANDLING AND STORAGE

At the time of the site visit, the subject property consisted of undeveloped land. Hazardous materials handling and/or storage activities were not observed at the subject property during the site visit.

### B. WASTESTREAM GENERATION, STORAGE AND DISPOSAL

At the time of the site visit, the subject property consisted of undeveloped land. Wastestream/hazardous waste generation, storage, and/or disposal activities were not observed at the subject property during the site visit.

### C. SOLID WASTE DISPOSAL

At the time of the site visit, the subject property consisted of undeveloped land. Solid waste disposal activities were not observed at the subject property during the site visit.

### D. ABOVEGROUND STORAGE TANKS (ASTs)

Visual or physical indicators of current or former hazardous material ASTs were not observed at the subject property during the site visit.

### E. UNDERGROUND STORAGE TANKS (USTs)

As discussed in the Section V (Agency Records Review) of this report, no USTs were reported at the subject property. In addition, no visual or physical evidence of current or past USTs was discovered during the site visit in the readily visible areas of the property. In particular, South Shore searched for: fill pipes, vent pipes, manways, manholes, access covers, concrete pads not homogeneous with surrounding surfaces, concrete built-up areas potentially indicating pump islands, abandoned pumping equipment, or fuel pumps.

## SECTION VIII.
## OTHER POTENTIAL ISSUES OF CONCERN

### A. PCB-CONTAINING EXTERIOR ELECTRICAL TRANSFORMERS

Exterior pad-mounted, pole-mounted, or below-ground (vaulted) electrical transformers were not observed at the subject property during the site visit.

### B. OTHER PCB-CONTAINING INTERIOR OR EXTERIOR EQUIPMENT

At the time of the site visit, the subject property consisted of undeveloped land, and no structures with fluorescent light fixtures containing PCBs, or other evidence of any other equipment likely containing PCB-contaminated fluid (e.g., interior electric transformers, hydraulic elevators, hydraulic hoists/lifts, hydraulic loading dock ramps, other fluid containing equipment, etc.) was observed.

### C. SUSPECT ASBESTOS-CONTAINING MATERIALS (ACMs)

At the time of the site visit, the subject property consisted of undeveloped land. Therefore, suspect asbestos-containing building materials were not observed. However, this report does not address the potential presence of naturally occurring asbestos or asbestos-like minerals which may or may not be present on-site. Such research is beyond the scope of this report.

### D. LEAD-BASED PAINT (LBP)

At the time of the site visit, the subject property consisted of undeveloped land. Therefore, suspect lead based paint covered building materials were not observed.

### E. LEAD IN DRINKING WATER

At the time of the site visit, the subject property consisted of undeveloped land. Therefore, drinking water plumbing systems related to structures were not observed.

### F. AIR QUALITY

Unusual smells, noxious odors, or visual emissions were not observed during the inspection of the subject property. However, these observations are general in nature and should not be construed as an air quality assessment.

### G. RADON

According to the USEPA, the general area of the site has a predicted average indoor screening level of less than the EPA guideline action level of 4.0 picoCuries per liter of air (EPA Radon

Zone Level of 2 or 3). Therefore, based upon the reported subsurface characteristics of the area, the subject property exhibits a low potential for high-level radon exposure.

## H. Railroad Rights-of-Way

There are several potential environmental risks associated with railroad rights-of-way, including the usage of herbicides, pesticides, petroleum materials and related heavy metals (e.g. arsenic) to maintain the tracks, as well as the potential spillage of hazardous materials from railcars. During the site visit, railroad rights-of-way, spurs, or related features were not observed on or immediately adjoining the subject property.

## SECTION IX.
## ADJOINING PROPERTY OBSERVATIONS

As discussed below, based upon limited observations of the adjoining properties from publicly accessible locations, as well as a review of federal, state, and local environmental databases, none of the adjoining properties appeared to have significantly environmentally impacted the subject property at this time.

Historically, nearby properties utilized various hazardous materials, and some of these sites may have impacted the environment (refer to Section V). However, based upon the limited database information available to South Shore, these sites do not appear to have significantly environmentally impaired the subject property at this time.

### A. ADJOINING PROPERTIES MATERIALS STORAGE

Visual observations of the portions of the adjoining properties visible from the subject property or public roadways did not indicate the exterior storage of hazardous materials or wastes. No indications of spillage or staining were observed in the observable exterior areas of these sites. Additionally, no obvious indications of improper hazardous material storage or unusual or suspicious materials handling or storage practices were observed.

### B. ADJOINING PROPERTIES WASTESTREAM DISPOSAL

No unusual or suspicious wastestream disposal activities were observed on the portions of the adjoining properties visible from the subject property or public roadways.

## SECTION X.
## STATEMENT OF THE ENVIRONMENTAL PROFESSIONALS

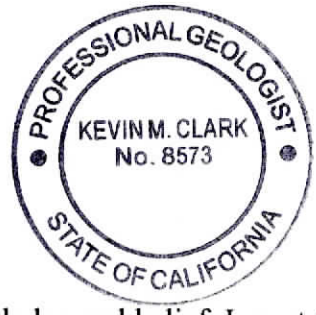
This Assessment has been performed for the exclusive use and benefit of the addressee(s) identified on the cover of this report, or agents directly specified by it (them), for the transaction at issue concerning the subject property described in this report. This Assessment shall not be used or relied upon by others without the prior written consent of South Shore and of the addressee(s) named on the cover of this report. In addition to any limitations described in this report, it is also subject to the terms and conditions of the signed service agreement with the Client.

### STATEMENT OF QUALITY ASSURANCE

The conclusions contained within this Assessment are based upon site conditions that were readily observed and were reasonably ascertainable and present at the time of the site visit, and upon the other research performed as detailed within this report. The findings and conclusions represent our best professional opinion and judgment. In addition, the conclusions and recommendations stated in this report are based upon personal observations made by South Shore and upon information provided by others and such information is presumed accurate.

Signature of Environmental Assessor or Professional - *Kevin M. Clark, Professional Geologist:*

Signature/Environmental Assessor or Professional




### STATEMENT OF QUALITY CONTROL

I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in 40 CFR §312.10. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Signature of Environmental Professional – *John P. Frey, Environmental Professional (EP):*

Signature/Environmental Professional

**Environmental Site Assessment**
**Key Site Manager Questionnaire**

To the best of your knowledge, do any of the following documents or situations exist, or have you been made aware of them in the past (*add brief explanation and/or circle or underline as necessary*):

Yes___/(No)___/ Unkwn___ (1) Past Environmental Assessments - Phase I, Phase II, etc.?

Yes___/(No)___/ Unkwn___ (2) Environmental Regulatory Permits (wastewater, hazardous materials, etc.)?

Yes___/(No)___/ Unkwn___ (3) Currently existing or former (removed/abandoned) underground storage tanks at the Property?

Yes___/(No)___/ Unkwn___ (4) Has the Property been used for an industrial use now or in the past?

Yes___/(No)___/ Unkwn___ (5) Has the Property, either currently or in the past, been used as a gasoline station, motor repair facility, printing facility, dry-cleaners, metal processing/plating, photo developing lab, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?

Yes___/(No)___/ Unkwn___ (6) Has any Neighboring (Adjoining) Property, either currently or in the past, been used as for industrial purposes, a gasoline station, motor repair facility, commercial printing facility, dry-cleaners, metal processing/plating, photo developing lab, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?

Yes___/(No)___/ Unkwn___ (7) Are there currently, or to the best of your knowledge have there been previously, any chemicals (e.g., solvents, paints, oils, pesticides, automotive batteries in significant quantities, etc.) in individual containers of greater than five gallons in volume or fifty gallons in the aggregate, stored on or used at the Property or within the facility?

Yes___/(No)___/ Unkwn___ (8) Has Fill Dirt been brought onto the Property which originated from a contaminated site or which is of an unknown origin?

Yes___/(No)___/ Unkwn___ (9) Are there currently, or to the best of your knowledge have there been previously, any wastewater Clarifiers, Interceptors, Septic Systems, Dry Wells, Pits, Ponds, Surface Impoundments or Lagoons located on the Property in connection with waste treatment or waste disposal?

Yes___/(No)___/ Unkwn___ (10) Are there currently, or to the best of your knowledge have there been previously, any Incinerators, Injection Wells, Transfer Stations, Waste Recycling, Waste Treatment, or Land Disposal Areas located on the Property in connection with waste treatment or waste disposal?

Yes___/(No)___/ Unkwn___ (11) Is there currently, or to the best of your knowledge has there been previously, any petroleum product or chemical spills or stained soil on the Property?

Yes___/(No)___/ Unkwn___ (12) Are there currently, or to the best of your knowledge have there been previously, any registered or unregistered aboveground or underground storage tanks located at the Property?

Yes___(No)___/ Unkwn___ (13) Is the Property served by a private well or non-public water system, or does the Property utilize a septic system?

Yes___/(No)___/ Unkwn___ (14) Does the Owner or Occupant of the Property have any knowledge of Environmental Cleanup Liens, Deed Restrictions, Use Restrictions, Institutional Controls, Activity and Use Limitations or any other government notification or restriction relating to past or current violations of environmental laws (or contamination) with respect to the Property or Property facility?

Yes___(No)___/ Unkwn___ (15) Does the Owner or Occupant of the Property have any knowledge of any Environmental Site Assessment of the Property or facility that indicated the presence of Hazardous Substances, chemicals or Petroleum Products on, or contamination of, the Property or recommended further assessment of the Property?

Yes___(No)___/ Unkwn___ (16) Do the Property Owner, Buyer or agent(s) (as applicable) have any information/knowledge that the Property is or has been sold, transferred, valued or refinanced at a reduced price due to current, past or suspected environmental issues either at the Property or a Nearby Property?

Yes___(No)___/ Unkwn___ (17) Does the Property discharge wastewater or process water (other than storm water), directly to a ditch or stream on or adjoining the Property?

Yes___/(No)___/ Unkwn___ (18) To the best of your knowledge, have any Hazardous Substances, chemicals or Petroleum Products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried, or burned on the Property?

Yes___(No)___/ Unkwn___ (19) Are there currently, or to the best of your knowledge, has the Owner or Operator of the Property been required previously to submit or file to any agency a Chemical Contingency Plan, Emergency and Hazardous Chemical Inventory Form, Toxic Chemical Release Form, SARA Title III - Emergency Planning and Community Right-to-Know Act inventory, SARA Title III - Extremely Hazardous Substances inventory, or report under the Emergency Response Notification System?

Yes___/(No)___/ Unkwn___ (20) Are there currently, or to the best of your knowledge, has the Owner or Operator of the Property been required previously to submit, file, or maintain Material Safety Data Sheets (MSDS) or a written Hazard Communication Program?

Yes___(No)___ / Unkwn___ (21) Based on your knowledge and experience related to the Property (or similar properties or usages), are you aware of any obvious indicators of, or likely presence of, current or past spills or releases at the Property?

Yes___(No)___ / Unkwn___ (22) Do you have any specialized knowledge or experience related to the Property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the Property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

**Site History**: Year property was developed with current building(s): N/A, Vacant

Year present owner acquired the property (if applicable): 2003

Main business(es) or tenant(s) prior to existing ones (if any): N/A, Vacant

Historical use of land before current development: N/A, Vacant

**Name of Property Service Providers:**

Natural Gas: Southern California Gas Company

Electricity: Southern California Edison

Water: Eastern Municipal Water District

Sewer: Eastern Municipal Water District

Propane: N/A

Fuel Oil: N/A

Waste Disposal/Recycling: CR&R Services

Elevator in Building(s)?: If yes, list service provider, phone number, and service schedule:

N/A

Any Hazardous Materials (Chemical) Usage and/or Hazardous Waste Generation? If so, please specify types of materials, quantities, how stored, disposal contractor, etc.

N/A

**Neighboring Property Occupants / Nature of Business (including across a street):**

North: Vacant Land

East: Vacant Land

South: Vacant Land

West: Vacant Land

Yes___(No)___/ Unkwn___ (23) Are you aware of any environmental issues on nearby properties or in the neighborhood that may affect the Property? If yes, describe below:

This questionnaire was answered:

___In Person
___Telephone Conversation
_XX__Fax/e-mail

This questionnaire was answered by:

Name: Peter Kuhiaticki

Signature:

Title: Project Manager

Firm: JD Pierce Company, Inc.

Date: 6/8/2021

This questionnaire was provided by:

Name: Kevin M. Clark

Signature:

Title: Registered Environmental Assessor

Date: 5/27/2021

(Note: This Questionnaire is based on the American Society of Testing and Materials Transaction Screen E1528-06 and Phase I ESA E1527-05)

# APPENDIX I

Professional Profiles

# PROFESSIONAL PROFILE

## CONTACT INFORMATION

Main: (310) 879-4900
Direct: (310) 879-4920
Email: mescobar@rouxinc.com
Website: www.rouxinc.com

5150 East Pacific Coast Highway
Suite 450
Long Beach, CA 90804


## EDUCATION

Bachelor of Arts, Earth Science, 1995, University of California, Berkeley

OSHA 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) Certified

Research Assistant to UC Berkeley Ph.D. Candidate Dawnika L. Blatter and Professor Ian S. E. Carmichael in Study of Continental Crustal Deformation from Subduction of the Cocos Plate in Western Mexico and Study of Upper Mantle Petrology in Central Mexico, January to April 1996

## PROFESSIONAL LICENSES

Professional Geologist, State of California, No. 07506

# Mauricio H. Escobar, P.G.

## Vice President | Principal Geologist

### EXPERIENCE SUMMARY

21 years of consulting experience: Principal Geologist with Roux Associates (2011 to Present); Senior Manager, Manager, and Senior Associate with ENVIRON International Corporation (2004 to 2011); Project Geologist with URS Corporation (2001 to 2004); Geologist with Hart Crowser (1998 to 2001).

### TECHNICAL SPECIALTIES

Professional Geologist with over twenty years of experience designing, managing, and implementing environmental soil and groundwater investigations and remediation strategies for public and private clients. Experience as in-house consultant assisting with management of a $25MM yearly remediation portfolio for a Fortune 100 Company. Practice developing and implementing high-level strategies that consider legal and regulatory issues, communications and government relations, as well as technical challenges and costs. Significant assignments representing clients during Working Group meetings for Superfund sites and participation in technical committee meetings. Expertise in design and field implementation of in-situ chemical oxidation (ISCO) in hard rock and porous media-flow aquifers.

Substantial experience evaluating and remediating industrial, commercial and residential sites impacted with numerous contaminants in multiple media, including crude oil, fuels, volatile organic compounds, chromium VI, 1,4-dioxane, and PCBs. Extensive experience managing implementation of remediation programs that utilize and consider multiple technologies including soil vapor extraction, dual phase extraction, traditional pump and treat, in-well stripping, air sparging, chemical oxidation and reduction, thermal treatment, and natural attenuation. Experience managing large-scale remedial excavations involving the use of heavy earth moving equipment. Significant field experience using numerous drilling, soil sampling, groundwater sampling, and soil vapor sampling techniques.

### CONTINUING EDUCATION

- Compounds of Emerging Concern in Groundwater, California Groundwater Resources Association, Concord, California, February 2012
- The Remediation Course, Princeton Groundwater, Las Vegas, Nevada, April 2010
- Vapor Intrusion Pathway: A Practical Guideline, Interstate Technology and Regulatory Council (ITRC) in conjunction with the California Department of Toxic Substances (DTSC) and California Water Boards, Long Beach, California, June 2009
- The Groundwater Pollution and Hydrology Course, Princeton Groundwater, Orlando, Florida, February 2007
- Hydrogeologic Analysis of Fractured Bedrock Systems, Midwest GeoSciences Group, University of Nevada Las Vegas and Nevada Test Site at Yucca Mountain, March 2006

### REPRESENTATIVE PROJECTS

- **PRP Representation of Fortune 100 Company, Omega Chemical Superfund Site, Whittier, California.** Provide ongoing technical consulting to a Fortune 100 Company and major PRP at the Omega Chemical Superfund Site in Whittier, California. Active participant of the Omega PRP Group (OPOG) Technical Committee. Attend all pertinent technical meetings and provide Client with technical and strategic input that protects their best interests. Maintain constant interaction with the legal and finance teams as necessary to ensure the technical and legal strategies are in agreement and that adequate funding is reserved well in advance of regulatory commitments and OPOG cash calls. Pertinent technical issues include soil gas and vapor intrusion, and a regional groundwater plume. Regulatory oversight is provided by USEPA Region IX.

- **PRP Representation of Fortune 100 Company, BKK Corporation Class I Landfill Organized Group, West Covina, California.** Provide ongoing technical consulting to a Fortune 100 Company at the former BKK Corporation Class I Landfill site in West Covina, California. Participant in the BKK Technical Committee and attendant of pertinent technical meetings. Maintain constant communication with the Client's legal and finance teams and responsible for informing Client on the direction the Organized Group is headed. Responsible for identifying financial commitments made as part of technical decisions. Trusted with voicing opinions, concerns, and/or offering direction to the Group (if and when necessary), to ensure the Organized Group's direction is consistent with the Client's strategy. Pertinent technical issues include upgrades to the landfill infrastructure and groundwater remedial investigations in and around the landfill prism. Regulatory oversight is provided by the Department of Toxic Substances Control.
- **Portfolio Project Control - Fortune 100 Company, Torrance, California.** Three years of experience working as a full-time in-house consultant for a Fortune 100 Company assisting with management of all aspects of a complex multi-site portfolio. General role included communication with alliance partners, vendors, corporate finance, attorneys, public relations/communications, and procurement to track and facilitate progress of 9 major projects ($400,000 to $1 MM/year) and 3 mega projects ($3MM to $10MM+/year) that were unique in nature and complexity. Portfolio included former chemical sites, landfills, aerospace facilities, and other heavy use industrial facilities that were undergoing State and RCRA closure, as well as sites under CERCLA Superfund actions with PRP commitments. Charged with helping to develop, evaluate, and refine remedial strategies and lifecycle costs for sites that utilized various cleanup technologies such as application of oxidants and reducing agents, thermal oxidation, groundwater pump and treat, dual-phase and 2-PHASE™ extraction, soil vapor extraction, air sparging, and in-well air stripping. Major role included verifying adequate funding and maintaining documentation consistent with Sarbanes Oxley.
- **Strategy Expert Consulting - Fortune 100 Company, Los Angeles, California.** Ongoing third-party technical and strategic support to a Fortune 100 company for a major project involving former bulk storage and distribution facilities converted to open public space and residential uses. Site is undergoing remedial investigations and remedial alternatives evaluations under heavy regulatory and public scrutiny. Charged with providing opinions and recommendations as to the direction the current consultant and the regulatory agencies want to take the project and evaluating the conceptual site model and long term technical strategy. Active participant on technical team calls and ongoing direct communications with internal legal team.
- **Shipyard Decommissioning - Subsurface Assessment, Remedial Investigation, Demolition and Closure, Campbell Shipyard - Marco, Port of San Diego, California.** Lead geologist in the preparation of a comprehensive subsurface study of the former Campbell Shipyard property at the Port of San Diego, California. Over 200 borings were necessary to delineate the extent of impacted soils. Relevant environmental issues included a former coal works gasification plant immediately adjacent to the Site, a 2 to 4-foot thick lens of polynuclear aromatic hydrocarbon (PAH) laden sediment present throughout the Site below the water table, a former on-site diesel and kerosene tank farm, and numerous leaking fuel USTs. Responsibilities also included management of shipyard abandonment activities, such as abatement of asbestos and lead-based paint containing materials, demolition of on-site structures, crushing of asphalt and concrete into Class II base, and a comprehensive geophysical survey to locate all on-site utilities and buried structures. The work was performed under the regulatory oversight of the San Diego Regional Water Quality Control Board and the San Diego Unified Port District. Total cost of the work was approximately $1.3MM, implemented over a 15-month period.
- **Neutral Third-Party Oversight of Remediation Work, ITT Corporation and Home Depot, Glendale, California.** Provided third party oversight for a site undergoing major remediation of VOCs and chromium VI in soils and groundwater. The site was a former electronics manufacturing facility redeveloped as a major box retailer in Glendale, California. Services were provided on behalf of the former facility owners/operators and the current property owners, both of whom had differing interests and views on the remedial work being performed. Viewed all fieldwork and construction of remediation systems and attended quarterly meetings with consultants, attorneys, and clients to gauge progress, discuss ongoing work, and evaluate projected schedules for completion of remediation. Technical challenges to remediation included dewatering of 20-foot thick perched zone impacted with VOC contamination, despite a leaking slurry wall originally designed to prevent onsite migration from upgradient sources.
- **ISCO Demonstration Plan Using Permanganate, Wyle Laboratories, Riverside County, California.** Designed, managed, and implemented an ISCO Demonstration Plan using sodium permanganate injection at a former industrial manufacturing facility in Southern California. Main goals of the application were to demonstrate effective oxidation of trichloroethene (TCE) in alluvium and fractured granitic bedrock, evaluate potential mobilization of naturally occurring reduced metals, and evaluate the potential application of ISCO

at other areas of the Site, including off-site beneath residential homes. Twelve thousand gallons of 10% permanganate solution were delivered to the subsurface through 47 multi-depth permanent injection probes over a 22-day field event. TCE concentrations were reduced from a maximum of 30,000 microgram per liter (µg/L) to non-detect at the source area. Significantly, elevated hexavalent chromium [Cr(VI)] concentrations were observed in the area of injection and immediately downgradient. Following field observations, a Bench Scale Assessment (BSA) was conducted to evaluate potential significant sources of Cr(VI), evaluate the capacity of the aquifer to naturally attenuate Cr(VI), and provide data sufficient to estimate distance and time Cr(VI) would revert to its trivalent form. BSA and field data showed that principal source of Cr(VI) was from the raw product, with secondary contribution from chromium in the native rock, and deterioration of stainless steel well screens. Natural attenuation of Cr(VI) to background concentrations was estimated at 2 to 3 years post injection. Monitoring of the Demonstration Plan area for the 2+ years has proved those predictions accurate and a Remedial Action Plan (RAP) recommending full-scale on- and off-site treatment of TCE with permanganate was submitted to the California Department of Toxic Substances Control (DTSC). Total cost of the work was more than $1.0 million.

- **Remedial Excavation and ISCO Used to Facilitate Property Transfer, Sanmina, Inc., Irvine, California.** Managed and implemented an aggressive remedial strategy for a former electronics manufacturing facility in Southern California. The site had TCE concentrations in groundwater suggestive of dense non-aqueous phase liquid (DNAPL) and required expedited soil and groundwater remediation, in lieu of ongoing 2-PHASE™ and dual-phase extraction (DPE) efforts, to accommodate its divesture and redevelopment. Groundwater was generally encountered at 15 feet below ground surface (bgs) and contained TCE concentrations in the source area as high as 77,000 µg/L. The project was successfully completed by installing a 90-well dewatering system, excavating 13,000 cubic yards (cy) of soils, and removing 3,200 cy of TCE impacted soil along the axis of a residual TCE DNAPL mass; total depth of the excavation was 32 feet bgs. ISCO using sodium and potassium permanganate was used to remediate residual TCE-impacted soil and groundwater outside the area of excavation. Following implementation of the aggressive remedial strategy, TCE concentrations in groundwater were reduced by one to three orders of magnitude, suggesting the DNAPL had been removed and/or destroyed. The Orange County Health Care Agency (OCHCA) provided soils closure and the Santa Ana Regional Water Quality Control Board provided groundwater closure for the site 16 months after completion of remediation. The site was sold and redeveloped. Total cost of excavation and ISCO application was approximately $1.4 million.

- **Assessment, Remediation and Closure of Former Industrial Facility for Residential Re-development, Former Boeing Plant, Los Angeles, California.** Managed the assessment, remediation, and closure of a former asphalt batch plant and defense contractor facility on behalf of a residential developer. The work was performed simultaneously with planning and entitlement of the property, under the oversight of the County of Los Angeles Fire Department, Hazardous Materials Division. Unique challenges included the discovery of 15+ feet of buried asphalt debris and soils with elevated arsenic and chromium concentrations requiring off-site disposal. Developed site-specific cleanup thresholds for VOCs and heavy metals by preparing a limited human health risk assessment and incorporating Risk Based Screening Levels (RBSLs) developed by the San Francisco Regional Water Quality Control Board. The entire project was implemented in 15 months from initial assessment to site closure at a cost of $250,000.

- **Hydrocarbon Release Characterization and Remedial Investigation, Kinder Morgan Energy Partners, La Habra, California.** Designed, managed, and implemented a subsurface investigation with the primary focus of characterizing lateral and vertical distribution of hydrocarbon impacts to the groundwater and unsaturated zone. The release was related to a pipeline booster station flange rupture dating to the early 1980s. Fractured siltstone bedrock presented unique subsurface conditions and as a result, special consideration was given to drilling techniques and boring/well installations. The project involved 12 months of fieldwork for the installation of soil vapor probes, backhoe trenches, soil borings, and monitoring wells. Discovery of up to 15-feet of light non-aqueous phase liquids (LNAPL) resulted in amendments to the original work scope to provide for LNAPL removal and assessment of pneumatic and hydraulic properties of the soil/rock. A high vacuum DPE test was performed at selected wells to evaluate the feasibility of this technology for the removal of hydrocarbons. All work was conducted under the oversight of the Los Angeles Regional Water Quality Control Board in consideration of future residential development. Work was performed over a 2-year period at an approximate cost of $1.0 million.

- **Resource Conservation and Recovery Act (RCRA) Facility Investigation Work Plan for Bunker C Tank Farm Redevelopment, Long Beach, California.** Managed the preparation of a RCRA Facility Investigation Work Plan for a former power plant tank farm facility in Long Beach, California. The site was being planned for redevelopment with a retail box store and restaurant uses. The RFI Work Plan was prepared as part of a Corrective Action Consent Agreement between the

Client and the DTSC. The purpose of the RFI was to determine the nature and extent of releases at the site and to gather all the necessary data to support completion and implementation of a Corrective Measures Study (CMS).

- **Remedial Investigation of Former Transformer Washing Facility, General Electric and City of Los Angeles Redevelopment Agency, Los Angeles, California.** Prepared, managed, and implemented a Remedial Investigation Work Plan for a former transformer washing facility under the oversight of the DTSC. The field investigation was intended to evaluate and delineate the nature and extent of residual VOC, PCB, and dioxin impacts at the Site, to support decisions regarding the need for, and extent of, future removal or remedial actions. The field program showed that shallow soils at the site were significantly impacted with PCBs and deep soils and groundwater were significantly impacted with TCE and tetrachloroethene (PCE). ISCO Demonstration Plan Using Permanganate, Riverside County, California.
- **Remedial Investigation and Remedial Action Plan for Former Small Arms Firing Range, City of Huntington Beach Community Development Office, Huntington Beach, California.** Managed the preparation of a Remedial Investigation and RAP for the City of Huntington Beach in their effort to assess the extent of contamination and remedial options for a former public and police firing range. The project was performed under the oversight of the OCHCA. Relevant issues included soil berms and coal-tar treated wood posts impregnated with lead-shot, shallow landfill conditions (<5-feet), lack of a landfill cap, heavy hydrocarbon contamination, and landfill gas issues. The RAP included remedial options, costing, and an outline for implementation. Special consideration was given to the fact that the City intended to use the property for future Central Park recreational uses. The project was awarded on technical merit following a public bidding process that required the submittal of a formal proposal and interviews with City officials. Total cost of the project was $150,000, implemented over a 2-year period.

**PRESENTATIONS***

*Prevalence and Persistence of Hexavalent Chromium During In Situ Chemical Oxidation of Trichloroethylene with Permanganate*, Antony D. G. Jones and Carol L. Serlin, ENVIRON, Irvine, CA; Mauricio H. Escobar, ENVIRON, Los Angeles, CA; George D. Havalias and Maria C. Echarte, American Analytics, Inc., Chatsworth, CA. The 19th Annual AEHS Meeting and West Coast Conference on Soils, Sediments, & Water, San Diego, California, March 2009

*Assessment of Microbial Community Composition Throughout In Situ Chemical Oxidation of Trichloroethylene with Permanganate*, Bram Sercu and Patricia Holden, UCSB, Santa Barbara, CA; Antony D. G. Jones and Carol L. Serlin, ENVIRON, Irvine, CA; Mauricio H. Escobar, ENVIRON, Los Angeles, CA. The 19th Annual AEHS Meeting and West Coast Conference on Soils, Sediments, & Water, San Diego, California, March 2009

*Evaluation of the Effects of ISCO on TCE Impacted Ground Water in Weathered Granitic Mass*, Mauricio H. Escobar, ENVIRON, Los Angeles, CA; Antony D. G. Jones and Carol L. Serlin, ENVIRON, Irvine, CA. The 6th International Conference on Oxidation and Reduction Technologies for In-Situ Treatment of Soil and Groundwater, San Diego, California, September 2008

*Assessing Sources of Hexavalent Chromium during In-Situ Chemical Oxidation of Trichloroethylene with Permanganate*, Antony D. G. Jones and Carol L. Serlin, ENVIRON, Irvine, CA; Mauricio H. Escobar, ENVIRON, Los Angeles, CA. The 6th International Conference on Oxidation and Reduction Technologies for In-Situ Treatment of Soil and Groundwater, San Diego, California, September 2008

*Aggressive DNAPL Remedial Program Replaces Conventional Methods and Facilitates Property Transaction*, Mauricio H. Escobar, Bita Tabatabai, and Douglas Jones, ENVIRON, Irvine, CA. The 4th International Conference on Oxidation and Reduction Technologies for In-Situ Treatment of Soil and Groundwater, Chicago, Illinois, October 2005

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ROUX

PROFESSIONAL PROFILE

# Rocio Quinones
## Project Scientist

### TECHNICAL SPECIALTIES

Phase I/II environmental site assessment and investigation covering impacts to soil, soil vapor, and groundwater. Other areas of focus include litigation support including historical research, agency file reviews, and report writing.

### EXPERIENCE SUMMARY

Over eight years of cumulative environmental consulting experience. Began as a Due Diligence Project Manager with AEI Consultants in June 2013. Joined Roux' Long Beach office as a Project Scientist in December 2020.

### CREDENTIALS

B.A. Environmental Earth Science, University of California, Berkeley

Adult First Aid/CPR/AED
American Red Cross

OSHA 40-Hour HAZWOPER (2021)

NRPP Certified Residential Measurement Provider, NRPP ID 111695 RT (2021)

SCAQMD Rule 403 Fugitive Dust Control Cert. # SC2103-010405-10425 (2021)

### KEY PROJECTS AND EXPERIENCE

ASTM E1527-13 Phase I ESAs

- Primary author of numerous Phase I ESAs conducting historical document review including agency files, aerial photographs, Sanborn fire insurance maps and site inspections for multiple sites in the greater Los Angeles basin. Compiled assessment observations in a Phase I report according to ASTM E1527-13 standard.
- Sites with Phase I ESA experience include current and historical industrial facilities, current oil production facility, school sites, agricultural sites, and multi-tenant commercial properties properties.
- Project Scientist for an inactive steel mill in San Bernardino County, California. Performed site walk, interviews with key personnel, reviewed regulatory agency records including remediation reports, and identified data gaps in previous investigations.
- Project Scientist for former chemical manufacturing facility in Northern California. Site under oversight of the Department of Toxic Substances Control (DTSC) for releases of volatile organic compounds to soil, soil vapor, and groundwater. Reviewed previous investigation and remediation reports and assisted in writing a workplan for proposed remediation.
- Project Scientist for current manufacturing facility / former plating facility located within a regional groundwater plume in Orange County, California. Reviewed regional groundwater reports and prepared a site investigation workplan to investigate potential on-site impacts to soil, soil vapor, and groundwater.

Site Investigation and Remediation

- Planned, oversaw, and managed several Phase II Environmental Site Assessments. Conducted field investigations, completed data analyses, preparation of reports for submittal to regulatory agencies, and the provision of recommendations for remediation.
- Experience includes Phase II subsurface investigations, soil sampling, and soil vapor sampling. Site types include automotive repair and former manufacturing facilities.
- Coordinate agency permitting and regulations, multiple subcontractors (geophysical, driller, laboratories, etc..), site personnel, and internal and client communication to ensure projects progress smoothly and any obstacles or delays are minimized and conveyed to clients as early as possible.
- Project Scientist for a soil investigation at an active large-scale printing facility in Orange County, California. Field work included coring, hand augering, and collection of soil samples to quantify potential impacts due to historical operations as part of property transaction due diligence.

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