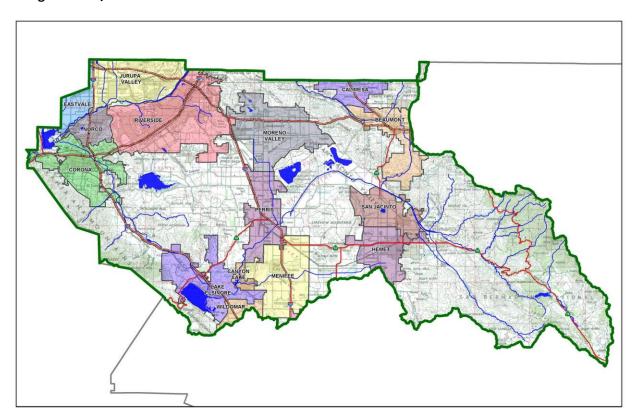
Project Specific Water Quality Management Plan

A Template for Projects located within the **Santa Ana Watershed** Region of Riverside County

Project Title: Cajalco Commerce Center

Development No: PPT220050

Design Review/Case No:



Preliminary
Final

Original Date Prepared: November 2022

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Prepared for Compliance with
Regional Board Order No. R8-2010-0033

Contact Information:

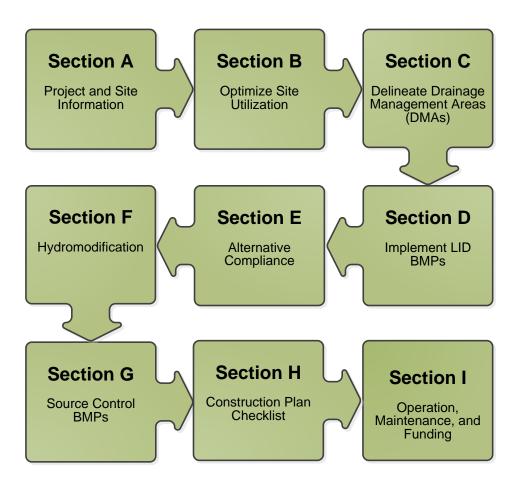
Prepared for: Industrial VI Enterprises, LLC 901 Via Piemonte Suite 175 Ontario, CA 91764 John Grace John.Grace@hillwood.com

Prepared by:

Albert A. Webb Associates 3788 McCray St Riverside, CA 92506 (951) 686 – 1070 Sarah Kowalski, PE Sarah.Kowalski@webbassociates.com

A Brief Introduction

This Project-Specific WQMP Template for the **Santa Ana Region** has been prepared to help guide you in documenting compliance for your project. Because this document has been designed to specifically document compliance, you will need to utilize the WQMP Guidance Document as your "how-to" manual to help guide you through this process. Both the Template and Guidance Document go hand-in-hand, and will help facilitate a well prepared Project-Specific WQMP. Below is a flowchart for the layout of this Template that will provide the steps required to document compliance.



OWNER'S CERTIFICATION

Preparer's Licensure: DRAFT

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for Industrial VI Enterprises, LLC by Albert A. Webb Associates for the Cajalco Commerce Center project.

This WQMP is intended to comply with the requirements of Riverside County for County of Riverside Ordinance No. 754 which includes the requirement for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under Riverside County Water Quality Ordinance (Municipal Code Section 13.12 – Stormwater Drainage System Protection Regulations).

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest." Owner's Signature Date Owner's Printed Name Owner's Title/Position PREPARER'S CERTIFICATION "The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. R8-2010-0033 and any subsequent amendments thereto." DRAFT Preparer's Signature Date Senior Engineer Preparer's Printed Name Preparer's Title/Position

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Section A: Project and Site Information

PROJECT INFORMATION					
Type of Project:	Commercial/Industrial				
Planning Area:	N/A				
Community Name:	N/A				
Development Name:	Cajalco Commerce Center				
PROJECT LOCATION					
Latitude & Longitude (DMS):	33°50'8.77"N, 117°15'53.73"W				
Project Watershed and Sub-V	Vatershed: Santa Ana River Watershed				
APN(s): 317-080-003 thru -00	8, -013, -014, -019 thru -023, -027 thru -029, and 317-090-002	2 thru -008			
Map Book and Page No.: Tho	mas Bros. Map Book Page 777, Grids: B3 & C3				
PROJECT CHARACTERISTICS					
Proposed or Potential Land U	se(s)	Community Development-			
		Light Indu	ustrial (CD-LI)	
		Open S (OS-R)	Space-R	Recreat	ional
Proposed or Potential SIC Cod	de(s)- 1541 (General Contractors-Industrial Building), 4225	(/			
·	(General Warehousing & Storage)				
Area of Impervious Project Fo	potprint (SF)	2,160,484	4		
Total Area of <u>proposed</u> Imper	vious Surfaces within the Project Limits (SF)/or Replacement	2,160,484	4		
Does the project consist of of	fsite road improvements?		□N		
Does the project propose to o	construct unpaved roads?		\boxtimes N		
Is the project part of a larger	common plan of development (phased project)?	☐ Y [\boxtimes N		
EXISTING SITE CHARACTERISTICS					
Total area of <u>existing</u> Impervi	ous Surfaces within the project limits (SF)	128,900 9	3F		
Is the project located within a	ny MSHCP Criteria Cell?		□ N		
If so, identify the Cell number	:	Mead V	'alley	Area	Plan,
		Quadrant	2334		
Are there any natural hydrolo	gic features on the project site?		□ N		
Is a Geotechnical Report atta	ched?	⊠ Y [□ N		
If no Geotech. Report, list the	NRCS soils type(s) present on the site (A, B, C and/or D)	N/A			
What is the Water Quality De	sign Storm Depth for the project?	0.57 in.			

Project Description

The Cajalco Commerce Center project consists of a proposed industrial project, a proposed park, and associated frontage road improvements. In general, the proposed industrial project will collect and detain flows onsite, treat them with LID BMPS, then discharge them north into the Perris Valley MDP system. The proposed park site will retain water quality storm flows for treatment through LID Principles, with larger storm events designed to surface flow towards the existing stream that travels through the southeast of the proposed park. Frontage road improvements will be split between these two drainage outlets.

For the industrial component of the Cajalco Commerce Center project, onsite runoff will be conveyed throughout the site via proposed ribbon gutters and curbs and gutters. Onsite runoff will then be captured by a network of drainage inlets provided at lows points. For water quality purposes, this is considered DMA-A. Proposed private underground storm drain conveys captured flows towards an underground storage chamber before being pumped to a proposed modular wetlands system for water quality treatment. Offsite flows from Cajalco Expressway and Seaton Avenue are collected via catch basins and are conveyed via 36-inch storm drain lines in Cajalco Expressway. These offsite road areas are considered DMA-C for water quality purposes. The onsite project treatment is oversized to compensate for the V_{BMP} of the offsite street frontages as a maximum extent practical. All onsite treated flows are then conveyed offsite to the proposed 36-inch extension of Perris Valley MDP Lateral E-9.1 in Cajalco Expressway connecting to Perris Valley MDP Lateral E-9.1 at Cajalco Expressway Station 57+09.79, per IP 200029. As described below, Decker Road flows within the industrial site frontage are conveyed southerly to be outletted into the existing stream that runs through the park component of the site. Similar to Cajalco Expressway and Seaton Avenue within the industrial project frontage, the Decker Road frontage area is accounted for in the V_{BMP} calculations of the industrial site onsite BMP.

The project site intercepts offsite flows from the adjacent MWD easement along a small portion of the southern boundary. For water quality purposes, this is considered DMA-B. These offsite flows enter a 0.7-acre landscape area on the project site that will be considered a self-retaining area for water quality treatment. Larger storm events for this area will be conveyed through the project site via a proposed 12-inch storm drain, Line A, that outlets to the proposed extension of Perris Valley MDP Lateral E-9.1.

Existing flows that travel east on Cajalco Expressway approaching Decker Road, outside of the project frontage, are collected via a proposed catch basin at the southeast corner of the Cajalco Expressway and Decker Road intersection and are then conveyed via proposed public 18-inch storm drain, Line B, which connects to the proposed extension of Perris Valley MDP Lateral E-9.1 at the intersection of Cajalco Expressway and Seaton Avenue.

According to the approved Perris Valley MDP Lateral E-9.1 Stage 1 improvement plans (IP 200029) the existing available capacity is 45 CFS at the point of connection with Perris Valley MDP Lateral E-9.1. The detention chambers onsite have been oversized to detain the 100-year, 24-hour storm flows of the project site as well as the BMP volume. As the water quality volume is being pumped from the chamber to the modular wetlands for treatment, when a larger volume storm hits, the larger volume will gravity out of the chamber system through an orifice plate that will control the discharge rate to not exceed the capacity of the downstream lateral. The elevation of this orifice plate will be above the V_{BMP} storage elevation.

In addition to the existing flows exceeding the available downstream facility's capacity, the project's proposed change of zone and land use will produce additional runoff that the existing condition will not be able to handle. The project will be responsible for detaining flows that currently exceed the downstream facilities capacity as well as detain the increased runoff produced by the project. The target rate of discharge from the site will need to match the capacity of Perris Valley MDP Lateral E-9.1 while insuring the dewatering of the chambers is done so within 72 hours. The preliminary routing analysis utilizes a discharge of 10 cfs leaving the detention chambers allowing the 100-year storm to leave the chambers within the 72-hour maximum timeframe. The underground chamber volume calculations can be found in Appendix 6 of this report. The Unit Hydrograph calculations can be found in Appendix A of the accompanying Drainage Report.

For the proposed park component of the Cajalco Commerce Center project, onsite runoff will be conveyed through surface flows, with flows eventually draining towards the existing stream that runs through the southeast portion of the park. The park is split into multiple DMAs, DMA-E1 through E5 and DMA-W1.

DMAs E1, E3, and E4 provide water quality treatment in areas that drain to depressed self-retaining areas. This offers treatment of the proposed improvements through LID Principles, allowing settlement of the flows in depressed low areas created by berms on the park site. The storm flows can pond to a maximum depth of 3 inches before bypassing the retaining areas over the berms and flowing toward the existing stream on the site. DMA-E4, specifically, consists of a stabilized, pervious access road that drains to a drainage swale that runs parallel to it on the south side. The swale contains decomposed granite and is utilized for water quality storage. While this area does not meet the 2:1 ratio for self-retaining areas, due to limitations of the site this area has been designed to the maximum extent practicable.

DMAs W1 and E2, which each contain the half width of Decker Road in the park frontage, drain to BMP-W1 and BMP-E2, respectively. The bioretention basins will have 2.5 feet of engineered media over 0.5 feet of choker gravel over 1.0 feet of gravel, and it will have a water quality ponding depth of 0.5 feet, per the Riverside County Santa Ana Region bioretention design sheet. The basins are also sized to handle the HCOC mitigation volumes for these respective DMAs in addition to the V_{BMP}, which is detailed further in Section F. Water quality flows will filter through the media and gravel before being picked up by perforated pipes in the gravel section, which conveys treated flows towards proposed 66-inch storm drain, Line C in Decker Road, which then conveys flows south towards the existing stream. In the bioretention basins, flows from larger storm events will be intercepted by an overflow grate inlet in the proposed basins, which will outlet through proposed Line C. Design of the overflow inlet will be finalized in Final Engineering.

The portion of Decker Road in the MWD frontage, north of the park site and south of the industrial site, drains to proposed inlets that convey flows to proposed Line C in Decker Road. BMPs W1 and E2 are oversized to compensate for the treatment of west and east sides of Decker Road in the MWD frontage, respectively. For treatment of Decker Road within the park frontage, flows are intercepted at the low spot in Decker Road and conveyed via reversed under sidewalk drains to bioretention basins.

DMA-E5 on the park site is a self-treating area. The area consists of a natural stream that drains to the east offsite. There are no existing impervious areas or proposed improvements or grading within this boundary.

The industrial component of the project site falls completely within the HCOC exemption area, as shown in the exhibit in Appendix 7. The park component of the project site falls within the non-exemption area, as shown in the exhibit. The difference between the pre- and post-development unit hydrograph calculations for the different DMA's in the park site are detailed in Section F. The DMA's that create an HCOC due to a larger difference of post-development runoff mitigate for this volume in the proposed bioretention basins of those DMA's. This is further detailed in Section F.

A.1 Maps and Site Plans

When completing your Project-Specific WQMP, include a map of the local vicinity and existing site. In addition, include all grading, drainage, landscape/plant palette and other pertinent construction plans in Appendix 2. At a **minimum**, your WQMP Site Plan should include the following:

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling

Use your discretion on whether or not you may need to create multiple sheets or can appropriately accommodate these features on one or two sheets. Keep in mind that the Co-Permittee plan reviewer must be able to easily analyze your project utilizing this template and its associated site plans and maps.

A.2 Identify Receiving Waters

Using Table A.1 below, list in order of upstream to downstream, the receiving waters that the project site is tributary to. Continue to fill each row with the Receiving Water's 303(d) listed impairments (if any), designated beneficial uses, and proximity, if any, to a RARE beneficial use. Include a map of the receiving waters in Appendix 1.

Table A.1 Identification of Receiving Waters

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use	
Perris Valley Storm Drain Channel	None	None	Not a water body classified as RARE	
San Jacinto River (Reach 3) (HU# 802.11)	None	Intermittent: MUN, AGR, GWR, REC1, REC2, WARM, WILD	Not a water body classified as RARE	
San Jacinto River (Reach 2) (HU# 802.11)	None	Intermittent: MUN, AGR, GWR, REC1, REC2, WARM, WILD	Not a water body classified as RARE	
Canyon Lake (HU# 802.11, 802.12)	Nutrients, Pathogens	MUN, AGR, GWR, REC1, REC2, WARM, WILD	Not a water body classified as RARE	
San Jacinto River (Reach 1) (HU# 802.31, 802.32)	None	MUN, AGR, GWR, REC1, REC2, WARM, WILD	Not a water body classified as RARE	
Lake Elsinore (HU# 802.31)	PCBs, (Organic Compound), Nutrients, Organic Enrichment (Low DO), Sediment Toxicity, Unknown Toxicity	REC1, REC2, WARM, WILD	Not a water body classified as RARE	

A.3 Additional Permits/Approvals required for the Project:

Table A.2 Other Applicable Permits

Agency	Permit Re	quired
State Department of Fish and Game, 1602 Streambed Alteration Agreement	⊠ Y	□ N
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Cert.	⊠ Y	N
US Army Corps of Engineers, CWA Section 404 Permit		⊠N
US Fish and Wildlife, Endangered Species Act Section 7 Biological Opinion		⊠N

Statewide Construction General Permit Coverage	⊠Y	П
Statewide Industrial General Permit Coverage	⊠Y	П
Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP)	⊠Y	Пи
Other (please list in the space below as required) County of Riverside Grading Permit	⊠Y	□N

If yes is answered to any of the questions above, the Co-Permittee may require proof of approval/coverage from those agencies as applicable including documentation of any associated requirements that may affect this Project-Specific WQMP.

Section B: Optimize Site Utilization (LID Principles)

Review of the information collected in Section 'A' will aid in identifying the principal constraints on site design and selection of LID BMPs as well as opportunities to reduce imperviousness and incorporate LID Principles into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, utility locations or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention BMPs), and differences in elevation (which can provide hydraulic head). Prepare a brief narrative for each of the site optimization strategies described below. This narrative will help you as you proceed with your LID design and explain your design decisions to others.

The 2010 Santa Ana MS4 Permit further requires that LID Retention BMPs (Infiltration Only or Harvest and Use) be used unless it can be shown that those BMPs are infeasible. Therefore, it is important that your narrative identify and justify if there are any constraints that would prevent the use of those categories of LID BMPs. Similarly, you should also note opportunities that exist which will be utilized during project design. Upon completion of identifying Constraints and Opportunities, include these on your WQMP Site plan in Appendix 1.

Site Optimization

The following questions are based upon Section 3.2 of the WQMP Guidance Document. Review of the WQMP Guidance Document will help you determine how best to optimize your site and subsequently identify opportunities and/or constraints, and document compliance.

Did you identify and preserve existing drainage patterns? If so, how? If not, why?

Yes, the existing drainage patterns within the industrial component of the project site have been generally preserved. In the existing condition, onsite flows generally flow from west to east. In the developed condition, runoff is captured by drainage inlets at low points around the site and are conveyed to the proposed underground chamber in the northeast section of the site. Flows are then routed offsite via storm drain to a connection in Cajalco Expressway.

The existing drainage patterns within the park component of the project site have been generally preserved. In the existing condition, onsite flows generally flow from northwest to the existing stream in the southeast. In the developed condition, runoff is directed to self-retaining areas with larger storms overtopping and draining towards the existing stream.

Did you identify and protect existing vegetation? If so, how? If not, why?

No, a majority of the site is vacant. Existing buildings and vegetation associated with the existing buildings will be removed. There are no dense areas of vegetation.

Did you identify and preserve natural infiltration capacity? If so, how? If not, why?

Per the attached memo regarding Project No. 22G213-2 "Storm Water Infiltration" in Appendix 3, the onsite storm water infiltration is not considered feasible for this project site.

Did you identify and minimize impervious area? If so, how? If not, why?

The site contains the standard impervious area per code for the given land use. The minimum required landscape area is 15%.

Did you identify and disperse runoff to adjacent pervious areas? If so, how? If not, why?

The majority of the industrial component of the site drains to the underground detention chamber, is treated via modular wetlands, and is then piped via storm drain to a connection in Cajalco Expressway. A small portion of the site collects offsite flows and drains to a self-retaining landscape area, which then larger storm event flows are then piped offsite.

The park site does generally disperse flow to adjacent pervious areas, including flows in Decker Road which are accepted via a reverse sidewalk drain into bioretention basins in the park site.

Section C: Delineate Drainage Management Areas (DMAs)

Utilizing the procedure in Section 3.3 of the WQMP Guidance Document which discusses the methods of delineating and mapping your project site into individual DMAs, complete Table C.1 below to appropriately categorize the types of classification (e.g., Type A, Type B, etc.) per DMA for your project site. Upon completion of this table, this information will then be used to populate and tabulate the corresponding tables for their respective DMA classifications.

 Table C.1 DMA Classifications

DMA Name or ID	Surface Type(s) ¹	Area (Sq. Ft.)	DMA Type
L-A	LANDSCAPE	238,328	D
R-A	ROOFS	993,511	D
H-A	HARDSCAPE	672,460	D
SR-A	LANDSCAPE	12,571	В
SR-B	LANDSCAPE	29,461	В
L-C	LANDSCAPE	84,475	D
H-C	HARDSCAPE	301,887	D
L-W1	LANDSCAPE	109,487	D
R-W1	ROOFS	3,010	D
H-W1	HARDSCAPE	105,338	D
B-W1	LANDSCAPE	9,137	D
L-E1	LANDSCAPE	57,522	С
N-E1	NATURAL GROUND	54,548	С
H-E1	HARDSCAPE	34,820	С
SR-E1	LANDSCAPE	59,219	В
L-E2	LANDSCAPE	32,991	D
H-E2	HARDSCAPE	42,989	D
B-E2	LANDSCAPE	4,234	D
L-E3	LANDSCAPE	81,453	С
N-E3	NATURAL GROUND	24,572	С
H-E3	HARDSCAPE	18,394	С
SR-E3	LANDSCAPE	15,001	В
L-E4	LANDSCAPE	7,987	С
D-E4	DECOMPOSED GRANITE	14,568	С
SR-E4	DECOMPOSED GRANITE	3,037	В
ST-E5	NATURAL GROUND	71,439	Α

¹Reference Table 2-1 in the WQMP Guidance Document to populate this column

Table C.2 Type 'A'. Self-Treating Areas

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)
ST-E5	71,439	N/A	N/A

Table C.3 Type 'B', Self-Retaining Areas

Table C.3 Ty	pe 'B', Self-Retainii	ng Areas				
			Type 'C' DMAs that are draining to the Self-Retaining Area			
			Storm			Dequired Detention Death
DMA	Post-project	Area (square feet)	(inches)	DMA Name /	[C] from Table C.4 =	Required Retention Depth (inches)
	surface type	[A]	[B]	ID	[C]	[D]
SR-A	LANDSCAPE	12,571	0.57	N/A	N/A	0.57
SR-B	LANDSCAPE	29,461	0.57	N/A	N/A	0.57
SR-E1	LANDSCAPE	59,219	0.57	DMA-E1	48,754	1.04
SR-E3	LANDSCAPE	15,001	0.57	DMA-E3	3,0225	1.72
SR-E4	LANDSCAPE	3,037	0.57	DMA-E3	6,626	1.81

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas

DMA	MA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet)	Post-project surface type	Runoff factor	Product [C] = [A] x [B]		Area (square feet) [D]	Ratio [C]/[D]	
L-E1	57,522	LANDSCAPE	0.1	5,752				
N-E1	54,548	NATURAL (B)	0.15	8,182				
H-E1	34,820	HARDSCAPE	1.0	34,820				
DMA-E1	146,890	MIXED USE	0.33	48,754	SR-E1	59,219	0.8	
L-E3	81,453	LANDSCAPE	0.1	8,145				
N-E3	24,572	NATURAL (B)	0.15	3,686				
H-E3	18,394	HARDSCAPE	1.0	18,394				
DMA-E3	124,419	MIXED USE	0.24	30,225	SR-E3	15,001	2.0	
L-E4	7,987	LANDSCAPE	0.1	799				
D-E4	14,568	DECOMPOSED GRANITE	0.4	5,827				
DMA-E4	22,555	MIXED USE	0.29	6,626	SR-E4	3,037	2.2	

Table C.5 Type 'D', Areas Draining to BMPs

DMA Name or ID	BMP Name or ID
DMA-A (L-A, R-A, H-A)	BMP-A (Contech Modular Wetlands System)
DMA-C (L-C, H-C)	BMP-A (Contech Modular Wetlands System)
DMA-W1 (L-W1, H-W1, R-	BMP-W1 (Bioretention Basin)
W1, B-W1)	
DMA-E2 (L-E2, H-E2, B-E2)	BMP-E2 (Bioretention Basin)

<u>Note</u>: More than one drainage management area can drain to a single LID BMP, however, one drainage management area may not drain to more than one BMP.

Section D: Implement LID BMPs

D.1 Infiltration Applicability

Is there an approved downstream 'Highest and Best Use' for st	tormwater	runoff (see discussion in Chapte
2.4.4 of the WQMP Guidance Document for further details)?	\square Y	\boxtimes N

If yes has been checked, Infiltration BMPs shall not be used for the site. If no, continue working through this section to implement your LID BMPs. It is recommended that you contact your Co-Permittee to verify whether or not your project discharges to an approved downstream 'Highest and Best Use' feature.

Geotechnical Report

A Geotechnical Report or Phase I Environmental Site Assessment may be required by the Copermittee to confirm present and past site characteristics that may affect the use of Infiltration BMPs. In addition, the Co-Permittee, at their discretion, may not require a geotechnical report for small projects as described in Chapter 2 of the WQMP Guidance Document. If a geotechnical report has been prepared, include it in Appendix 3. In addition, if a Phase I Environmental Site Assessment has been prepared, include it in Appendix 4.

Is this project classified as a small project consistent with the requirements of Chapter 2 of the WQMP Guidance Document?

Y

N

Infiltration Feasibility

Table D.1 below is meant to provide a simple means of assessing which DMAs on your site support Infiltration BMPs and is discussed in the WQMP Guidance Document in Chapter 2.4.5. Check the appropriate box for each question and then list affected DMAs as applicable. If additional space is needed, add a row below the corresponding answer.

Table D.1 Infiltration Feasibility

Does the project site	YES	NO
have any DMAs with a seasonal high groundwater mark shallower than 10 feet?		Χ
If Yes, list affected DMAs:		
have any DMAs located within 100 feet of a water supply well?		Χ
If Yes, list affected DMAs:		
have any areas identified by the geotechnical report as posing a public safety risk where infiltration of stormwater		Х
could have a negative impact?		
If Yes, list affected DMAs:		
have measured in-situ infiltration rates of less than 1.6 inches / hour?	Χ	
If Yes, list affected DMAs: All DMAs		
have significant cut and/or fill conditions that would preclude in-situ testing of infiltration rates at the final infiltration surface?		Х
If Yes, list affected DMAs:		
geotechnical report identify other site-specific factors that would preclude effective and safe infiltration?	Χ	
Describe here: Infiltration is infeasible per Geotech.		

If you answered "Yes" to any of the questions above for any DMA, Infiltration BMPs should not be used for those DMAs and you should proceed to the assessment for Harvest and Use below.

D.2 Harvest and Use Assessment

Please check what applies:

☐ Reclaimed water will be used for the non-potable water demands for the project.
\Box Downstream water rights may be impacted by Harvest and Use as approved by the Regiona Board (verify with the Copermittee).
☐ The Design Capture Volume will be addressed using Infiltration Only BMPs. In such a case
Harvest and Use BMPs are still encouraged, but it would not be required if the Design Capture
Volume will be infiltrated or evapotranspired.

If any of the above boxes have been checked, Harvest and Use BMPs need not be assessed for the site. If neither of the above criteria applies, follow the steps below to assess the feasibility of irrigation use, toilet use and other non-potable uses (e.g., industrial use).

Irrigation Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for Irrigation Use BMPs on your site:

Step 1: Identify the total area of irrigated landscape on the site, and the type of landscaping used.

Total Area of Irrigated Landscape: N/A

Type of Landscaping (Conservation Design or Active Turf): N/A

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for irrigation use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: N/A

Step 3: Cross reference the Design Storm depth for the project site (see Exhibit A of the WQMP Guidance Document) with the left column of Table 2-3 in Chapter 2 to determine the minimum area of Effective Irrigated Area per Tributary Impervious Area (EIATIA).

Enter your EIATIA factor: N/A

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum irrigated area that would be required.

Minimum required irrigated area: N/A

Step 5: Determine if harvesting stormwater runoff for irrigation use is feasible for the project by comparing the total area of irrigated landscape (Step 1) to the minimum required irrigated area (Step 4).

 Minimum required irrigated area (Step 4)	Available Irrigated Landscape (Step 1)
 N/A	N/A

Toilet Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for toilet flushing uses on your site:

Step 1: Identify the projected total number of daily toilet users during the wet season, and account for any periodic shut downs or other lapses in occupancy:

Projected Number of Daily Toilet Users: N/A

Project Type: N/A

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for toilet use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: N/A

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-1 in Chapter 2 to determine the minimum number or toilet users per tributary impervious acre (TUTIA).

Enter your TUTIA factor: N/A

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of toilet users that would be required.

Minimum number of toilet users: N/A

Step 5: Determine if harvesting stormwater runoff for toilet flushing use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

Minimum required Toilet Users (Step 4)	Projected number of toilet users (Step 1)
N/A	N/A

Other Non-Potable Use Feasibility

Are there other non-potable uses for stormwater runoff on the site (e.g. industrial use)? See Chapter 2 of the Guidance for further information. If yes, describe below. If no, write N/A.

N/A

Step 1: Identify the projected average daily non-potable demand, in gallons per day, during the wet season and accounting for any periodic shut downs or other lapses in occupancy or operation.

Average Daily Demand: N/A

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for the identified non-potable use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: N/A

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-3 in Chapter 2 to determine the minimum demand for non-potable uses per tributary impervious acre.

Enter the factor from Table 2-3: N/A

- Step 4: Multiply the unit value obtained from Step 4 by the total of impervious areas from Step 3 to develop the minimum number of gallons per day of non-potable use that would be required.
 - Minimum required use: N/A
- Step 5: Determine if harvesting stormwater runoff for other non-potable use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

Minimum required non-potable use (Step 4)	Projected average daily use (Step 1)
N/A	N/A

If Irrigation, Toilet and Other Use feasibility anticipated demands are less than the applicable minimum values, Harvest and Use BMPs are not required and you should proceed to utilize LID Bioretention and Biotreatment, unless a site-specific analysis has been completed that demonstrates technical infeasibility as noted in D.3 below.

D.3 Bioretention and Biotreatment Assessment

Other LID Bioretention and Biotreatment BMPs as described in Chapter 2.4.7 of the WQMP Guidance Document are feasible on nearly all development sites with sufficient advance planning.

Select one of the following:

oxtimes LID Bioretention/B	Biotreatment BMPs w	ill be used for some	e or all DMAs	of the proje	ct as noted
pelow in Section D.4	(note the requiremen	nts of Section 3.4.2	in the WQMP	Guidance D	Document).

☐ A site-specific analysis demonstrating the technical infeasibility of all LID BMPs has been performed and is included in Appendix 5. If you plan to submit an analysis demonstrating the technical infeasibility of LID BMPs, request a pre-submittal meeting with the Copermittee to discuss this option. Proceed to Section E to document your alternative compliance measures.

D.4 Feasibility Assessment Summaries

From the Infiltration, Harvest and Use, Bioretention and Biotreatment Sections above, complete Table D.2 below to summarize which LID BMPs are technically feasible, and which are not, based upon the established hierarchy.

Table D.2 LID Prioritization Summary Matrix

		LID BMP Hierarchy								
DMA Name/ID	1. Infiltration	2. Harvest and use	3. Bioretention	4. Biotreatment	(Alternative Compliance)					
DMA-A										
DMA-W1			\boxtimes							
DMA-E2			\boxtimes							

D.5 LID BMP Sizing

Each LID BMP must be designed to ensure that the Design Capture Volume will be addressed by the selected BMPs. First, calculate the Design Capture Volume for each LID BMP using the V_{BMP} worksheet in Appendix F of the LID BMP Design Handbook. Second, design the LID BMP to meet the required V_{BMP} using a method approved by the Copermittee. Utilize the worksheets found in the LID BMP Design Handbook or consult with your Copermittee to assist you in correctly sizing your LID BMPs. Complete Table D.3 below to document the Design Capture Volume and the Proposed Volume for each LID BMP. Provide the completed design procedure sheets for each LID BMP in Appendix 6. You may add additional rows to the table below as needed.

Table D.3 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post- Project Surface Type	Effective Impervious Fraction, I _f	DMA Runoff Factor	DMA Areas x Runoff Factor [A] x [C]	BMP A - System	- Contech Modulai	r Wetlands
L-A	238,328	Landscape	0.1	0.11	26,235.2			
R-A	993,511	Roofs	1	0.89	886,211.8		Proposed Volume Design Capture on Plan Volume, V _{BMP} (cubic (cubic feet) feet)	Pronosed
H-A	672,460	Hardscape	1	0.89	599,834.3	Design		•
н-с	301,887	Hardscape	1	0.89	269,283.2	Storm Depth		•
L-C	84,475	Landscape	0.1	0.11	9330.9	(in)		
	$A_T = \Sigma[A]$				Σ= [D]	[E]	$[F] = \frac{[D]x[E]}{12}$	[G]
_	2,290,661				1,790,985.4	0.57	85,071.8	900,431

[[]B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

Table D.4 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I _f	DMA Runoff Factor	DMA Areas x Runoff Factor	BMP-W	1 – Bioretention B	asin
L-W1	109,487	Landscape	0.1	0.11	12,093.7			
H-W1	105,338	Concrete or Asphalt	1	0.89	93,961.5	Design		Pro
B-W1	9,137	Landscape	0.1	0.11	1,009.3	Storm Depth	Design Capture Volume, V BMP	Vo. Pla
R-W1	3,010	Roofs	1	0.89	2,684.9	(in)	(cubic feet)	(cu
	$A_T = \Sigma[A]$				Σ= [D]	[E]	$[F] = \frac{[D]x[E]}{12}$	[G]
	226,972				109,749.4	0.57	5,213.1	9,8

[[]B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[[]E] is obtained from Exhibit A in the WQMP Guidance Document

[[]G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

 $[\]hbox{\ensuremath{[E]} is obtained from Exhibit A in the WQMP Guidance Document} \\$

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Table D.5 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I _f	DMA Runoff Factor	DMA Areas x Runoff Factor	BMP-E2	? – Bioretention Ba	sin
L-E2	32,991	Landscape	0.1	0.11	3,644.1			
H-E2	42,989	Concrete or Asphalt	1	0.89	38,346.2	Design Storm Depth	Design Capture Volume, V _{BMP}	Proposed Volume of Plans
B-E2	4,234	Landscape	0.1	0.11	467.7	(in)	(cubic feet)	(cubic fee
	$A_T = \Sigma[A]$				Σ= [D]	[E]	$[F] = \frac{[D]x[E]}{12}$	[G]
	80,214				42,458	0.57	2,016.8	4,511

[[]B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[[]E] is obtained from Exhibit A in the WQMP Guidance Document

[[]G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Section E: Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to LID waiver approval by the Copermittee). Check one of the following Boxes:

☑ LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- Or -

☐ The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Co-Permittee and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The following alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

E.1 Identify Pollutants of Concern

Utilizing Table A.1 from Section A above which noted your project's receiving waters and their associated EPA approved 303(d) listed impairments, cross reference this information with that of your selected Priority Development Project Category in Table E.1 below. If the identified General Pollutant Categories are the same as those listed for your receiving waters, then these will be your Pollutants of Concern and the appropriate box or boxes will be checked on the last row. The purpose of this is to document compliance and to help you appropriately plan for mitigating your Pollutants of Concern in lieu of implementing LID BMPs.

Table E.1 Potential Pollutants by Land Use Type

Prior	Priority Development Project Categories and/or Project Features (check those that apply)		General Pollutant Categories								
Proje			Metals	Nutrients	Pesticides	Toxic Organic Compounds	Sediments	Trash & Debris	Oil & Grease		
	Detached Residential Development	Р	Z	Р	Р	N	Р	Р	Р		
	Attached Residential Development	Р	N	Р	Р	N	Р	Р	P ⁽²⁾		
\boxtimes	Commercial/Industrial Development	P ⁽³⁾	Р	P ⁽¹⁾	P ⁽¹⁾	P ⁽⁵⁾	P ⁽¹⁾	Р	Р		
	Automotive Repair Shops	N	Р	N	N	P ^(4, 5)	N	Р	Р		
	Restaurants (>5,000 ft ²)	Р	N	N	N	N	N	Р	Р		
	Hillside Development (>5,000 ft²)	Р	N	Р	Р	N	Р	Р	Р		
	Parking Lots (>5,000 ft ²)	P ⁽⁶⁾	Р	P ⁽¹⁾	P ⁽¹⁾	P ⁽⁴⁾	P ⁽¹⁾	Р	Р		
	Retail Gasoline Outlets	N	Р	N	N	Р	N	Р	Р		
	ect Priority Pollutant(s) oncern					\boxtimes		\boxtimes			

P = Potential

N = Not Potential

⁽¹⁾ A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected

⁽²⁾ A potential Pollutant if the project includes uncovered parking areas; otherwise not expected

⁽³⁾ A potential Pollutant is land use involving animal waste

⁽⁴⁾ Specifically petroleum hydrocarbons

⁽⁵⁾ Specifically solvents

⁽⁶⁾ Bacterial indicators are routinely detected in pavement runoff

E.2 Stormwater Credits

Projects that cannot implement LID BMPs but nevertheless implement smart growth principles are potentially eligible for Stormwater Credits. Utilize Table 3-8 within the WQMP Guidance Document to identify your Project Category and its associated Water Quality Credit. If not applicable, write N/A.

Table E.2 Water Quality Credits

Qualifying Project Categories	Credit Percentage ²
N/A	
Total Credit Percentage ¹	

¹Cannot Exceed 50%

E.3 Sizing Criteria

After you appropriately considered Stormwater Credits for your project, utilize Table E.3 below to appropriately size them to the DCV, or Design Flow Rate, as applicable. Please reference Chapter 3.5.2 of the WQMP Guidance Document for further information.

Table E.3 Treatment Control BMP Sizing

DMA Type/ID	DMA Area (square feet) [A]	Post- Project Surface Type	Effective Impervious Fraction, I _f	DMA Runoff Factor	DMA Area x Runoff Factor [A] x [C]		Enter BMP Na	me / Identifie	r Here
N/A						Design Storm Depth (in)	Minimum Design Capture Volume or Design Flow Rate (cubic feet or cfs)	Total Storm Water Credit % Reduction	Proposed Volume or Flow on Plans (cubic feet or cfs)
	A _T = Σ[A]		<u> </u>	1	Σ= [D]	[E]	$[F] = \frac{[D]x[E]}{[G]}$	[F] X (1-[H])	[1]

[[]B], [C] is obtained as described in Section 2.3.1 from the WQMP Guidance Document

 $^{^2}$ Obtain corresponding data from Table 3-8 in the WQMP Guidance Document

[[]E] is obtained from Exhibit A in the WQMP Guidance Document

[[]G] is for Flow-Based Treatment Control BMPs [G] = 43,560, for Volume-Based Control Treatment BMPs, [G] = 12

[[]H] is from the Total Credit Percentage as Calculated from Table E.2 above

[[]I] as obtained from a design procedure sheet from the BMP manufacturer and should be included in Appendix 6

E.4 Treatment Control BMP Selection

Treatment Control BMPs typically provide proprietary treatment mechanisms to treat potential pollutants in runoff, but do not sustain significant biological processes. Treatment Control BMPs must have a removal efficiency of a medium or high effectiveness as quantified below:

- **High**: equal to or greater than 80% removal efficiency
- Medium: between 40% and 80% removal efficiency

Such removal efficiency documentation (e.g., studies, reports, etc.) as further discussed in Chapter 3.5.2 of the WQMP Guidance Document, must be included in Appendix 6. In addition, ensure that proposed Treatment Control BMPs are properly identified on the WQMP Site Plan in Appendix 1.

Table E.4 Treatment Control BMP Selection

Selected Treatment Control BMP	Priority Pollutant(s) of	Removal Efficiency
Name or ID ¹	Concern to Mitigate ²	Percentage ³
N/A		

¹ Treatment Control BMPs must not be constructed within Receiving Waters. In addition, a proposed Treatment Control BMP may be listed more than once if they possess more than one qualifying pollutant removal efficiency.

² Cross Reference Table E.1 above to populate this column.

³ As documented in a Co-Permittee Approved Study and provided in Appendix 6.

Section F: Hydromodification

F.1 Hydrologic Conditions of Concern (HCOC) Analysis

Once you have determined that the LID design is adequate to address water quality requirements, you will need to assess if the proposed LID Design may still create a HCOC. Review Chapters 2 and 3 (including Figure 3-7) of the WQMP Guidance Document to determine if your project must mitigate for Hydromodification impacts. If your project meets one of the following criteria which will be indicated by the check boxes below, you do not need to address Hydromodification at this time. However, if the project does not qualify for Exemptions 1, 2 or 3, then additional measures must be added to the design to comply with HCOC criteria. This is discussed in further detail below in Section F.2.

HCOC EXEMPTION 1 : The Priority Development Project disturbs less than one acre. The Copermittee
has the discretion to require a Project-Specific WQMP to address HCOCs on projects less than one
acre on a case by case basis. The disturbed area calculation should include all disturbances associated
with larger common plans of development.

Does the project qualify for this HCOC Exemption?	Y	\boxtimes N
If Yes, HCOC criteria do not apply.		

HCOC EXEMPTION 2: The volume and time of concentration¹ of storm water runoff for the post-development condition is not significantly different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant) using one of the following methods to calculate:

- Riverside County Hydrology Manual
- Technical Release 55 (TR-55): Urban Hydrology for Small Watersheds (NRCS 1986), or derivatives thereof, such as the Santa Barbara Urban Hydrograph Method
- Other methods acceptable to the Co-Permittee

Does the project qualify for this HCOC Exemption? \square Y \square N

If Yes, report results in Table F.1 below and provide your substantiated hydrologic analysis in Appendix 7.

Portions of the park component of the project are exempt from HCOC mitigation. See Table with DMA breakdowns in Mitigation section below.

Table F.1 Hydrologic Conditions of Concern Summary

	2 year – 24 hour			
	Pre-condition	Post-condition	% Difference	
Time of	N/A	N/A	N/A	
Concentration				
Volume (Cubic Feet)	N/A	N/A	N/A	

¹ Time of concentration is defined as the time after the beginning of the rainfall when all portions of the drainage basin are contributing to flow at the outlet.

HCOC EXEMPTION 3: All downstream conveyance channels to an adequate sump (for example, Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River, or other lake, reservoir or naturally erosion resistant feature) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on the Co-Permittees Hydromodification Sensitivity Maps.

Does the project qualify for this HCOC Exemption?	☐ Y ⊠ N
If Yes, HCOC criteria do not apply and note below qualifier:	which adequate sump applies to this HCO

F.2 HCOC Mitigation

If none of the above HCOC Exemption Criteria are applicable, HCOC criteria is considered mitigated if they meet one of the following conditions:

- a. Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.
- b. The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.
- c. Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

Be sure to include all pertinent documentation used in your analysis of the items a, b or c in Appendix 7.

	2 year – 24 hour	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference	
DMA W1 – Flow Rate (cfs)	0.300	0.532	77.3%	
DMA E1 – Flow Rate (cfs)	0.285	0.304	6.7%	
DMA E2 – Flow Rate (cfs)	0.122	0.230	88.5%	
DMA E3 – Flow Rate (cfs)	0.152	0.118	-22.4%	
DMA E4 – Flow Rate (cfs)	0.037	0.028	-24.3%	
DMA E5 – Flow Rate (cfs)	0.121	0.121	0%	

The industrial component of the project is located within the HCOC Exemption area as found in the approved Riverside County HCOC Applicability Map dated April 20, 2017. See Appendix 7 for approved HCOC Applicability Map. As such, no HCOC mitigation is required for DMAs A, B, or C.

HCOC mitigation was evaluated for the park component of the project, per condition F.2.c above, by comparing pre-development and post-development hydrographs. Per the above table, DMAs E1, E3, E4 and E5 of the park component of the project site are exempt from mitigation due to a less than 10% increase between the pre and post 2 year-24 hour unit hydrographs. DMAs W1 and E2 are subject to mitigation for HCOC. The bioretention BMPs for DMAs W1 and E2 have been sized to adequately contain the 2 year-24 hour mitigation volumes, as shown in the table below. Unit hydrograph calculations and self-retaining volumes can be found in Appendix 7.

	2 year – 24 hour			
	Pre-condition Volume	Post-condition Volume	Mitigation Volume	Proposed Volume
DMA W1 – Volume (cf)	3,833 cf	14,070 cf	9,801 cf	10,208 cf
DMA E2 – Volume (cf)	1,568 cf	6,098 cf	4,360 cf	4,579 cf

¹ Self-Retaining Volume is the volume proposed on the plan. A cut/fill report is included in Appendix 7 which shows the volume of each self-retaining area alone.

Section G: Source Control BMPs

Source control BMPs include permanent, structural features that may be required in your project plans — such as roofs over and berms around trash and recycling areas — and Operational BMPs, such as regular sweeping and "housekeeping", that must be implemented by the site's occupant or user. The MEP standard typically requires both types of BMPs. In general, Operational BMPs cannot be substituted for a feasible and effective permanent BMP. Using the Pollutant Sources/Source Control Checklist in Appendix 8, review the following procedure to specify Source Control BMPs for your site:

- 1. *Identify Pollutant Sources*: Review Column 1 in the Pollutant Sources/Source Control Checklist. Check off the potential sources of Pollutants that apply to your site.
- Note Locations on Project-Specific WQMP Exhibit: Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist. Show the location of each Pollutant source and each permanent Source Control BMP in your Project-Specific WQMP Exhibit located in Appendix 1.
- 3. Prepare a Table and Narrative: Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist. In the left column of Table G.1 below, list each potential source of runoff Pollutants on your site (from those that you checked in the Pollutant Sources/Source Control Checklist). In the middle column, list the corresponding permanent, Structural Source Control BMPs (from Columns 2 and 3 of the Pollutant Sources/Source Control Checklist) used to prevent Pollutants from entering runoff. Add additional narrative in this column that explains any special features, materials or methods of construction that will be used to implement these permanent, Structural Source Control BMPs.
- 4. Identify Operational Source Control BMPs: To complete your table, refer once again to the Pollutant Sources/Source Control Checklist. List in the right column of your table the Operational BMPs that should be implemented as long as the anticipated activities continue at the site. Copermittee stormwater ordinances require that applicable Source Control BMPs be implemented; the same BMPs may also be required as a condition of a use permit or other revocable Discretionary Approval for use of the site.

Table G.1 Permanent and Operational Source Control Measures

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
A. On-site storm drain inlets	Mark all inlets with the works "Only Rain Down the Storm Drain" or similar. Catch Basin Markers may be available from the Riverside County Flood Control and Water Conservation District, call 951-955-1200 to verify. On-site drainage structures, including all storm drain clean outs, area drains, inlets, catch basins, inlet & outlet structures, forebays, & water treatment control basins shall be inspected and maintained on a	Maintain and periodically repaint or replace inlet markings. Provide stormwater pollution prevention information to new site owners, lessees, or operators. See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in Appendix 10 (CASQA Stormwater Quality Handbook at www.cabmphandbooks.com Include the following in lessee

	regular basis to insure their operational adequacy.	agreements: "Tenants shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains" Maintenance should include removal of trash, debris, & sediment and the repair of any deficiencies or damage that may impact water quality.
B. Interior floor drains and elevator shaft sump	The interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer	Inspect and maintain drains to prevent blockages and overflow.
C. Need for future indoor & structural pest control	Note building design features that discourage entry of pests.	Provide Integrated Pest Management information to owners, lessees, and operators.
D. Landscape/Outdoor Pesticide Use	The final landscape shall be designed to accomplish all of the following:	
	Preserve existing native trees, shrubs and ground cover to the maximum extent possible.	
	Design landscape to minimize irrigation and runoff, to promote surface infiltration where appropriate and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.	
	Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions.	
	Consider using pest-resistant plants, especially adjacent to hardscape.	
	To insure successful establishments, select plants appropriate to site, soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency and plant interactions.	
	Pesticide usage should be at a necessary minimum and be consistent with the instructions contained on product labels and with the regulations administered by the State Department of Pesticide	
	Regulation. Pesticides should be used at an absolute minimum or not at all in the retention/infiltration basin. If	

	used, it should not be applied in close	
	proximity to the rainy season.	
E. Refuse Trash Storage areas	Trash container storage areas shall be paved with an impervious surface, designed not to allow run-on from adjoining areas, designed to divert drainage from adjoining roofs and pavements from the surrounding area, and screened or walled to prevent off-site transport of trash. Trash dumpsters (containers) shall be leak proof and have attached covers or lids. Trash enclosures shall be roofed per City standards and the details on the PWQMP Exhibit in Appendix 1. Trash compactors shall be roofed and set on a concrete pad per City standards. The pad shall be a minimum of one foot larger all around than the trash compactor and sloped to drain to a sanitary sewer line. Connection of trash area drains to the MS4 is prohibited. See CASQA SD-32 BMP Fact Sheets in Appendix 10 for additional information. Signs shall be posted on or near dumpsters with the words "Do not dump hazardous materials here" or	Adequate number of receptacles shall be provided. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, in Appendix 10, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbook at www.cabmphandbooks.com
F. Loading Docks	similar. Loading docks will not be covered and are 4 feet above finished pavement surface.	Move loaded and unloaded items indoors as soon as possible.
	Spill kits are to be kept on-site at all times per SC-11	Inspect for accumulated trash and debris. Implement good housekeeping procedures on a regular basis. Sweep areas clean instead of using wash water. Loading docks will be kept in a clean and orderly condition, through a regular program of sweeping and litter control, and immediate clean up of any spills or broken containers. Property owner will ensure that loading docks will be swept as needed. Cleanup procedures will not include the use of wash-down water. Property owner will be responsible

			for implementation of loading dock housekeeping procedures
			See the Fact Sheet SC-30, in Appendix 10, "Outdoor Loading and Unloading" in the CASQA Stormwater Quality Handbooks a www.cabmphandbooks.com
G.	Fire Sprinkler Test Water	Provide a means to drain fire sprinkler test water to the sanitary sewer.	See the note in the Fact Sheet SC-41, in Appendix 10, "Building and Grounds Maintenance", in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
Н.	Miscellaneous Drain or Wash Water or Other Sources	Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system	
	Boiler drain lines	Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur.	
	Condensate drain lines	Condensate drain lines may not discharge to the storm drain system.	
	Rooftop equipment	Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment.	
	Drainage sumps	Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water.	
	Roofing, gutters and trim	Avoid roofing, gutters and trim made of copper of other unprotected metals that may leach into runoff.	
	Other sources	Include controls for other sources as specified by local reviewer.	
I.	Plazas, sidewalks, and parking lots	Spill kits are to be kept on-site at all times per SC-11	Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

Section H: Construction Plan Checklist

Populate Table H.1 below to assist the plan checker in an expeditious review of your project. The first two columns will contain information that was prepared in previous steps, while the last column will be populated with the corresponding plan sheets. This table is to be completed with the submittal of your final Project-Specific WQMP.

Table H.1 Construction Plan Cross-reference

BMP No. or ID	BMP Identifier and Description	Corresponding Plan Sheet(s)
*	*	*

Note that the updated table — or Construction Plan WQMP Checklist — is **only** a **reference tool** to facilitate an easy comparison of the construction plans to your Project-Specific WQMP. Co-Permittee staff can advise you regarding the process required to propose changes to the approved Project-Specific WQMP.

*This section will be completed in FWQMP

Section I: Operation, Maintenance and Funding

The Copermittee will periodically verify that Stormwater BMPs on your site are maintained and continue to operate as designed. To make this possible, your Copermittee will require that you include in Appendix 9 of this Project-Specific WQMP:

- 1. A means to finance and implement facility maintenance in perpetuity, including replacement cost.
- 2. Acceptance of responsibility for maintenance from the time the BMPs are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
- 3. An outline of general maintenance requirements for the Stormwater BMPs you have selected.
- 4. Figures delineating and designating pervious and impervious areas, location, and type of Stormwater BMP, and tables of pervious and impervious areas served by each facility. Geolocating the BMPs using a coordinate system of latitude and longitude is recommended to help facilitate a future statewide database system.
- 5. A separate list and location of self-retaining areas or areas addressed by LID Principles that do not require specialized O&M or inspections but will require typical landscape maintenance as noted in Chapter 5, pages 85-86, in the WQMP Guidance. Include a brief description of typical landscape maintenance for these areas.

Your local Co-Permittee will also require that you prepare and submit a detailed Stormwater BMP Operation and Maintenance Plan that sets forth a maintenance schedule for each of the Stormwater BMPs built on your site. An agreement assigning responsibility for maintenance and providing for inspections and certification may also be required.

Details of these requirements and instructions for preparing a Stormwater BMP Operation and Maintenance Plan are in Chapter 5 of the WQMP Guidance Document.

Maintenance Mechanism:	Industrial Component: To be privately maintained by owner	
	Park Component: To be publicly maintained by County	
Will the proposed BMPs be n Association (POA)?	naintained by a Home Owners' Association (HOA) or Property Owners	
☐ Y ⊠ N		

Include your Operation and Maintenance Plan and Maintenance Mechanism in Appendix 9. Additionally, include all pertinent forms of educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP in Appendix 10.

*To be completed in FWWQMP

Appendix 1: Maps and Site Plans

Location Map, WQMP Site Plan and Receiving Waters Map

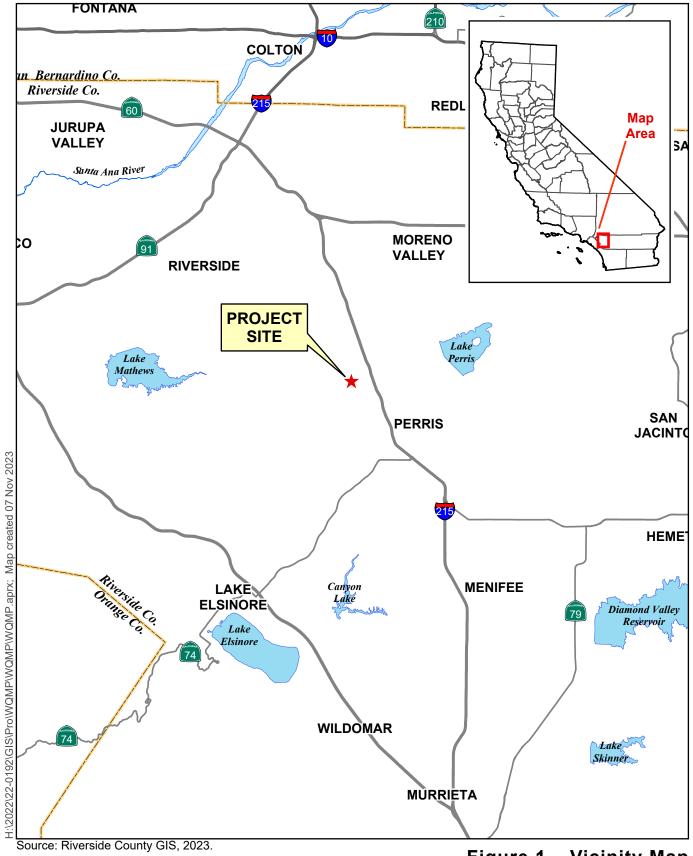
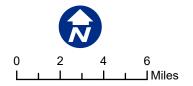


Figure 1 – Vicinity Map
Mead Valley Commerce Center





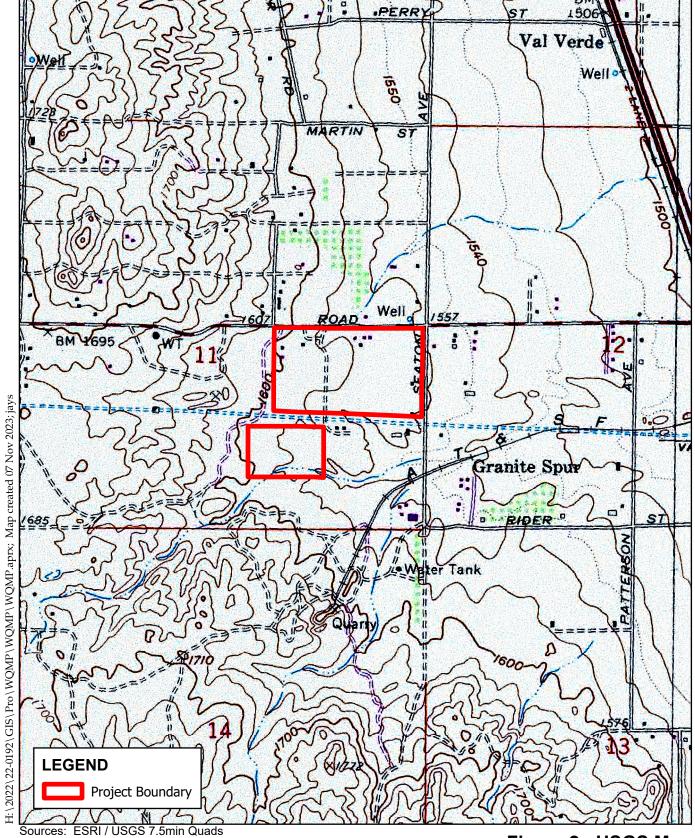


Figure 2 - USGS Map Mead Valley Commerce Center

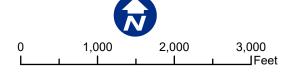
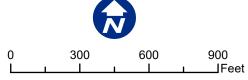




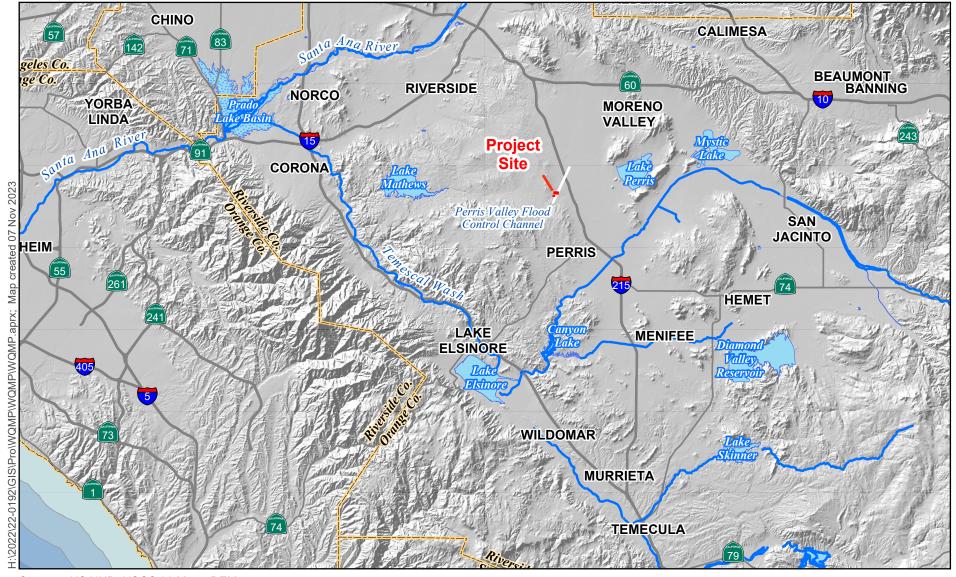


Figure 3 - Aerial Map

Mead Valley Commerce Center







Sources: US NHD; USGS 30 Meter DEM

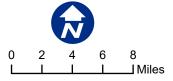
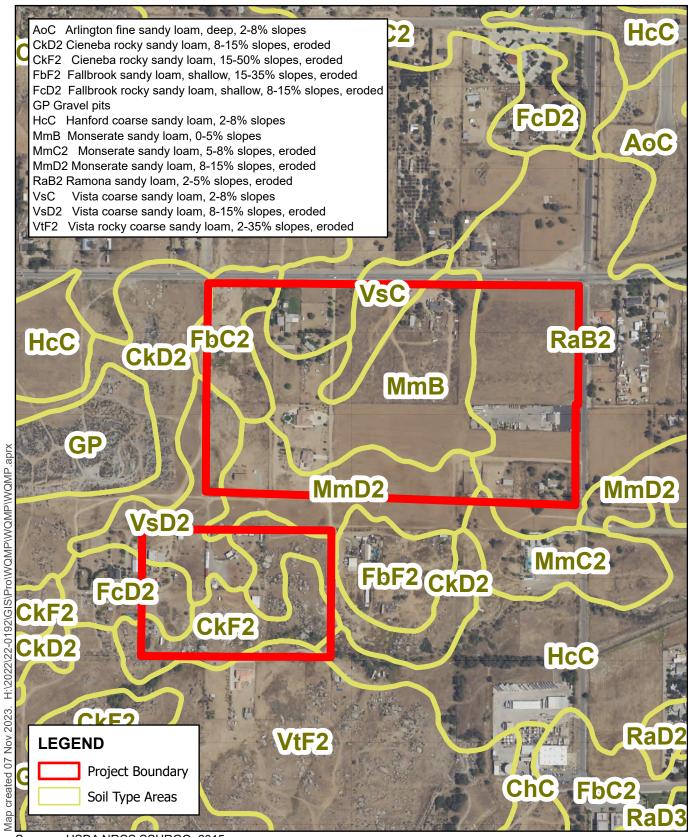


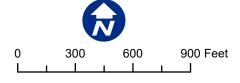
Figure 4 – Receiving Waterbodies
Mead Valley Commerce Center



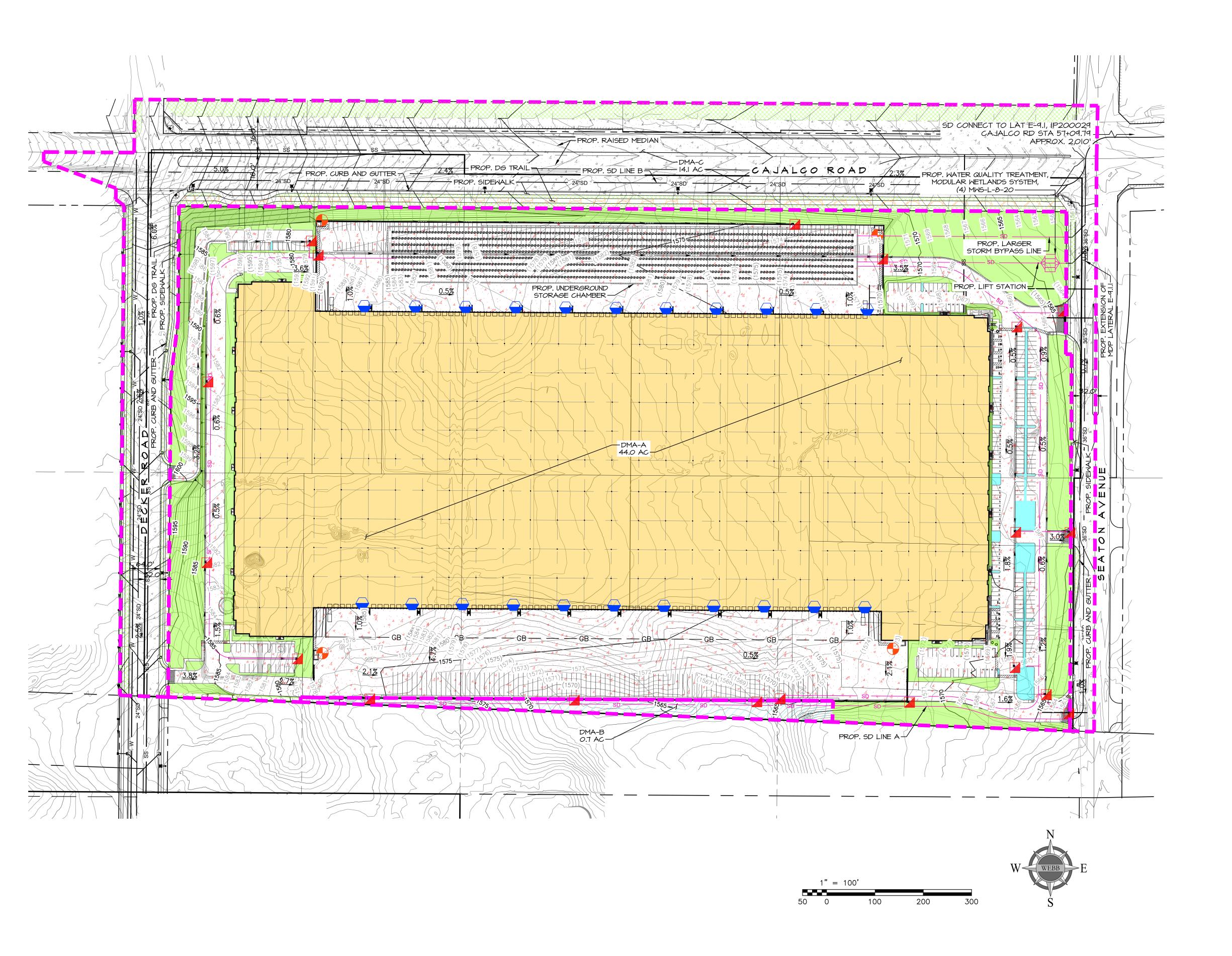


Sources: USDA NRCS SSURGO, 2015; Riverside Co. GIS, 2023; USDA NAIP, 2016.

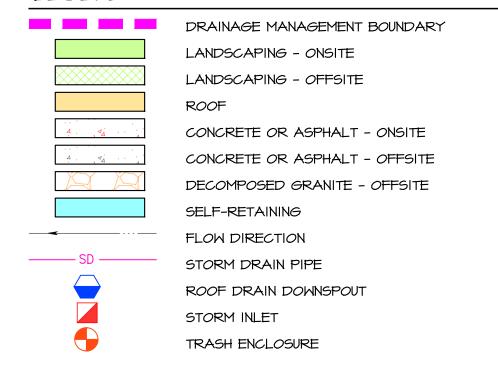
Figure 5 – Soils Map Mead Valley Commerce Center







LEGEND

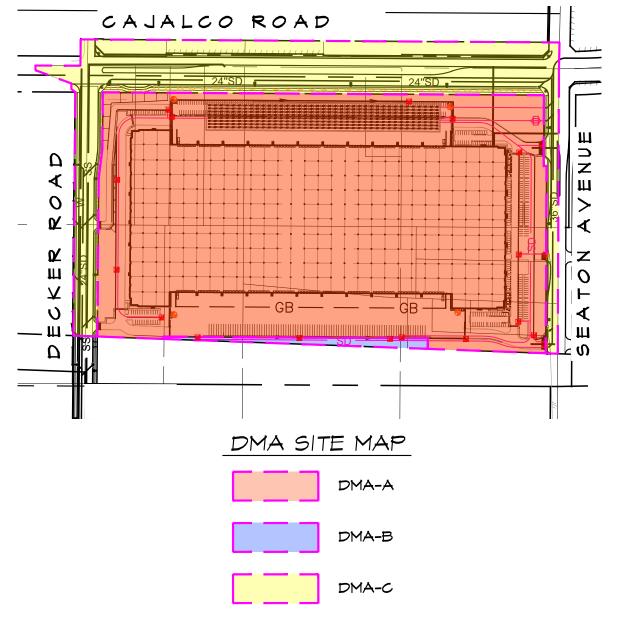


DRAINAGE MANAGEMENT AREAS					
LEGEND	DMA-ID	TYPE	AREA (SF)		
	L-A	LANDSCAPE	238,328		
	R-A	ROOF	993,511		
	H-A	HARDSCAPE	672,460		
	SR-A	SELF-RETAINING	11,805		
	SR-B	SELF-RETAINING	29,461		
[A A	H-C	HARDSCAPE - OFFSITE	465,260		
	DG-C	DG TRAIL - OFFSITE	25,400		
	L-C	LANDSCAPE - OFFSITE	121,610		

ONSITE IMPERVIOUS AREA = (993,511+672,460)/(1,945,444) = 85.6%

NOTE: DMA'S H-C AND L-C DO NOT DRAIN TO THE ONSITE MODULAR WETLANDS SYSTEM, BUT THE SYSTEM IS OVERSIZED TO TREAT THE $\rm V_{BMP}$ OF THESE DMA'S.

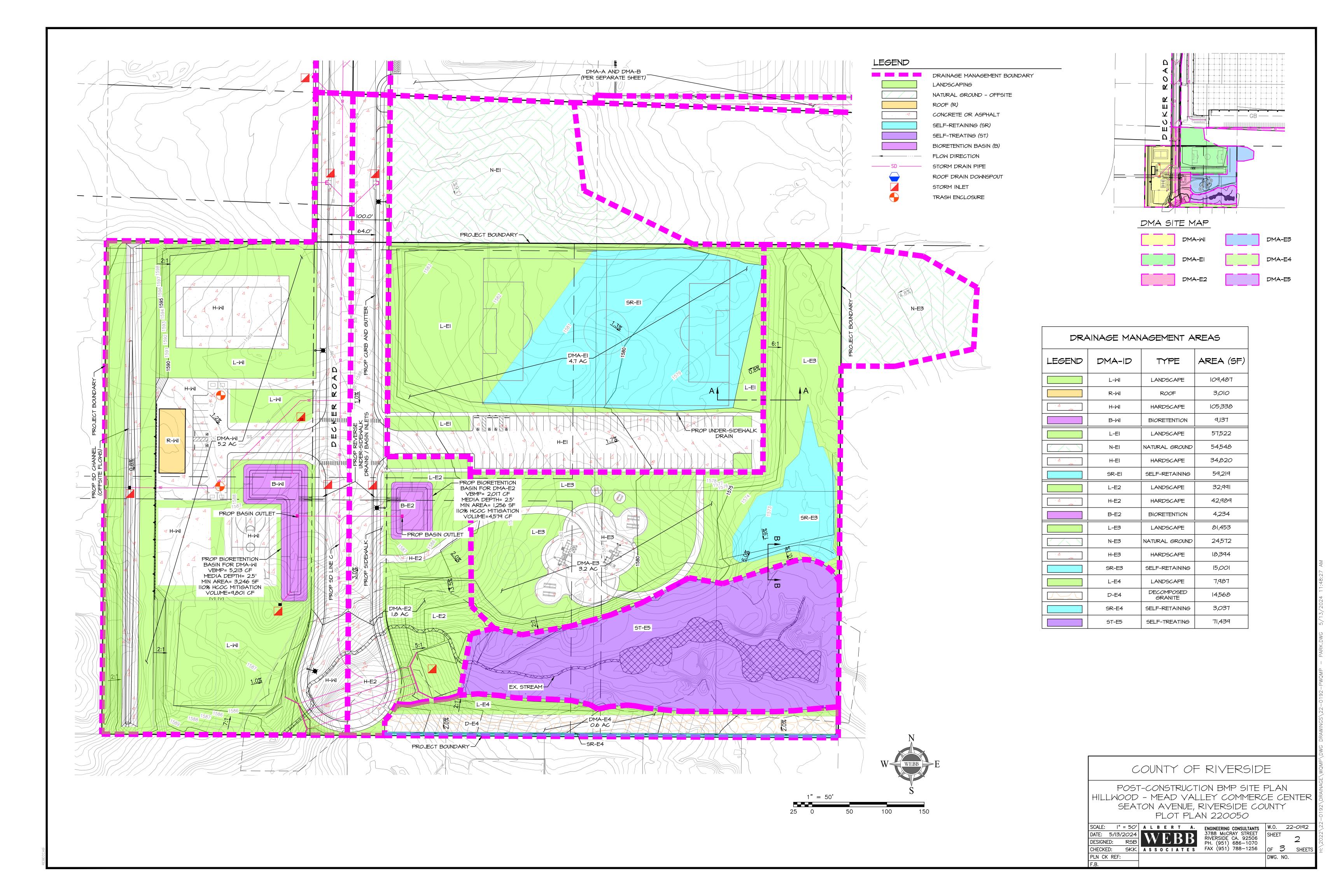
NOTE: ALL STORM INLETS TO INCLUDE FULL TRASH CAPTURE DEVICE.

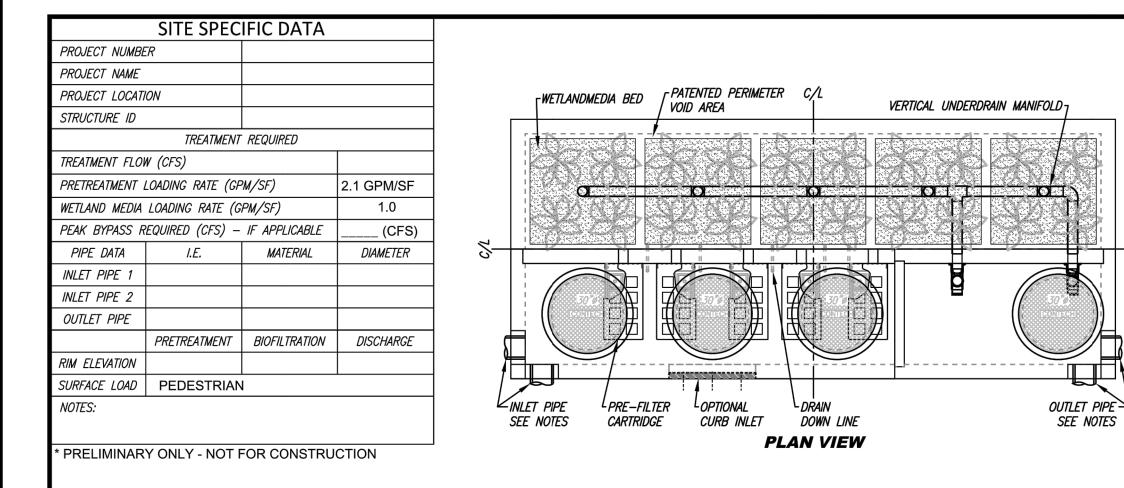


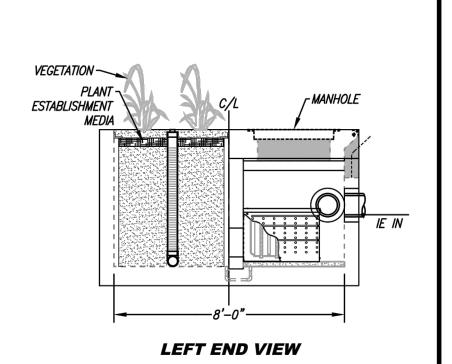
COUNTY OF RIVERSIDE

POST-CONSTRUCTION BMP SITE PLAN HILLWOOD - MEAD VALLEY COMMERCE CENTER SEATON AVENUE, RIVERSIDE COUNTY PLOT PLAN 220050

SCALE: |" = 100' | A L B E R T A. | ENGINEERING CONSULTANTS 3788 McCRAY STREET RIVERSIDE CA. 92506 PH. (951) 686-1070 FAX (951) 788-1256 | SHEETS PLN CK REF:





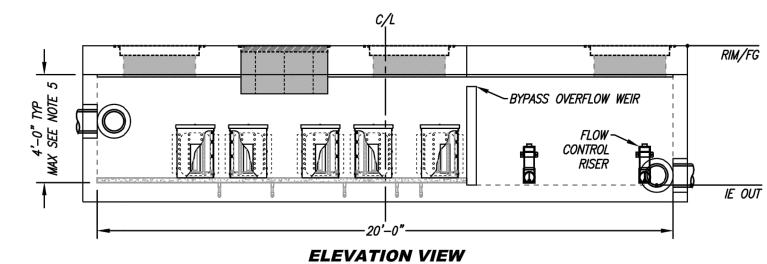


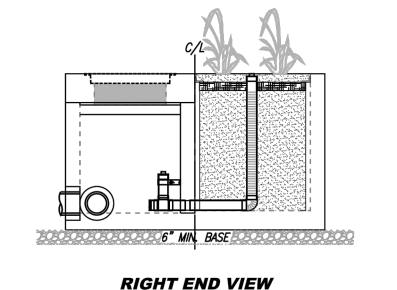
INSTALLATION NOTES

REQUIREMENTS.

- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL
- CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATERTIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL. CONTRACTOR RESPONSIBLE FOR CONTACTING CONTECH FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A CONTECH REPRESENTATIVE.

VERTICAL HEIGHT VARIES BASED ON SITE SPECIFIC

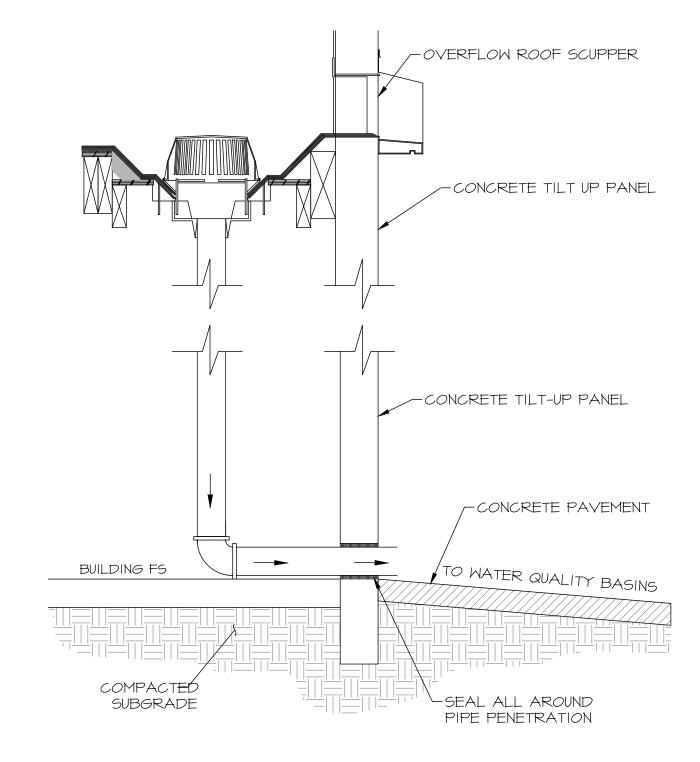




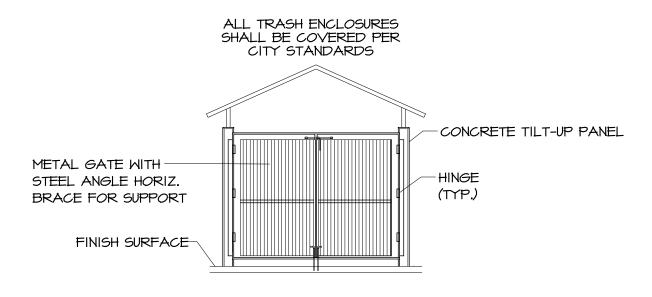
THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE SOLE PROPERTY OF CONTECH AND ITS COMPANIES. THIS DOCUMENT, NOR ANY PART THEREOF, MAY BE USED, REPRODUCED OR MODIFIED IN ANY MANNER WITH OUT THE WRITTEN CONSENT OF CONTECH.

ENGINEERED SOLUTIONS LLC www.ContechES.com

MWS-L-8-20-V STORMWATER BIOFILTRATION SYSTEM STANDARD DETAIL

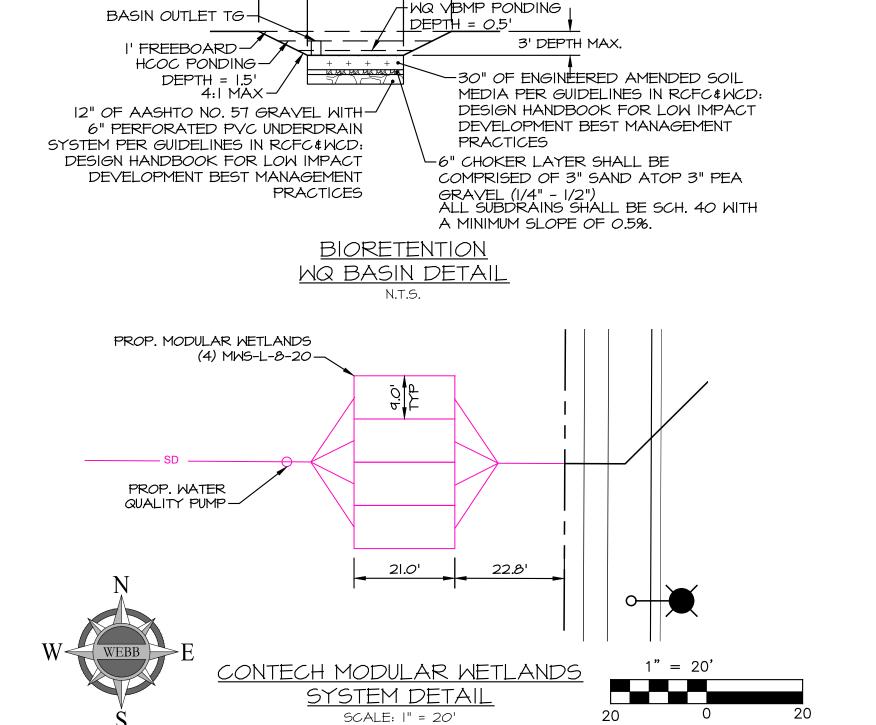


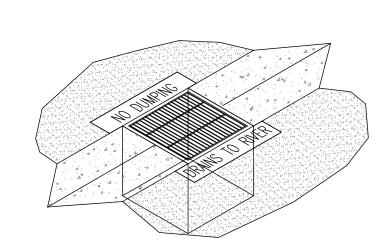


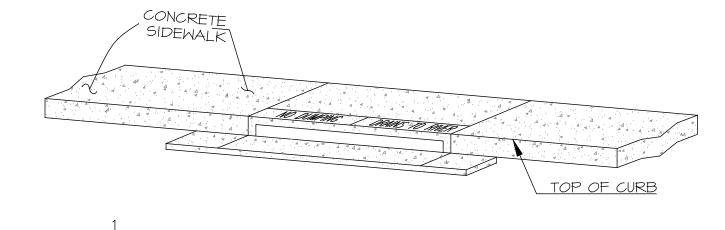


TRASH ENCLOSURE GATE ELEVATION

PROP BIORETENTION





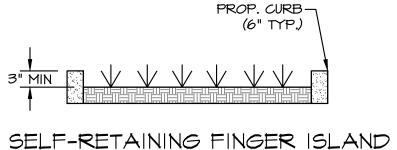


- STENCILS TO HAVE 2" LETTERS AS FOLLOWS: "NO DUMPING - DRAINS TO RIVER"

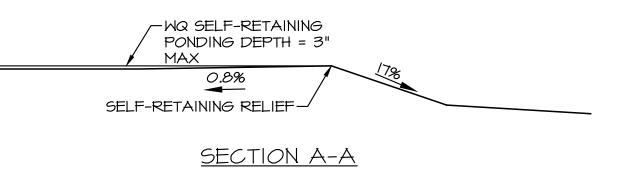
(4)—— REMOVE STENCILS WHEN PAINT IS DRY.

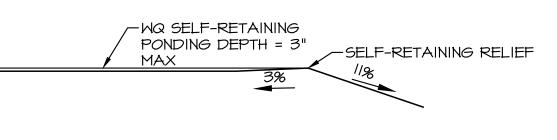
2 PLACE BOTH STENCILS CENTERED WITHIN THE CATCHBASIN OPENINGS AND WITHIN THE TOP OF THE CURB.)----- SPRAY BOTH STENCILS WITH WHITE PAINT.

> CATCH BASIN STENCILING DETAIL NTS



ALL SELF-RETAINING AREAS WILL BE DEPRESSED A MINIMUM OF 3-INCHES





SECTION B-B N.T.S.

N.T.S.

COUNTY OF RIVERSIDE

POST CONSTRUCTION BMP SITE PLAN HILLWOOD - MEAD VALLEY COMMERCE CENTER SEATON AVENUE, RIVERSIDE COUNTY PLOT PLAN 220050

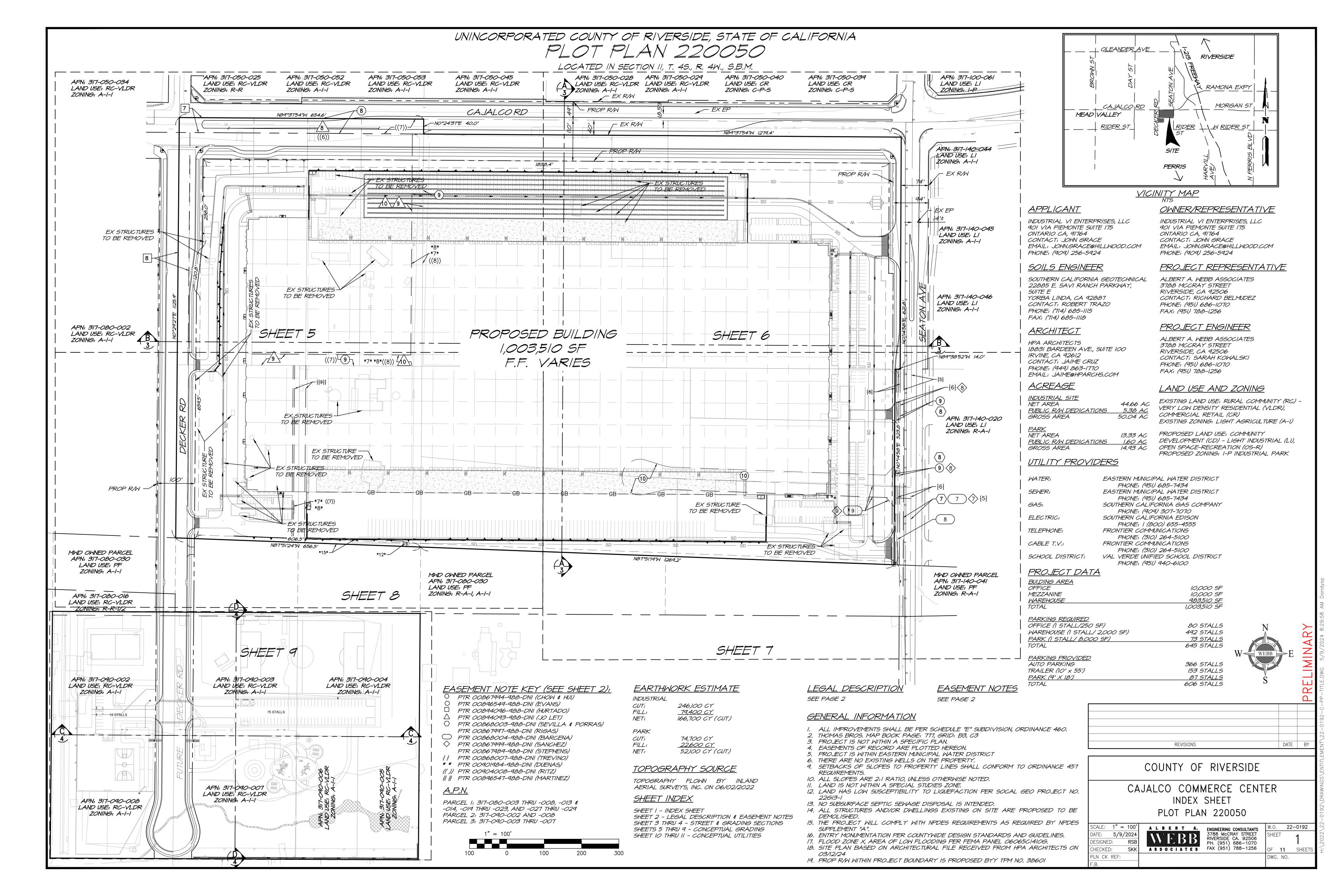
N/A | A L B E R T | A. | ENGINEERING CONSULTANTS | 3788 McCRAY STREET | RIVERSIDE CA. 92506 | PH. (951) 686-1070 | SHEET | 3 DATE: 5/13/2024
DESIGNED: RSB
WEBB CHECKED: SKK ASSOCIATES FAX (951) 788-1256 PLN CK REF: REF

F.B.

OF 3 SHEETS DWG. NO.

Appendix 2: Construction Plans

Grading and Drainage Plans



APN: 317-080-003 (HURTADO)

THE WESTERLY 200.00 FEET OF THE NORTHEAST QUARTER OF THE NORTHWEST PARCEL I: QUARTER OF THE SOUTHEAST QUARTER OF THE EAST HALF OF THE SOUTHEAST QUARTER RECORDED JANUARY 9, 1978 AS INSTRUMENT SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST, OF THE NORTHWEST QUARTER OF THE NO. 3851, OFFICIAL RECORDS OF SAID SAN BERNARDINO MERIDIAN, IN THE COUNTY SOUTHEAST QUARTER OF SECTION II, TOWNSHIP COUNTY. OF RIVERSIDE, STATE OF CALIFORNIA, 4 SOUTH, RANGE 4 WEST, SAN BERNARDINO ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 317-080-004 (EVANS)

QUARTER OF THE SOUTHEAST QUARTER OF PAGE 68 OF OFFICIAL RECORDS. SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST, COUNTY OF RIVERSIDE, STATE OF THAT CERTAIN CERTIFICATE OF COMPLIANCE CALIFORNIA, ACCORDING TO THE OFFICIAL CALIFORNIA.

PARCEL 2:

A NON-EXCLUSIVE EASEMENT FOR ROAD AND PUBLIC UTILITY PURPOSES OVER THE SOUTH PARCEL 2: QUARTER OF THE SOUTHEAST QUARTER OF QUARTER OF THE NORTHWEST QUARTER OF NO. 3849, OF OFFICIAL RECORDS. SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST, THE SOUTHEAST QUARTER OF SECTION II. SAN BERNARDINO BASE AND MERIDIAN, IN THE TOWNSHIP 4 SOUTH, RANGE 4 WEST, SAN ALSO EXCEPTING THEREFROM THE EASTERLY COUNTY OF RIVERSIDE, STATE OF BERNARDINO BASE AND MERIDIAN. CALIFORNIA.

APN: 317-080-005 (JO LET)

THE EAST 144 FEET AT THE WEST 488 FEET OF THE NORTHEAST QUARTER OF THE PARCEL 3: QUARTER OF SECTION II, TOWNSHIP 4, SOUTH, PUBLIC UTILITY PURPOSES OVER THE SOUTH APN: 317-080-028 (SANCHEZ) RANGE 4 WEST, SAN BERNARDINO BASE AND 30 FEET, EXCEPT THE WEST 200 FEET STATE OF CALIFORNIA.

PARCEL 2:

A NON-EXCLUSIVE EASEMENT FOR ROAD AND PUBLIC UTILITY PURPOSES OVER THE SOUTH APN: 317-080-014 (MARTINEZ) 30 FEET AND THE EAST 30 FEET OF THE NORTHEAST QUARTER OF THE NORTHWEST PARCEL IS THEREOF.

APN: 317-080-006 (RITZ)

SAN BERNARDINO BASE AND MERIDIAN, IN THE PAGE 68 OF OFFICIAL RECORDS. COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

FEET THEREOF.

EXCEPTING ANY MOBILE HOME OR PARCEL 2: APPURTENANCES, IF ANY, LOCATED ON SAID

APN: 317-080-001, 008 (STEPHENS)

PARCEL I:

SAN BERNARDINO BASE AND MERIDIAN, IN THE RECORDED AUGUST 17, 1933 IN BOOK 134, SAN BERNARDINO BASE AND MERIDIAN. COUNTY OF RIVERSIDE, STATE OF PAGE 68 OF OFFICIAL RECORDS. CALIFORNIA, AS SHOWN BY UNITED STATES GOVERNMENT SURVEY.

COPY OF SAID DECREE WAS RECORDED BERNARDINO BASE AND MERIDIAN. FEBRUARY 16, 1943 IN BOOK 569 PAGE 491 OF OFFICIAL RECORDS, RIVERSIDE COUNTY APN: 317-080-019, 020, 022 (CHOW & HUI) RECORDS.

ALSO EXCEPTING THEREFROM THE EAST 150 THROUGH E, OF PARCEL MAP NO. 8592, IN THE RIVERSIDE, STATE OF CALIFORNIA. FEET OF THE NORTH 370 FEET OF THE COUNTY OF RIVERSIDE, STATE OF ACCORDING TO THE OFFICIAL PLAT THEREOF. NORTHWEST QUARTER OF THE NORTHEAST CALIFORNIA, AS SHOWN BY MAP ON FILE IN QUARTER OF THE SOUTHEAST QUARTER OF BOOK 40 PAGE 31 OF PARCEL MAPS, IN THE EXCEPTING THEREFROM THE MOBILE HOME OR SAID SECTION II.

ALSO EXCEPTING THEREFROM THE MOBILE HOME OR MANUFACTURED HOUSING UNIT AND APN: 317-080-021 (TREVINO) APPURTENANCES, IF ANY, LOCATED ON SAID LAND.

PARCEL 2:

OF THE NORTHWEST QUARTER OF THE CALIFORNIA. NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION II, TOWNSHIP 4 SOUTH, APN: 317-080-023 (RIGAS) RANGE 4 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF RIVERSIDE, THE NORTHEAST QUARTER OF THE NORTHEAST STATE OF CALIFORNIA, AS SHOWN BY UNITED QUARTER OF THE SOUTHEAST QUARTER OF STATES GOVERNMENT SURVEY.

EXCEPTING THEREFROM THE NORTHERLY 40 COUNTY OF RIVERSIDE, STATE OF FEET ACQUIRED BY THE COUNTY OF CALIFORNIA, ACCORDING TO THE OFFICIAL RIVERSIDE BY DECREE OF CONDEMNATION PLAT THEREOF. HAD IN THE SUPERIOR COURT OF STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF EXCEPTING THE NORTHERLY 40 FEET

THE LAND REFERRED TO HEREIN IS SITUATED COPY OF SAID DECREE WAS RECORDED 33459 IN THE SUPERIOR COURT OF RIVERSIDE APN: 317-080-003 (HURTADO) IN THE COUNTY OF RIVERSIDE, STATE OF FEBRUARY 16, 1943 IN BOOK 569 PAGE 491 OF COUNTY, CALIFORNIA. RECORDED FEBRUARY CALIFORNIA AND IS DESCRIBED AS FOLLOWS: OFFICIAL RECORDS, RIVERSIDE COUNTY I6, 1943 IN BOOK 569 PAGE 491 OF OFFICIAL 7.

APN: 317-080-013 (DUENAS)

BASE AND MERIDIAN, IN THE COUNTY OF **APN: 317-080-027 (BARCENA)** RIVERSIDE, STATE OF CALIFORNIA.

CONVEYED TO METROPOLITAN WATER 626 FEET OF THAT PORTION OF THE THE EAST 144 FEET OF THE WEST 344 OF THE DISTRICT OF SOUTHERN CALIFORNIA, BY DEED SOUTHEAST QUARTER OF THE NORTHEAST NORTHEAST QUARTER OF THE NORTHWEST RECORDED AUGUST 17, 1933 IN BOOK 134, QUARTER OF THE SOUTHEAST QUARTER OF

CONVEYED TO METROPOLITAN WATER OFFICIAL RECORDS. DISTRICT OF SOUTHERN CALIFORNIA, BY DEED RECORDED AUGUST 17, 1933 IN BOOK 134 ALSO EXCEPTING THEREFROM THE MOBILE PAGE 68 OF OFFICIAL RECORDS.

NORTHWEST QUARTER OF THE SOUTHEAST A NON-EXCLUSIVE EASEMENT FOR ROAD AND MERIDIAN, IN THE COUNTY OF RIVERSIDE, THEREOF AND THE EAST 30 FEET OF THE THE SOUTH 209 FEET OF THE EAST 626 FEET SAN BERNARDINO BASE AND MERIDIAN.

QUARTER OF THE SOUTHEAST QUARTER OF THE WEST HALF OF THE SOUTHEAST QUARTER WATER DISTRICT RIGHT OF WAY. SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST, OF THE NORTHWEST QUARTER OF THE SAN BERNARDINO BASE AND MERIDIAN, SOUTHEAST QUARTER OF SECTION II, TOWNSHIP EXCEPTING THEREFROM THE WEST 488 FEET 4 SOUTH, RANGE 4 WEST, SAN BERNARDINO COUNTY OF RIVERSIDE BY DEEDS RECORDED BASE AND MERIDIAN, IN THE COUNTY OF JANUARY 9, 1978 AS INSTRUMENT NO. 3849 RIVERSIDE, STATE OF CALIFORNIA.

EXCEPTING THEREFROM THAT PORTION THE NORTHEAST QUARTER OF THE NORTHWEST CONVEYED TO METROPOLITAN WATER

SAID LAND IS PURSUANT TO THE CERTIFICATE ALSO EXCEPT THEREFROM THAT PORTION OF OF COMPLIANCE NO. 07219 RECORDED MAY CERTIFICATE OF COMPLIANCE NO. 06150 EXCEPTING THEREFROM THE WESTERLY 488 27, 2015 AS INSTRUMENT NO. 2015-0219558, RECORDED NOVEMBER 14, 2005 AS OF OFFICIAL RECORDS.

MANUFACTURED HOUSING UNIT AND A NON-EXCLUSIVE EASEMENT FOR ROAD AND THE WESTERLY 160.00 FEET OF THE PUBLIC UTILITY PURPOSES OVER THE WEST IT NORTHERLY 136.00 FEET OF THE EASTERLY FEET OF THE EAST HALF OF THE SOUTHEAST 524.00 FEET OF THAT CERTAIN PARCEL OF QUARTER OF THE NORTHWEST QUARTER OF LAND SHOWN AS "NOT A PART" ON PARCEL THE SOUTHEAST QUARTER OF SECTION II, MAP NO. 8592 RECORDED IN BOOK 40 PAGE TOWNSHIP 4 SOUTH, RANGE 4 WEST, SAN 31 OF PARCEL MAPS, RECORDS OF THE BERNARDINO BASE AND MERIDIAN.

PARCEL 3:

EXCEPTING THEREFROM THE NORTHERLY 40 PUBLIC UTILITY PURPOSES OVER THE SOUTH NORTHERLY 136.00 FEET OF THE EASTERLY FEET ACQUIRED BY THE COUNTY OF 30 FEET, EXCEPT THE WEST 200 FEET AND 524.00 FEET OF THAT CERTAIN PARCEL OF RIVERSIDE BY DECREE OF CONDEMNATION THE EAST 30 FEET OF THE NORTHEAST LAND SHOWN AS "NOT A PART" ON PARCEL APN: 317-080-013 (DUENAS) HAD IN THE SUPERIOR COURT OF STATE OF QUARTER OF THE NORTHWEST QUARTER OF MAP NO. 8592 RECORDED IN BOOK 40, PAGE CALIFORNIA, IN AND FOR THE COUNTY OF THE SOUTHEAST QUARTER OF SECTION II, 31 OF PARCEL MAPS, IN THE OFFICE OF THE RIVERSIDE, CASE NO. 33459, A CERTIFIED TOWNSHIP 4 SOUTH, RANGE 4 WEST, SAN COUNTY RECORDER OF RIVERSIDE COUNTY,

OFFICE OF THE COUNTY RECORDER OF SAID MANUFACTURED HOUSING UNIT AND COUNTY.

INSTRUMENT NO. 201660, IN THE OFFICIAL RECORDS. THE EAST 150 FEET OF THE NORTH 370 FEET RECORDS OF RIVERSIDE COUNTY, STATE OF

SECTION II TOWNSHIP 4 SOUTH, RANGE 4 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE

RIVERSIDE, CASE NO. 33459, A CERTIFIED CONDEMNED BY THE COUNTY OF RIVERSIDE FOR HIGHWAY PURPOSES BY ACTION NO.

RECORDS.

ALSO EXCEPTING THE EASTERLY RECTANGULAR 30 FEET AS CONVEYED TO THE COUNTY OF RIVERSIDE BY GRANT DEED

THE EAST 364.00 FEET OF THE NORTH 136.00 EXCEPTING THEREFROM THAT PORTION FEET OF THE SOUTH 209 FEET OF THE EAST SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE SAN BERNARDINO BASE AND MERIDIAN, IN THE SAID DESCRIPTION IS MADE PURSUANT TO COUNTY OF RIVERSIDE, STATE OF NO. 5543, RECORDED JANUARY 13, 2004 AS PLAT THEREOF, LYING NORTHERLY OF THE INSTRUMENT NO. 2004-002344T, OF OFFICIAL METROPOLITAN WATER DISTRICT RIGHT OF

EXCEPTING THEREFROM THE EASTERLY 30 FEET, EXCEPT THE WEST 344 FEET A NON-EXCLUSIVE EASEMENT FOR ROAD AND RECTANGULAR 30 FEET THEREOF, CONVEYED THEREOF; AND THE EAST 30 FEET OF THE PUBLIC UTILITY PURPOSES OVER THE EAST IT TO THE COUNTY OF RIVERSIDE IN THE DEED NORTHEAST QUARTER OF THE NORTHWEST FEET OF THE WEST HALF OF THE SOUTHEAST RECORDED JANUARY 9, 1978, AS INSTRUMENT

> 44 FEET THEREOF, CONVEYED TO THE COUNTY OF RIVERSIDE IN THE DEED RECORDED APRIL EXCEPTING THEREFROM THAT PORTION 1, 1978, AS INSTRUMENT NO. 66941, OF

> > HOME OR MANUFACTURED HOUSING UNIT AND APPURTENANCES, IF ANY, LOCATED ON SAID LAND.

NORTHEAST QUARTER OF THE NORTHWEST OF THAT PORTION OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF QUARTER OF THE NORTHEAST QUARTER OF SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST, THE SOUTHEAST QUARTER OF SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA ACCORDING TO THE OFFICIAL PLAT THEREOF, LYING NORTHERLY OF THE METROPOLITAN

> EXCEPT THOSE PORTIONS CONVEYED TO THE AND APRIL 7, 1978 AS INSTRUMENT NO. 66941, BOTH OF OFFICIAL RECORDS.

ALSO EXCEPT THAT PORTION CONVEYED TO QUARTER OF THE SOUTHEAST QUARTER OF DISTRICT OF SOUTHERN CALIFORNIA BY DEED DAN J. BARUNA AND DORTHY Z. BARUNA SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST. RECORDED AUGUST 17, 1933 IN BOOK 134, RECORDED JUNE 20, 1978 AS INSTRUMENT NO. 125771, OFFICIAL RECORDS.

> INSTRUMENT 2005-0941064 AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

RECORDER OF RIVERSIDE COUNTY, STATE OF CALIFORNIA, LYING WITHIN A PORTION OF THE 8. THE NORTHWEST QUARTER OF THE NORTHEAST EXCEPTING THEREFROM THAT PORTION SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF CONVEYED TO METROPOLITAN WATER QUARTER OF THE SOUTHEAST QUARTER OF SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST, DISTRICT OF SOUTHERN CALIFORNIA BY DEED SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST,

APN: 317-080-029 (SEVILLA & PORRAS)

A NON-EXCLUSIVE EASEMENT FOR ROAD AND THE WESTERLY 160.00 FEET OF THE LYING WITHIN A PORTION OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION II, TOWNSHIP 4 SOUTH, RANGE 4 WEST, SAN PARCELS I, 2 AND 4 AND LETTERED LOTS C BERNARDINO MERIDIAN, IN THE COUNTY OF

> APPURTENANCES, IF ANY, LOCATED ON SAID LAND.

SAID DESCRIPTION IS PURSUANT TO THAT PARCEL 3 OF PARCEL MAP NO. 8592, IN THE CERTAIN CERTIFICATE OF COMPLIANCE NO. COUNTY OF RIVERSIDE, STATE OF 6150, RECORDED NOVEMBER 14, 2005, AS CALIFORNIA, RECORDED 12 OCTOBER 1977 AS INSTRUMENT NO. 2005-0941064, OF OFFICIAL

EASEMENT NOTES

AN EASEMENT FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT: IN FAVOR OF: COUNTY OF RIVERSIDE PURPOSE: PUBLIC HIGHWAY AND UTILITY PURPOSES RECORDING DATE: JUNE 27, 1939

RECORDING NO: 1939-3321, OF OFFICIAL RECORDS

AN EASEMENT FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT: IN FAVOR OF: CALIFORNIA ELECTRIC POWER COMPANY, A CORPORATION AND CALIFORNIA WATER AND

TELEPHONE COMPANY, A CORPORATION

PURPOSE: PUBLIC UTILITIES RECORDING DATE: AUGUST 16, 1963 RECORDING NO: 1963-86541, OF OFFICIAL RECORDS

APN: 317-080-004 (EVANS)

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT: GRANTED TO: COUNTY OF RIVERSIDE PURPOSE: PUBLIC HIGHWAY AND PUBLIC UTILITY

RECORDING DATE: JUNE 27, 1939 RECORDING NO: IN BOOK 421 PAGE 363, OF OFFICIAL RECORDS

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT; ROAD AND PUBLIC UTILITY PURPOSE: RECORDING DATE: SEPTEMBER 11, 1970 RECORDING NO: 91875, OF OFFICIAL RECORDS

APN: 317-080-005 (JO LET)

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT: PUBLIC HIGHWAY AND PUBLIC UTILITY AND INCIDENTAL **PURPOSES**

RECORDING DATE: JUNE 27, 1939 RECORDING NO.: BOOK 421, PAGE 363, OF OFFICIAL RECORDS

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT; ROAD AND PUBLIC UTILITY AND INCIDENTAL PURPOSES RECORDING DATE: SEPTEMBER 17, 1970 RECORDING NO .: 91870, OF OFFICIAL RECORDS

TO BE VACATED

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT; PURPOSE: ROAD AND PUBLIC UTILITY AND INCIDENTAL PURPOSES RECORDING DATE: SEPTEMBER 17, 1970 RECORDING NO.: 91872, OF OFFICIAL RECORDS TO BE VACATED

APN: 317-080-006 (RITZ)

TO BE VACATED

((6)) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT: PURPOSE: PULBIC HIGHWAY AND PUBLIC UTILITY RECORDING DATE: JUNE 27, 1939 RECORDING NO.: BOOK 421, PAGE 363, OF OFFICIAL RECORDS

((1)) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT; ROAD AND PUBLIC UTILITY RECORDING DATE: SEPTEMBER 17, 1970 RECORDING NO .: 91870, OF OFFICIAL RECORDS

((8)) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT: PURPOSE: ROAD AND PUBLIC UTILITY RECORDING DATE: SEPTEMBER 17, 1970 RECORDING NO .: 91872, OF OFFICIAL RECORDS TO BE VACATED

APN: 317-080-007, 008 (STEPHENS)

RESERVATIONS CONTAINED IN THE PATENT FROM: THE UNITED STATES OF AMERICA TO: SOUTHERN PACIFIC RAILROAD COMPANY OF CALIFORNIA, A CORPORATION RECORDING DATE: DECEMBER 04, 1891 RECORDING NO: BOOK 1, PAGE 59, OF PATENTS, SAN DIEGO COUNTY

RECORDS [THE LEGAL DESCRIPTION IS AMBIGUOUS - BLANKET IN NATURE] [LANDS DESCRIBED ARE NORTH OF BASE LINE AND EAST OF SAN BERNARDINO PRINCIPAL MERIDIAN]

TO BE VACATED

PURPOSE:

7 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT: PURPOSE: ROAD AND PUBLIC UTILITY RECORDING DATE: SEPTEMBER 17, 1970 RECORDING NO.: 91873, OF OFFICIAL RECORDS TO BE VACATED

8 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT; PURPOSE: ROAD AND PUBLIC UTILITY RECORDING DATE: SEPTEMBER 17, 1970 RECORDING NO.: 91879, OF OFFICIAL RECORDS

I2 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS GRANTED IN A DOCUMENT: GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION

PUBLIC UTILITIES

THERETO AS GRANTED IN A DOCUMENT:

RECORDING DATE: JULY 25, 2007 RECORDING NO: 2001-0482864, OF OFFICIAL RECORDS *|5* EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL

CORPORATION PURPOSE: PUBLIC UTILITIES RECORDING DATE: MARCH 30, 2016 RECORDING NO: 2016-0122656, OF OFFICIAL RECORDS

GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY, A

APN: 317-080-014 (MARTINEZ)

{{9}} EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT; ROAD AND PUBLIC UTILITY RECORDING DATE: SEPTEMBER 17, 1970

APN: 317-080-019, 020, 022 (CHOW & HUI)

[OUTSIDE OF THE SUBJECT PROPERTY]

RECORDING NO .: 91883, OF OFFICIAL RECORDS

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT: GRANTED TO: CALIFORNIA WATER AND TELEPHONE COMPANY, A CORPORATION PUBLIC UTILITIES RECORDING DATE: MAY 25, 1962 RECORDING NO: IN BOOK 3148 PAGE 102, OF OFFICIAL RECORDS

ALL EASEMENTS, OFFERS AND DEDICATIONS AS SHOWN ON THE OFFICIAL MAP TRACT OF: PARCEL MAP NO. 8592. TO BE VACATED.

APN: 317-080-021 (TREVINO)

{5} EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT: PURPOSE: PIPE LINE RECORDING DATE: APRIL 20, 1987

RECORDING NO: BOOK 45, PAGE 362, OF OFFICIAL RECORDS [OUTSIDE OF THE SUBJECT PROPERTY]

{6} EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT: GRANTED TO: CALIFORNIA WATER AND TELEPHONE COMPANY, A CORPORATION PURPOSE: PUBLIC UTILITIES RECORDING DATE: MAY 25, 1962 RECORDING NO: BOOK 3148, PAGE 102, OF OFFICIAL RECORDS [IO' WIDE] [OUTSIDE OF THE SUBJECT PROPERTY]

{8} ALL EASEMENTS, OFFERS AND DEDICATIONS AS SHOWN ON THE OFFICIAL MAP PARCEL MAP NO: 8592. [LOT "A" OF PM NO. 8592] [OUTSIDE OF THE SUBJECT PROPERTY]

APN: 317-080-023 (RIGAS)

7. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT: DIGGING TRENCHES AND LAYING WATER PIPES RECORDING DATE: APRIL II, 1911 RECORDING NO: IN BOOK 325 PAGE 356, OF DEEDS [BLANKET IN NATURE - AFFECTS THE NEI/4, NEI/4, SEI/4, SEC. II]

APN: 317-080-021 (BARCENA)

6. RESERVATIONS CONTAINED IN THE PATENT FROM: THE UNITED STATES OF AMERICA SOUTHERN PACIFIC RAILROAD COMPANY OF TO: CALIFORNIA, A CORPORATION RECORDING DATE: DECEMBER 04, 1891 RECORDING NO: BOOK 7, PAGE 59, OF PATENTS, SAN DIEGO COUNTY

[THE LEGAL DESCRIPTION IS AMBIGUOUS - BLANKET IN NATURE] [LANDS DESCRIBED ARE NORTH OF BASE LINE AND EAST OF SAN BERNARDINO PRINCIPAL MERIDIAN]

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT: RIGHT OF WAY TO ENTER UPON SAID LAND TO MAKE CONNECTIONS WITH THE MAIN PIPE LINE OF THE PERRIS IRRIGATION DISTRICT; ALSO A RIGHT OF WAY FOR

CONNECTION WITH SAID PIPE LINE RECORDING DATE: APRIL 20, 1897 RECORDING NO: BOOK 47, PAGE 362, OF [OUTSIDE OF THE SUBJECT PROPERTY]

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT: GRANTED TO: THE NEVADA-CALIFORNIA ELECTRIC

CORPORATION ELECTRIC POWER AND TELEPHONE POLE LINE RECORDING DATE: AUGUST 26, 1938 RECORDING NO: BOOK 389, PAGE 259, OF OFFICIAL RECORDS [& OF UNDISCLOSED WIDTH PLOTTED HEREIN] [OUTSIDE OF THE SUBJECT PROPERTY]

(9.) AN IRREVOCABLE OFFER TO DEDICATE AN EASEMENT OVER A PORTION OF SAID LAND FOR PURPOSE(S): PUBLIC ROAD PURPOSES, INCLUDING PUBLIC UTILITY

AND PUBLIC SERVICE USES RECORDING DATE: APRIL 03, 1978 RECORDING NO: 626TT, OF OFFICIAL RECORDS. TO BE VACATED

APN: 317-080-028 (SANCHEZ)

PURPOSE:

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT: PURPOSE: PIPELINES RECORDING DATE: APRIL 20, 1897 RECORDING NO: IN BOOK 47 PAGE 362, OF DEEDS [OUTSIDE OF THE SUBJECT PROPERTY]

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT: GRANTED TO: CALIFORNIA WATER AND TELEPHONE COMPANY, A CORPORATION

RECORDING DATE: MAY 25, 1962 RECORDING NO: IN BOOK 3148 PAGE 102, OF OFFICIAL RECORDS [IO' WIDE - PLOTTED HEREIN] [OUTSIDE OF THE SUBJECT PROPERTY]

PUBLIC UTILITIES

AN IRREVOCABLE OFFER TO DEDICATE AN EASEMENT OVER A PORTION OF SAID LAND FOR PURPOSE(S): ROAD, PUBLIC UTILITIES AND PUBLIC SERVICE USES RECORDING DATE: APRIL 3, 1978 RECORDING NO: 626TT, OF OFFICIAL RECORDS TO BE VACATED

APN: 317-080-029 (SEVILLA & PORRAS)

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT: PIPELINE PURPOSE: RECORDING DATE: APRIL 20, 1897 RECORDING NO: BOOK 47, PAGE 362 OF DEEDS

[OUTSIDE OF THE SUBJECT PROPERTY]

EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT: GRANTED TO: CALIFORNIA WATER AND TELEPHONE COMPANY, A

CORPORATION PUBLIC UTILITIES RECORDING DATE: MAY 25, 1962

RECORDING NO: BOOK 3148, PAGE 102, OF OFFICIAL RECORDS [IO' WIDE - PLOTTED HEREIN] [OUTSIDE OF THE SUBJECT PROPERTY]

COUNTY OF RIVERSIDE

CAJALCO COMMERCE CENTER LEGAL DESC. AND EASEMENT NOTES PLOT PLAN 220050

SKK

5/9/2024

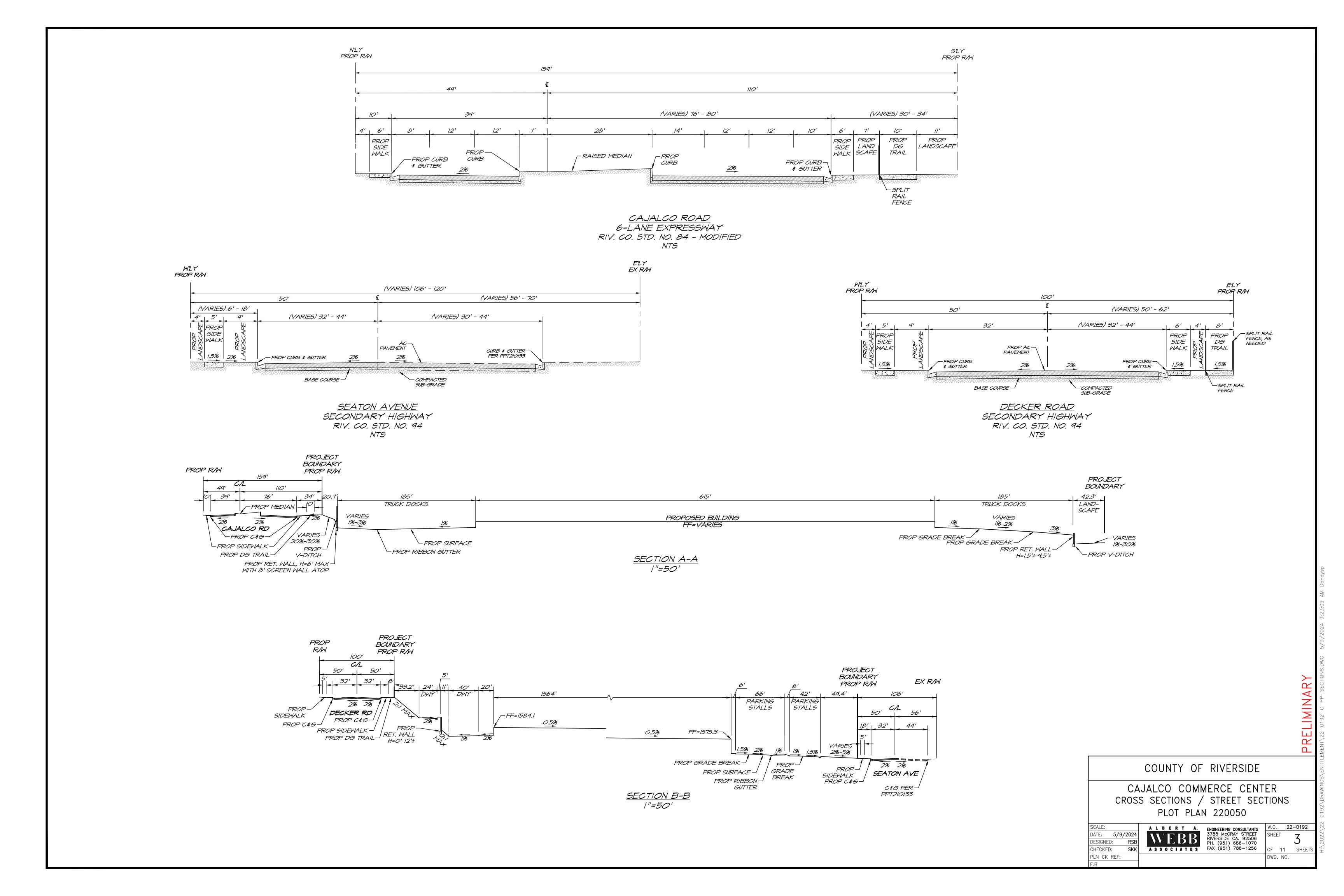
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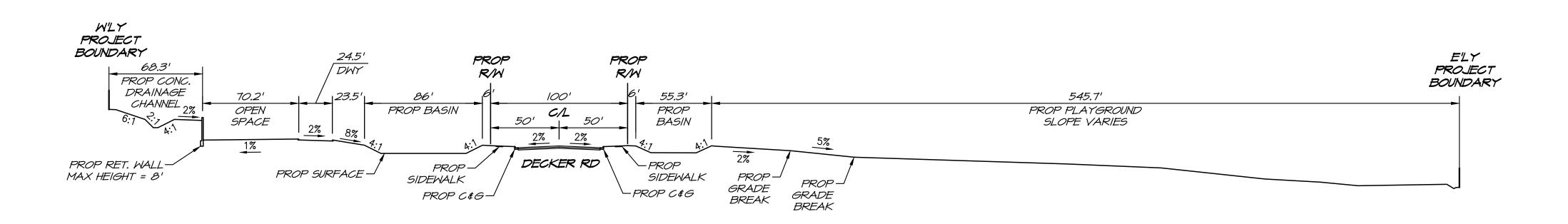
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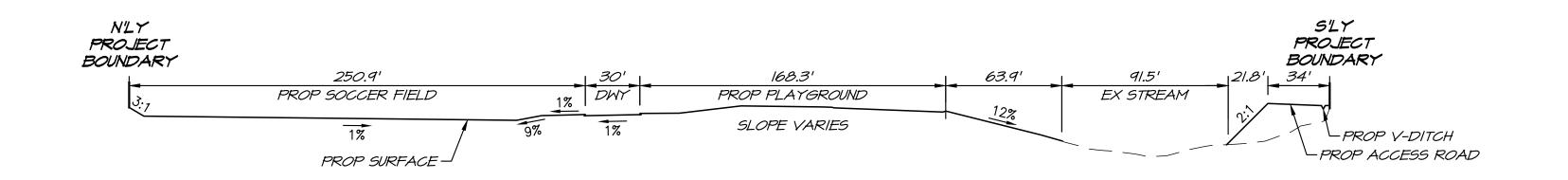
A L B E R T A. ENGINEERING CONSULTANTS W.O. 22-0192 3788 McCRAY STREET PH. (951) 686-1070 **A S S O C I A T E S** FAX (951) 788-1256

SHEET \mathbf{C} OF 11 SHEETS DWG. NO.





<u>SECTION C-C</u> |"=50'



<u>SECTION D-D</u> |"=50"

COUNTY OF RIVERSIDE

CAJALCO COMMERCE CENTER GRADING SECTIONS PLOT PLAN 220050

SCALE: 1" = 50'

DATE: 5/9/2024

DESIGNED: RSB

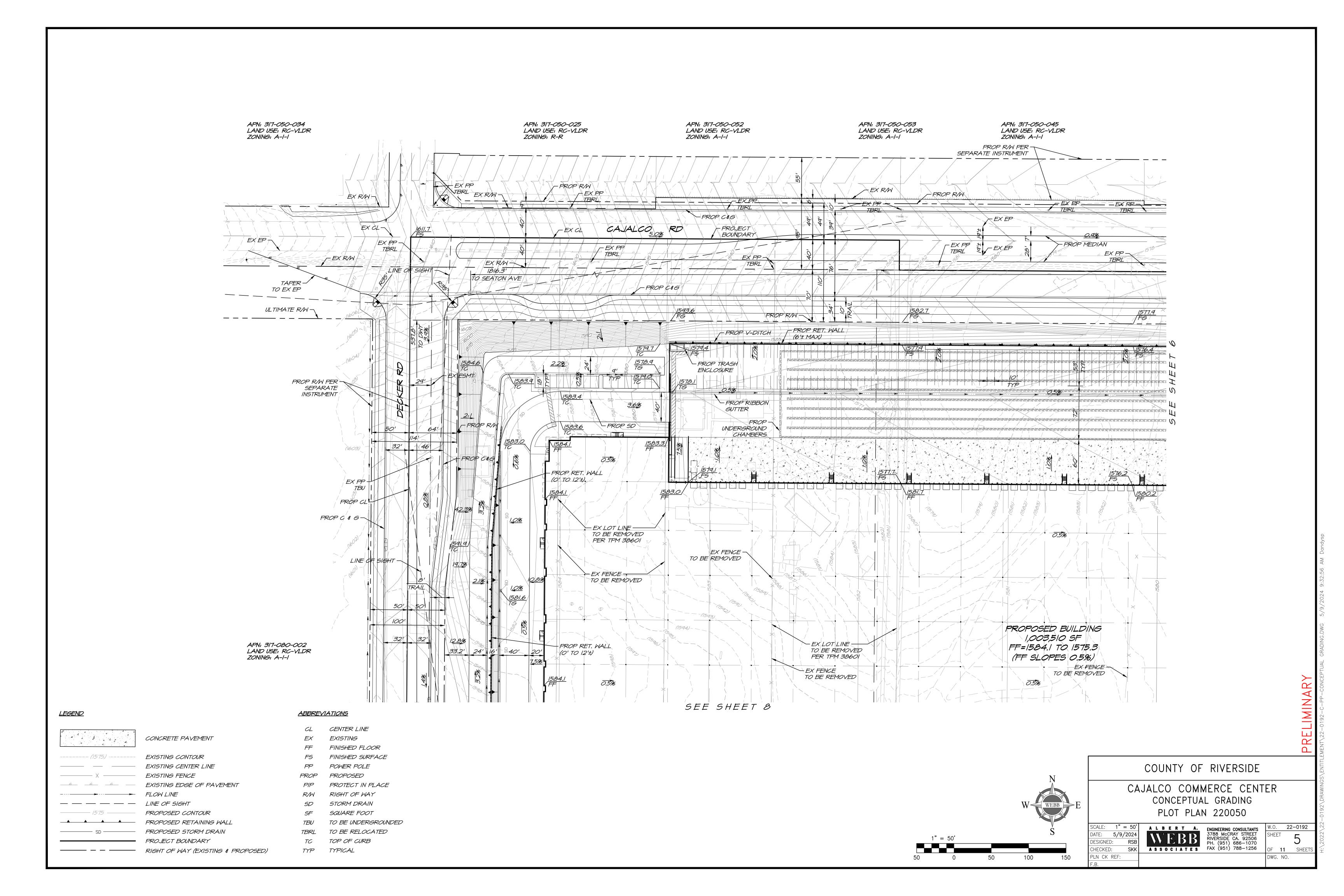
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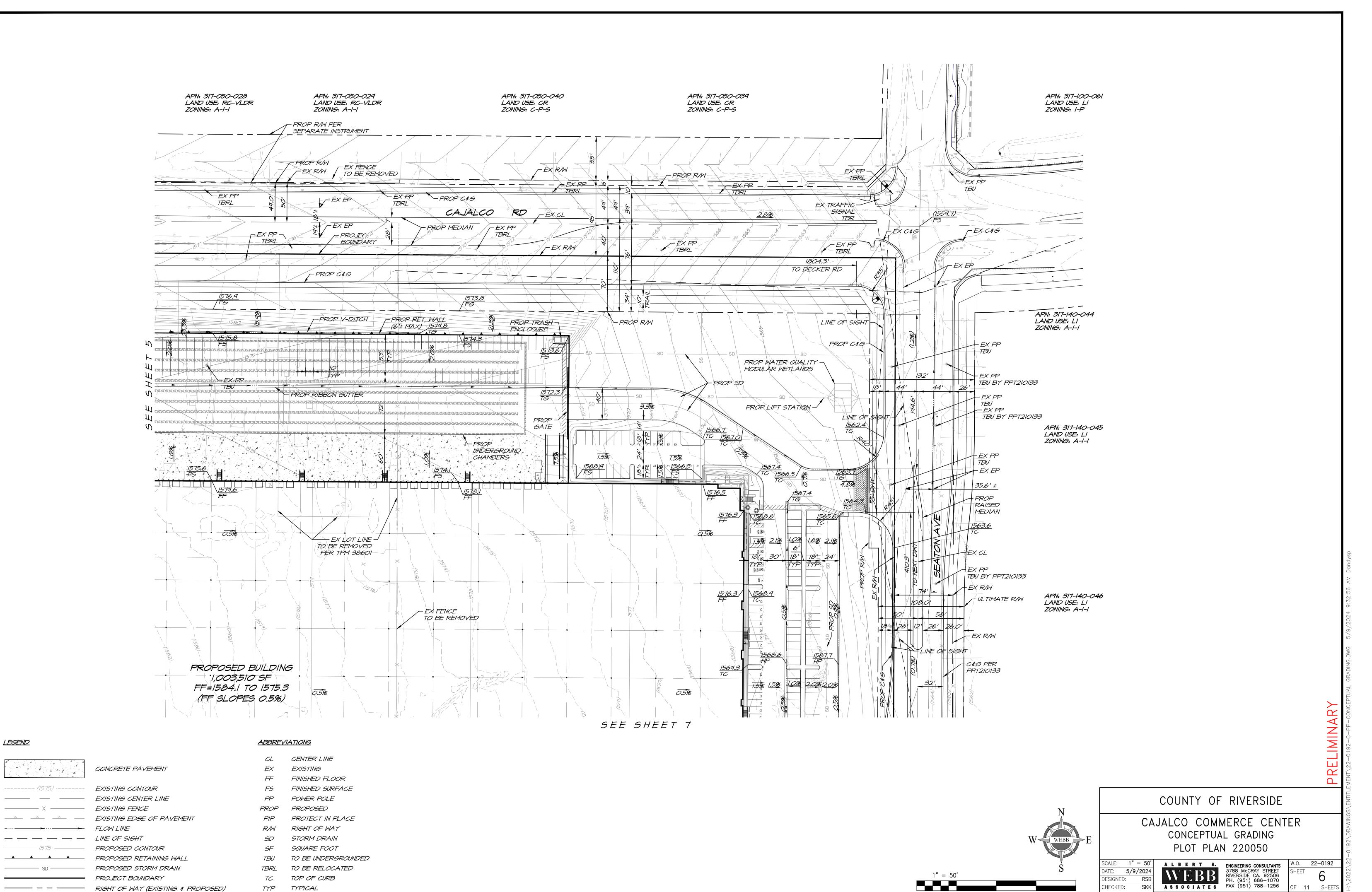
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A L B E R T A.

ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

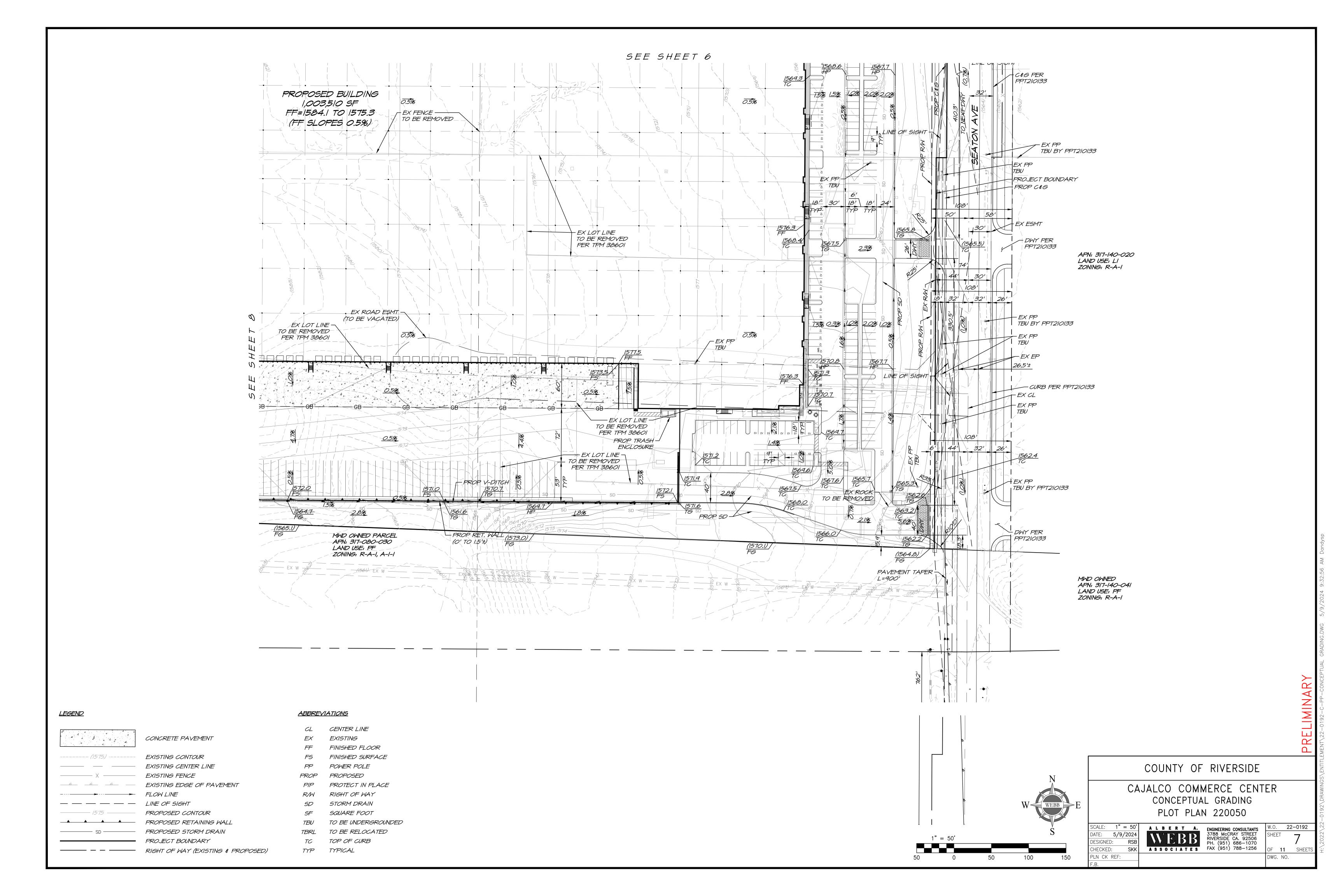
OF 11 SHEETS DWG. NO.

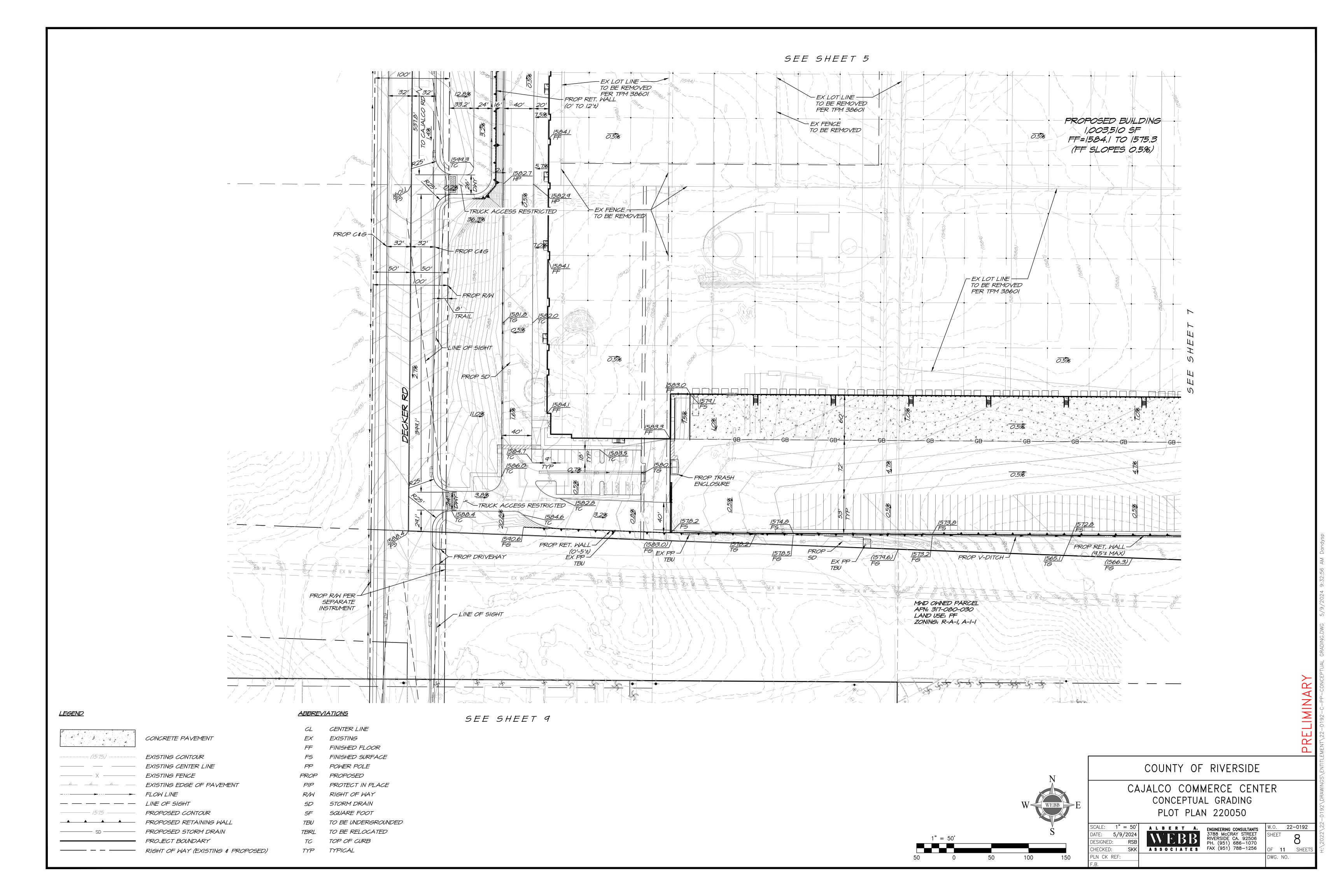


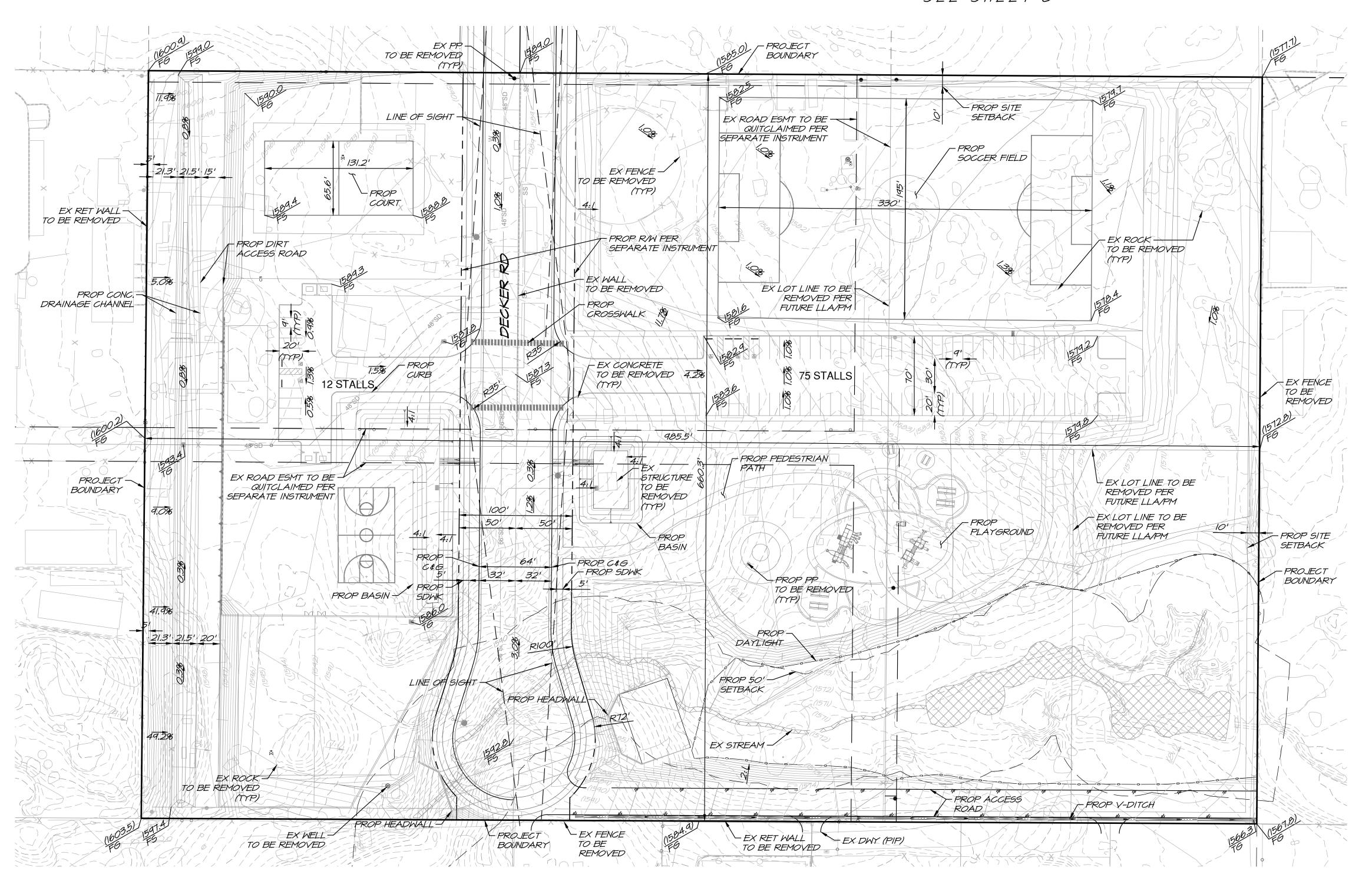


PLN CK REF:

DWG. NO.







PROJECT BOUNDARY

RIGHT OF WAY (EXISTING & PROPOSED)

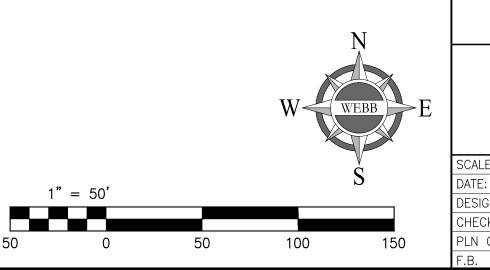
<u>LEGEND</u>

<u>ABBREVIATIONS</u>

TYP TYPICAL

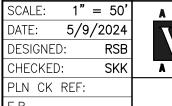
CL CENTER LINE

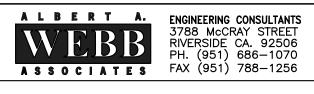
EX	EXISTING
FF	FINISHED FLOOR
FS	FINISHED SURFACE
PP	POWER POLE
PROP	PROPOSED
PIP	PROTECT IN PLACE
R/W	RIGHT OF WAY
SD	STORM DRAIN
SF	SQUARE FOOT
TBU	TO BE UNDERGROUNDED
TBRL	TO BE RELOCATED
TC	TOP OF CURB

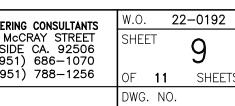


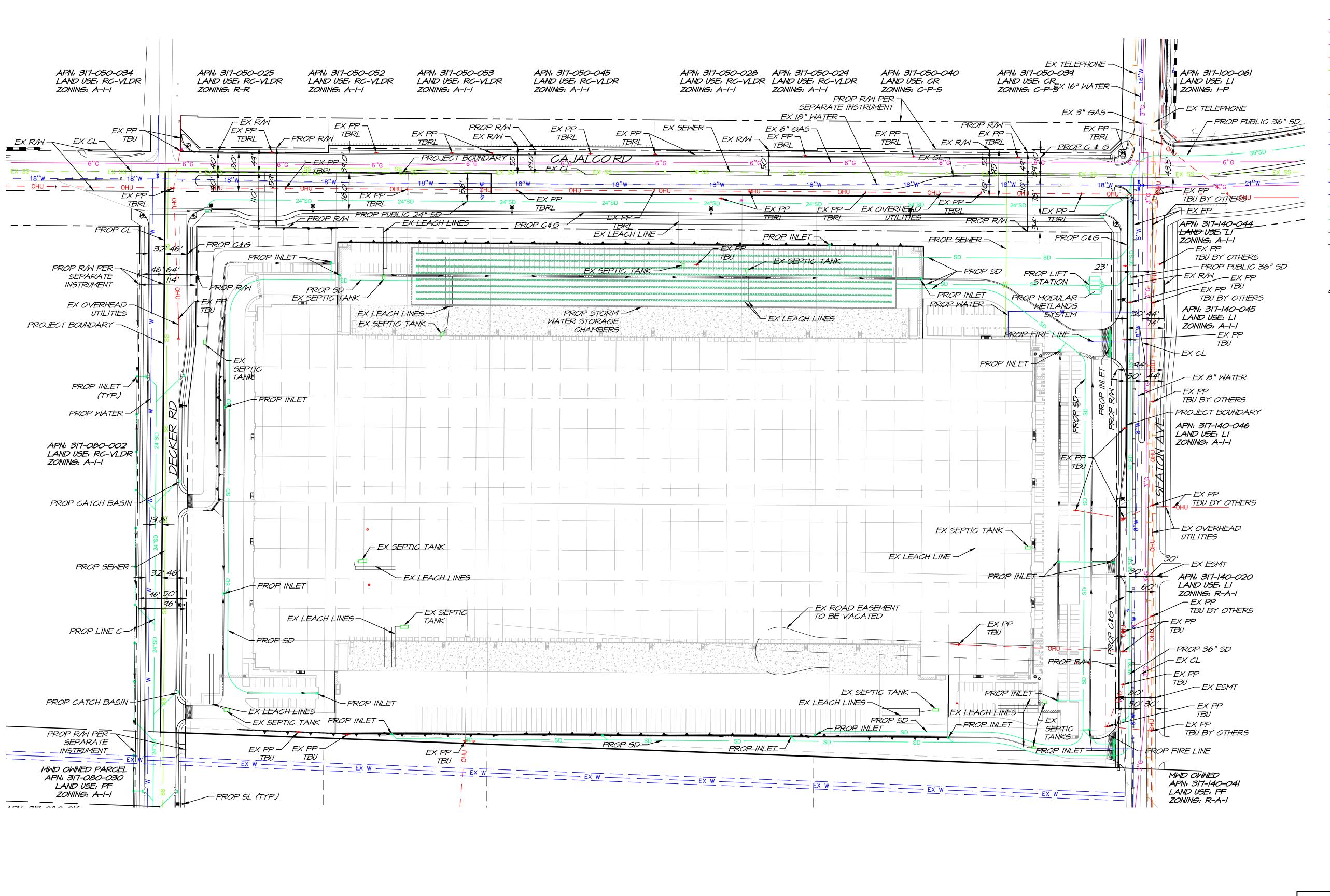
COUNTY OF RIVERSIDE

CAJALCO COMMERCE CENTER CONCEPTUAL GRADING PLOT PLAN 220050

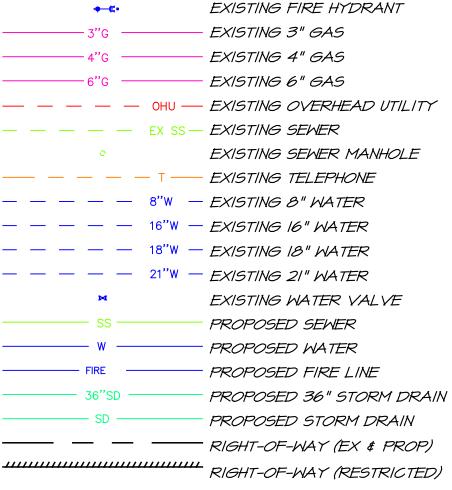










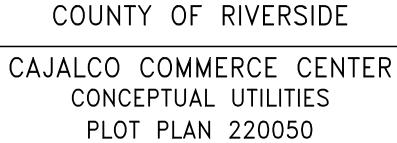


EXISTING AIR VALVE

PROPOSED STREET LIGHT

ABBREVIATIONS

CENTER LINE CLC\$G CURB & GUTTER **ESMT** EASEMENT EP EDGE OF PAVEMENT EΧ EXISTING PP POWER POLE PROP PROPOSED PIP PROTECT IN PLACE R/W RIGHT-OF-WAY SD STORM DRAIN SL STREET LIGHT TBU TO BE UNDERGROUNDED



5/9/2024 DESIGNED: CHECKED: SKK PLN CK REF:

1" = 100'

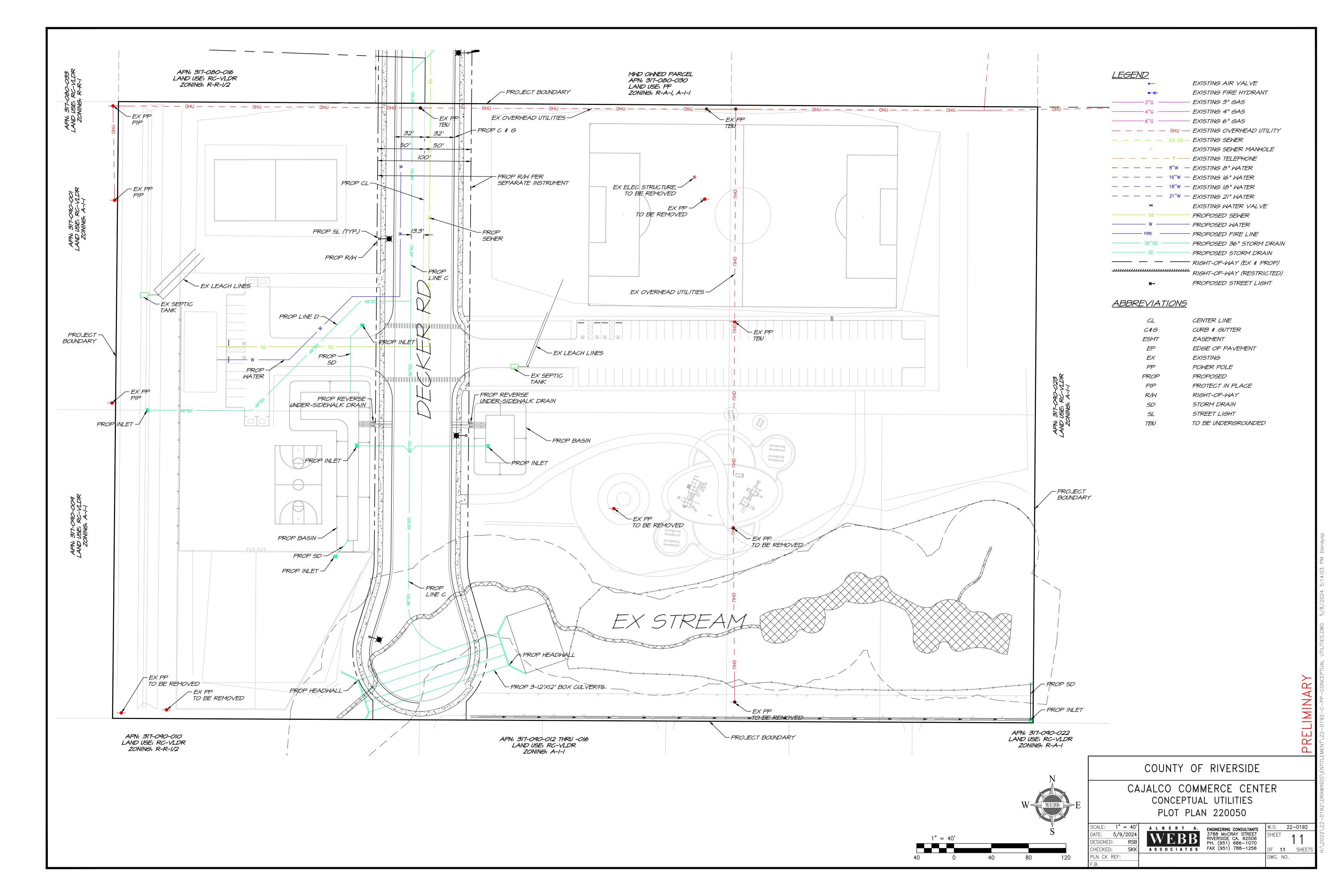
100

200

W.O. **22-0192** SHEET OF 11 SHEET DWG. NO.

A L B E R T A.

ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE CA. 92506
PH. (951) 686–1070
PH. (951) 788 1256 ASSOCIATES FAX (951) 788-1256



Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data

November 30, 2022

Hillwood 901 Via Piemonte, Suite 175 Ontario, California 91764

Attention: Mr. John Grace

Vice President, Development

Project No.: **22G213-2**

Subject: Storm Water Infiltration

Proposed Warehouse Development SWC Cajalco Road and Seaton Avenue Riverside County (Perris Area), California

Reference: <u>Geotechnical Investigation, Proposed Warehouse Development, SWC Cajalco Road</u>

<u>and Seaton Avenue, Riverside County (Perris), California</u>, prepared for Hillwood, by Southern California Geotechnical, Inc. (SCG), SCG Project No. 22G213-1, dated

SoCalGeo

SOUTHERN

CALIFORNIA

A California Corporation

No. 2655

GEOTECHNICAL

August 25, 2022.

Mr. Grace:

In accordance with your request, we have prepared this letter to comment on the feasibility for storm water infiltration at the subject site.

Based on the conditions encountered at the time of the referenced geotechnical investigation, the site is underlain by Val Verde Tonalite bedrock. The bedrock materials were encountered at depths of 0 to 17± feet. The bedrock materials possess high strengths with very poor infiltration characteristics. Based on the identified subsurface conditions, on-site storm water infiltration is not considered feasible and is not recommended for this project.

We sincerely appreciate the opportunity to be of service on this project. We look forward to providing additional consulting services during the course of the project. If we may be of further assistance in any manner, please contact our office.

Respectfully Submitted,

SOUTHERN CALIFORNIA GEOTECHNICAL, INC.

Daryl Kas, CEG 2467 Senior Geologist

Distribution: (1) Addressee

Robert G. Trazo, GE 2655 Principal Engineer

22885 Savi Ranch Parkway ▼ Suite E ▼ Yorba Linda ▼ California ▼ 92887 voice: (714) 685-1115 ▼ fax: (714) 685-1118 ▼ www.socalgeo.com



April 17, 2023

Hillwood 901 Via Piemonte, Suite 175 Ontario, California 91764

Attention: M. John Grace

Vice President, Development

Project No.: **22G213-4**

Subject: Seismic Refraction Study

Proposed Warehouse Development SWC Cajalco Road and Seaton Avenue Riverside County (Perris Area), California

Reference: <u>Geotechnical Investigation, Proposed Warehouse Development, SWC Cajalco</u>

Road and Seaton Avenue, Riverside County (Perris Area), California, prepared by Southern California Geotechnical, Inc. (SCG), SCG Project No. 22G213-3, dated

December 9, 2022.

Mr. Grace:

In accordance with your request, we have conducted a seismic refraction study for the subject site. We are pleased to present this report summarizing the conclusions and recommendations developed from our investigation.

Site Conditions

The subject site is located at the southwest corner of Cajalco Road and Seaton Avenue in an unincorporated portion of Riverside County near Perris, California. The site is bounded to the north by Cajalco Road, to the west by the Decker Road easement, to the south by single-family residences, and to the east by Seaton Avenue. The general location of the site is illustrated on the Site Location Map, enclosed as Plate 1 of this report.

The subject site consists of several rectangular-shaped parcels, which total 50± acres in size. The site is currently developed with several single-family residences (SFRs) and one (1) commercial/industrial building. Camino Del Sol trends north-south and transects the subject site.

The western parcels consist of six (6) SFRs that range from 1,200 to 2,000± ft² in size and are of wood frame and stucco construction assumed to be supported on conventional shallow foundations with concrete slab-on-grade floors. Two of these parcels are vacant and undeveloped.

The eastern parcels consist of three (3) SFRs that range from 1,000 to $1,700\pm$ ft² in size and are of wood frame and stucco construction assumed to be supported on conventional shallow foundations with concrete slab-on-grade floors. The industrial building is approximately 1,750

ft² in size located in the east-central area of the site. Five of the parcels are vacant and undeveloped.

Detailed topographic information was provided on a conceptual grading plan prepared by Webb & Associates, Inc. (Webb), the project civil engineer. Site topography ranges from a topographic high of 1610± feet mean sea level (msl) in the northwest corner of the site to 1560± feet msl in the northeast corner of the site. The overall site topography slopes gently toward the east at a gradient of less than 2± percent.

Proposed Development

Based on the preliminary grading plan designed by Webb, the site will be developed with one warehouse, $1,001,010\pm$ ft² in size, located in the central-western area of the site. The building will be constructed with dock-high doors along portions of the north and south building walls. The building is expected to be surrounded by AC pavements in the parking and drive lane areas, PCC pavements in the loading dock areas, and concrete flatwork with limited areas of landscaped planters throughout.

Detailed structural information has not been provided. We assume that the new building will be a single-story structure of tilt-up concrete construction, typically supported on a conventional shallow foundation system with a concrete slab-on-grade floor. Based on the assumed construction, maximum column and wall loads are expected to be on the order of 100 kips and 4 to 6 kips per linear foot, respectively.

No significant amounts of below-grade construction, such as crawl spaces or new basements, are expected to be included in the proposed development. Based on the provided preliminary grading plan, cuts of 5 to $34\frac{1}{2}$ feet in the western area of the site and fills of $\frac{1}{2}$ to $6\frac{1}{2}$ feet in the eastern area of the site will be necessary to achieve the proposed site grades.

Previous Studies

SCG previously performed a geotechnical investigation at the subject site, referenced above. As part of this investigation, SCG drilled a total of sixteen (16) borings to depths of 10 to $30\pm$ feet below the existing site grades. SCG encountered younger alluvium at the ground surface at several of the boring locations. The younger alluvium consisted of loose to medium dense silty sands and sandy silts with varying clay and fine gravel content extending to depths of $2\frac{1}{2}$ to $8\pm$ feet below existing site grades. Older alluvium was encountered at the ground surface or beneath the younger alluvial soils at several of the boring locations. The older alluvium consisted of medium dense to very dense silty sands, well-graded sands, and sandy silts extending to depths of $20\pm$ feet below site grades. Val Verde Tonalite (Kvt) bedrock was encountered at the ground surface or beneath the alluvium at most of the boring locations. The bedrock consisted of fine to coarse-grained tonalite extending to the maximum depth explored of $30\pm$ feet. The tonalite was phaneritic, friable, weathered and weakly-cemented condition. Groundwater was not encountered during the previous drilling activities. Therefore, static groundwater was considered to have existed at a depth in excess of $30\pm$ feet.

Scope of Exploration

The subsurface exploration conducted for this project consisted of nine (9) trenches, identified as Trench Nos. T-1 through T-9 excavated to depths of 8 to 15± feet below the existing site



grades. The trenches were excavated with a CAT 320 GC excavator equipped with a 2-foot bucket. The trenches were logged during excavation by a member of our staff.

The approximate locations of the trenches are indicated on the Exploration Location Plan, included as Plate 2 of this report. The Trench Logs, which illustrate the conditions encountered at the trench locations, as well as the results of some of the laboratory testing, are included in Appendix B.

Geotechnical Conditions

Artificial fill soils were encountered at the ground surface at all of the trench locations extending to depths of 1 to 5± feet below the existing site grades. The artificial fill soils consist of loose to medium dense silty fine to medium sands and fine to medium sandy silts with varying amounts of coarse sands. Older alluvial soils were encountered beneath the fill soils at Trench Nos. T-1, T-4, T-6, and T-7. The older alluvial soils consist of medium dense silty fine to medium sands with varying amounts of coarse sands. The older alluvial soils were weakly cemented. Val Verde Tonalite (Kvt) bedrock was encountered beneath the fill and/or older alluvium at all of the trench locations except Trench No. T-4, extending to the maximum depth explored of 15± feet below existing site grades. The bedrock consists of fine to coarse-grained Tonalite which is phaneritic, friable, weathered, and weakly cemented.

Site Geology

Regional geologic conditions were obtained from the <u>Geologic Map of the Steele Peak 7.5'</u> <u>Quadrangle, Riverside County, California</u>, by Douglas M. Morton, 2001. This map indicates that the eastern portion of the site is underlain by very old alluvial fan deposits (Map Symbol Qvof). This unit is described as early Pleistocene-age, mostly well-dissected, well-indurated, reddishbrown sand deposits. The western area of the site is underlain by Val Verde tonalite (Map Symbol Kvt). The Cretaceous-age granitic bedrock is described as gray-weathering, relatively homogeneous, massive- to well-foliated, medium- to coarse-grained, hypautomorphic-granular biotite-hornblende tonalite.

Based on the materials encountered in the trenches for this investigation and borings in the previous investigation and the results of the seismic refraction survey, it is our opinion the site is underlain by Val Verde tonalite which is consistent with the geologic mapping.

Seismic Refraction Survey

A seismic refraction survey was performed at the subject site. The purpose of the seismic refraction survey was to define the excavation characteristics of the bedrock materials that underlie the subject site.

A brief summary of the methodology, field procedures, and the results of the seismic refraction survey are presented below. The complete results of the seismic refraction survey are presented in an appendix of this report.

<u>Methodology</u>

The seismic refraction method consists of measuring (at known points along the surface of the ground) the travel times of compressional waves generated by an impulsive energy source and



can be used to estimate the layering, structure, and seismic acoustic velocities of subsurface horizons. Seismic waves travel down and through the soils and rocks, and when the wave encounters a contact between two earth materials having different velocities, some of the wave's energy travels along the contact at the velocity of the lower layer. The fundamental assumption is that each successively deeper layer has a velocity greater than the layer immediately above it. As the wave travels along the contact, some of the wave's energy is refracted toward the surface where it is detected by a series of motion-sensitive transducers (geophones). The arrival time of the seismic wave at the geophone locations can be related to the relative seismic velocities of the subsurface layers in feet per second (fps), which can then be used to aid in interpreting both the depth and type of materials encountered.

Field Procedures

Four (4) 150-foot-long seismic refraction survey lines (Seismic Lines S-1 though S-4) were performed as shown on the Exploration Location Plan, enclosed as Plate 2 of this report. These lines were generally placed near areas of proposed cuts with expected underlying bedrock. A 16-pound sledge-hammer was used as an energy source to produce the seismic waves and twenty-four, 14-Hz geophones (used to aid in filtering background noise from nearby vehicular traffic) spaced at six-foot intervals were employed to detect both the direct and refracted waves. The seismic wave arrivals were digitally recorded in SEG-2 format on a Geometries StrataVisor™ NZXP model signal enhancement refraction seismograph. Seven shot points were utilized along the spread using forward, reverse, and several intermediate locations in order to obtain high resolution survey data for velocity analysis and depth modeling purposes. The data was acquired using a sampling rate of 0.0625 milliseconds having a record length of 0.08 seconds with no acquisition filters.

During acquisition, the seismograph provides both a hard copy and screen display of the seismic wave arrivals, of which are digitally recorded on the in-board seismograph computer. The data on the paper record and/or display screen were used to analyze the arrival time of the primary seismic "P"-waves at each geophone station, in the form of a wiggle trace, for quality control purposes in the field. Since the survey area was essentially flat, no topographic corrections were necessary.

Results and Conclusions

The field data obtained during the seismic refraction survey was processed and analyzed using two specialized computer programs, SIPWin (Seismic Refraction Interpretation Program for Windows), Rayfract, and Refractor. SIPWin provides average characteristics for several layers which are defined within the subsurface profile. Rayfract provides more discrete data that indicates the relative structure of the subsurface materials. Refractor evaluates the subsurface using layer assignments and this technique provides an approach for recognizing and compensating for hidden layers. In all of the cases, the results of the geophysical interpretation provide shear wave velocities can be evaluated using rippability charts published by Caterpillar and other grading equipment manufacturers. Typically, the Caterpillar rippability chart for a D-9 Single Shank Ripper is utilized when evaluating the excavation characteristics of bedrock. This table is presented below:



Granitic Rock Velocity (feet/second±)	Rippability	
<6,800	Rippable	
6,800 – 8,000	Moderately Rippable	
>8,000	Non-Rippable	

However, it should be noted that different excavating equipment, such as a track-mounted excavator or other trench excavating equipment, may not correlate well with these velocity ranges. Therefore, the following chart is considered a more considered appropriate for trenching operations. This table is presented below:

Granitic Rock Velocity (feet/second±)	Rippability	
<4,000	Rippable	
4,000 – 7,000	Moderately Rippable	
>7,000	Non-Rippable	

Using the layer velocity model, the geophysical survey identified three major subsurface layers with respect to seismic velocities. These layers are depicted graphically in Appendix A of the Seismic Refraction Survey, which has been included as an appendix of this report. Velocity Layer V-1, ranges from 1,242 to 1,707 feet/second, and is considered to represent the artificial fill, topsoil, or younger alluvium. Velocity Layer V-2, ranges from 2,635 to 3,673 feet/second and is considered to represent the older alluvial deposits or highly-weathered granitic bedrock. Velocity Layer V-3, ranges from 4,045 to 6,192 feet/second, and is considered to represent highly- to moderately-weathered bedrock, becoming fresher with depth. The approximate depths to each layer are below:

Seismic Line	Velocity Layer	Upper Limit (feet)	Lower Limit (feet)
S-1	V-1	0	3
	V-2	3	14 to 27
	V-3	14 to 27	>40
S-2	V-1	0	2 to 6
	V-2	2 to 6	33 to 40
	V-3	33 to 40	>50
S-3	V-1	0	4
	V-2	4	12 to 15
	V-3	12 to 15	>40
S-4	V-1	0	5
	V-2	5	10 to 30
	V-3	10 to 30	>40

Using the tomographic model, the geophysical survey identified the following conditions. Please note that based on SCG experience, grading equipment encounters very difficult/marginally to



non-rippable conditions at 4,000 feet/second. Therefore, the following chart utilizes the tomographic model the depths to very difficult/marginally to non-rippable conditions.

Seismic Line	Depth to Very Difficult/Marginally to Non-Rippable Conditions (feet)
S-1	10 to 35
S-2	5 to 25
S-3	12 to 15
S-4	17 to >25

Conclusions and Recommendations

Based on the results of the layer model of the geophysical survey, the tonalite bedrock, which is represented by Velocity Layer V-3, is considered moderately rippable to trench excavating equipment and rippable based on the Caterpillar rippability chart. However, based on our experience with grading equipment and using the tomographic model, SCG considers that the grading contractor will encounter very difficult/marginally to non-rippable conditions during grading. Therefore, blasting should be expected in limited areas in the western area of the site where these materials will need to be excavated to greater depths up to $34\frac{1}{2}\pm$ feet. It is recommended that the full text of the seismic refraction survey be reviewed for more complete information.



Closure

We sincerely appreciate the opportunity to be of continued service on this project. If we may be of further assistance in any manner, please contact our office.

Respectfully Submitted,

SOUTHERN CALIFORNIA GEOTECHNICAL, INC.

Daryl R. Kas, CEG 2467 Senior Geologist

Robert G. Trazo, GE 2655 Principal Engineer

Enclosures: Plate 1 – Site Location Map

Plate 2 – Exploration Location Plan

Plate 3 – Geologic Map

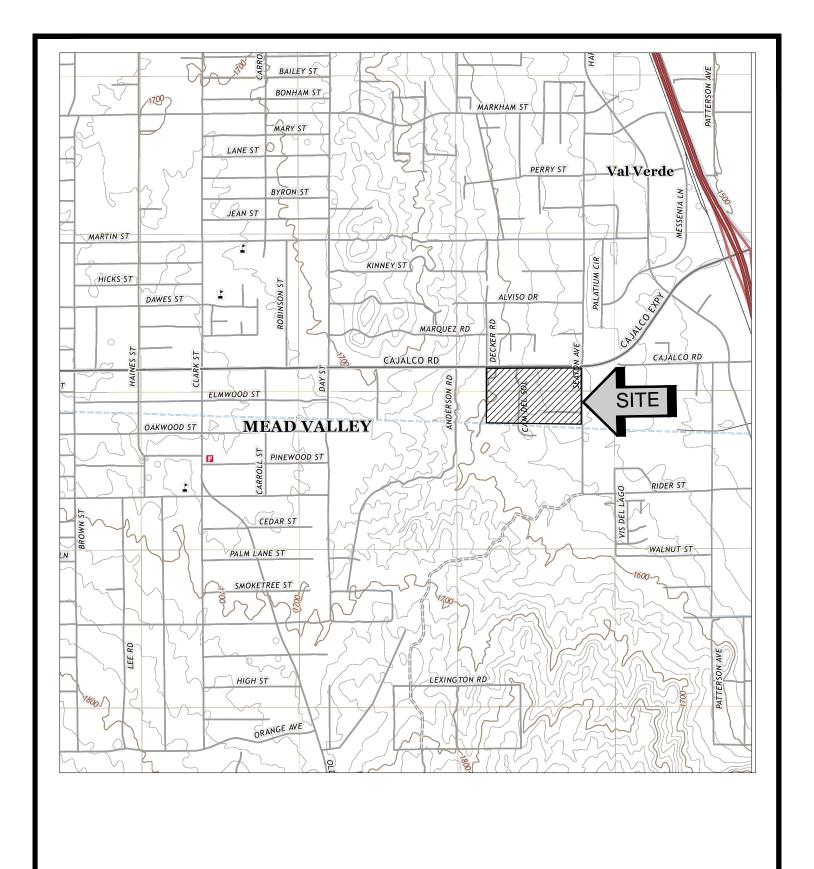
Trench Logs

Seismic Refraction Survey

Distribution: (1) Addressee







SOURCE: USGS TOPOGRAPHIC MAP OF THE STEELE PEAK QUADRANGLE, SAN BERNARDINO COUNTY, CALIFORNIA, 2021.



SITE LOCATION MAP

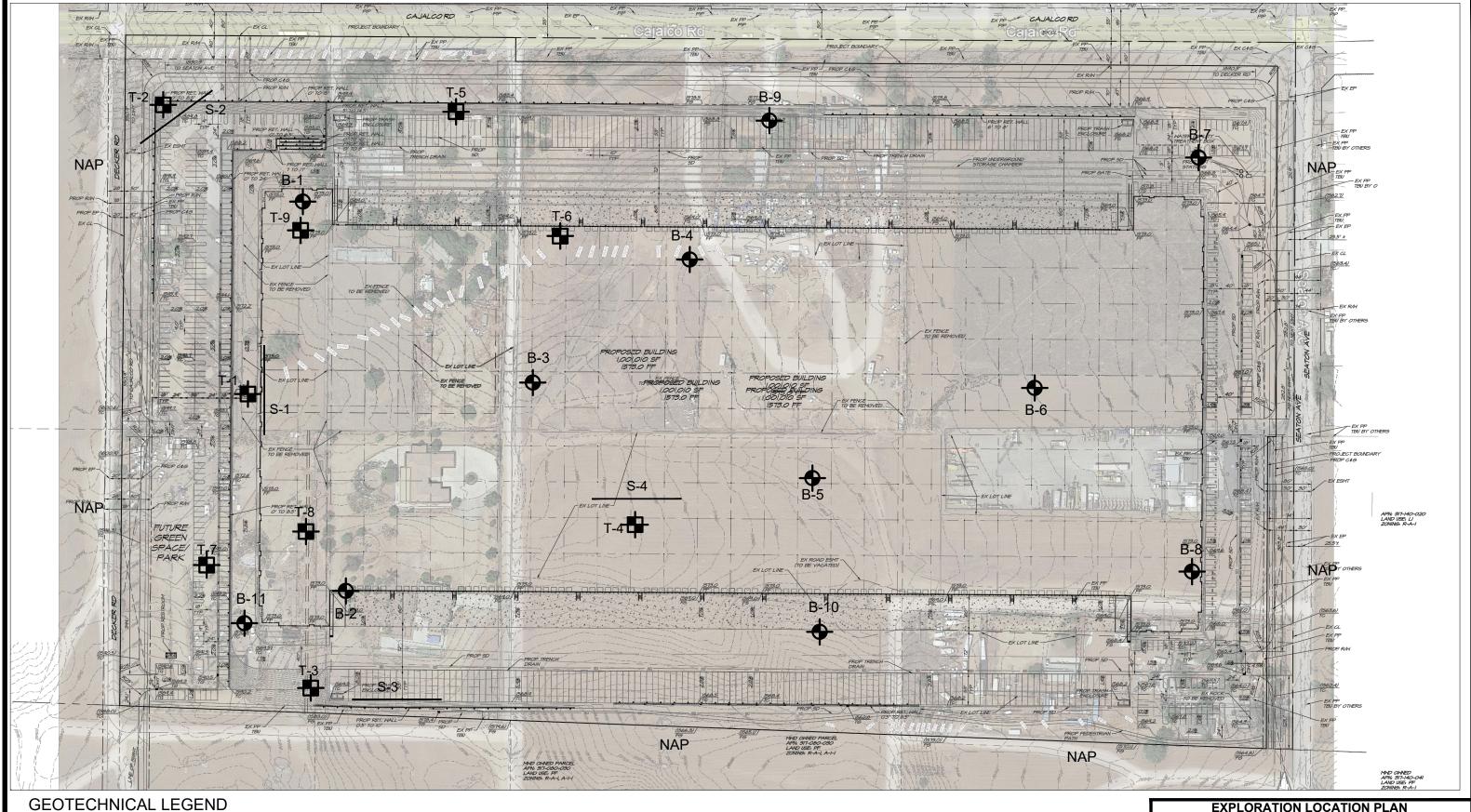
PROPOSED WAREHOUSE DEVELOPMENT RIVERSIDE CO. (PERRIS), CALIFORNIA

SCALE: 1" = 2000' DRAWN: RB

CHKD: RGT SCG PROJECT 22G213-4

PLATE 1







APPROXIMATE TRENCH LOCATION



PREVIOUS BORING LOCATION (SCG PROJECT NO 22G213-1)

APPROXIMATE SEISMIC LINE LOCATION



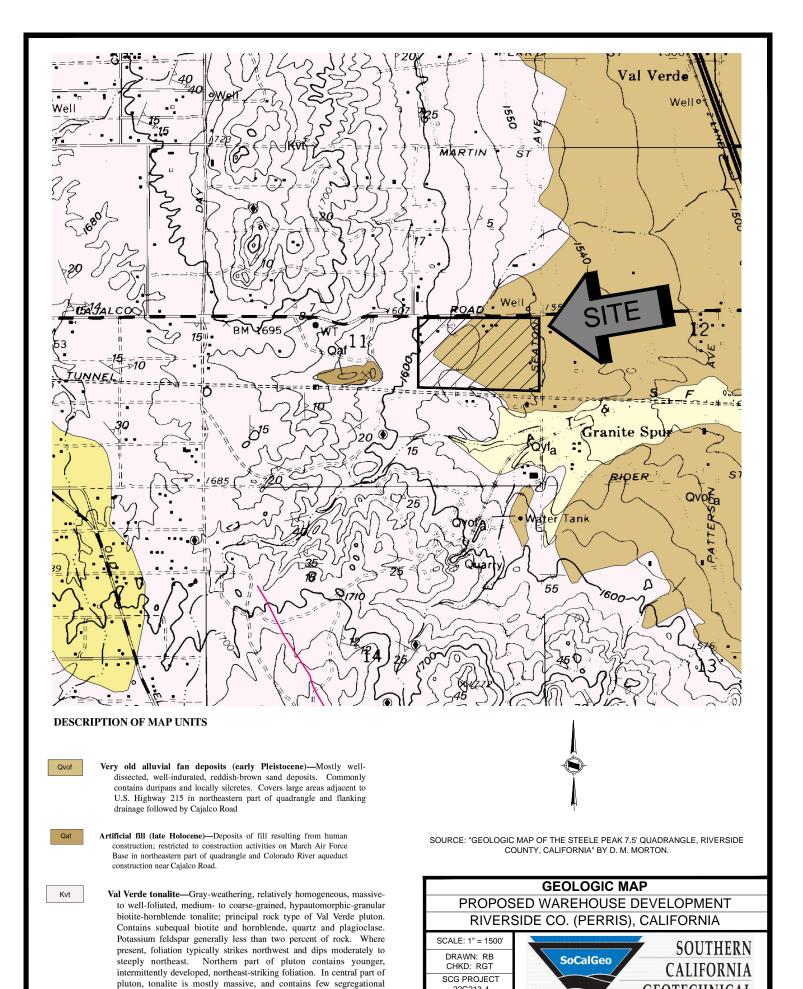
NOTE: AIR PHOTO OBTAINED FROM GOOGLE EARTH. PRELIMINARY GRADING PLAN DESIGNED BY WEBB.

EXPLORATION LOCATION PLAN

PROPOSED WAREHOUSE DEVELOPMENT RIVERSIDE CO. (PERRIS), CALIFORNIA

SCALE: 1" = 150' DRAWN: RB CHKD: RGT SCG PROJECT 22G213-4 PLATE 2





22G213-4

PLATE 3

masses of mesocratic to melanocratic tonalite. Elliptical- to pancake-

shaped, meso-to melanocratic inclusions are common

GEOTECHNICAL

TRENCH NO. T-1

PLATE B-1

JOB NO.: 22G213-4 **EQUIPMENT USED: Excavator** WATER DEPTH: Dry PROJECT: Proposed Warehouse Development LOGGED BY: Ryan Bremer SEEPAGE DEPTH: Dry LOCATION: Perris, California ORIENTATION: N 22 E **READINGS TAKEN: At Completion** DATE: 3/28/2023 ELEVATION: ---DRY DENSITY (PCF) MOISTURE (%) SAMPLE DEPTH **EARTH MATERIALS GRAPHIC REPRESENTATION DESCRIPTION** N 22 E SCALE: 1" = 5' A: FILL: Dark Brown Silty fine to medium Sand, little fine root fibers, loose-moist to very moist 13 (A)b b B: OLDER ALLUVIUM: Brown Silty fine to medium Sand, cemented, very (B) dense-damp 9 6 10 C: VAL VERDE TONALITE (Kvt): Brown fine to coarse-grained Tonalite, weathered, friable, phaneritic, very dense-damp @ 12 feet, Light Brown Trench Terminated @ 12 feet due to refusal on very dense bedrock 15

TRENCH NO. T-2

JOB NO.: 22G213-4 **EQUIPMENT USED: Excavator** WATER DEPTH: Dry PROJECT: Proposed Warehouse Development LOGGED BY: Ryan Bremer SEEPAGE DEPTH: Dry LOCATION: Perris, California ORIENTATION: N 60 W **READINGS TAKEN: At Completion** DATE: 3/28/2023 ELEVATION: ---DRY DENSITY (PCF) MOISTURE (%) SAMPLE DEPTH **EARTH MATERIALS GRAPHIC REPRESENTATION DESCRIPTION** N 60 W SCALE: 1" = 5' A: FILL: Brown fine to medium Sandy Silt, trace coarse Sand, loose-very (A)moist 17 (**B**) b B: VAL VERDE TONALITE (Kvt): Gray Brown fine to coarse-grained Tonalite, phaneritic, friable, weathered, very dense-damp 5 @ 8 feet, density increase 5 Trench Terminated @ 8 feet due to refusal on very dense bedrock 10

TRENCH NO. T-3

JOB NO.: 22G213-4 **EQUIPMENT USED: Excavator** WATER DEPTH: Dry PROJECT: Proposed Warehouse Development LOGGED BY: Ryan Bremer SEEPAGE DEPTH: Dry LOCATION: Perris, California ORIENTATION: N 81 E **READINGS TAKEN: At Completion** ELEVATION: ---DATE: 3/28/2023 DRY DENSITY (PCF) MOISTURE (%) SAMPLE DEPTH **EARTH MATERIALS GRAPHIC REPRESENTATION DESCRIPTION** N 81 E SCALE: 1" = 5' A: FILL: Dark Brown Silty fine to medium Sand, trace coarse Sand, trace (A)fine root fibers, loose-damp to very moist 16 b 8 b B: VAL VERDE TONALITE (Kvt): Brown fine to medium-grained Tonalite, highly weathered, friable, phaneritic, friable, highly weathered, (B)dense-damp 4 10 (C) C: VAL VERDE TONALITE (Kvt): Brown Gray fine to coarse-grained Tonalite, weathered, phaneritic, very dense-moist 9 15 Trench Terminated @ 15 feet

TRENCH NO. T-4

JOB NO.: 22G213-4 **EQUIPMENT USED: Excavator** WATER DEPTH: Dry PROJECT: Proposed Warehouse Development LOGGED BY: Ryan Bremer SEEPAGE DEPTH: Dry LOCATION: Perris, California **ORIENTATION: N 1 W READINGS TAKEN: At Completion** DATE: 3/28/2023 ELEVATION: ---DRY DENSITY (PCF) MOISTURE (%) SAMPLE DEPTH **EARTH MATERIALS GRAPHIC REPRESENTATION DESCRIPTION** N 1 W SCALE: 1" = 5' A: FILL: Dark Brown Silty fine to medium Sand to fine to medium Sandy (A)Silt, trace fine root fibers, loose-very moist b 17 B: OLDER ALLUVIUM: Brown Silty fine to medium Sand, highly cemented, dense-damp 6 (B) 10 C: OLDER ALLUVIUM: Brown Silty fine to coarse Sand, highly cemented, (C) very dense-damp b Trench Terminated @ 12 feet due to very dense soil 15

TRENCH NO. T-5

JOB NO.: 22G213-4 **EQUIPMENT USED: Excavator** WATER DEPTH: Dry PROJECT: Proposed Warehouse Development LOGGED BY: Ryan Bremer SEEPAGE DEPTH: Dry LOCATION: Perris, California **ORIENTATION: N 8 E READINGS TAKEN: At Completion** DATE: 3/28/2023 ELEVATION: ---DRY DENSITY (PCF) MOISTURE (%) SAMPLE DEPTH **EARTH MATERIALS GRAPHIC REPRESENTATION DESCRIPTION** N 8 E SCALE: 1" = 5' A: FILL: Brown to Dark Brown Silty fine to medium Sand to fine to medium (A)Sandy Silt, loose-very moist 12 b B: VAL VERDE TONALITE (Kvt): Brown fine to coarse-grained Tonalite, b weathered, friable, phaneritic, very dense-dry to damp (B) @ 81/2 feet, less weathered Trench Terminated @ 81/2 feet due to refusal on very dense bedrock 10 15

TRENCH NO. T-6

JOB NO.: 22G213-4 **EQUIPMENT USED: Excavator** WATER DEPTH: Dry PROJECT: Proposed Warehouse Development LOGGED BY: Ryan Bremer SEEPAGE DEPTH: Dry LOCATION: Perris, California ORIENTATION: N 40 E **READINGS TAKEN: At Completion** DATE: 3/28/2023 ELEVATION: ---DRY DENSITY (PCF) MOISTURE (%) SAMPLE DEPTH **EARTH MATERIALS GRAPHIC REPRESENTATION DESCRIPTION** N 40 E SCALE: 1" = 5' A: FILL: Brown Silty fine to medium Sand to fine to medium Sandy Silt, (A)trace fine root fibers, loose-very moist 15 b B: OLDER ALLUVIUM: Brown Silty fine to medium Sand to fine to (B) medium Sandy Silt, cemented, very dense-damp (C) C: VAL VERDE TONALITE (Kvt): Brown fine to coarse-grained Tonalite, phaneritic, friable, slightly weathered, very dense-dry Trench Terminated @ 8 feet due to refusal on very dense bedrock 10

TRENCH NO. T-7

JOB NO.: 22G213-4 **EQUIPMENT USED: Excavator** WATER DEPTH: Dry PROJECT: Proposed Warehouse Development LOGGED BY: Ryan Bremer SEEPAGE DEPTH: Dry LOCATION: Perris, California ORIENTATION: N 44 E **READINGS TAKEN: At Completion** DATE: 3/28/2023 ELEVATION: ---DRY DENSITY (PCF) MOISTURE (%) SAMPLE DEPTH **EARTH MATERIALS GRAPHIC REPRESENTATION DESCRIPTION** N 44 E SCALE: 1" = 5' A: FILL: Brown Silty fine to coarse Sand, trace fine root fibers, (A)loose-moist B: OLDER ALLUVIUM: Brown Silty fine to medium Sand, trace coarse (B)Sand, medium dense-damp 5 (C) C: VAL VERDE TONALITE (Kvt): Brown fine to coarse-grained Tonalite, phaneritic, highly weathered, friable, dense-damp 10 @ 12 feet, less weathered, very dense 3 Trench Terminated @ 12 feet due to refusal on very dense bedrock 15

TRENCH NO. T-8

JOB NO.: 22G213-4 **EQUIPMENT USED: Excavator** WATER DEPTH: Dry PROJECT: Proposed Warehouse Development LOGGED BY: Ryan Bremer SEEPAGE DEPTH: Dry LOCATION: Perris, California **ORIENTATION: N 12 W READINGS TAKEN: At Completion** DATE: 3/28/2023 ELEVATION: ---DRY DENSITY (PCF) MOISTURE (%) SAMPLE DEPTH **EARTH MATERIALS GRAPHIC REPRESENTATION DESCRIPTION** N 12 W SCALE: 1" = 5' A: FILL: Brown Silty fine to medium Sand, trace coarse Sand, trace trash debris, medium dense-damp to moist 9 b B: VAL VERDE TONALITE (Kvt): Brown fine to coarse-grained Tonalite, 4 phaneritic, friable, weathered, very dense-damp (B) 10 Trench Terminated @ 131/2 feet due to refusal on very dense bedrock 15

TRENCH NO. T-9

JOB NO.: 22G213-4 **EQUIPMENT USED: Excavator** WATER DEPTH: Dry PROJECT: Proposed Warehouse Development LOGGED BY: Ryan Bremer SEEPAGE DEPTH: Dry LOCATION: Perris, California **ORIENTATION: N 15 W READINGS TAKEN: At Completion** DATE: 3/28/2023 ELEVATION: ---DRY DENSITY (PCF) MOISTURE (%) SAMPLE DEPTH **EARTH MATERIALS GRAPHIC REPRESENTATION DESCRIPTION** N 15 W SCALE: 1" = 5' A: FILL: Brown to Dark Brown Silty fine to medium Sand, trace coarse (A)Sand, trace fine root fibers, loose-moist B: VAL VERDE TONALITE (Kvt): Brown fine to coarse-grained Tonalite, b (B) moderately weathered, friable, phaneritic, very dense-dry to damp 3 @ 10 feet, less weathering 10 Trench Terminated @ 10 feet due to refusal on very dense bedrock 15



SEISMIC REFRACTION SURVEY PROPOSED WAREHOUSE DEVELOPMENT SWC OF CAJALCO ROAD AND SEATON AVENUE PERRIS AREA, RIVERSIDE COUNTY, CALIFORNIA

Project No. 239329-1

March 21, 2023

Prepared for:

Southern California Geotechnical, Inc. 22885 E. Savi Ranch Parkway Suite E Yorba Linda, CA 92887 Southern California Geotechnical, Inc. 22885 E. Savi Ranch Parkway, Suite E Yorba Linda, CA 92887

March 21, 2023 Project No. 233929-1

Attention: Mr. Daryl R. Kas, CEG, Senior Geologist

Regarding: Seismic Refraction Survey

Proposed Warehouse Development

SWC of Cajalco Road and Seaton Avenue Perris Area, Riverside County, California

SCG Project No. 22G213-4

EXECUTIVE SUMMARY

As requested, this firm has performed a geophysical survey using the seismic refraction method for the above-referenced site. The purpose of this investigation was to assess the general seismic velocity characteristics of the underlying earth materials and to evaluate whether high velocity bedrock materials (non-rippable) may be present. Additionally, the structure and seismic velocity distribution of the subsurface earth materials was also assessed. This report will describe in further detail the procedures used and the results of our findings, along with presentation of representative seismic models for the survey traverses.

For this study, four survey traverses were performed across the subject property, as selected by you. The traverses were located in the field by use of Google™ Earth imagery (2023) and GPS coordinates. The approximate locations of these traverses are shown on the Google™ Earth Imagery Map (see Plate 1) and also on a partial copy of the provided 150-scale Grading Plan, as presented on the Seismic Line Location Map, Plate 2.

This opportunity to be of service is sincerely appreciated. If you should have questions regarding this report or do not understand the limitations of this study or the data and results that are presented, please do not hesitate to contact our office.

Respectfully submitted, TERRA GEOSCIENCES

Donn C. SchwartzkopfPrincipal Geophysicist
PGP 1002

DONN C.

SCHWARTZKOPF

No. 1002

PLANT OF CALIFORNIA

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INTRODUCTION

The subject site is located southwest of the intersection of Cajalco Road and Seaton Avenue, in the Perris area of Riverside County, California. Topographically, the site is situated along a gently easterly sloping plain with very low-lying rolling hills, along with occasional scattered large rock outcrops.

Locally, as shown on Figure 1 below, surficial geologic mapping by Morton (2001) indicates the eastern portion of the subject property to mantled by early Pleistocene age very old alluvial fan deposits, generally described as consisting of well-indurated sand deposits (map symbol Qvof). Mapped along the west and underling the older alluvial deposits at depth, is a gray-weathering, relatively homogeneous, massive to well-foliated, medium- to coarse-grained, hypautomorphic-granular biotite-hornblende tonalite (map symbol Kvt). These rocks are locally referred to as the Val Verde Tonalite which formed during the emplacement of the Cretaceous age Peninsular Ranges Batholith and are associated with the Val Verde Pluton (Morton and Cox, 2014). Structurally, most of the foliation within the tonalite strikes along a northwesterly direction.

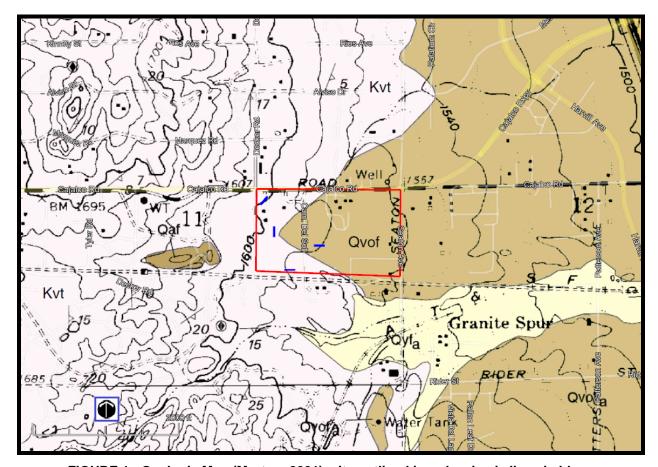


FIGURE 1- Geologic Map (Morton, 2001), site outlined in red, seismic lines in blue.

SEISMIC REFRACTION SURVEY

<u>Methodology</u>

The seismic refraction method consists of measuring (at known points along the surface of the ground) the travel times of compressional waves generated by an impulsive energy source and can be used to estimate the layering, structure, and seismic acoustic velocities of subsurface horizons. Seismic waves travel down and through the soils and rocks, and when the wave encounters a contact between two earth materials having different velocities, some of the wave's energy travels along the contact at the velocity of the lower layer. The fundamental assumption is that each successively deeper layer has a velocity greater than the layer immediately above it. As the wave travels along the contact, some of the wave's energy is refracted toward the surface where it is detected by a series of motion-sensitive transducers (geophones). The arrival time of the seismic wave at the geophone locations can be related to the relative seismic velocities of the subsurface layers in feet per second (fps), which can then be used to aid in interpreting both the depth and type of materials encountered.

Field Procedures

Four seismic refraction survey lines (Seismic Lines S-1 through S-4) have been performed along representative areas across the subject study area as selected by you. The traverses were located in the field by use of Google™ Earth Imagery (2023) and GPS coordinates, and have been delineated on the Google™ Earth Imagery Map and the Seismic Line Location Map, as presented on Plates 1 and 2, respectively.

The survey traverses were each 150 feet in length, which consisted of a total of twenty-four 14-Hertz geophones, spaced at regular six-foot intervals, in order to detect both the direct and refracted waves. A 16-pound sledge-hammer was used as the energy source to produce the seismic waves. Multiple hammer impacts were utilized at each shot point in order to increase the signal to noise ratio, which enhanced the primary seismic "P"-waves.

The seismic wave arrivals were digitally recorded in SEG-2 format on a Geometrics StrataVisor™ NZXP model signal enhancement refraction seismograph. Seven shot points were utilized along each spread using forward, reverse, and several intermediate locations in order to obtain high resolution survey data for velocity analysis and depth modeling purposes. The data was acquired using a sampling rate of 0.0625 milliseconds having a record length of 0.08 seconds. No acquisition filters were used during data collection. During acquisition, the seismograph displays the seismic wave arrivals on the computer screen which were used to analyze the arrival time of the primary seismic "P"-waves at each geophone station, in the form of a wiggle trace for quality control purposes in the field. If spurious "noise" was observed, the shot location was resampled during relatively quieter periods. Each geophone and seismic shot location were surveyed using a hand level and ruler for topographic correction, with "0" being the lowest point along each survey line.

Data Processing

The recorded seismic data was subsequently transferred to our office computer for processing and analyzing purposes, using the computer programs **SIPwin** (**S**eismic Refraction Interpretation **P**rogram for **Win**dows) developed by Rimrock Geophysics, Inc. (2004); **Refractor** (Geogiga, 2001-2023); and **Rayfract™** (Intelligent Resources, Inc., 1996-2022). All of the computer programs perform their individual analyses using exactly the same input data, which includes the first-arrival times of the "P"-waves and the survey line geometry.

SIPwin is a ray-trace modeling program that evaluates the subsurface using layer assignments based on time-distance curves and is better suited for layered media, using the "Seismic Refraction Modeling by Computer" method (Scott, 1973). The first step in the modeling procedure is to compute layer velocities by least-squares techniques. Then the program uses the delay-time method to estimate depths to the top of layer-2. A forward modeling routine traces rays from the shot points to each geophone that received a first-arrival ray refracted along the top of layer-2. The travel time of each such ray is compared with the travel time recorded in the field by the seismic system. The program then adjusts the layer-2 depths so as to minimize discrepancies between the computed ray-trace travel times and the first arrival times picked from the seismic waveform record.

The process of ray tracing and model adjustment is repeated a total of six times to improve the accuracy of depths to the top of layer-2. This first-arrival picks were then used to generate the Layer Velocity Models using the **SIPwin** computer program, which presents the subsurface velocities as individual layers and are presented within Appendix A for reference. In addition, the associated Time-Distance Plot for each survey line, which shows the individual data picks of the first "P-wave" arrival times, also appears in Appendix A.

- ➤ Refractor is seismic refraction software that also evaluates the subsurface using layer assignments utilizing interactive and interchangeable analytical methods that include the Delay-Time method, the Plus-Minus method, and the Generalized Reciprocal Method (GRM). These methods are used for defining irregular non-planar refractors and are briefly described below.
 - The <u>Delay-Time</u> method will measure the delay time depth to a refractor beneath each geophone rather than at shot points. Delay-time is the time spent by a wave to travel up or down through the layer (slant path) compared to the time the wave would spend if traveling along the projection of the slant path on the refractor.
 - The <u>Plus-Minus</u> time analysis method includes a Plus time analysis for depth analysis and a Minus time analysis for velocity determination. The basis of the Plus-Minus time analysis method lies in the traveltime reciprocity, i.e., the traveltime of a seismic wave from source to receiver is equal to the traveltime

in the opposite direction if source and receiver are interchanged. It can be used to calculate the depth and velocity variations of an undulating layer boundary for slope angles less than ~10°.

The <u>GRM</u> method is a technique for delineating undulating refractors at any depth from in-line seismic refraction data consisting of forward and reverse travel-times and is capable of resolving dips of up to 20% and does not oversmooth or average the subsurface refracting layers. In addition, the technique provides an approach for recognizing and compensating for hidden layer conditions.

Rayfract™ is seismic refraction tomography software that models subsurface refraction, transmission, and diffraction of acoustic waves which generally indicates the relative structure and velocity distribution of the subsurface using first break energy propagation modeling. An initial 1D gradient model is created using the DeltatV method (Gebrande and Miller, 1985) which gives a good initial fit between modeled and picked first breaks. The DeltatV method is a turning-ray inversion method which delivers continuous depth vs. velocity profiles for all profile stations. These profiles consist of horizontal inline offset, depth, and velocity triples. The method handles real-life geological conditions such as velocity gradients, linear increasing of velocity with depth, velocity inversions, pinched-out layers and outcrops, and faults and local velocity anomalies. This initial model is then refined automatically with a true 2D WET (Wavepath Eikonal Traveltime) tomographic inversion (Schuster and Quintus-Bosz, 1993).

WET tomography models multiple signal propagation wave-paths contributing to one first break, whereas conventional ray tracing tomography is limited to the modeling of just one ray per first break. This computer program performs the analysis by using the same first-arrival P-wave times and survey line geometry that were generated during the layer velocity model analyses. The associated Refraction Tomographic Models, which display the subsurface earth material velocity structure, is represented by the velocity contours (isolines displayed in feet/second), supplemented with the color-coded velocity shading for visual reference, and are presented within Appendix B.

The combined use of these computer programs provided a more thorough and comprehensive analysis of the subsurface structure and velocity characteristics. Each computer program has a specific purpose based on the objective of the analysis being performed. **SIPwin** and **Refractor** were primarily used for detecting generalized subsurface velocity layers providing "weighted average velocities." The processed seismic data of these two programs were compared and averaged to provide a final composite layer velocity model which provided a more thorough representation of the subsurface. **Rayfract™** provided tomographic velocity and structural imaging that is very conducive to detecting strong lateral velocity characteristics such as imaging corestones, dikes, and other subsurface structural characteristics.

SUMMARY OF GEOPHYSICAL INTERPRETATION

To begin our discussion, it is important to consider that the seismic velocities obtained within bedrock materials are influenced by the nature and character of the localized major structural discontinuities (foliation, fracturing, relic bedding, etc.), creating anisotropic conditions. Anisotropy (direction-dependent properties of materials) can be caused by "micro-cracks," jointing, foliation, layered or inter-bedded rocks with unequal layer stiffness, small-scale lithologic changes, etc. (Barton, 2007). Velocity anisotropy complicates interpretation and it should be noted that the seismic velocities obtained during this survey may have been influenced by the nature and character of any localized structural discontinuities within the bedrock underlying the subject site. Generally, it is expected that higher (truer) velocities will be obtained when the seismic waves propagate along direction (strike) of the dominant structure, with a damping effect when the seismic waves travel in a perpendicular direction. Such variable directions can result in velocity differentials of between 2% to 40% depending upon the degree of the structural fabric (i.e., weakly-moderately-strongly foliated, respectively). Therefore, the seismic velocities obtained during our field study and as discussed below, should be considered minimum velocities at this time.

The first computer method described below used for data analysis is the traditional layer method (**SIPwin** and **Refractor**). Using this method, it should be understood that the data obtained represents an average of seismic velocities within any given layer. For example, high seismic velocity boulders, dikes, or other local lithologic inconsistencies, may be isolated within a low velocity matrix, thus yielding an average medium velocity for that layer. Therefore, in any given layer, a range of velocities could be anticipated, which can also result in a wide range of excavation characteristics.

In general, the site where locally surveyed, was noted to be characterized by three major subsurface layers (Layers V1 through V3) with respect to seismic velocities. The following velocity layer summaries have been prepared using the **SIPwin** and **Refractor** analysis, with the representative Layer Velocity Models presented within Appendix A along with their respective Time-Distance Plots.

- □ <u>Velocity Layer V1</u>: This uppermost velocity layer (V1) is most likely comprised of alluvial materials, colluvium, topsoil, and/or completely-weathered and fractured bedrock materials. This layer has an average weighted velocity of 1,242 to 1,707 fps, which is typical for these types of unconsolidated surficial earth materials.
- Velocity Layer V2: The second layer (V2) yielded a seismic velocity range of 2,635 to 3,673 fps, which is generally typical for highly-weathered granitic bedrock materials. This velocity range may indicate the presence of homogeneous weathered bedrock with a relatively wide spaced joint/fracture system and/or the possibility of buried relatively-fresher boulders within a very highly-weathered bedrock matrix. Additionally, the presence of semi-consolidated older alluvial materials may also be locally present within this velocity layer.

<u>Velocity Layer V3</u>: The third layer (V3) indicates the presence of highly- to moderately-weathered bedrock, having a velocity range of 4,045 to 6,192 fps. These higher velocities signify the decreasing effect of weathering as a function of depth and could indicate a highly- to moderately-weathered bedrock matrix that has a wide-spaced fracture system, or possibly the presence of abundant widely-scattered buried fresh large crystalline boulders in a highly-weathered matrix.

The following table summarizes the results of the survey lines with respect to the "weighted average" seismic velocities for each layer, as indicated on the Layer Velocity Models, presented within Appendix A.

TABLE 1- VELOCITY SUMMARY OF SEISMIC SURVEY LINES

Seismic Line	V1 Layer (fps)	V2 Layer (fps)	V3 Layer (fps)
S-1	1,330	2,635	4,048
S-2	1,707	3,673	6,192
S-3	1,242	3,411	5,079
S-4	1,279	2,956	4,045

Using **Rayfract™**, tomographic models were also prepared for comparative purposes to better illustrate the general structure and velocity distribution of the subsurface, using velocity contour isolines, as presented within Appendix B. Although no discrete velocity layers or boundaries are created, these models generally resemble the corresponding overall average layer velocities as presented within Appendix A.

In general, the seismic velocity of the bedrock gradually increases with depth, with occasional lateral velocity differentials suggesting the local presence of buried corestones, lithologic variabilities, and/or dike structures. The colors representing the velocity gradients have been standardized on all of the models for comparative purposes.

GENERALIZED RIPPABILITY CHARACTERISTICS OF BEDROCK

A summary of the generalized rippability characteristics of bedrock based on a compilation of rippability performance charts prepared by Caterpillar, Inc. (2019), Caltrans (Stephens, 1978), and Santi (2006), has been provided to aid in evaluating potential excavation difficulties with respect to the seismic velocities obtained along the local areas surveyed. These seismic velocity ranges and rippability potentials have been tabulated below for reference.

TABLE 2- CATERPILLAR RIPPABILITY CHART (D9 Ripper)

Granitic Rock Velocity	Rippability	
< 7,200	Rippable	
7,200 – 9,000	Moderately Rippable	
> 9,000	Non-Rippable	

Additionally, we have provided the Caltrans Rippability Chart as presented below within Table 3 for comparison. These values are from published Caltrans studies (Stephens, 1978) that are based on their experience and which appear to be more conservative than Caterpillar's rippability chart. It should be noted that the type of bedrock was not indicated.

TABLE 3- STANDARD CALTRANS RIPPABILITY CHART

Velocity (feet/sec ±)	Rippability	
< 3,500	Easily Ripped	
3,500 – 5,000	Moderately Difficult	
5,000 - 6,600	Difficult Ripping / Light Blasting	
> 6,600	Blasting Required	

Table 4 is partially modified from the "Engineering Behavior from Weathering Grade" as presented by Santi (2006), which also provides velocity ranges with respect to rippability potentials, along with other rock engineering properties that may be pertinent.

TABLE 4- SUMMARY OF ROCK ENGINEERING PROPERTIES

ENGINEERING PROPERTY:	Slightly Weathered	Moderately Weathered	d Highly Weathered	Completely Weathered
Excavatability	Blasting necessary	Blasting to rippable	Generally rippable	Rippable
Slope Stability	½ :1 to 1:1 (H:V)	1:1 (H:V)	1:1 to 1.5:1 (H:V)	1.5:1 to 2:1 (H:V)
Schmidt Hammer Value	51 – 56	37 – 48	12 – 21	5 – 20
Seismic Velocity (fps)	8,200 – 13,125	5,000 – 10,000	3,300 - 6,600	1,650 – 3,300

The Caterpillar D9R Ripper Performance Chart (Caterpillar, 2019) has been provided on Figure 2 below for reference.

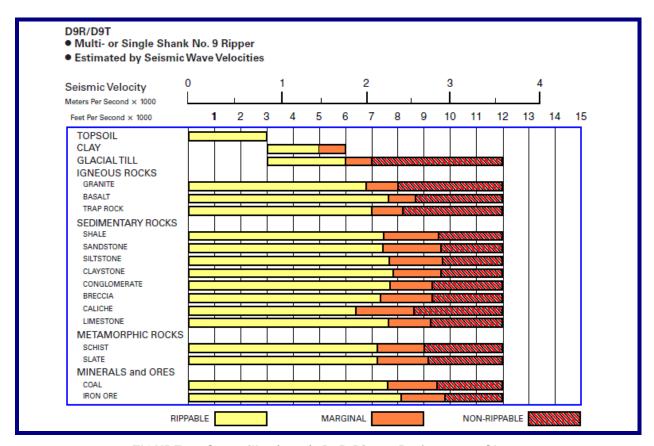


FIGURE 2- Caterpillar (2019); D9R Ripper Performance Chart.

For purposes of the discussion in this report with respect to the expected bedrock rippability characteristics, we are assuming that a D9R/D9T dozer will be used as a minimum, such as discussed further below and as shown in Figure 2 above. Smaller excavating equipment will most likely result in slower production rates and possible refusal within relatively lower velocity bedrock materials. It should be noted that the decision for blasting of bedrock materials for facilitating the excavation process is sometimes made based upon economic production reasons and not solely on the rippability (velocity/hardness) characteristics of the bedrock.

A summary of the generalized rippability characteristics of granitic bedrock has been provided below to aid in evaluating potential excavation difficulties with respect to the seismic velocities obtained along the local areas that were surveyed. The velocity ranges described below are general averages of Tables 2 and 3 presented in this report (see Page 7) and assume typical, good-working, heavy excavation equipment, such as D9R dozer using a single shank, as described by Caterpillar, Inc. (2000 and 2019), as shown above on Figure 2.

However, different excavating equipment (i.e., trenching equipment) <u>may not</u> correlate well with these velocity ranges as the rippability performance charts are tailored for conventional bulldozer equipment and cannot be directly correlated. Trenching operations which utilize large excavator-type equipment within granitic bedrock materials, typically encounter very difficult to non-productable conditions where seismic velocities are generally greater than 4,000± fps, and less for smaller backhoe-type equipment.

These average seismic velocity ranges are summarized below:

□ Rippable Condition (0 - 4,000 ft/sec):

This velocity range indicates rippable materials which may consist of alluvial-type deposits and decomposed granitic bedrock, with random hardrock floaters. These materials typically break down into silty sands (depending on parent lithologic materials), whereas floaters will require special disposal. Some areas containing numerous hardrock floaters may present utility trench problems. Large floaters exposed at or near finished grade may present problems for footing or infrastructure trenching.

Marginally Rippable Condition (4,000 - 7,000 ft/sec):

This range of seismic velocities indicates materials which may consist of moderately weathered bedrock and/or large areas of fresh bedrock materials separated by weathered fractured zones. These bedrock materials are generally rippable with difficulty by a Caterpillar D9R or equivalent. Excavations may produce material that will partially break down into a coarse silty to clean sand, with a high percentage of very coarse sand to pebble-sized material depending on the parent bedrock lithology. Less fractured or weathered materials will probably require blasting to facilitate removal.

Non-Rippable Condition (7,000 ft/sec or greater):

This velocity range includes non-rippable material consisting primarily of moderately fractured bedrock at lower velocities and only slightly fractured or unfractured rock at higher velocities. Materials in this velocity range may be marginally rippable, depending upon the degree of fracturing and the skill and experience of the operator. Tooth penetration is often the key to ripping success, regardless of seismic velocity. If the fractures and joints do not allow tooth penetration, the material may not be ripped effectively; however, pre-blasting or "popping" may induce sufficient fracturing to permit tooth entry. In their natural state, materials with these velocities are generally not desirable for building pad grade, due to difficulty in footing and utility trench excavation. Blasting will most likely produce oversized material, requiring special disposal.

GEOLOGIC & EARTHWORK CONSIDERATIONS

To evaluate whether a particular bedrock material can be ripped or excavated, this geophysical survey should be used in conjunction with the geologic and/or geotechnical report and/or information gathered for the subject project which may describe the physical properties of the bedrock. The physical characteristics of bedrock materials that favor ripping generally include the presence of fractures, faults, and other structural discontinuities, weathering effects, brittleness or crystalline structure, stratification or lamination, large grain size, moisture permeated clay, and low compressive strength. If the bedrock is foliated and/or fractured at depth, this structure could aid in excavation Unfavorable bedrock conditions can include such characteristics as production. massive and homogeneous formations, non-crystalline structure, absence of planes of weakness, fine-grained materials, and formations of clay origin where moisture makes the material plastic. Use of these physical bedrock conditions along with the subsurface velocity characteristics as presented within this report should aid in properly evaluating the type of equipment that will be necessary and the production levels that can be anticipated for this project.

A summary of excavation considerations is included within Appendix C in order to provide you and your grading contractor with a better understanding of the complexities of excavation in granitic bedrock materials, so that proper planning and excavation techniques can be employed.

SUMMARY OF FINDINGS AND CONCLUSIONS

The raw field data was considered to be of good quality with some ambient "noise" that was introduced during our survey, most likely originating from nearby vehicular traffic, air traffic, and high-frequency communications. Analysis of the data and picking of the primary "P"-wave arrivals was performed with little difficulty, with minor interpolation of some data points being necessary. Based on the results of our comparative seismic analyses of the computer programs **SIPwin**, **Refractor**, and **Rayfract™**, the seismic refraction survey line models appear to generally coincide with one another, with some minor variances due to the methods that these programs process, integrate, and display the input data. The anticipated excavation potentials of the velocity layers encountered locally during our survey are as follows:

□ <u>Velocity Layer V1</u>:

No excavating difficulties are expected to be encountered within the uppermost, low-velocity V1 layer (average weighted velocity of 1,242 to 1,707 fps) and should excavate with conventional ripping. This surficial velocity layer is expected to be comprised of alluvial materials, topsoil, colluvium, and/or completely-weathered and fractured bedrock materials. Random isolated bedrock floaters could also be locally encountered within this layer, based on surficial exposures across the site, creating excavation difficulties.

Velocity Layer V2:

The second V2 layer (average weighted velocity of 2,635 to 3,673 fps) is believed to consist of highly-weathered granitic bedrock, and/or possibly localized indurated older alluvial deposits. Differentiating these materials in this layer is not be possible due to similar seismic velocity characteristics. Using the rock classifications as presented within Tables 1 through 3 and Figure 2, seismic wave velocities of less than 6,800± fps are generally noted to be within the threshold for conventional ripping. Isolated floaters (i.e., boulders, corestones, etc.) should be expected to be present within this layer and could produce somewhat difficult conditions locally. Placement of infrastructure within this velocity layer may require some breaking and/or light blasting to obtain desired grade.

Velocity Layer V3:

The third V3 layer is believed to consist of highly- to moderately-weathered bedrock, becoming fresher at depth. Harder excavation difficulties within this layer (average weighted velocity range of 4,045 to 6,192 fps) should be anticipated if encountered during grading. This layer may consist of relatively homogeneous bedrock with wide-spaced fracturing, or may contain higher velocity scattered corestones, dikes, and other lithologic variables, within a relatively lower velocity bedrock matrix.

Blasting is not encountered but cannot be completely ruled out in the event localized corestones are encountered, including any infrastructure. Caterpillar (2019; see Figure 2) indicates this velocity range to be "rippable" using a D9R dozer or equivalent. Larger equipment may facilitate excavation potentials within this relatively higher velocity layer, if encountered during grading.

The ray sampling coverage of the subsurface seismic waves that were acquired during the processing of the refraction tomographic models using **Rayfract**™, appeared to be of good quality, which was verified by having a Root Mean Square Error (RMS) of 2.4 to 3.0 percent (see lower right-hand corner of the models). The RMS error (misfit between picked and modeled first break times) is automatically calculated during the processing routine, with a value of less than 5.0% being preferred, which was obtained on all of the seismic models.

Based on the tomographic modeling and typical excavation characteristics observed within granitic bedrock materials of the southern California region, anticipation of gradual increasing hardness with depth should be anticipated during grading. Some lateral velocity variations should be expected to be encountered across the subject property generally due to the presence of buried corestones, dikes, and/or lithologic variabilities.

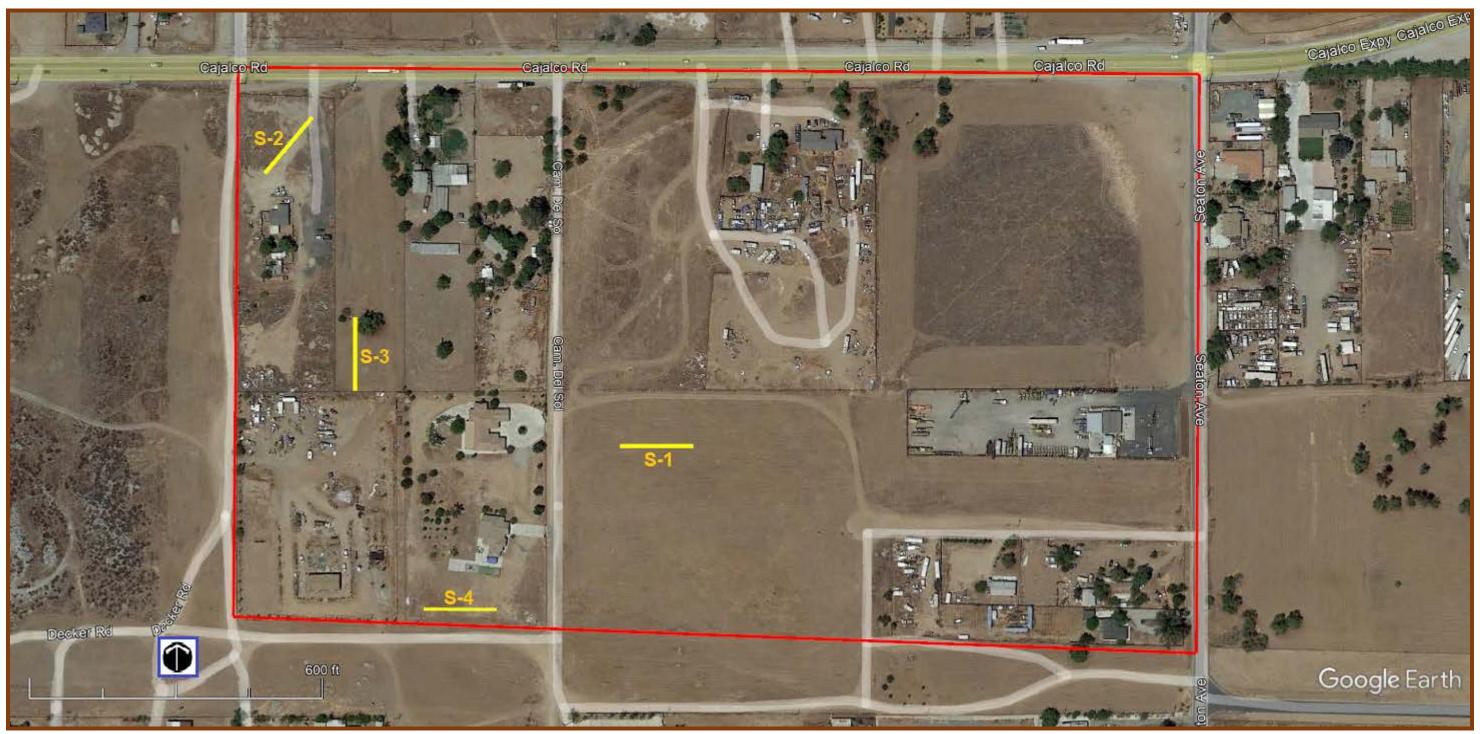
CLOSURE

The field geophysical survey was performed on March 18, 2023 by the undersigned using "state of the art" geophysical equipment and techniques along the selected seismic traverse locations. The seismic data was further evaluated using recently developed computerized tomographic inversion techniques to provide a more thorough analysis and understanding of the subsurface velocity and structural conditions. It should be noted that our data presented within this report was obtained along four specific locations therefore other areas in the local may contain different velocity layers and depths not encountered during our field survey. Additional survey traverses may be necessary to further evaluate the excavation characteristics across other portions of the site where cut grading will be proposed, if warranted. Estimates of layer velocity boundaries as presented in this report are generally considered to be within 10± percent of the total depth of the contact.

It is important to understand that the fundamental limitation for seismic refraction surveys is known as nonuniqueness, wherein a specific seismic refraction data set does not provide sufficient information to determine a single "true" earth model. Therefore, the interpretation of any seismic data set uses "best-fit" approximations along with the geologic models that appear to be most reasonable for the local area being surveyed. Client should also understand that when using the theoretical geophysical principles and techniques discussed in this report, sources of error are possible in both the data obtained, and in the interpretation, and that the results of this survey may not represent actual subsurface conditions. These are all factors beyond **Terra Geosciences** control and no guarantees as to the results of this survey can be made. We make no warranty, either expressed or implied.

In summary, the results of this seismic refraction survey are to be considered as an aid to assessing the rippability and excavation potentials of the bedrock locally. This information should be carefully reviewed by the grading contractor and representative "test" excavations with the proposed type of excavation equipment for the proposed construction should be considered, so that they may be correlated with the data presented within this report.

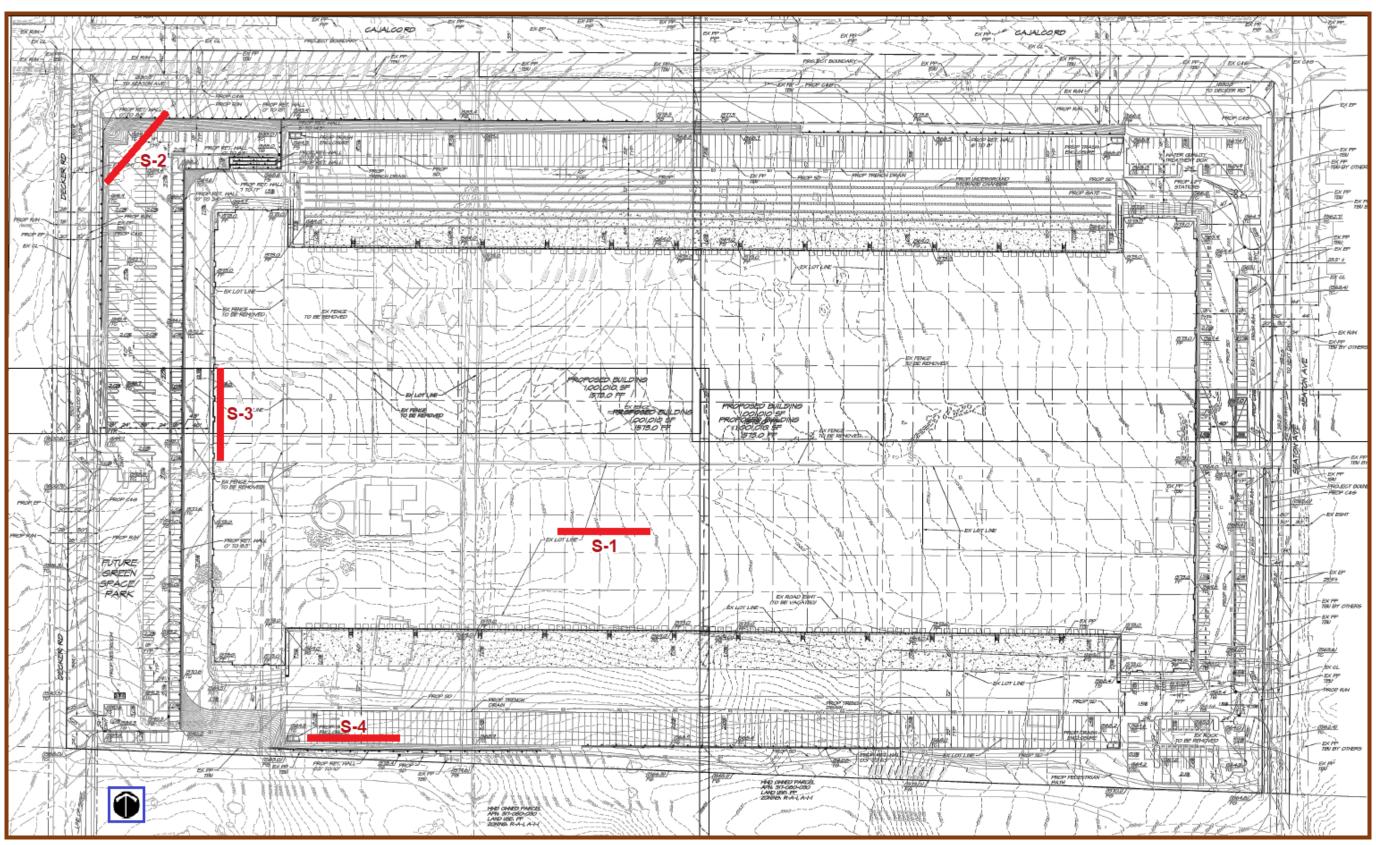
GOOGLE™ EARTH IMAGERY MAP



Base Map: Google™ Earth imagery (2023); Seismic traverses S-1 through S-4 shown as yellow lines; Approximate site boundary outlined in red.

PROJECT NO. 233929-1 PLATE 1

SEISMIC LINE LOCATION MAP



Base Map: Partial copy of the provided 150-scale Grading Plan; Seismic traverses S-1 through S-4 shown as red lines.

PROJECT NO. 233929-1 PLATE 2

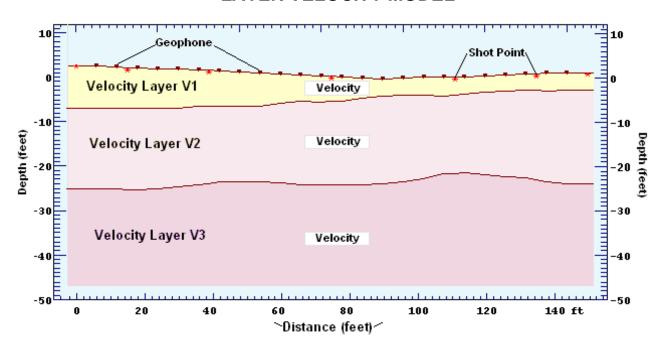
APPENDIX A

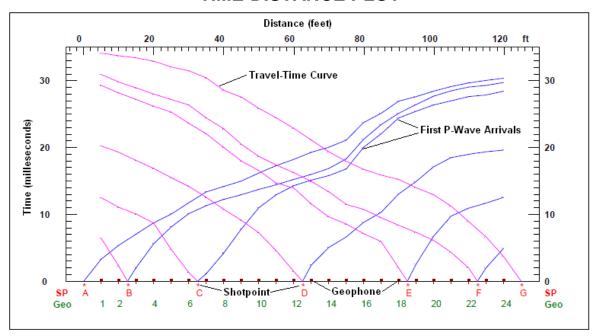
LAYER VELOCITY MODELS



LAYER VELOCITY MODEL LEGEND

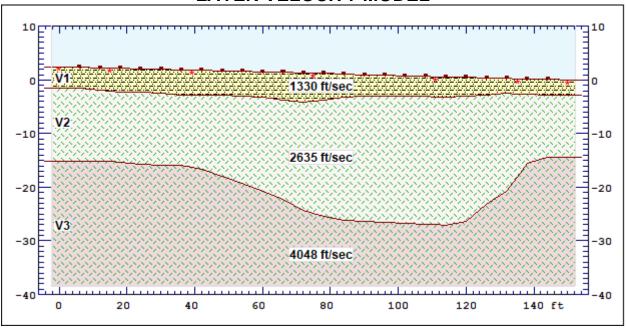
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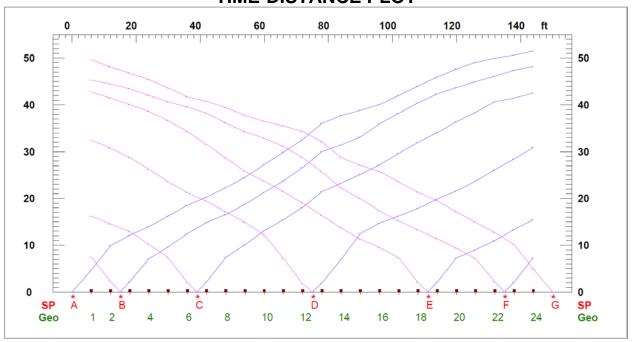




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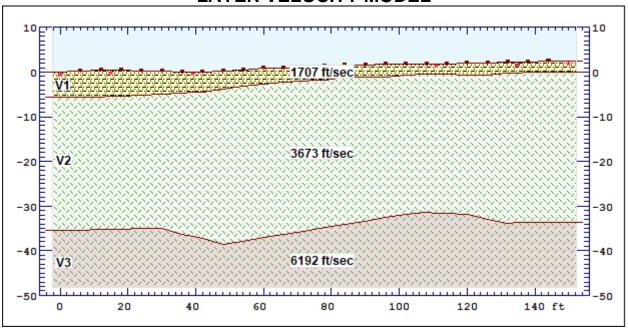
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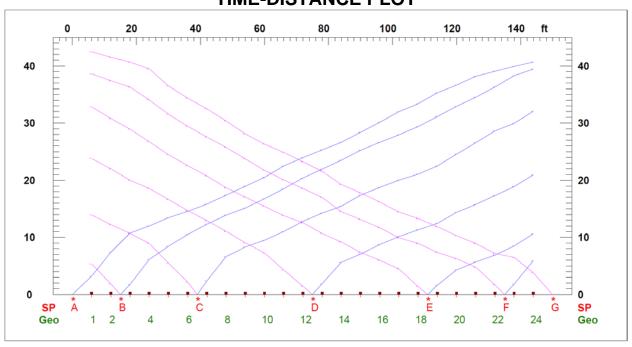




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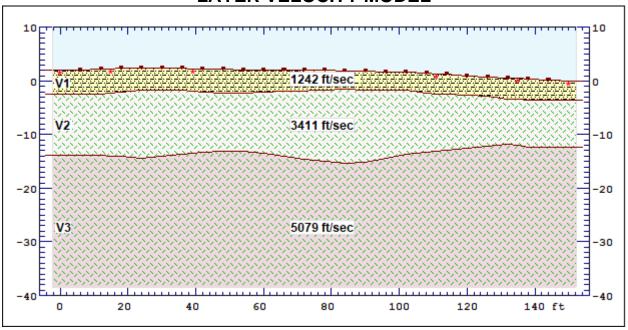
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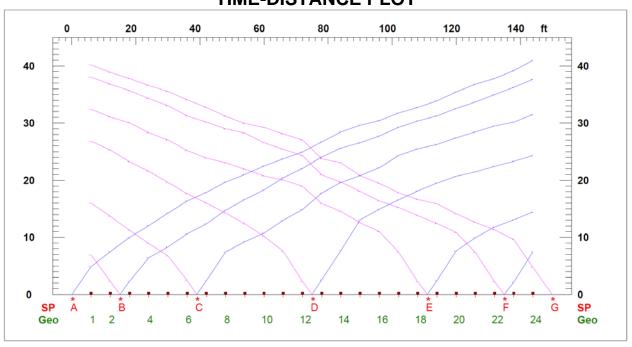




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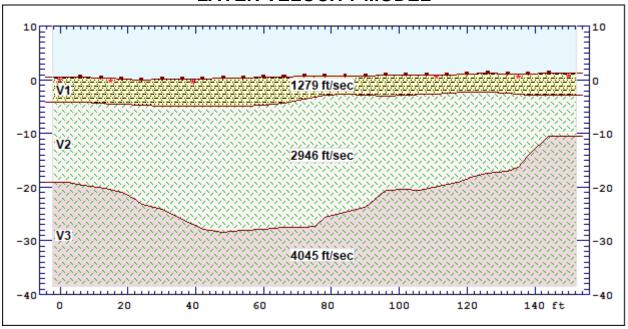
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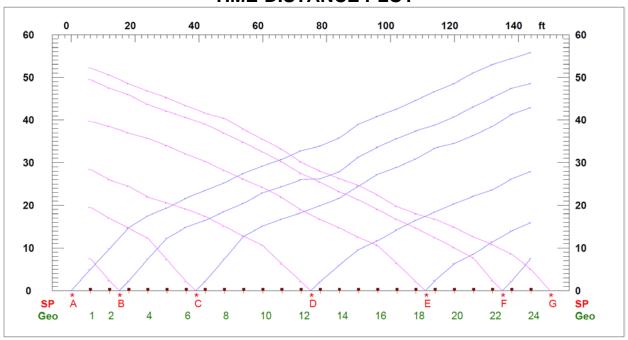




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LAYER VELOCITY MODEL





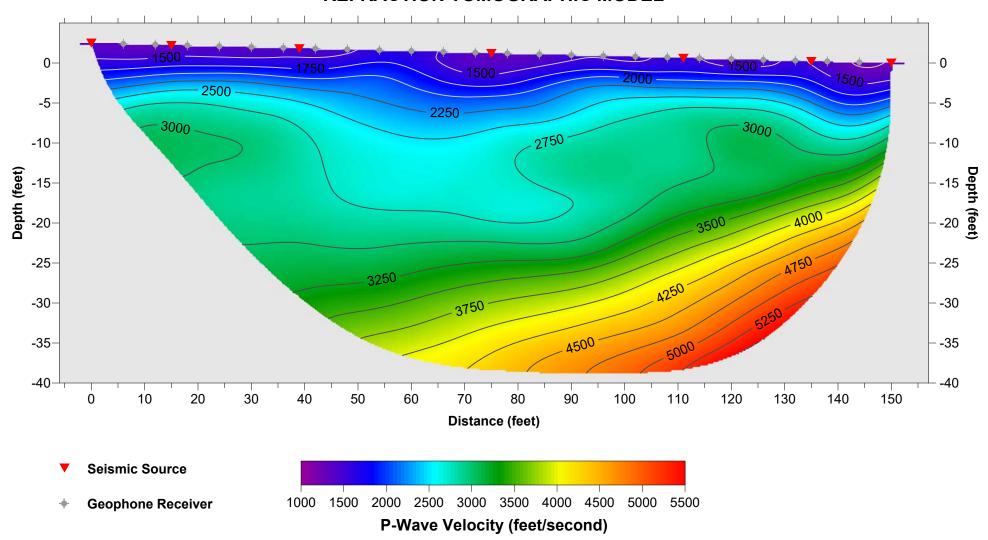
APPENDIX B

REFRACTION TOMOGRAPHIC MODELS

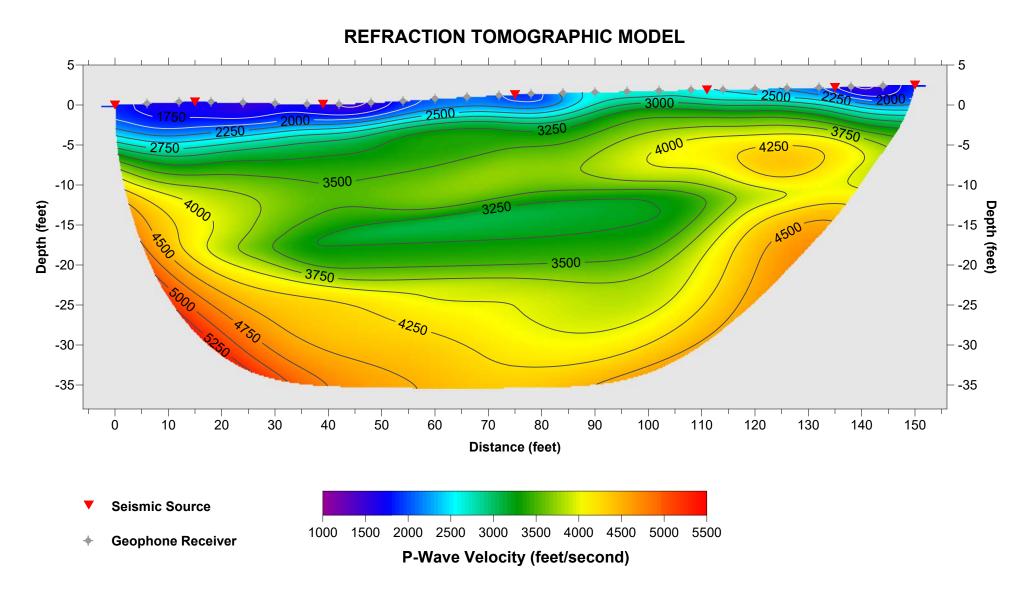


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REFRACTION TOMOGRAPHIC MODEL

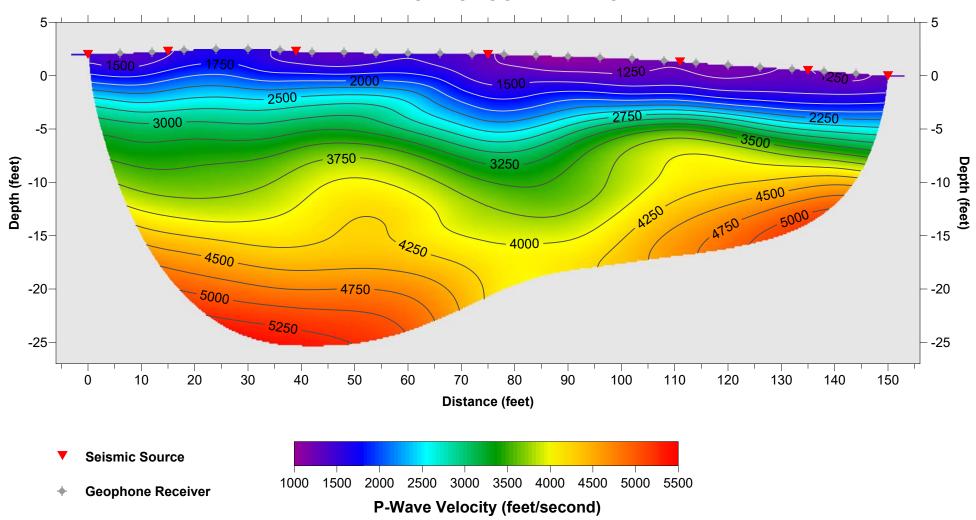


North 40° East →



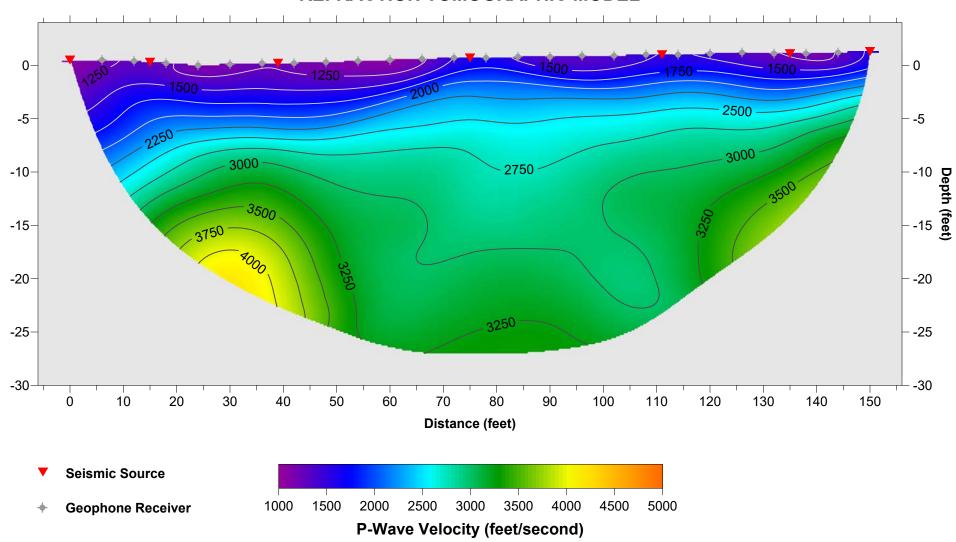
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REFRACTION TOMOGRAPHIC MODEL



< West - East >

REFRACTION TOMOGRAPHIC MODEL



APPENDIX C

EXCAVATION CONSIDERATIONS



EXCAVATION CONSIDERATIONS

These excavation considerations have been included to provide the client with a brief overall summary of the general complexity of hard bedrock excavation. It is considered the client's responsibility to ensure that the grading contractor they select is both properly licensed and qualified, with experience in hard-bedrock ripping processes. To evaluate whether a particular bedrock material can be ripped, this geophysical survey should be used in conjunction with the geologic or geotechnical report prepared for the project which describes the physical properties of the bedrock. The physical characteristics of bedrock materials that favor ripping generally include the presence of fractures, faults and other structural discontinuities, weathering effects, brittleness or crystalline structure, stratification of lamination, large grain size, moisture permeated clay, and low compressive strength. Unfavorable conditions can include such characteristics as massive and homogeneous formations, non-crystalline structure, absence of planes of weakness, fine-grained materials, and formations of clay origin where moisture makes the material plastic.

When assessing the potential rippability of the underlying bedrock of a given site, the above geologic characteristics along with the estimated seismic velocities can then be used to evaluate what type of equipment may be appropriate for the proposed grading. When selecting the proper ripping equipment there are three primary factors to consider, which are:

- Down Pressure available at the tip, which determines the ripper penetration that can be attained and maintained,
- ◆ Tractor flywheel horsepower, which determines whether the tractor can advance the tip, and,
- ♦ Tractor gross-weight, which determines whether the tractor will have sufficient traction to use the horsepower.

In addition to selecting the appropriate tractor, selection of the proper ripper design is also important. There are basically three designs, being radial, parallelogram, and adjustable parallelogram, of which the contractor should be aware of when selecting the appropriate design to be used for the project. The penetration depth will depend upon the down-pressure and penetration angle, as well as the length of the shank tips (short, intermediate, and long).

Also, important in the excavation process is the ripping technique used as well as the skill of the individual tractor operator. These techniques include the use of one or more ripping teeth, up- and down-hill ripping, and the direction of ripping with respect to the geologic structure of the bedrock locally. The use of two tractors (one to push the first tractor-ripper) can extend the range of materials that can be ripped. The second tractor can also be used to supply additional down-pressure on the ripper. Consideration of light blasting can also facilitate the ripper penetration and reduce the cost of moving highly consolidated rock formations.

All of the combined factors above should be considered by both the client and the grading contractor, to ensure that the proper selection of equipment and ripping techniques are used for the proposed grading.

APPENDIX D

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GEOTECHNICAL INVESTIGATION PROPOSED WAREHOUSE DEVELOPMENT

SWC Cajalco road and Seaton Avenue Riverside County (Perris Area), California for Hillwood



August 25, 2022

Hillwood 901 Via Piemonte, Suite 175 Ontario, California 91764



Vice President, Development

Project No.: **22G213-1**

Subject: **Geotechnical Investigation**

Proposed Warehouse Development SWC Cajalco Road and Seaton Avenue Riverside County (Perris Area), California

Gentlemen:

In accordance with your request, we have conducted a geotechnical investigation at the subject site. We are pleased to present this report summarizing the conclusions and recommendations developed from our investigation.

SOUTHERN

CALIFORNIA

A California Corporation

GEOTECHNICAL

SoCalGeo

We sincerely appreciate the opportunity to be of service on this project. We look forward to providing additional consulting services during the course of the project. If we may be of further assistance in any manner, please contact our office.

ERICK J. ALDRICH No. 2565

GEOTECHNICA

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Respectfully Submitted,

SOUTHERN CALIFORNIA GEOTECHNICAL, INC.

Erick J. Aldrich, GE 2565 Geotechnical Engineer

Geotechnicai Engineer

Robert G. Trazo, GE 2655 Principal Engineer

Distribution: (1) Addressee

PROFESSIONAL PROFE

22885 Savi Ranch Parkway
Suite E
Yorba Linda
California
92887 voice: (714) 685-1115
fax: (714) 685-1118
www.socalgeo.com

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1.0 EXECUTIVE SUMMARY

Presented below is a brief summary of the conclusions and recommendations of this investigation. Since this summary is not all inclusive, it should be read in complete context with the entire report.

Site Preparation

- Initial site preparation should include stripping of the existing native grass and weed growth, organic topsoil materials, and trees that will not remain with the proposed development. Existing debris and trash should be removed from the site.
- Demolition of the various structures in several portions of the site will be necessary in order to facilitate the construction of the proposed development. Demolition should include foundations, floor slabs, utilities and other subsurface improvements that will not remain in place with the new development.
- The near-surface soils consist of bedrock in the western area with younger and older native alluvium in the remainder of the site. The younger alluvium was encountered at two boring locations extending to depths of 3 to 5½± feet below grade. The younger alluvium and some of the older alluvium, possesses a moderate potential for hydrocollapse. Additionally, based on the existing site topography, the proposed grading is expected to create cut-fill transitions in the proposed building pad area. Therefore, remedial grading is recommended to remove some of the hard bedrock as well as a portion of the near-surface native alluvium and replace these soils as compacted structural fill soils. The recommended remedial grading will reduce potential differential settlements by creating more uniform conditions across cut/fill transitions and by removing near surface hard bedrock as well as the variable strength and collapsible near-surface alluvial soils. These materials will be replaced as compacted structural fill.
- The proposed building area should be overexcavated to a depth of at least 3 feet below existing grade and to a depth of 3 feet below the proposed building pad subgrade elevation, whichever is deeper. Within the foundation influence zones, the overexcavation should extend to a depth of at least 2 feet below proposed foundation bearing grade. The overexcavation should extend horizontally at least 5 feet beyond the building perimeter. Additional overexcavation may be necessary in portions of the building pad area in order to remove potentially collapsible, low density, younger alluvial soils. The limits of additional overexcavation should be evaluated during grading.
- After overexcavation has been completed, the resulting subgrade soils should be evaluated by the geotechnical engineer to identify additional soils that should be removed. The resulting subgrade should then be scarified to a depth of 12 inches and moisture conditioned to 2 to 4 percent above optimum. The previously excavated soils may then be replaced as compacted structural fill. Structural fill soils should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density.
- The new pavement and flatwork subgrade soils are recommended to be scarified to a depth of 12± inches, thoroughly moisture conditioned and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density.

Building Foundations

- Conventional shallow foundations, supported in newly placed compacted fill.
- 2,500 lbs/ft² maximum allowable soil bearing pressure.



• Reinforcement consisting of at least four (4) No. 5 rebars (2 top and 2 bottom) in strip footings. Additional reinforcement may be necessary for structural considerations.

Building Floor Slab

- Conventional Slab-on-grade, 6 inches thick.
- Modulus of Subgrade Reaction: 100 psi/in
- Minimum slab reinforcement: No. 3 bars at 16 inches on-center, in both directions, due to the presence of potentially expansive soils at the site. The actual floor slab reinforcement should be evaluated by the structural engineer, based on the imposed loading, and intended use.

Pavements

ASPHALT PAVEMENTS (R=40)					
		Thick	ness (inches)		
Makadala	Auto Parking and		Truck	Traffic	
Materials	Auto Drive Lanes (TI = 4.0 to 5.0)	TI = 6.0	TI = 7.0	TI = 8.0	TI = 9.0
Asphalt Concrete	3	31/2	4	5	51/2
Aggregate Base	4	6	7	8	10
Compacted Subgrade	12	12	12	12	12

PORTLAND CEMENT CONCRETE PAVEMENTS (R=40)				
	Thickness (inches)			
Materials	Autos and Light		Truck Traffic	
	Truck Traffic (TI = 6.0)	TI = 7.0	TI = 8.0	TI = 9.0
PCC	5	51/2	61/2	8
Compacted Subgrade (95% minimum compaction)	12	12	12	12



2.0 SCOPE OF SERVICES

The scope of services performed for this project was in accordance with our Proposal No. 22P192, dated April 20, 2022. The scope of services included a visual site reconnaissance, subsurface exploration, field and laboratory testing, and geotechnical engineering analysis to provide criteria for preparing the design of the building foundations, building floor slab, and parking lot pavements along with site preparation recommendations and construction considerations for the proposed development. The evaluation of the environmental aspects of this site was beyond the scope of services for this geotechnical investigation.



3.0 SITE AND PROJECT DESCRIPTION

3.1 Site Conditions

The subject site is located at the southwest corner of Cajalco Road and Seaton Avenue in an unincorporated portion of Riverside County near Perris, California. The site is bounded to the north by Cajalco Road, to the west by the Decker Road easement, to the south by single-family residences, and to the east by Seaton Avenue. The general location of the site is illustrated on the Site Location Map, enclosed as Plate 1 in Appendix A of this report.

The subject site consists of several rectangular-shaped parcels, which total $50\pm$ acres in size. Based on our visit to the site and aerial photographs obtained from Google Earth, the site is currently developed with several single-family residences (SFRs) and one commercial/industrial building. The SFRs range from 1,200 to 2,000 \pm ft² in size and are of wood frame and stucco construction assumed to be supported on conventional shallow foundations with concrete slab-on-grade floors. The industrial building is approximately 1,750 ft² in size located in the east-central area of the site.

The southwestern parcel consists of a SFR, several sheds, and an animal pen. Ground surface cover at this portion of the site consists of exposed soil and bedrock.

The central parcels consist of three undeveloped lots, four SFRs and one commercial/industrial building. Ground surface cover surrounding the SFRs consists of exposed soil, areas of medium-sized trees, and limited areas of moderate-condition Portland Cement concrete (PCC). The empty lots consist of exposed soil with occasional small to medium-sized trees in the western parcel. An east-west trending homeless encampment is present along the northern boundary of the central undeveloped parcel. The central-eastern parcel is currently developed with an industrial building and is utilized to store construction equipment. Ground surface cover on this parcel consists of open graded gravel and Asphaltic Concrete (AC) pavements.

The northern parcels consist of three SFRs and three undeveloped lots. Ground surface cover in these areas consists of exposed soil. Small to medium-sized trees surround some of the SFRs. Various canopy structures are present on the developed parcels.

Detailed topographic information was not available at the time of this report. Based on elevations obtained from Google Earth, and visual observations made at the time of the subsurface investigation, the overall site topography slopes gently toward the east at a gradient of less than 2± percent.

3.2 Proposed Development

Based on the site plan provided by the client, the site will be developed with one warehouse, $1,000,710\pm \text{ ft}^2$ in size, located in the east-central area of the site. The building will be constructed with dock-high doors along portions of the north and south building walls. The building will be



surrounded by asphaltic concrete pavements in the parking and drive lanes, Portland cement concrete pavements in the loading dock areas, and concrete flatwork with limited areas of landscape planters throughout. In addition, two (2) soccer fields will be installed in the south western portion of the site, and a future green space/park in the western portion of the site. A trail area is currently planned south of the building and parking lot that extends east to west.

Detailed structural information has not been provided. We assume that the new building will be a single-story structure of tilt-up concrete construction, typically supported on conventional shallow foundation system with a concrete slab-on-grade floor. Based on the assumed construction, maximum column and wall loads are expected to be on the order of 100 kips and 4 to 6 kips per linear foot, respectively.

No significant amounts of below-grade construction, such as crawl spaces or new basements, are expected to be included in the proposed development. Based on the assumed topography, cuts and fills up to 15 to 20± feet are expected to be necessary to achieve the proposed site grades.



4.0 SUBSURFACE EXPLORATION

4.1 Scope of Exploration/Sampling Methods

The subsurface exploration conducted for this project consisted of twelve (12) borings identified as Boring Nos. B-1 through B-12, advanced to depths of 10 to 30± feet below the existing site grades. Two (2) of the borings were attempted to be drilled to a depth of 50± feet as part of the liquefaction evaluation, but very dense bedrock was encountered at shallow depths. The borings were logged during drilling by a member of our staff.

The borings were advanced with hollow-stem augers, by a conventional truck-mounted drilling rig. Representative bulk and relatively undisturbed soil samples were taken during drilling. Relatively undisturbed soil samples were taken with a split barrel "California Sampler" containing a series of one inch long, 2.416± inch diameter brass rings. This sampling method is described in ASTM Test Method D-3550. In-situ samples were also taken using a 1.4± inch inside diameter split spoon sampler, in general accordance with ASTM D-1586. Both of these samplers are driven into the ground with successive blows of a 140-pound weight falling 30 inches. The blow counts obtained during driving are recorded for further analysis. Bulk samples were collected in plastic bags to retain their original moisture content. The relatively undisturbed ring samples were placed in molded plastic sleeves that were then sealed and transported to our laboratory.

The approximate locations of the borings are indicated on the Boring Location Plan, included as Plate 2 in Appendix A of this report. The Boring Logs, which illustrate the conditions encountered at the boring locations, as well as the results of some of the laboratory testing, are included in Appendix B.

4.2 Geotechnical Conditions

Younger Alluvium

Younger alluvium was encountered at the ground surface of Boring Nos. B-8 and B-12, extending to depths ranging from 3 to $5\frac{1}{2}$ feet below existing site grades. The younger alluvium consists of medium dense silty fine sands, fine to medium sandy silts, and silty fine to medium sands.

Older Alluvium

Older alluvium was encountered at the ground surface or beneath the younger alluvium at Boring Nos. B-3 through B-11, extending to depths ranging from the ground surface to 20 feet below existing site grades. The older alluvium consists of medium dense to dense silty fine sands, medium dense fine to coarse sands, and medium dense to very dense fine sandy silts and silty fine to coarse sands. Additionally, dense to very dense fine to medium sandy silts were encountered in the older alluvium. Trace quantities of clay were occasionally encountered in the older alluvium.



Bedrock

Val Verde Tonalite (Kvt) bedrock was encountered at the ground surface or beneath the alluvium at each boring locations except for Boring Nos. B-4 and B-6, extending to depths ranging from the ground surface to at least the maximum explored depth of 30± feet below existing site grades. The bedrock consists of fine to coarse-grained Tonalite which is phaneritic, friable, weathered, and weakly cemented.

Groundwater

Free water was not encountered during the drilling of the borings. Based on the lack of water within the borings and the moisture contents of the recovered soil samples, the static groundwater is considered to have existed at a depth in excess of $30\pm$ feet at the time of the subsurface exploration.

Recent water level data was obtained from the California State Water Resources Control Board, GeoTracker, website, https://geotracker.waterboards.ca.gov/. One monitoring wells on record is located 1.78 \pm miles west of the site. Water level readings within this monitoring wells indicate a high groundwater level of $4\frac{1}{2}\pm$ feet below the ground surface in February 2010.

4.3 Geologic Conditions

Regional geologic conditions were obtained from the <u>Geologic Map of the Steele Peak 7.5'</u> <u>Quadrangle, Riverside County, California</u>, by Douglas M. Morton published by the California Department of Mines and Geology and United States Air Force, 2001. This map indicates that the site is predominantly underlain by early Pleistocene (Map Symbol Qvof) old alluvial valley deposits in the eastern portion and some Val Verde tonalite (Map Symbol Kvt) formation in the western portion of the site. Morton describes the older alluvium deposits as predominantly composed of moderately indurated, slightly dissected, sandy alluvium, containing lesser silt, and clay-bearing alluvium. Morton describes this formation as gray-weathering, relatively homogeneous, massive to well-foliated, medium to coarse grained, hypautomorphic granular biotite-hornblende tonalite. A portion of this map indicating the location of the subject site is included as Plate 3 in Appendix A.

Older alluvium and bedrock materials were encountered at most of the boring locations. The geologic conditions encountered at the site are consistent with the mapped geologic conditions.



5.0 LABORATORY TESTING

The soil samples recovered from the subsurface exploration were returned to our laboratory for further testing to evaluate selected physical and engineering properties of the soils. The tests are briefly discussed below. It should be noted that the test results are specific to the actual samples tested, and variations could be expected at other locations and depths.

Classification

Recovered soil samples were classified using the Unified Soil Classification System (USCS), in accordance with ASTM D-2488. Field identifications were then supplemented with additional visual classifications and/or by laboratory testing. The USCS classifications are shown on the Boring Logs and are periodically referenced throughout this report.

Density and Moisture Content

The density has been evaluated for selected relatively undisturbed ring samples. These densities were evaluated in general accordance with the method presented in ASTM D-2937. The results are recorded as dry unit weight in pounds per cubic foot. The moisture contents are evaluated in accordance with ASTM D-2216, and are expressed as a percentage of the dry weight. These test results are presented on the Boring Logs.

Consolidation

Selected soil samples have been tested to evaluate their consolidation and collapse potential, in accordance with ASTM D-2435. The testing apparatus is designed to accept either natural or remolded samples in a one-inch high ring, approximately 2.416 inches in diameter. Each sample is then loaded incrementally in a geometric progression and the resulting deflection is recorded at selected time intervals. Porous stones are in contact with the top and bottom of the sample to permit the addition or release of pore water. The samples are typically inundated with water at an intermediate load to evaluate their potential for collapse or heave. The results of the consolidation testing are plotted on Plates C-1 through C-4 in Appendix C of this report.

Maximum Dry Density and Optimum Moisture Content

A representative bulk sample of the near surface soils was tested for its maximum dry density and optimum moisture content. The results have been obtained using the Modified Proctor procedure, per ASTM D-1557, and are presented on Plate C-5 in Appendix C of this report. These tests are generally used to with compare the dry densities of undisturbed field samples, and for later compaction testing. Additional testing of other soil types or soil mixes may be necessary at a later date.

Expansion Index

The expansion potential of the on-site soils was evaluated in general accordance with ASTM D-4829. The testing apparatus is designed to accept a 4-inch diameter, 1-in high, remolded sample. The sample is initially remolded to 50 ± 1 percent saturation and then loaded with a surcharge



equivalent to 144 pounds per square foot. The sample is then inundated with water, and allowed to swell against the surcharge. The resultant swell or consolidation is recorded after a 24-hour period. The results of the expansion index shown on the boring logs and in the table below:

Sample Identification	Expansion Index	Expansive Potential
B-3 @ 0 to 5 feet	6	Very Low
B-6 @ 0 to 5 feet	32	Low

Soluble Sulfates

Representative samples of the near-surface soils were submitted to a subcontracted analytical laboratory for determination of soluble sulfate content. Soluble sulfates are naturally present in soils, and if the concentration is high enough, can result in degradation of concrete which comes into contact with these soils. The results of the soluble sulfate testing are presented below, and are discussed further in a subsequent section of this report.

Sample Identification	Soluble Sulfates (%)	<u>Severity</u>
B-3 @ 0 to 5 feet	0.009	Not Applicable (S0)
B-6 @ 0 to 5 feet	0.011	Not Applicable (S0)

Corrosivity Testing

Representative bulk samples of the near-surface soils was submitted to a subcontracted corrosion engineering laboratory to identify potentially corrosive characteristics with respect to common construction materials. The corrosivity testing included an evaluation of the electrical resistivity, pH, and chloride and nitrate concentrations of the soils, as well as other tests. The results of some of these tests are presented below.

<u>Sample</u> <u>Identification</u>	<u>Saturated Resistivity</u> (ohm-cm)	<u>pH</u>	<u>Chlorides</u> (mg/kg)	<u>Nitrates</u> (mg/kg)
B-3 @ 0 to 5 feet	5,561	7.6	42.0	36.9
B-6 @ 0 to 5 feet	8,040	9.4	41.6	0.4



6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our review, field exploration, laboratory testing and geotechnical analysis, the proposed development is considered feasible from a geotechnical standpoint. The recommendations contained in this report should be taken into the design, construction, and grading considerations. The recommendations are contingent upon all grading and foundation construction activities being monitored by the geotechnical engineer of record. The Grading Guide Specifications, included as Appendix D, should be considered part of this report, and should be incorporated into the project specifications. The contractor and/or owner of the development should bring to the attention of the geotechnical engineer any conditions that differ from those stated in this report, or which may be detrimental for the development.

6.1 Seismic Design Considerations

The subject site is located in an area which is subject to strong ground motions due to earthquakes. The performance of a site specific seismic hazards analysis was beyond the scope of this investigation. However, numerous faults capable of producing significant ground motions are located near the subject site. Due to economic considerations, it is not generally considered reasonable to design a structure that is not susceptible to earthquake damage. Therefore, significant damage to structures may be unavoidable during large earthquakes. The proposed structures should, however, be designed to resist structural collapse and thereby provide reasonable protection from serious injury, catastrophic property damage and loss of life.

Faulting and Seismicity

Research of available maps indicates that the subject site is not located within an Alquist-Priolo Earthquake Fault Zone. Therefore, the possibility of significant fault rupture on the site is considered to be low.

Seismic Design Parameters

Based on standards in place at the time of this report, the proposed development is expected to be designed in accordance with the requirements of the 2019 edition of the California Building Code (CBC), which was adopted on January 1, 2020. The 2019 California Building Code (CBC) provides procedures for earthquake resistant structural design that include considerations for onsite soil conditions, occupancy, and the configuration of the structure including the structural system and height. The seismic design parameters presented below are based on the soil profile and the proximity of known faults with respect to the subject site.

The 2019 CBC Seismic Design Parameters have been generated using the <u>SEAOC/OSHPD Seismic Design Maps Tool</u>, a web-based software application available at the website www.seismicmaps.org. This software application calculates seismic design parameters in accordance with several building code reference documents, including ASCE 7-16, upon which the 2019 CBC is based. The application utilizes a database of risk-targeted maximum considered earthquake (MCE_R) site accelerations at 0.01-degree intervals for each of the code documents.



The table below was created using data obtained from the application. The output generated from this program is included as Plate E-1 in Appendix E of this report.

2019 CBC SEISMIC DESIGN PARAMETERS

Parameter	Value	
Mapped Spectral Acceleration at 0.2 sec Period	Ss	1.500
Mapped Spectral Acceleration at 1.0 sec Period	S ₁	0.556
Site Class		С
Site Modified Spectral Acceleration at 0.2 sec Period	S _{MS}	1.800
Site Modified Spectral Acceleration at 1.0 sec Period	S _{M1}	0.803
Design Spectral Acceleration at 0.2 sec Period	S _{DS}	1.200
Design Spectral Acceleration at 1.0 sec Period	S _{D1}	0.535

Liquefaction

Liquefaction is the loss of strength in generally cohesionless, saturated soils when the pore-water pressure induced in the soil by a seismic event becomes equal to or exceeds the overburden pressure. The primary factors which influence the potential for liquefaction include groundwater table elevation, soil type and plasticity characteristics, relative density of the soil, initial confining pressure, and intensity and duration of ground shaking. The depth within which the occurrence of liquefaction may impact surface improvements is generally identified as the upper 50 feet below the existing ground surface. Liquefaction potential is greater in saturated, loose, poorly graded fine sands with a mean (d_{50}) grain size in the range of 0.075 to 0.2 mm (Seed and Idriss, 1971). Non-sensitive clayey (cohesive) soils which possess a plasticity index of at least 18 (Bray and Sancio, 2006) are generally not considered to be susceptible to liquefaction, nor are those soils which are above the historic static groundwater table.

The Riverside County GIS website indicates that the subject site is located within a zone of low to moderate liquefaction susceptibility. However, the subsurface conditions encountered at the boring locations are not considered to be conducive to liquefaction. These conditions include near-surface soils consisting of older alluvium, relatively shallow, very dense tonalite bedrock, and the lack of a static groundwater table within the upper $30\pm$ feet. Based on these factors, liquefaction is not considered to be a design concern for this project.

6.2 Geotechnical Design Considerations

General

The near-surface soils at the boring locations consist of loose to medium dense younger alluvium and medium dense to very dense older alluvium underlain by very dense tonalite bedrock. The younger alluvial soils are present within the upper 3 to $5\frac{1}{2}$ feet and typically possess a significant potential for collapse. Additionally, based on the present site topography, it is expected that some cut/fill transitions will be created during grading for the proposed structure. We expect



that geologic contacts between the on-site soils and bedrock will be exposed during remedial grading within the proposed building area. Remedial grading is considered warranted within the proposed building area, in order to remove the near surface younger, some older alluvium and the hard bedrock. These materials can be replaced as compacted structural fill. The recommended remedial grading will reduce potential differential settlements by creating more uniform conditions across cut/fill transitions and by replacing near surface variable strength soils (as well as near-surface bedrock materials) as compacted fill.

Settlement

The recommended remedial grading will remove the potentially collapsible native younger alluvium, as well as a portion of the near-surface older alluvium and near-surface bedrock, and replace these soils as compacted structural fill. The native soils that will remain in place below the recommended depth of overexcavation possess more favorable consolidation/collapse characteristics and will not be subject to significant load increases from the foundations of the new structures. Provided that the recommended remedial grading is completed, the post-construction static settlement of the proposed structure is expected to be within tolerable limits.

Soluble Sulfates

The results of the soluble sulfate testing indicate that the selected sample of the on-site soils possesses a sulfate concentration that corresponds to Class S0 with respect to the American Concrete Institute (ACI) Publication 318-14 <u>Building Code Requirements for Structural Concrete and Commentary</u>, Section 4.3. Therefore, specialized concrete mix designs are not considered to be necessary, with regard to sulfate protection purposes. It is, however, recommended that additional soluble sulfate testing be conducted at the completion of rough grading to verify the soluble sulfate concentrations of the soils which are present at the pad grade in the building area.

Expansion

Laboratory testing performed on representative samples of the near surface soils indicates that these materials possess a very low to low expansion potential (EI = 6 to 32). Based on the possible presence of expansive soils, special care should be taken to properly moisture condition and maintain adequate moisture content within subgrade soils as well as newly placed fill soils. The foundation and floor slab design recommendations contained within this report are made in consideration of the expansion index test results. It is recommended that additional expansion index testing be conducted at the completion of rough grading to evaluate the expansion potential of the as-graded building pad.

Corrosion Potential

The results of the electrical resistivity and pH testing indicate that samples of the on-site soils possess minimum electrical resistivities of 5,561 and 8,040 ohm-cm and pH values of 7.6 and 9.4. These test results have been evaluated in accordance with guidelines published by the Ductile Iron Pipe Research Association (DIPRA). The DIPRA guidelines consist of a point system by which characteristics of the soils are used to quantify the corrosivity characteristics of the site. Resistivity and pH are two of the five factors that enter into the evaluation procedure. Relative soil moisture content as well as redox potential and sulfide testing are also included in the DIPRA procedure. Although redox potential and sulfide testing were not a part of the scope of this investigation, we



have evaluated the corrosivity characteristics of the on-site soils using resistivity, pH and moisture content. **Based on these factors, and utilizing the DIPRA procedure, some of the on-site soils are considered to be corrosive to ductile iron pipe.** Therefore, it is expected that polyethylene encasement will be required for ductile iron pipe.

A low concentration of chlorides (41.6 to 42.0 mg/kg) was detected in the samples submitted for corrosivity testing. In general, soils possessing chloride concentrations in excess of 350 to 500 parts per million (ppm) are considered to be corrosive with respect to steel reinforcement within reinforced concrete. Based on the lack of any significant chlorides in the tested sample, the site is considered to have a C1 chloride exposure in accordance with the American Concrete Institute (ACI) Publication 318 <u>Building Code Requirements for Structural Concrete and Commentary.</u> Therefore, a specialized concrete mix design for reinforced concrete for protection against chloride exposure is not considered warranted.

Nitrates present in soil can be corrosive to copper tubing at concentrations greater than 50 mg/kg. The tested samples possess nitrate concentrations of up to 36.9 mg/kg. Based on this test result, the on-site soils are not considered to be corrosive to copper pipe.

Since SCG does not practice in the area of corrosion engineering, the client may wish to contact a corrosion engineer to provide a more thorough evaluation.

Shrinkage/Subsidence

Removal and recompaction of the near surface alluvium is expected to result in an average shrinkage of up to 5 to 15 percent. Minor ground subsidence is expected to occur in the soils below the zone of removal, due to settlement and machinery working. The subsidence is estimated to be 0.1± feet. This estimate may be used for grading in areas that are underlain by native alluvial soils. Bulking of bedrock materials is expected to be on the order of 0 to 5 percent.

These estimates are based on previous experience and the subsurface conditions encountered at the boring locations. The actual amount of subsidence is expected to be variable and will be dependent on the type of machinery used, repetitions of use, and dynamic effects, all of which are difficult to assess precisely.

Grading and Foundation Plan Review

It is recommended that we be provided with copies of the grading and foundation plans, when they become available, for review with regard to the conclusions, recommendations, and assumptions contained within this report.

6.3 Site Grading Recommendations

The grading recommendations presented below are based on the subsurface conditions encountered at the boring locations and our understanding of the proposed development. We recommend that all grading activities be completed in accordance with the Grading Guide Specifications included as Appendix D of this report, unless superseded by site-specific recommendations presented below.



Site Stripping and Demolition

Initial site preparation should include stripping of any surficial vegetation and organic soils. Based on conditions encountered at the time of the subsurface exploration, stripping of native grass and weed growth is expected to be necessary. These materials should be disposed of offsite. Removal of trees should include the associated root masses. Initial site stripping should also remove the minor amounts of trash and debris that are present on the subject site. The actual extent of site stripping should be evaluated in the field by the geotechnical engineer, based on the organic content and stability of the materials encountered.

Demolition of the existing single-family residential structures and industrial building at the site will be necessary in order to facilitate the construction of the proposed development. Demolition should include foundations, floor slabs, tanks, utilities and any other subsurface improvements that will not remain in place with the new development. Demolition debris should be disposed of off-site in accordance with any applicable regulations. Alternatively, concrete and asphalt debris may be crushed to a maximum 2-inch particle size, mixed with the on-site sandy soils, and reused as compacted structural fill.

Treatment of Existing Soils: Building Pad

Remedial grading should be performed within the proposed building pad area in order to remove the existing potentially compressible/collapsible native younger alluvium, near-surface older alluvium and hard bedrock. In general, it is recommended that the overexcavation extend to a depth of at least 3 feet below existing grade, and to a depth of at least 3 feet below proposed grade, whichever is greater. Within the influence zones of the new foundations, the overexcavation should extend to a depth of at least 2 feet below proposed foundation bearing grade.

Boring No. B-8 encountered potentially collapsible younger alluvial soils extending to a depth of at least 3± feet below grade. Boring No. B-12 (which is located in the soccer field area, outside of the proposed building area) also encountered younger alluvium, extending to a depths of 5½± feet. Based on the depths and locations where potentially collapsible younger alluvium was encountered, most of the younger alluvium in the building pas area is anticipated to be removed during remedial grading. However, additional overexcavation may be necessary. The extent of potentially collapsible soils should be evaluated at the time of site grading.

The overexcavation areas should extend at least 5 feet beyond the building perimeter, and to an extent equal to the depth of fill below the new foundations. If the proposed structure incorporates exterior columns (such as for a canopy or overhang) the area of overexcavation should also encompass these areas.

Following completion of the overexcavation, the subgrade soils within the overexcavation areas should be evaluated by the geotechnical engineer to confirm their suitability to serve as the structural fill subgrade, as well as to support the foundation loads of the new structure. This evaluation should include proofrolling and probing to identify soft, loose or otherwise unstable soils that must be removed. Some localized areas of deeper excavation may be required if additional fill materials or loose, porous, overly moist, or low density native soils are encountered at the base of the overexcavation.



After a suitable overexcavation subgrade has been achieved, the exposed soils should be scarified to a depth of at least 12 inches and moisture conditioned to achieve a moisture content of 2 to 4 percent above optimum moisture content. The subgrade soils should then be recompacted to at least 90 percent of the ASTM D-1557 maximum dry density.

The building pad area may then be raised to grade with previously excavated soils or imported, very low expansive structural fill. Structural fill soils present within the proposed building area should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density.

Treatment of Existing Soils: Retaining Walls and Site Walls

The existing soils within the areas of any proposed retaining walls and site walls should be overexcavated to a depth of 2 feet below foundation bearing grade and replaced as compacted structural fill as discussed above for the proposed building pad. Younger alluvial soils, if encountered, within the wall foundation areas should be removed to a depth sufficient to expose firm and unyielding native older alluvium or bedrock. Erection pads used to construct the walls are considered to be part of the foundation system with respect to these remedial grading recommendations. The overexcavation subgrade soils should be evaluated by the geotechnical engineer prior to scarifying, moisture conditioning, and recompacting the upper 12 inches of exposed subgrade soils, as discussed for the building area. The previously excavated soils may then be replaced as compacted structural fill.

If the recommended remedial grading cannot be completed for screen walls located along property lines, such walls should be designed for a reduced allowable bearing pressure. The allowable bearing pressure will be evaluated based on the actual extent of remedial grading that can be accomplished.

Treatment of Existing Soils: Parking Areas

Based on economic considerations, overexcavation of the alluvial soils in the new parking and drive areas is not considered warranted, with the exception of areas where lower strength, or unstable soils are identified by the geotechnical engineer during grading.

Subgrade preparation in the new parking and drive areas should initially consist of removal of all soils disturbed during stripping and demolition operations. The geotechnical engineer should then evaluate the subgrade to identify any areas of additional unsuitable soils. The subgrade soils should then be scarified to a depth of $12\pm$ inches, moisture conditioned to 2 to 4 percent above optimum, and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. Based on the presence of variable strength alluvial soils throughout the site, it is expected that some isolated areas of additional overexcavation may be required to remove zones of lower strength, unsuitable soils.

The grading recommendations presented above for the proposed parking and drive areas assume that the owner and/or developer can tolerate minor amounts of settlement within the proposed parking areas. The grading recommendations presented above do not completely mitigate the extent of the low strength and potentially collapsible alluvium in the parking areas. As such, settlement and associated pavement distress could occur. Typically, repair of such distressed areas involves significantly lower costs than completely mitigating these soils at the time of construction. If the owner cannot tolerate the risk of such settlements, the parking and drive



areas should be overexcavated to a depth of 2 feet below proposed pavement subgrade elevation, with the resulting soils replaced as compacted structural fill.

Fill Placement

- Fill soils should be placed in thin (6± inches), near-horizontal lifts, moisture conditioned to 2 to 4 percent above the optimum moisture content, and compacted.
- On-site soils may be used for fill provided they are cleaned of any debris to the satisfaction of the geotechnical engineer. Excavated bedrock materials with particle sizes of less than 6 inches may be used in fills. Larger rock materials should be disposed of offsite or placed in accordance with the recommendations for placement of oversized materials contained in the Grading Guide Specifications in Appendix D of this report.
- All grading and fill placement activities should be completed in accordance with the requirements of the 2019 CBC and the grading code of the county of Riverside.
- All fill soils should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. Fill soils should be well mixed.
- Compaction tests should be performed periodically by the geotechnical engineer as random verification of compaction and moisture content. These tests are intended to aid the contractor. Since the tests are taken at discrete locations and depths, they may not be indicative of the entire fill and therefore should not relieve the contractor of his responsibility to meet the job specifications.

Imported Structural Fill

All imported structural fill should consist of very low expansive (EI < 20), well graded soils possessing at least 10 percent fines (that portion of the sample passing the No. 200 sieve). Additional specifications for structural fill are presented in the Grading Guide Specifications, included as Appendix D.

Utility Trench Backfill

In general, all utility trench backfill soils should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. As an alternative, a clean sand (minimum Sand Equivalent of 30) may be placed within trenches and compacted in place (jetting or flooding is not recommended). Compacted trench backfill should conform to the requirements of the local grading code, and more restrictive requirements may be indicated by the county of Riverside. All utility trench backfills should be witnessed by the geotechnical engineer. The trench backfill soils should be compaction tested where possible; probed and visually evaluated elsewhere.

Utility trenches which parallel a footing, and extending below a 1h:1v plane projected from the outside edge of the footing should be backfilled with structural fill soils, compacted to at least 90 percent of the ASTM D-1557 standard. Pea gravel backfill should not be used for these trenches.



6.4 Construction Considerations

Excavation Considerations

The near surface soils generally consist of sands and silty sands. These materials will likely be subject to minor caving within shallow excavations. Where caving occurs within shallow excavations, flattened excavation slopes may be sufficient to provide excavation stability. On a preliminary basis, the inclination of temporary slopes should not exceed 1.5h:1v. Deeper excavations may require some form of external stabilization such as shoring or bracing. Maintaining adequate moisture content within the near-surface soils will improve excavation stability. All excavation activities on this site should be conducted in accordance with Cal-OSHA regulations.

As discussed in Section 4 of this report, very dense bedrock was encountered at most of the boring locations at or near the ground surface. Based on conditions encountered at the boring locations, conventional grading equipment may be suitable to excavate these soils to the depths recommended in this report. However, large track mounted excavators, large track mounted dozers equipped with a ripping shank, or similar equipment may be required for excavation in areas with bedrock, especially in areas where excavations exceed more than 3 to $5\pm$ feet into the bedrock. We recommend a geophysical survey be performed such as seismic lines to further evaluate the estimated rippability and expected excavation characteristics of the bedrock.

Groundwater

The static groundwater table is considered to exist at a depth greater than 30± feet or more below existing grade. Therefore, groundwater is not expected to impact the grading or foundation construction activities.

6.5 Foundation Design and Construction

Based on the preceding grading recommendations, it is assumed that the new building pad will be underlain by newly placed structural fill soils extending to a depth of at least 2 feet below foundation bearing grade. Based on this subsurface profile, the proposed structure may be supported on shallow foundations.

Foundation Design Parameters

New square and rectangular footings may be designed as follows:

- Maximum, net allowable soil bearing pressure: 2,500 lbs/ft².
- Minimum wall/column footing width: 14 inches/24 inches.
- Minimum longitudinal steel reinforcement within strip footings: Four (4) No. 5 rebars (2 top and 2 bottom).



- Minimum foundation embedment: 12 inches into suitable structural fill soils, and at least 18 inches below adjacent exterior grade. Interior column footings may be placed immediately beneath the floor slab.
- It is recommended that the perimeter building foundations be continuous across exterior doorways. Flatwork adjacent to the exterior doors should be doweled into the perimeter foundations in a manner evaluated by the structural engineer.

The allowable bearing pressures presented above may be increased by 1/3 when considering short duration wind or seismic loads. The minimum steel reinforcement recommended above is based on standard geotechnical practice. Additional rigidity may be necessary for structural considerations. The actual design of the foundations should be evaluated by the structural engineer.

Foundation Construction

The foundation subgrade soils should be evaluated at the time of overexcavation, as discussed in Section 6.3 of this report. It is further recommended that the foundation subgrade soils be evaluated by the geotechnical engineer immediately prior to steel or concrete placement. Soils suitable for direct foundation support should consist of newly placed structural fill compacted at least 90 percent of the ASTM D-1557 maximum dry density. Any unsuitable materials should be removed to a depth of suitable bearing compacted structural fill, with the resulting excavations backfilled with compacted fill soils. As an alternative, lean concrete slurry (500 to 1,500 psi) may be used to backfill such isolated overexcavations.

The foundation subgrade soils should also be properly moisture conditioned to 2 to 4 percent above the Modified Proctor optimum, to a depth of at least 12 inches below bearing grade. Since it is typically not feasible to increase the moisture content of the floor slab and foundation subgrade soils once rough grading has been completed, care should be taken to maintain the moisture content of the building pad subgrade soils throughout the construction process.

Estimated Foundation Settlements

Post-construction total and differential static settlements of shallow foundations designed and constructed in accordance with the previously presented recommendations are estimated to be less than 1.0 and 0.5 inches, respectively, under static conditions. Differential movements are expected to occur over a 30-foot span, thereby resulting in an angular distortion of less than 0.002 inches per inch.

Lateral Load Resistance

Lateral load resistance will be developed by a combination of friction acting at the base of foundations and slabs and the passive earth pressure developed by footings below grade. The following friction and passive pressure may be used to resist lateral forces:

Passive Earth Pressure: 250 lbs/ft³

• Friction Coefficient: 0.25



These are allowable values, and include a factor of safety. When combining friction and passive resistance, the passive pressure component should be reduced by one-third. These values assume that footings will be poured directly against compacted structural fill soils. The maximum allowable passive pressure is 2,500 lbs/ft².

6.6 Floor Slab Design and Construction

Subgrades which will support the new floor slab should be prepared in accordance with the recommendations contained in the *Site Grading Recommendations* section of this report. Based on the anticipated grading which will occur at this site, the floor of the proposed structure may be constructed as a conventional slab-on-grade, supported on newly placed structural fill, extending to a depth of at least 3 feet below finished pad grade. Based on geotechnical considerations, the floor slab may be designed as follows:

- Minimum slab thickness: 6 inches.
- Modulus of Subgrade Reaction: 100 psi/in.
- Minimum slab reinforcement: No. 3 bars at 16 inches on-center, in both directions, due to the presence of potentially expansive soils at the site. The actual floor slab reinforcement should be evaluated by the structural engineer, based on the imposed loading, and intended use.
- Slab underlayment: If moisture sensitive floor coverings will be used then minimum slab underlayment should consist of a moisture vapor barrier constructed below the entire area of the proposed slab. The moisture vapor barrier should meet or exceed the Class A rating as defined by ASTM E 1745-97 and have a permeance rating less than 0.01 perms as described in ASTM E 96-95 and ASTM E 154-88. A polyolefin material such as Stego® Wrap Vapor Barrier or equivalent will meet these specifications. The moisture vapor barrier should be properly constructed in accordance with all applicable manufacturer specifications. Given that a rock free subgrade is anticipated and that a capillary break is not required, sand below the barrier is not required. The need for sand and/or the amount of sand above the moisture vapor barrier should be specified by the structural engineer or concrete contractor. The selection of sand above the barrier is not a geotechnical engineering issue and hence outside our purview. Where moisture sensitive floor coverings are not anticipated and moisture transmission through the slab is acceptable, the vapor barrier may be eliminated.
- Moisture condition the floor slab subgrade soils to 2 to 4 percent above the Modified Proctor optimum moisture content, to a depth of 12 inches. The moisture content of the floor slab subgrade soils should be verified by the geotechnical engineer within 24 hours prior to concrete placement.
- Proper concrete curing techniques should be utilized to reduce the potential for slab curling or the formation of excessive shrinkage cracks.



The actual design of the floor slab should be completed by the structural engineer to confirm adequate thickness and reinforcement.

6.7 Retaining Wall Design and Construction

Although not indicated on the site plan, some retaining walls may be required to facilitate the new site grades. Retaining walls are also expected to be necessary in dock-high areas of the new building. The parameters recommended for use in the design of these walls are presented below.

Retaining Wall Design Parameters

Based on the soil conditions encountered at the boring locations, the following parameters may be used in the design of new retaining walls for this site. We have provided parameters assuming the use of on-site soils for retaining wall backfill. The on-site soils generally consist of silty sands and sandy silts with some minor amounts of clay. Based on their classifications, the silty sand materials are expected to possess a friction angle of at least 30 degrees when compacted to 90 percent of the ASTM-1557 maximum dry density.

If desired, SCG could provide design parameters for an alternative select backfill material behind the retaining walls. The use of select backfill material could result in lower lateral earth pressures. In order to use the design parameters for the imported select fill, this material must be placed within the entire active failure wedge. This wedge is defined as extending from the heel of the retaining wall upwards at an angle of approximately 60° from horizontal. If select backfill material behind the retaining wall is desired, SCG should be contacted for supplementary recommendations.

RETAINING WALL DESIGN PARAMETERS

		Soil Type
Design Parameter		On-Site Silty Sands and Sandy Silts
Interna	al Friction Angle (φ)	30°
Unit Weight		133 lbs/ft ³
	Active Condition (level backfill)	45 lbs/ft ³
Equivalent Fluid	Active Condition (2h:1v backfill)	72 lbs/ft ³
Pressure:	At-Rest Condition (level backfill)	67 lbs/ft ³

Regardless of the backfill type, the walls should be designed using a soil-footing coefficient of friction of 0.25 and an equivalent passive pressure of 250 lbs/ft³. The structural engineer should incorporate appropriate factors of safety in the design of the retaining walls.

The active earth pressure may be used for the design of retaining walls that do not directly support structures or support soils that in turn support structures and which will be allowed to deflect. The at-rest earth pressure should be used for walls that will not be allowed to deflect



such as those which will support foundation bearing soils, or which will support foundation loads directly.

Where the soils on the toe side of the retaining wall are not covered by a "hard" surface such as a structure or pavement, the upper 1 foot of soil should be neglected when calculating passive resistance due to the potential for the material to become disturbed or degraded during the life of the structure.

Seismic Lateral Earth Pressures

In accordance with the 2019 CBC, any retaining walls more than 6 feet in height must be designed for seismic lateral earth pressures. If walls 6 feet or more are required for this site, the geotechnical engineer should be contacted for supplementary seismic lateral earth pressure recommendations.

Retaining Wall Foundation Design

The retaining wall foundations should be supported within newly placed compacted structural fill, extending to a depth of at least 2 feet below proposed foundation bearing grade. Foundations to support new retaining walls should be designed in accordance with the general Foundation Design Parameters presented in a previous section of this report.

Backfill Material

On-site soils may be used to backfill the retaining walls. However, all backfill material placed within 3 feet of the back wall face should have a particle size no greater than 3 inches. The retaining wall backfill materials should be well graded.

It is recommended that a properly installed prefabricated drainage composite such as the MiraDRAIN 6000XL (or approved equivalent), which is specifically designed for use behind retaining walls be used. If the drainage composite material is not covered by an impermeable surface, such as a structure or pavement, a 12-inch thick layer of a low permeability soil should be placed over the backfill to reduce surface water migration to the underlying soils. The drainage composite should be separated from the backfill soils by a suitable geotextile, approved by the geotechnical engineer.

Retaining wall backfill should be placed and compacted under engineering observed conditions in the necessary layer thicknesses to ensure an in-place density between 90 and 93 percent of the maximum dry density as evaluated by the Modified Proctor test (ASTM D1557). Care should be taken to avoid over-compaction of the soils behind the retaining walls, and the use of heavy compaction equipment should be avoided.

Subsurface Drainage

As previously indicated, the retaining wall design parameters are based upon drained backfill conditions. Consequently, some form of permanent drainage system will be necessary in conjunction with the appropriate backfill material. Subsurface drainage may consist of either:



- A weep hole drainage system typically consisting of a series of 2-inch diameter holes in the wall situated slightly above the ground surface elevation on the exposed side of the wall and at an approximate 10-foot on-center spacing. Alternatively, 4-inch diameter holes at an approximate 20-foot on-center spacing can be used for this type of drainage system. In addition, the weep holes should include a 2 cubic foot pocket of open graded gravel, surrounded by an approved geotextile fabric, at each weep hole location.
- A 4-inch diameter perforated pipe surrounded by 2 cubic feet of gravel per linear foot
 of drain placed behind the wall, above the retaining wall footing. The gravel layer
 should be wrapped in a suitable geotextile fabric to reduce the potential for migration
 of fines. The footing drain should be extended to daylight or tied into a storm drainage
 system. The actual design of this type of system should be designed by the civil
 engineer to provide a drainage system that possesses adequate capacity and slope for
 its intended use.

Weep holes or a footing drain will not be required for building stem walls.

6.8 Pavement Design Parameters

Site preparation in the pavement area should be completed as previously recommended in the **Site Grading Recommendations** section of this report. The subsequent pavement recommendations assume proper drainage and construction monitoring, and are based on either PCA or CALTRANS design parameters for a twenty (20) year design period. However, these designs also assume a routine pavement maintenance program to obtain the anticipated 20-year pavement service life.

Pavement Subgrades

It is anticipated that the new pavements will be primarily supported on a layer of compacted structural fill, consisting of scarified, thoroughly moisture conditioned and recompacted existing soils. The on-site soils generally consist of silty sands with some silt and clay with anticipated estimated R-values ranging from 40 to 50. Therefore, the subsequent pavement design is based upon an R-value of 40. Fill material imported to the site should have support characteristics equal to or greater than that of the on-site soils and be placed and compacted under engineering observed conditions. It is recommended that additional R-value testing be performed after completion of rough grading to verify the pavement support characteristics of the pavement subgrades following site grading.

Asphaltic Concrete

Presented below are the recommended thicknesses for new flexible pavement structures consisting of asphaltic concrete over a granular base. The pavement designs are based on the traffic indices (TI's) indicated. The client and/or civil engineer should verify that these TI's are representative of the anticipated traffic volumes. If the client and/or civil engineer evaluate that the expected traffic volume will exceed the applicable traffic index, we should be contacted for supplementary recommendations. The design traffic indices equate to the following approximate daily traffic volumes over a 20-year design life, assuming six operational traffic days per week.



Traffic Index	No. of Heavy Trucks per Day
4.0	0
5.0	1
6.0	3
7.0	11
8.0	35
9.0	93

For the purpose of the traffic volumes indicated above, a truck is defined as a 5-axle tractor trailer unit with one 8-kip axle and two 32-kip tandem axles. The traffic indices above allow for 1,000 automobiles per day.

ASPHALT PAVEMENTS (R=40)					
		Thick	ness (inches)		
	Auto Parking and		Truck	Traffic	
Materials	Auto Drive Lanes (TI = 4.0 to 5.0)	TI = 6.0	TI = 7.0	TI = 8.0	TI = 9.0
Asphalt Concrete	3	31/2	4	5	51/2
Aggregate Base	4	6	7	8	10
Compacted Subgrade	12	12	12	12	12

The aggregate base course should be compacted to at least 95 percent of the ASTM D-1557 maximum dry density. The asphaltic concrete should be compacted to at least 95 percent of the Marshall maximum density, as evaluated by ASTM D-2726. The aggregate base course may consist of crushed aggregate base (CAB) or crushed miscellaneous base (CMB), which is a recycled gravel, asphalt and concrete material. The gradation, R-Value, Sand Equivalent, and Percentage Wear of the CAB or CMB should comply with appropriate specifications contained in the current edition of the "Greenbook" Standard Specifications for Public Works Construction.

Portland Cement Concrete

The preparation of the subgrade soils within Portland cement concrete pavement areas should be performed as previously described in Section 6.3 "Treatment of Existing Soils: Flatwork, Parking, and Drive Areas". The minimum recommended thicknesses for the Portland Cement Concrete pavement sections are as follows:



PORTLAND CEMENT CONCRETE PAVEMENTS (R=40)				
	Thickness (inches)			
Materials	Autos and Light		Truck Traffic	
	Truck Traffic (TI = 6.0)	TI = 7.0	TI = 8.0	TI = 9.0
PCC	5	51/2	61/2	8
Compacted Subgrade (95% minimum compaction)	12	12	12	12

The concrete should have a 28-day compressive strength of at least 3,000 psi. The maximum joint spacing within all of the PCC pavements is recommended to be equal to or less than 30 times the pavement thickness.



7.0 GENERAL COMMENTS

This report has been prepared as an instrument of service for use by the client, in order to aid in the evaluation of this property and to assist the architects and engineers in the design and preparation of the project plans and specifications. This report may be provided to the contractor(s) and other design consultants to disclose information relative to the project. However, this report is not intended to be utilized as a specification in and of itself, without appropriate interpretation by the project architect, civil engineer, and/or structural engineer. The reproduction and distribution of this report must be authorized by the client and Southern California Geotechnical, Inc. Furthermore, any reliance on this report by an unauthorized third party is at such party's sole risk, and we accept no responsibility for damage or loss which may occur. The client(s)' reliance upon this report is subject to the Engineering Services Agreement, incorporated into our proposal for this project.

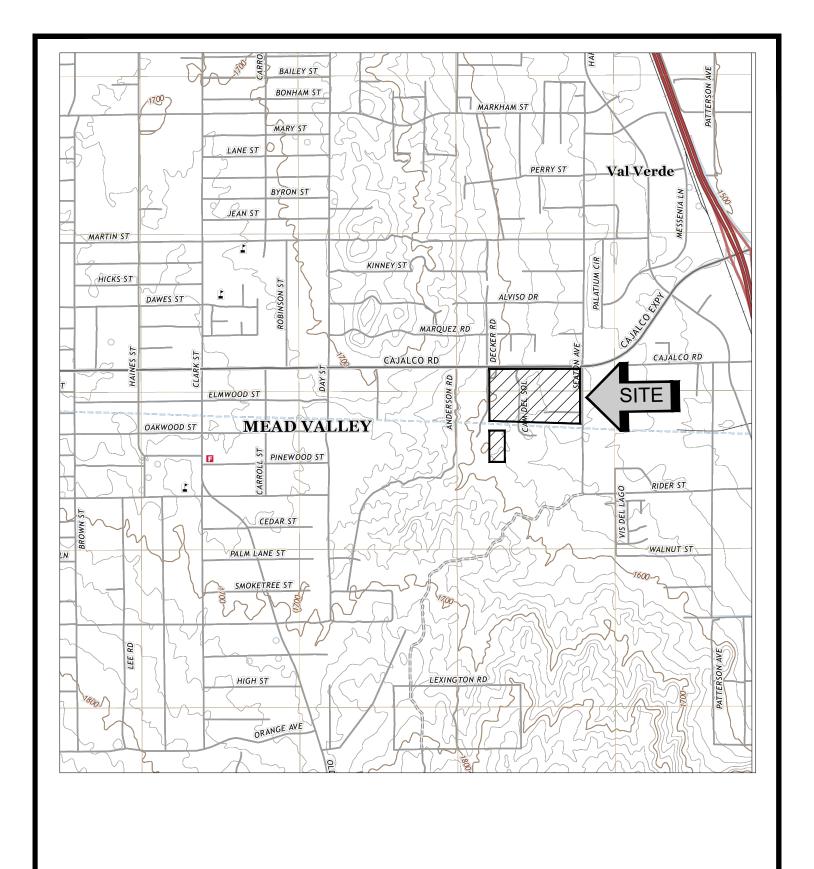
The analysis of this site was based on a subsurface profile interpolated from limited discrete soil samples. While the materials encountered in the project area are considered to be representative of the total area, some variations should be expected between boring locations and sample depths. If the conditions encountered during construction vary significantly from those detailed herein, we should be contacted immediately to evaluate if the conditions alter the recommendations contained herein.

This report has been based on assumed or provided characteristics of the proposed development. It is recommended that the owner, client, architect, structural engineer, and civil engineer carefully review these assumptions to ensure that they are consistent with the characteristics of the proposed development. If discrepancies exist, they should be brought to our attention to verify that they do not affect the conclusions and recommendations contained herein. We also recommend that the project plans and specifications be submitted to our office for review to verify that our recommendations have been correctly interpreted.

The analysis, conclusions, and recommendations contained within this report have been promulgated in accordance with generally accepted professional geotechnical engineering practice. No other warranty is implied or expressed.



A P PEN D I X



SOURCE: USGS TOPOGRAPHIC MAP OF THE STEELE PEAK QUADRANGLE, SAN BERNARDINO COUNTY, CALIFORNIA, 2021.



SITE LOCATION MAP

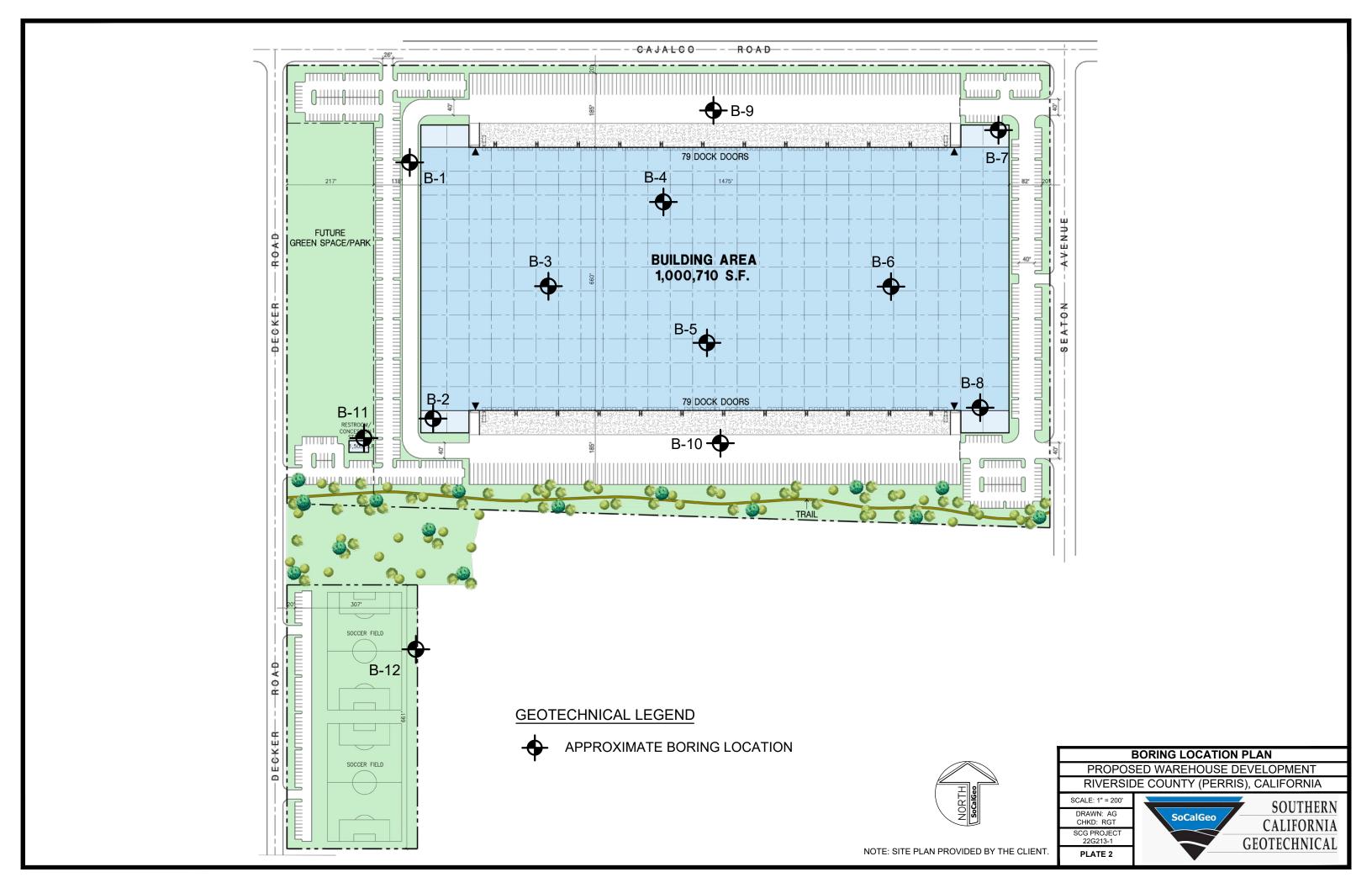
PROPOSED WAREHOUSE DEVELOPMENT RIVERSIDE COUNTY (PERRIS), CALIFORNIA

SCALE: 1" = 2000'

DRAWN: AG CHKD: JLL

22G213-1
PLATE 1





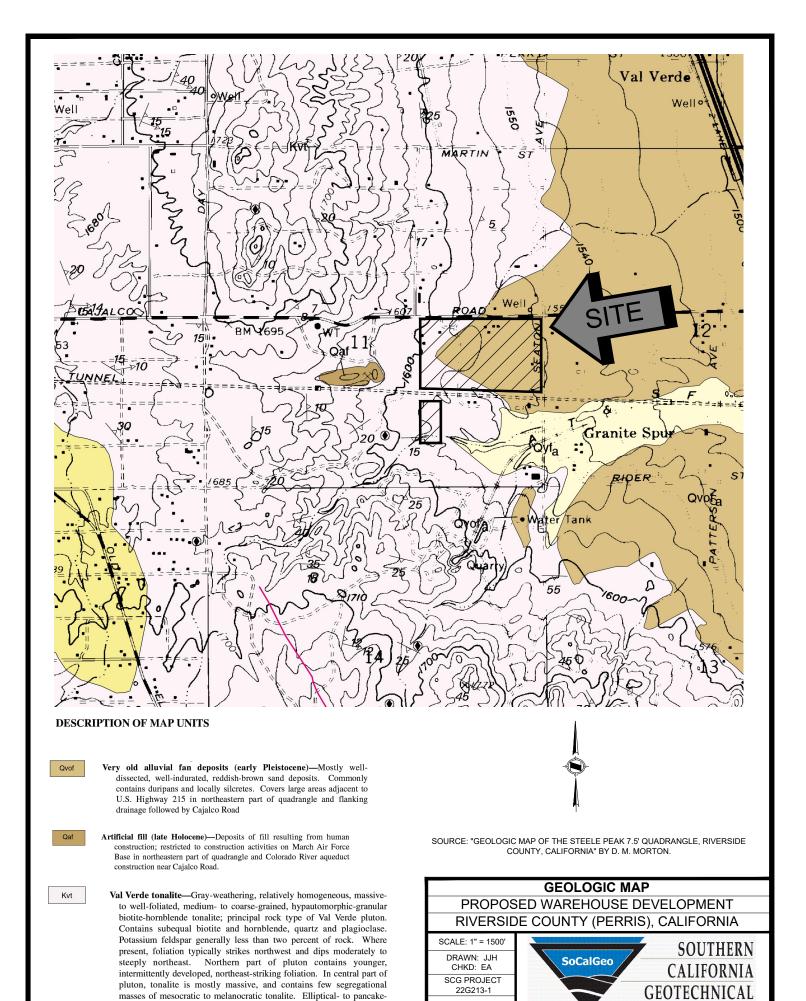


PLATE 3

shaped, meso-to melanocratic inclusions are common

P E N I B

BORING LOG LEGEND

SAMPLE TYPE	GRAPHICAL SYMBOL	SAMPLE DESCRIPTION
AUGER		SAMPLE COLLECTED FROM AUGER CUTTINGS, NO FIELD MEASUREMENT OF SOIL STRENGTH. (DISTURBED)
CORE		ROCK CORE SAMPLE: TYPICALLY TAKEN WITH A DIAMOND-TIPPED CORE BARREL. TYPICALLY USED ONLY IN HIGHLY CONSOLIDATED BEDROCK.
GRAB	M	SOIL SAMPLE TAKEN WITH NO SPECIALIZED EQUIPMENT, SUCH AS FROM A STOCKPILE OR THE GROUND SURFACE. (DISTURBED)
CS		CALIFORNIA SAMPLER: 2-1/2 INCH I.D. SPLIT BARREL SAMPLER, LINED WITH 1-INCH HIGH BRASS RINGS. DRIVEN WITH SPT HAMMER. (RELATIVELY UNDISTURBED)
NSR		NO RECOVERY: THE SAMPLING ATTEMPT DID NOT RESULT IN RECOVERY OF ANY SIGNIFICANT SOIL OR ROCK MATERIAL.
SPT		STANDARD PENETRATION TEST: SAMPLER IS A 1.4 INCH INSIDE DIAMETER SPLIT BARREL, DRIVEN 18 INCHES WITH THE SPT HAMMER. (DISTURBED)
SH		SHELBY TUBE: TAKEN WITH A THIN WALL SAMPLE TUBE, PUSHED INTO THE SOIL AND THEN EXTRACTED. (UNDISTURBED)
VANE		VANE SHEAR TEST: SOIL STRENGTH OBTAINED USING A 4 BLADED SHEAR DEVICE. TYPICALLY USED IN SOFT CLAYS-NO SAMPLE RECOVERED.

COLUMN DESCRIPTIONS

DEPTH: Distance in feet below the ground surface.

SAMPLE: Sample Type as depicted above.

BLOW COUNT: Number of blows required to advance the sampler 12 inches using a 140 lb

hammer with a 30-inch drop. 50/3" indicates penetration refusal (>50 blows) at 3 inches. WH indicates that the weight of the hammer was sufficient to

push the sampler 6 inches or more.

POCKET PEN.: Approximate shear strength of a cohesive soil sample as measured by pocket

penetrometer.

GRAPHIC LOG: Graphic Soil Symbol as depicted on the following page.

DRY DENSITY: Dry density of an undisturbed or relatively undisturbed sample in lbs/ft³.

MOISTURE CONTENT: Moisture content of a soil sample, expressed as a percentage of the dry weight.

LIQUID LIMIT: The moisture content above which a soil behaves as a liquid.

PLASTIC LIMIT: The moisture content above which a soil behaves as a plastic.

PASSING #200 SIEVE: The percentage of the sample finer than the #200 standard sieve.

UNCONFINED SHEAR: The shear strength of a cohesive soil sample, as measured in the unconfined state.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL
			GRAPH	LETTER	DESCRIPTIONS
	GRAVEL AND	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
COARSE GRAINED SOILS	GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
				ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				СН	INORGANIC CLAYS OF HIGH PLASTICITY
				ОН	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS



JOB NO.: 22G213-1 DRILLING DATE: 7/21/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 16 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** PASSING #200 SIEVE (* COMMENTS **DESCRIPTION** MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE LIQUID SURFACE ELEVATION: --- MSL VAL VERDE TONALITE (Kvt): Gray Brown fine to coarse-grained Tonalite, phaneritic, weathered, friable, weakly 50/5' 108 3 cemented, very dense-dry to damp 1 2 50/5' 112 2 113 105 2 10 50/3' 128 2 15 Boring Terminated at 17' due to very dense bedrock 22G213-1.GPJ SOCALGEO.GDT 8/25/22



JOB NO.: 22G213-1 DRILLING DATE: 7/20/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 19 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS GRAPHIC LOG DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** PASSING #200 SIEVE (* COMMENTS **DESCRIPTION** MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE LIQUID SURFACE ELEVATION: --- MSL VAL VERDE TONALITE (Kvt): Brown Gray fine to coarse-grained Tonalite, weathered, friable, phaneritic, weakly 36 2 cemented, dense to very dense-dry 2 @ 31/2 to 5 feet, weathered Tonalite vein, very loose-dry 2 5 50/5' 2 50/5' @ 81/2 feet, damp 4 10 50/3' 2 15 50/5' 2 20 Boring Terminated at 20' 22G213-1.GPJ SOCALGEO.GDT 8/25/22



JOB NO.: 22G213-1 DRILLING DATE: 7/21/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 13 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** PASSING #200 SIEVE (* DESCRIPTION COMMENTS MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE SURFACE ELEVATION: --- MSL OLDER ALLUVIUM: Brown Silty fine Sand, trace Clay, trace fine root fibers, little medium to coarse Sand, medium 16 109 1 EI = 6 @ 0-5' dense-dry to damp 18 3 32 108 4 VAL VERDE TONALITE (Kvt): Brown to Gray Brown fine to 50/5 coarse-grained Tonalite, phaneritic, weathered, friable, weakly 111 4 cemented, very dense-dry to damp 95 3 10 50/4' 1 Boring Terminated at 15' 22G213-1.GPJ SOCALGEO.GDT 8/25/22



JOB NO.: 22G213-1 DRILLING DATE: 7/20/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 18 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** 8 PASSING #200 SIEVE (* COMMENTS DESCRIPTION MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE SURFACE ELEVATION: --- MSL OLDER ALLUVIUM: Light Brown fine Sandy Silt, trace fine Gravel, trace medium to coarse Sand, very dense-damp 50/5' 4 Light Brown fine to medium Sandy Silt, trace Clay, trace 5 89 Calcareous nodules, very dense-damp Brown fine Sandy Silt, trace medium Sand, micaceous, 6 28 medium dense-damp Brown fine to medium Sandy Silt, trace coarse Sand, 7 dense-damp to wet 10 Green Gray Silty fine to coarse Sand, very dense-dry to damp 50/5' 3 15 Green Gray fine Sandy Silt, trace medium to coarse Sand, very dense-dry 50/5' 2 20 Boring Terminated at 20' 22G213-1.GPJ SOCALGEO.GDT 8/25/22



JOB NO.: 22G213-1 DRILLING DATE: 7/20/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 23 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** PASSING #200 SIEVE (COMMENTS DESCRIPTION MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE SURFACE ELEVATION: --- MSL OLDER ALLUVIUM: Brown Silty fine to medium Sand to fine to medium Sandy Silt, trace coarse Sand, very dense-damp 53 4 Brown fine Sandy Silt, trace medium Sand, very dense-damp 80 6 Brown Silty fine Sand, trace medium Sand, dense-damp 6 34 Brown Silty fine to medium Sand, very dense-damp 73 6 66/11' 4 VAL VERDE TONALITE (Kvt): Gray fine to coarse-grained Tonalite, weathered, friable, phaneritic, weakly cemented, very 15 dense-dry to damp 50/4' 1 20 50/3' 1 Boring Terminated at 25' due to very dense bedrock 22G213-1.GPJ SOCALGEO.GDT 8/25/22



JOB NO.: 22G213-1 DRILLING DATE: 7/20/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 13 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** PASSING #200 SIEVE (* COMMENTS DESCRIPTION MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE SURFACE ELEVATION: --- MSL OLDER ALLUVIUM: Brown fine to medium Sandy Silt, trace Clay, dense-dry to damp 48 114 3 EI = 32 @ 0-5' @ 3 feet, trace Calcareous veining 119 6 Light Brown fine Sandy Silt, trace medium Sand, medium 35 116 4 Gray fine to coarse Sand, trace Silt, trace Iron Oxide staining, 3 111 some fine Gravel, medium dense-dry to damp Brown Silty fine to medium Sand, medium dense-damp 120 5 7 9 Boring Terminated at 15' 22G213-1.GPJ SOCALGEO.GDT 8/25/22



JOB NO.: 22G213-1 DRILLING DATE: 7/20/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 29 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** PASSING #200 SIEVE (COMMENTS DESCRIPTION MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE LIQUID SURFACE ELEVATION: --- MSL OLDER ALLUVIUM: Brown fine Sandy Silt, trace to little medium Sand, trace Clay, trace fine root fibers, medium 34 6 dense to dense-damp to wet 30 6 7 21 29 8 10 33 12 15 VAL VERDE TONALITE (Kvt): Gray fine to coarse-grained Tonalite, phaneritic, friable, weathered, weakly cemented, very dense-dry to moist 50/5' 5 20 50/5' 2 25 22G213-1.GPJ SOCALGEO.GDT 8/25/22 7 50/5' Boring Terminated at 30' due to very dense bedrock



JOB NO.: 22G213-1 DRILLING DATE: 7/20/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 24 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) **BLOW COUNT** DEPTH (FEET PASSING #200 SIEVE (DESCRIPTION COMMENTS MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE SURFACE ELEVATION: --- MSL YOUNGER ALLUVIUM: Brown Silty fine Sand, trace medium Sand, medium dense-dry 28 109 1 OLDER ALLUVIUM: Brown fine Sandy Silt, trace medium to 1 50/5 coarse Sand, moderately cemented, very dense-dry Brown Silty fine to coarse Sand, trace to little Clay, trace fine 5 @ 5 feet, 28 Gravel, trace Calcareous nodules, medium dense-damp Disturbed Sample Brown fine Sandy Silt, little Calcareous nodules and veining, 120 6 medium dense-damp Brown Silty fine Sand, trace to little medium Sand, micaceous, 109 3 medium dense-dry to damp 7 25 15 VAL VERDE TONALITE (Kvt): Brown Gray fine to coarse-grained Tonalite, weathered, phaneritic, friable, weakly cemented, very dense-damp to very moist 3 20 50/5' 13 Boring Terminated at 25' 22G213-1.GPJ SOCALGEO.GDT 8/25/22



JOB NO.: 22G213-1 DRILLING DATE: 7/20/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 18 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** PASSING #200 SIEVE (* COMMENTS **DESCRIPTION** MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE LIQUID SURFACE ELEVATION: --- MSL OLDER ALLUVIUM: Brown fine to medium Sandy Silt, trace coarse Sand, trace Clay, very dense-damp 74/9' 6 ⁷86/10" 6 6 7/11' 62/11 2 VAL VERDE TONALITE (Kvt): Gray fine to coarse-grained Tonalite, weathered, phaneritic, friable, weakly cemented, very 10 dense-dry 50/5' 2 15 50/3' 1 20 Boring Terminated at 20' 22G213-1.GPJ SOCALGEO.GDT 8/25/22



JOB NO.: 22G213-1 DRILLING DATE: 7/21/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 19 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** PASSING #200 SIEVE (* COMMENTS **DESCRIPTION** MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE SURFACE ELEVATION: --- MSL <u>OLDER ALLUVIUM:</u> Brown fine to medium Sandy Silt, trace Clay, dense to very dense-damp 37 5 50/5" 4 VAL VERDE TONALITE (Kvt): Brown Gray fin to 90/11" 6 coarse-grained Tonalite, weathered, phaneritic, friable, weakly cemented, very dense-dry to damp 50/5' 3 10 86/9' 2 15 87/9" 4 20 Boring Terminated at 20' 22G213-1.GPJ SOCALGEO.GDT 8/25/22

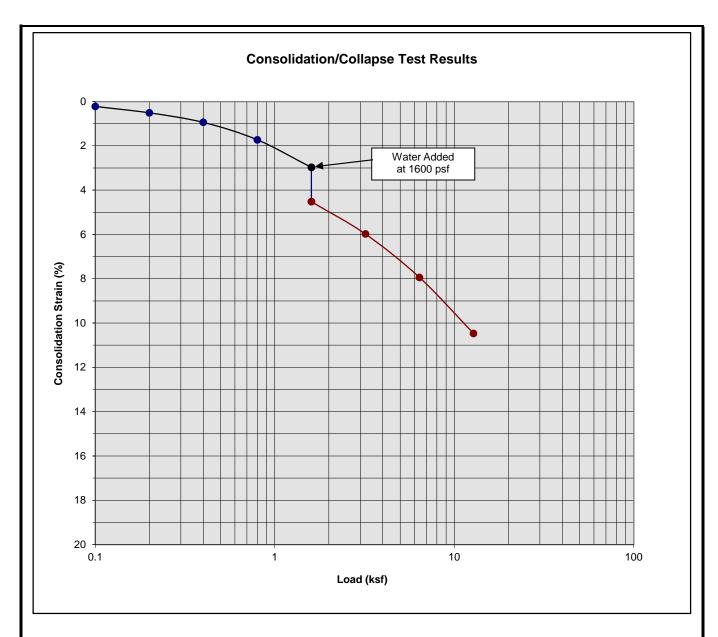


JOB NO.: 22G213-1 DRILLING DATE: 7/21/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 14 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** PASSING #200 SIEVE (* COMMENTS **DESCRIPTION** MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE LIQUID SURFACE ELEVATION: --- MSL OLDER ALLUVIUM: Brown Silty fine to coarse Sand, trace Clay, dense-dry 43 116 2 VAL VERDE TONALITE (Kvt): Gray fine to coarse-grained Tonalite, weathered, phaneritic, friable, very dense-dry to 106 5 2 50/5' 113 105 4 105 4 10 50/5' 2 Boring Terminated at 15' 22G213-1.GPJ SOCALGEO.GDT 8/25/22



JOB NO.: 22G213-1 DRILLING DATE: 7/21/22 WATER DEPTH: Dry PROJECT: Proposed Warehouse Development DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 9 feet LOCATION: Perris, California LOGGED BY: Ryan Bremer READING TAKEN: At Completion FIELD RESULTS LABORATORY RESULTS **GRAPHIC LOG** DRY DENSITY (PCF) POCKET PEN. (TSF) DEPTH (FEET **BLOW COUNT** PASSING #200 SIEVE (* COMMENTS DESCRIPTION MOISTURE CONTENT (9 ORGANIC CONTENT (PLASTIC LIMIT SAMPLE LIQUID SURFACE ELEVATION: --- MSL YOUNGER ALLUVIUM: Brown fine to medium Sandy Silt, medium dense-dry to damp 12 3 Brown Silty fine to medium Sand, trace coarse Sand, little 3 24 Tonalite fragments, medium dense-dry to damp VAL VERDE TONALITE (Kvt): Gray Brown fine to 50/5' 4 coarse-grained Tonalite, weathered, phaneritic, friable, very dense-dry to damp 50/3' 2 Boring Terminated at 10' 22G213-1.GPJ SOCALGEO.GDT 8/25/22

A P P E N I C



Classification: Brown fine to medium Sandy Silt, trace Clay

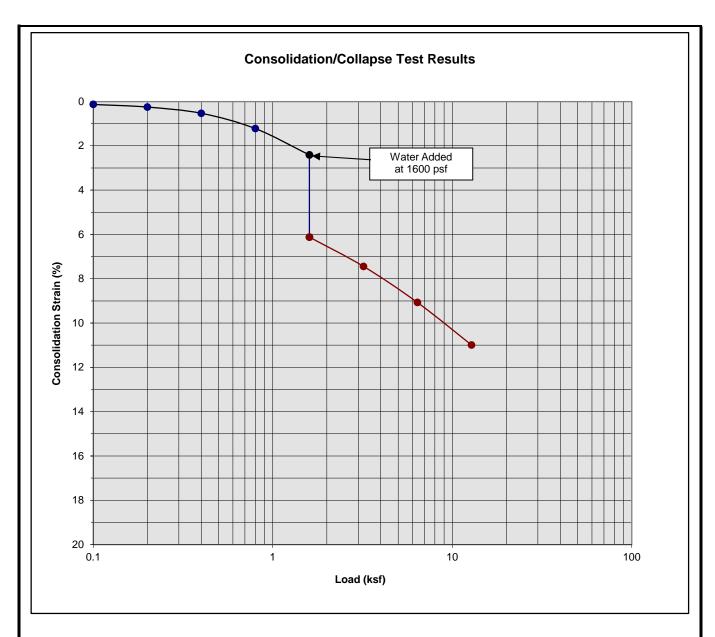
Boring Number:	B-6	Initial Moisture Content (%)	5
Sample Number:		Final Moisture Content (%)	12
Depth (ft)	3 to 4	Initial Dry Density (pcf)	120.9
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	133.0
Specimen Thickness (in)	1.0	Percent Collapse (%)	1.55

Proposed Warehouse Development

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Classification: Gray fine to coarse Sand, trace Silt

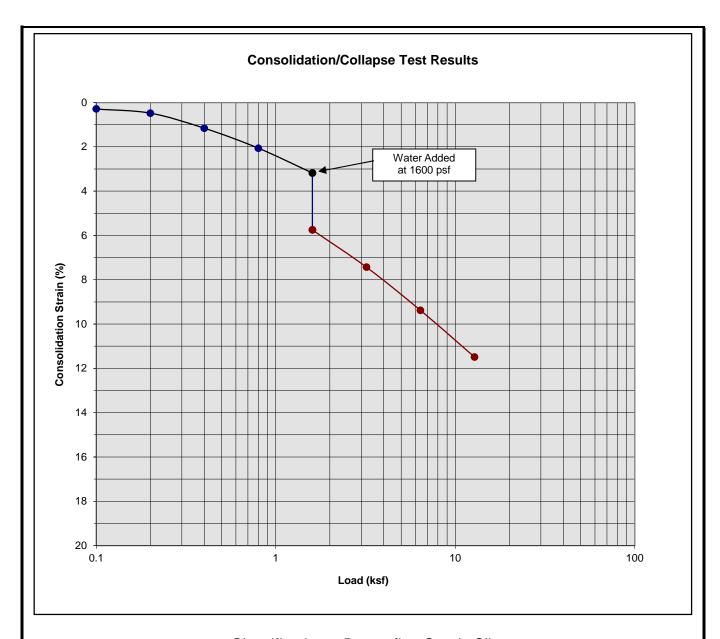
Boring Number:	B-6	Initial Moisture Content (%)	2
Sample Number:		Final Moisture Content (%)	16
Depth (ft)	7 to 8	Initial Dry Density (pcf)	102.7
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	114.9
Specimen Thickness (in)	1.0	Percent Collapse (%)	3.71

Proposed Warehouse Development

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Classification: Brown fine Sandy Silt

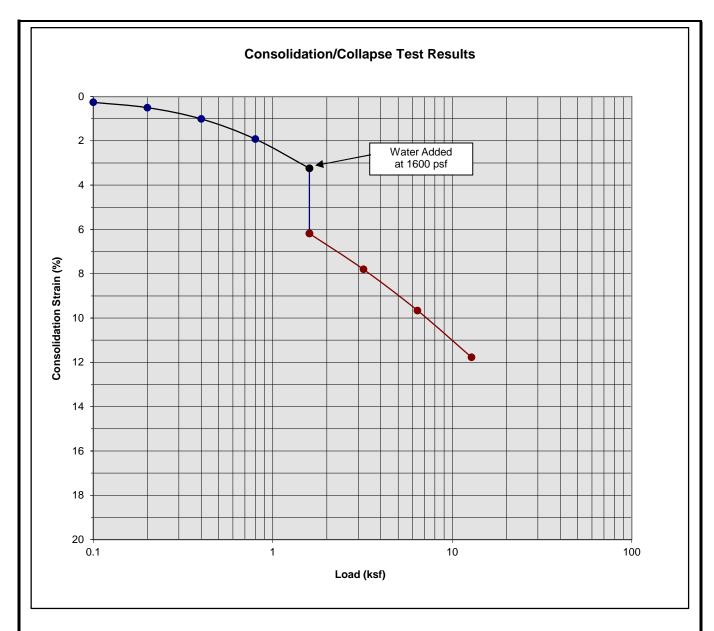
Boring Number:	B-8	Initial Moisture Content (%)	8
Sample Number:		Final Moisture Content (%)	21
Depth (ft)	7 to 8	Initial Dry Density (pcf)	109.5
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	123.8
Specimen Thickness (in)	1.0	Percent Collapse (%)	2.57

Proposed Warehouse Development

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Classification: Brown Silty fine Sand, trace to little medium Sand

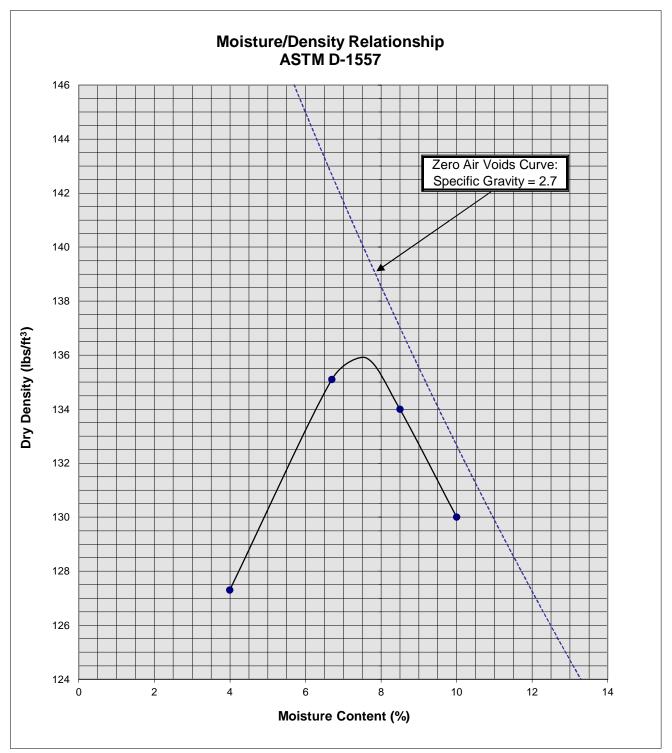
Boring Number:	B-8	Initial Moisture Content (%)	4
Sample Number:		Final Moisture Content (%)	17
Depth (ft)	9 to 10	Initial Dry Density (pcf)	100.1
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	113.4
Specimen Thickness (in)	1.0	Percent Collapse (%)	2.94

Proposed Warehouse Development

Perris, California

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Soil II	B-3 @ 0-5'	
Optimum Moisture (%)		7.5
Maximum Dry Density (pcf)		136
Soil Brown Silty f		ne Sand,
Classification trace C		Clay
		·

Proposed Warehouse Development Perris, California Project No. 22G213-1 PLATE C-5



P E N D I

GRADING GUIDE SPECIFICATIONS

These grading guide specifications are intended to provide typical procedures for grading operations. They are intended to supplement the recommendations contained in the geotechnical investigation report for this project. Should the recommendations in the geotechnical investigation report conflict with the grading guide specifications, the more site specific recommendations in the geotechnical investigation report will govern.

General

- The Earthwork Contractor is responsible for the satisfactory completion of all earthwork in accordance with the plans and geotechnical reports, and in accordance with city, county, and applicable building codes.
- The Geotechnical Engineer is the representative of the Owner/Builder for the purpose of implementing the report recommendations and guidelines. These duties are not intended to relieve the Earthwork Contractor of any responsibility to perform in a workman-like manner, nor is the Geotechnical Engineer to direct the grading equipment or personnel employed by the Contractor.
- The Earthwork Contractor is required to notify the Geotechnical Engineer of the anticipated work and schedule so that testing and inspections can be provided. If necessary, work may be stopped and redone if personnel have not been scheduled in advance.
- The Earthwork Contractor is required to have suitable and sufficient equipment on the jobsite to process, moisture condition, mix and compact the amount of fill being placed to the approved compaction. In addition, suitable support equipment should be available to conform with recommendations and guidelines in this report.
- Canyon cleanouts, overexcavation areas, processed ground to receive fill, key excavations, subdrains and benches should be observed by the Geotechnical Engineer prior to placement of any fill. It is the Earthwork Contractor's responsibility to notify the Geotechnical Engineer of areas that are ready for inspection.
- Excavation, filling, and subgrade preparation should be performed in a manner and sequence that will provide drainage at all times and proper control of erosion. Precipitation, springs, and seepage water encountered shall be pumped or drained to provide a suitable working surface. The Geotechnical Engineer must be informed of springs or water seepage encountered during grading or foundation construction for possible revision to the recommended construction procedures and/or installation of subdrains.

Site Preparation

- The Earthwork Contractor is responsible for all clearing, grubbing, stripping and site
 preparation for the project in accordance with the recommendations of the Geotechnical
 Engineer.
- If any materials or areas are encountered by the Earthwork Contractor which are suspected
 of having toxic or environmentally sensitive contamination, the Geotechnical Engineer and
 Owner/Builder should be notified immediately.

- Major vegetation should be stripped and disposed of off-site. This includes trees, brush, heavy grasses and any materials considered unsuitable by the Geotechnical Engineer.
- Underground structures such as basements, cesspools or septic disposal systems, mining shafts, tunnels, wells and pipelines should be removed under the inspection of the Geotechnical Engineer and recommendations provided by the Geotechnical Engineer and/or city, county or state agencies. If such structures are known or found, the Geotechnical Engineer should be notified as soon as possible so that recommendations can be formulated.
- Any topsoil, slopewash, colluvium, alluvium and rock materials which are considered unsuitable by the Geotechnical Engineer should be removed prior to fill placement.
- Remaining voids created during site clearing caused by removal of trees, foundations basements, irrigation facilities, etc., should be excavated and filled with compacted fill.
- Subsequent to clearing and removals, areas to receive fill should be scarified to a depth of 10 to 12 inches, moisture conditioned and compacted
- The moisture condition of the processed ground should be at or slightly above the optimum moisture content as determined by the Geotechnical Engineer. Depending upon field conditions, this may require air drying or watering together with mixing and/or discing.

Compacted Fills

- Soil materials imported to or excavated on the property may be utilized in the fill, provided each material has been determined to be suitable in the opinion of the Geotechnical Engineer. Unless otherwise approved by the Geotechnical Engineer, all fill materials shall be free of deleterious, organic, or frozen matter, shall contain no chemicals that may result in the material being classified as "contaminated," and shall be very low to non-expansive with a maximum expansion index (EI) of 50. The top 12 inches of the compacted fill should have a maximum particle size of 3 inches, and all underlying compacted fill material a maximum 6-inch particle size, except as noted below.
- All soils should be evaluated and tested by the Geotechnical Engineer. Materials with high
 expansion potential, low strength, poor gradation or containing organic materials may
 require removal from the site or selective placement and/or mixing to the satisfaction of the
 Geotechnical Engineer.
- Rock fragments or rocks less than 6 inches in their largest dimensions, or as otherwise
 determined by the Geotechnical Engineer, may be used in compacted fill, provided the
 distribution and placement is satisfactory in the opinion of the Geotechnical Engineer.
- Rock fragments or rocks greater than 12 inches should be taken off-site or placed in accordance with recommendations and in areas designated as suitable by the Geotechnical Engineer. These materials should be placed in accordance with Plate D-8 of these Grading Guide Specifications and in accordance with the following recommendations:
 - Rocks 12 inches or more in diameter should be placed in rows at least 15 feet apart, 15
 feet from the edge of the fill, and 10 feet or more below subgrade. Spaces should be
 left between each rock fragment to provide for placement and compaction of soil
 around the fragments.
 - Fill materials consisting of soil meeting the minimum moisture content requirements and free of oversize material should be placed between and over the rows of rock or

concrete. Ample water and compactive effort should be applied to the fill materials as they are placed in order that all of the voids between each of the fragments are filled and compacted to the specified density.

- Subsequent rows of rocks should be placed such that they are not directly above a row placed in the previous lift of fill. A minimum 5-foot offset between rows is recommended.
- To facilitate future trenching, oversized material should not be placed within the range of foundation excavations, future utilities or other underground construction unless specifically approved by the soil engineer and the developer/owner representative.
- Fill materials approved by the Geotechnical Engineer should be placed in areas previously prepared to receive fill and in evenly placed, near horizontal layers at about 6 to 8 inches in loose thickness, or as otherwise determined by the Geotechnical Engineer for the project.
- Each layer should be moisture conditioned to optimum moisture content, or slightly above, as directed by the Geotechnical Engineer. After proper mixing and/or drying, to evenly distribute the moisture, the layers should be compacted to at least 90 percent of the maximum dry density in compliance with ASTM D-1557-78 unless otherwise indicated.
- Density and moisture content testing should be performed by the Geotechnical Engineer at random intervals and locations as determined by the Geotechnical Engineer. These tests are intended as an aid to the Earthwork Contractor, so he can evaluate his workmanship, equipment effectiveness and site conditions. The Earthwork Contractor is responsible for compaction as required by the Geotechnical Report(s) and governmental agencies.
- Fill areas unused for a period of time may require moisture conditioning, processing and recompaction prior to the start of additional filling. The Earthwork Contractor should notify the Geotechnical Engineer of his intent so that an evaluation can be made.
- Fill placed on ground sloping at a 5-to-1 inclination (horizontal-to-vertical) or steeper should be benched into bedrock or other suitable materials, as directed by the Geotechnical Engineer. Typical details of benching are illustrated on Plates D-2, D-4, and D-5.
- Cut/fill transition lots should have the cut portion overexcavated to a depth of at least 3 feet and rebuilt with fill (see Plate D-1), as determined by the Geotechnical Engineer.
- All cut lots should be inspected by the Geotechnical Engineer for fracturing and other bedrock conditions. If necessary, the pads should be overexcavated to a depth of 3 feet and rebuilt with a uniform, more cohesive soil type to impede moisture penetration.
- Cut portions of pad areas above buttresses or stabilizations should be overexcavated to a
 depth of 3 feet and rebuilt with uniform, more cohesive compacted fill to impede moisture
 penetration.
- Non-structural fill adjacent to structural fill should typically be placed in unison to provide lateral support. Backfill along walls must be placed and compacted with care to ensure that excessive unbalanced lateral pressures do not develop. The type of fill material placed adjacent to below grade walls must be properly tested and approved by the Geotechnical Engineer with consideration of the lateral earth pressure used in the design.

Foundations

- The foundation influence zone is defined as extending one foot horizontally from the outside edge of a footing, and proceeding downward at a ½ horizontal to 1 vertical (0.5:1) inclination.
- Where overexcavation beneath a footing subgrade is necessary, it should be conducted so as to encompass the entire foundation influence zone, as described above.
- Compacted fill adjacent to exterior footings should extend at least 12 inches above foundation bearing grade. Compacted fill within the interior of structures should extend to the floor subgrade elevation.

Fill Slopes

- The placement and compaction of fill described above applies to all fill slopes. Slope compaction should be accomplished by overfilling the slope, adequately compacting the fill in even layers, including the overfilled zone and cutting the slope back to expose the compacted core
- Slope compaction may also be achieved by backrolling the slope adequately every 2 to 4
 vertical feet during the filling process as well as requiring the earth moving and compaction
 equipment to work close to the top of the slope. Upon completion of slope construction,
 the slope face should be compacted with a sheepsfoot connected to a sideboom and then
 grid rolled. This method of slope compaction should only be used if approved by the
 Geotechnical Engineer.
- Sandy soils lacking in adequate cohesion may be unstable for a finished slope condition and therefore should not be placed within 15 horizontal feet of the slope face.
- All fill slopes should be keyed into bedrock or other suitable material. Fill keys should be at least 15 feet wide and inclined at 2 percent into the slope. For slopes higher than 30 feet, the fill key width should be equal to one-half the height of the slope (see Plate D-5).
- All fill keys should be cleared of loose slough material prior to geotechnical inspection and should be approved by the Geotechnical Engineer and governmental agencies prior to filling.
- The cut portion of fill over cut slopes should be made first and inspected by the Geotechnical Engineer for possible stabilization requirements. The fill portion should be adequately keyed through all surficial soils and into bedrock or suitable material. Soils should be removed from the transition zone between the cut and fill portions (see Plate D-2).

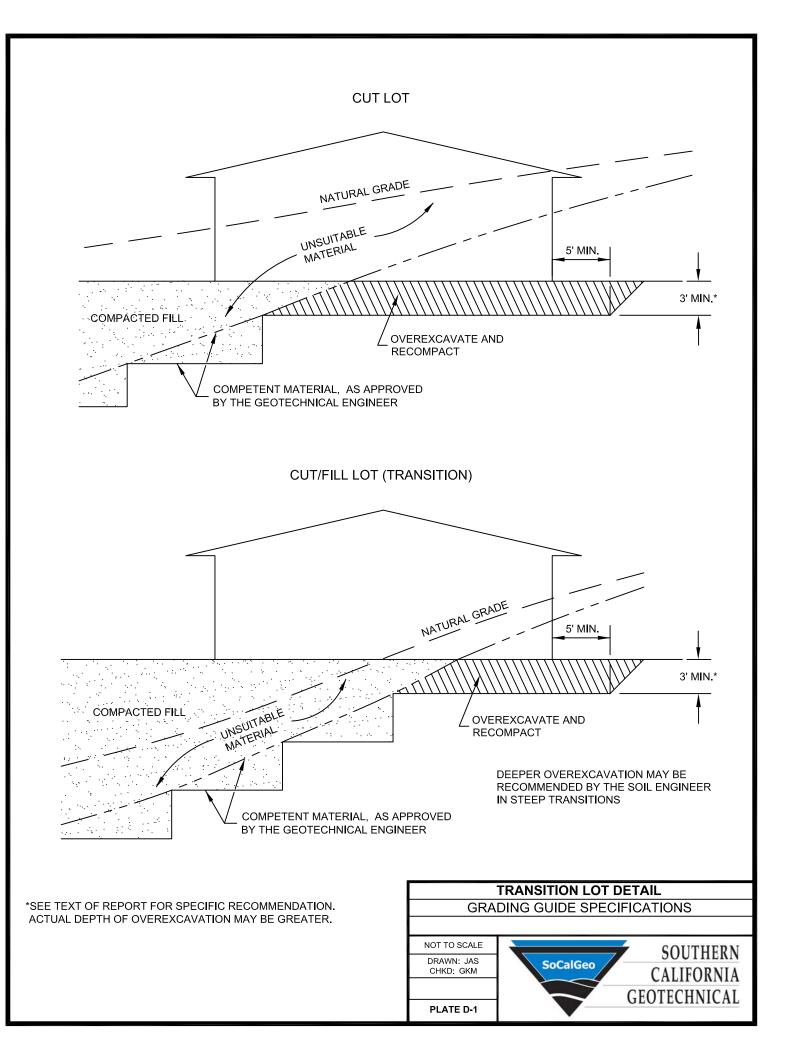
Cut Slopes

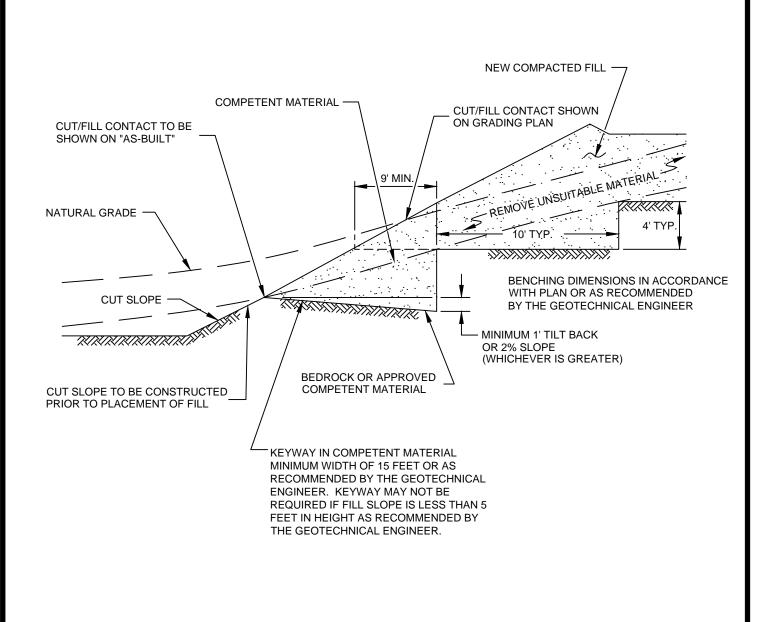
- All cut slopes should be inspected by the Geotechnical Engineer to determine the need for stabilization. The Earthwork Contractor should notify the Geotechnical Engineer when slope cutting is in progress at intervals of 10 vertical feet. Failure to notify may result in a delay in recommendations.
- Cut slopes exposing loose, cohesionless sands should be reported to the Geotechnical Engineer for possible stabilization recommendations.
- All stabilization excavations should be cleared of loose slough material prior to geotechnical inspection. Stakes should be provided by the Civil Engineer to verify the location and dimensions of the key. A typical stabilization fill detail is shown on Plate D-5.

 Stabilization key excavations should be provided with subdrains. Typical subdrain details are shown on Plates D-6.

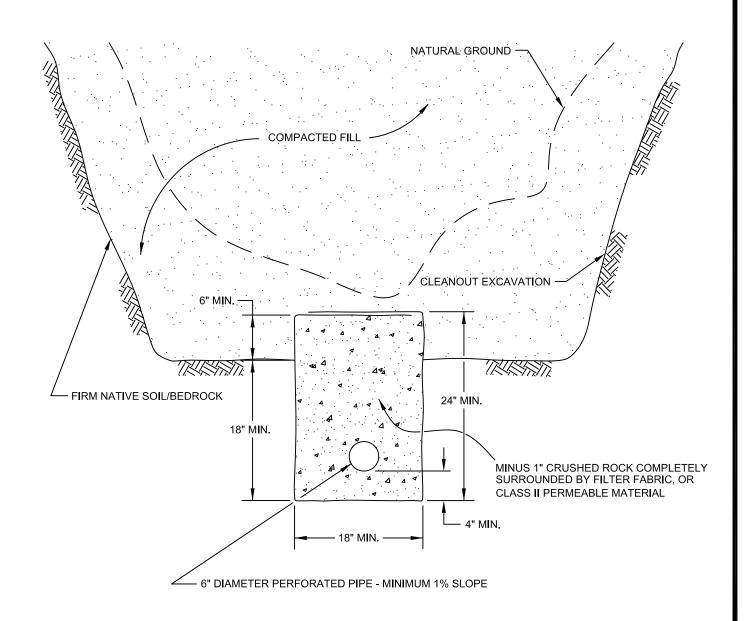
Subdrains

- Subdrains may be required in canyons and swales where fill placement is proposed. Typical subdrain details for canyons are shown on Plate D-3. Subdrains should be installed after approval of removals and before filling, as determined by the Soils Engineer.
- Plastic pipe may be used for subdrains provided it is Schedule 40 or SDR 35 or equivalent.
 Pipe should be protected against breakage, typically by placement in a square-cut (backhoe) trench or as recommended by the manufacturer.
- Filter material for subdrains should conform to CALTRANS Specification 68-1.025 or as approved by the Geotechnical Engineer for the specific site conditions. Clean ¾-inch crushed rock may be used provided it is wrapped in an acceptable filter cloth and approved by the Geotechnical Engineer. Pipe diameters should be 6 inches for runs up to 500 feet and 8 inches for the downstream continuations of longer runs. Four-inch diameter pipe may be used in buttress and stabilization fills.







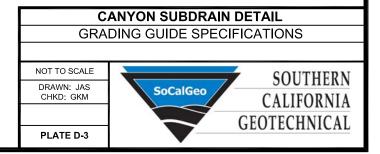


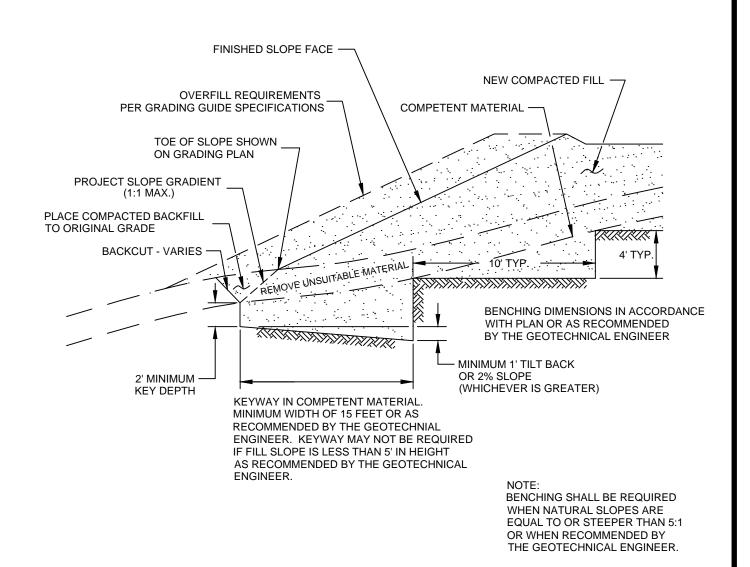
PIPE MATERIAL OVER SUBDRAIN

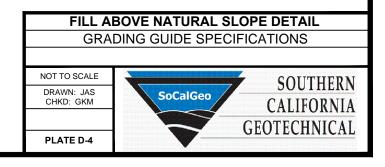
ADS (CORRUGATED POLETHYLENE)
TRANSITE UNDERDRAIN
PVC OR ABS: SDR 35
SDR 21

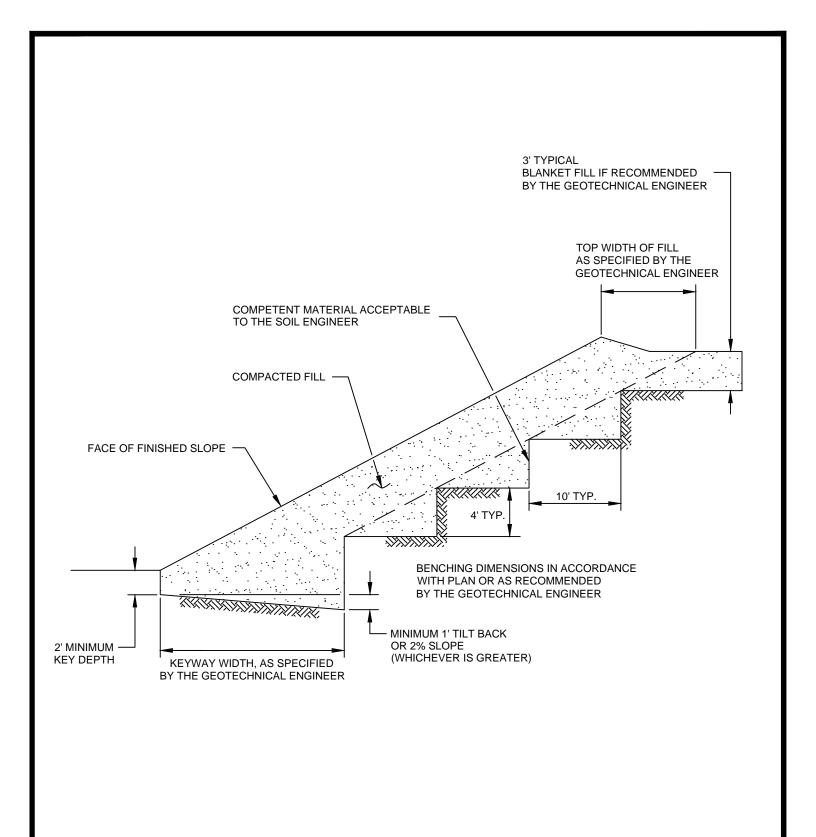
DEPTH OF FILL
OVER SUBDRAIN
20
PVC SDR 35
35
SDR 21

SCHEMATIC ONLY NOT TO SCALE

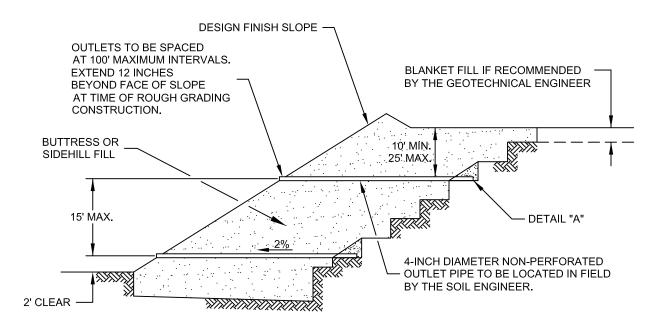












"FILTER MATERIAL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT: (CONFORMS TO EMA STD. PLAN 323) "GRAVEL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT:

> MAXIMUM PERCENTAGE PASSING 100 50 8

			MAXIMUM
SIEVE SIZE	PERCENTAGE PASSING	SIEVE SIZE	PERCENTAGE PA
1"	100	1 1/2"	100
3/4"	90-100	NO. 4	50
3/8"	40-100	NO. 200	8
NO. 4	25-40	SAND EQUIVALE	NT = MINIMUM OF 50
NO. 8	18-33		
NO. 30	5-15		
NO. 50	0-7		
NO. 200	0-3		

OUTLET PIPE TO BE CON-NECTED TO SUBDRAIN PIPE WITH TEE OR ELBOW THININITALIN

FILTER MATERIAL - MINIMUM OF FIVE CUBIC FEET PER FOOT OF PIPE. SEE ABOVE FOR FILTER MATERIAL SPECIFICATION.

ALTERNATIVE: IN LIEU OF FILTER MATERIAL FIVE CUBIC FEET OF GRAVEL PER FOOT OF PIPE MAY BE ENCASED IN FILTER FABRIC. SEE ABOVE FOR GRAVEL SPECIFICATION.

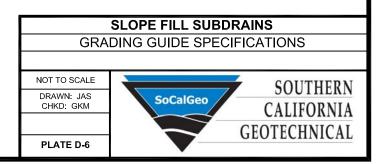
FILTER FABRIC SHALL BE MIRAFI 140 OR EQUIVALENT. FILTER FABRIC SHALL BE LAPPED A MINIMUM OF 12 INCHES ON ALL JOINTS.

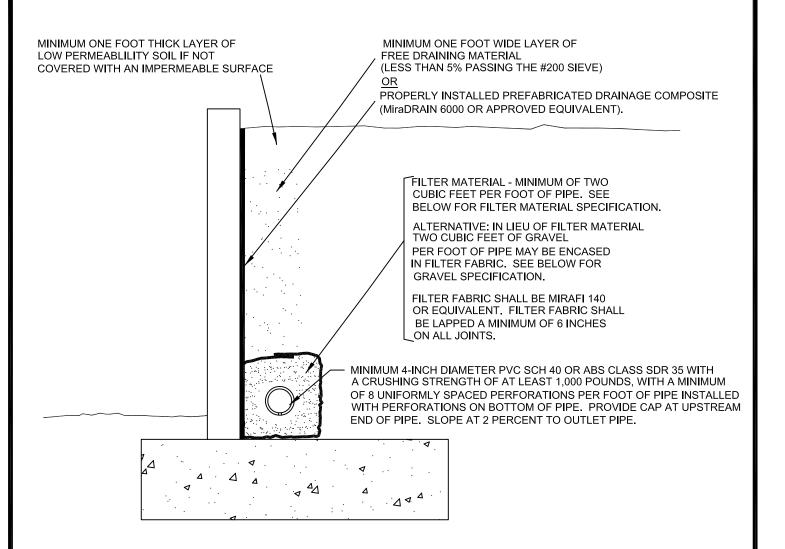
MINIMUM 4-INCH DIAMETER PVC SCH 40 OR ABS CLASS SDR 35 WITH A CRUSHING STRENGTH OF AT LEAST 1,000 POUNDS, WITH A MINIMUM OF 8 UNIFORMLY SPACED PERFORATIONS PER FOOT OF PIPE INSTALLED WITH PERFORATIONS ON BOTTOM OF PIPE. PROVIDE CAP AT UPSTREAM END OF PIPE. SLOPE AT 2 PERCENT TO OUTLET PIPE.

NOTES:

1. TRENCH FOR OUTLET PIPES TO BE BACKFILLED WITH ON-SITE SOIL.

DETAIL "A"





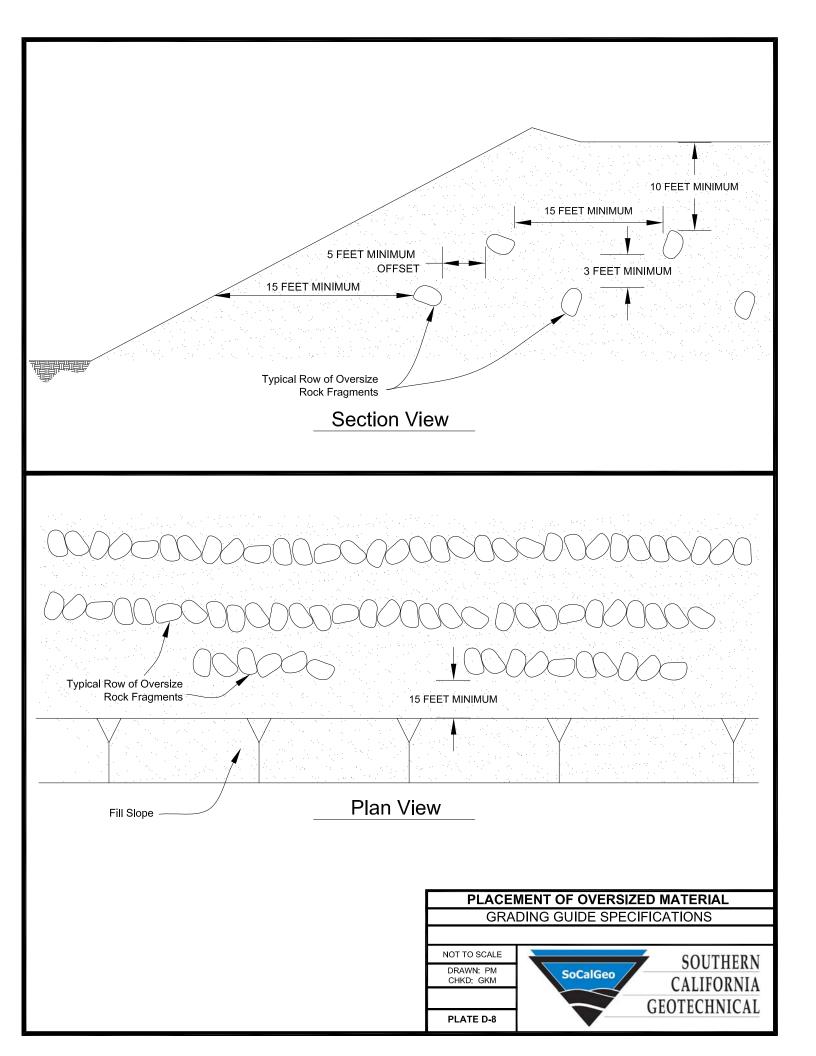
"FILTER MATERIAL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT: (CONFORMS TO EMA STD. PLAN 323)

"GRAVEL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT:

SIEVE SIZE 1"	PERCENTAGE PASSING 100
3/4"	90-100
3/8"	40-100
NO. 4	25-40
NO. 8	18-33
NO. 30	5-15
NO. 50	0-7
NO. 200	0-3

	MAXIMUM
SIEVE SIZE	PERCENTAGE PASSING
1 1/2"	100
NO. 4	50
NO. 200	8
SAND EQUIVALENT	= MINIMUM OF 50



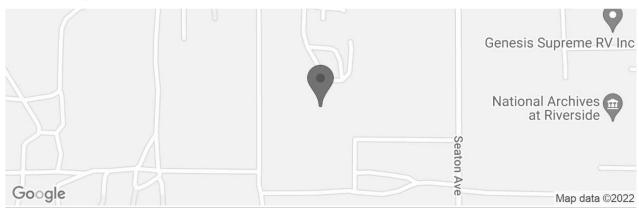


P E N D I Ε



OSHPD

Latitude, Longitude: 33.835325, -117.264596



Date
Design Code Reference Document

Risk Category

Site Class

8/22/2022, 3:39:47 PM

ASCE7-16

Ш

C - Very Dense Soil and Soft Rock

Туре	Value	Description
S _S	1.5	MCE _R ground motion. (for 0.2 second period)
S ₁	0.556	MCE _R ground motion. (for 1.0s period)
S _{MS}	1.8	Site-modified spectral acceleration value
S _{M1}	0.803	Site-modified spectral acceleration value
S _{DS}	1.2	Numeric seismic design value at 0.2 second SA
S _{D1}	0.535	Numeric seismic design value at 1.0 second SA

Туре	Value	Description
SDC	D	Seismic design category
F_a	1.2	Site amplification factor at 0.2 second
F_v	1.444	Site amplification factor at 1.0 second
PGA	0.5	MCE _G peak ground acceleration
F_{PGA}	1.2	Site amplification factor at PGA
PGA_{M}	0.6	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
SsRT	1.505	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	1.605	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.556	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.606	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGAd	0.5	Factored deterministic acceleration value. (Peak Ground Acceleration)
PGA_{UH}	0.631	Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration
C_{RS}	0.937	Mapped value of the risk coefficient at short periods
C _{R1}	0.917	Mapped value of the risk coefficient at a period of 1 s
c_V	1.2	Vertical coefficient

SOURCE: SEAOC/OSHPD Seismic Design Maps Tool https://seismicmaps.org/



SEISMIC DESIGN PARAMETERS - 2019 CBC PROPOSED WAREHOUSE DEVELOPMENT RIVERSIDE COUNTY (PERRIS), CALIFORNIA

DRAWN: AG CHKD: RGT SCG PROJECT

22G213-1 PLATE E-1



Appendix 4: Historical Site Conditions

Phase I Environmental Site Assessment or Other Information on Past Site Use



PHASE I ENVIRONMENTAL SITE ASSESSMENT UPDATE

Seaton Land Assemblage Seaton Avenue and Cajalco Road Riverside County, California

Prepared for

Hillwood

36 Discovery, Suite 130 Irvine, California 92618

Prepared by

GROUP DELTA CONSULTANTS, INC.

1035 South Milliken Avenue, Suite G Ontario, California 91761 Group Delta Project No. EN8220

December 23, 2022



Hillwood 36 Discovery, Suite 130 Irvine, California 92618 December 23, 2022 Project No. EN8268

Attention: Alissa Welch

Subject: Phase I Environmental Site Assessment (ESA) Update

Seaton Land Assemblage

Approximately 65-acre Site at Seaton Avenue and Cajalco Road

Riverside County, California Group Delta Project No. EN8268

Dear Ms. Welch:

Group Delta Consultants, Inc. is pleased to submit to Hillwood this Phase I Environmental Site Assessment Update report for the property located in Riverside County, California. This report discusses our project purpose, scope of work, execution of work, conclusions, and recommendations for the site. This Environmental Site Assessment was performed in general accordance with our proposal submitted on November 10, 2022.

We appreciate your selection of Group Delta Consultants for this project and look forward to assisting you further on this and other projects. If you have any questions, please do not hesitate to contact us.

Should you have any questions regarding this report, please feel free to call us at (949) 450-2100.

Sincerely,

GROUP DELTA CONSULTANTS, INC.

Glenn Burks, Ph.D., P.E.

Principal, Director of Environmental Services

Environmental Professional

Laura Botzong

Laura Botzong Project Scientist

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Figure 1 Site Location Map

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Appendix A Site Photographs

Appendix B Environmental Data Resources, Inc. Report (Radius Search Map, Sanborn

Maps, Aerial Photographs, Topographic Maps & City Directories)



EXECUTIVE SUMMARY

Group Delta Project No. EN8268

Hillwood (herein referred to as Client) has engaged Group Delta Consultants, Inc. (Group Delta) to perform a Phase I Environmental Site Assessment (ESA) Update for the Seaton Land Assemblage, the approximately 65-acre site at Seaton Avenue and Cajalco Road (Site) in Riverside County, California (Figure 1). The Site is currently occupied by approximately twenty-six (26) single-family residential structures and one commercial structure, with vacant land in the remainder.

This Phase I ESA Update was performed in accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-21. This version of the ASTM standard complies with the Federal All Appropriate Inquiry (AAI) rule (40 Code of Federal Regulations [CFR] Part 312 – Standards and Practices for All Appropriate Inquiries). The purpose of the Phase I ESA Update is to review, evaluate, and document present and past land use and practices, and visually examine Site conditions to identify Recognized Environmental Conditions (RECs). The Phase I ESA Update included a Site reconnaissance, observation of adjacent properties, environmental regulatory agency records review, review of available historic documents, and an interview.

A Site reconnaissance was performed on December 2, 2022 as part of the ESA to observe current conditions throughout the Site. No evidence of RECs was identified during the Site reconnaissance.

This assessment also included a review of available federal and state data reported by Environmental Data Resources (EDR), available regulatory agency environmental records, and available site history and records. No environmental concerns were identified for the Site during the regulatory database review. The review also included properties in the vicinity of the Site. Records indicated listed locations within ½ mile of the Site as listed in the EDR report. However, based on type of regulatory listing, regulatory status of the case, and/or location with respect to regional groundwater flow, the likelihood of Site contamination from an off-site source is considered low. The information procured during this investigation was used to identify, to the extent practical and within the limitations of the Scope, RECs associated with the Site due to current or past land use.

This assessment has not revealed evidence of RECs in connection to the Site. No further investigation is recommended at this time.

Based on the age of the existing structures, there is potential for asbestos-containing materials (ACMs) and/or lead-based paint (LBP)-containing materials to be present at the Site. ACM and LBP sampling is recommended prior to demolition activities at the Site.



1.0 INTRODUCTION

1.1 Background and Project Description

Hillwood (herein referred to as Client) has engaged Group Delta Consultants, Inc. (Group Delta) to perform a Phase I Environmental Site Assessment (ESA) Update for an approximately 65-acre site located at Seaton Avenue and Cajalco Road (Site) in Riverside County, California. The Site is currently occupied by approximately twenty-six (26) single-family residential structures and one commercial structure, with vacant land in the remainder.

1.2 Purpose

The purpose of the Phase I ESA Update is to review, evaluate, and document present and past land uses and practices, and visually examine Site conditions to identify Recognized Environmental Conditions (RECs). A REC is defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The REC term does not 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.

1.3 Detailed Scope of Work

Group Delta has interpreted American Society for Testing and Materials (ASTM) E1527-21 as the guidance document and used its provisions to the extent deemed appropriate for this report. In general, the scope of work included:

- Review of available information to describe the general geology and hydrogeology at the Site and adjacent areas;
- Search of regulatory records regarding possible hazardous material handling, spills, storage, or production at the Site or in its vicinity;
- Review of on-line available data including databases maintained by the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB);
- Perform agency records review of available files from the Riverside County Department of Building and Safety, Santa Ana Regional Water Quality Control Board (SARWQCB), Riverside County Department of Environmental Health (RCDEH), Department of Toxic Substances Control (DTSC), Department of Transportation Pipeline and Hazardous Materials Administration (PHMSA) National Pipeline Mapping System (NPMS), and California Geologic Energy Management Division (CalGEM) for on-site wells;



- Review of historic aerial photographs, historic topographic maps, Sanborn® fire maps, City Directories, and a radius map database search provided by Environmental Data Resources, Inc. (EDR);
- Reconnaissance of the Site and the immediately surrounding area to identify indicators of the existence of hazardous materials or RECs;
- Interview of an owner representative for the Site;
- Development of conclusions and findings, and;
- Preparation of a report describing the assessment and presenting the results and findings.

A statement of interpretive limitations is contained in Section 1.5 of the report.

1.4 Significant Assumptions

As stated in the previous section, this ESA was conducted in general accordance with ASTM E1527-21 to the extent deemed appropriate. This was done to identify and analyze environmental conditions that constitute existing, past, or potential environmental risks associated with the Site. Performance in accord with this standard is intended to reduce, but not eliminate uncertainty with respect to the potential for RECs associated with the Site.

1.5 Limitations and Exceptions

This ESA report is intended for the sole use of the Client and on the specific project identified. Our services have been performed under mutually agreed-upon terms and conditions. If other parties wish to rely on this report, please have them contact us so that a mutual understanding and agreement of the terms and conditions for our services can be established prior to their use and reliance of this report and the information it contains.

The findings and opinions presented are relative to the dates of our Site work and should not be relied on to represent conditions at substantially later dates. The opinions included herein are based on information obtained during the study and our experience. If additional information becomes available, which might impact our environmental findings, we request the opportunity to review the information, reassess the potential conditions, and modify our opinions, if warranted.

Although this assessment has attempted to identify the potential for environmental impacts to the Site, potential sources of contamination may have escaped detection due to: (1) the limited scope of this assessment, (2) the inaccuracy of public records, and/or (3) the presence of undetected or unreported environmental incidents.



It was not within the scope of this assessment to address issues not included in ASTM E1527-21 (such as radon, lead in drinking water, naturally-occurring hazardous materials or vegetation, endangered species, wetlands, etc.). Furthermore, it was not the purpose of this study to determine the degree or extent of contamination, if any, at the Site.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar conditions, by reputable environmental consultants practicing in this or similar localities. No other warranty, expressed or implied, is made regarding the professional information in this report.

1.6 Special Terms and Conditions

All appropriate inquiry (AAI) into the prior uses of the Site was made in accordance with good commercial and customary practices to identify and analyze RECs constituting existing, past or potential environmental conditions in connection with the Site.

There are no special terms and conditions that apply to the preparation of this report.

1.7 User Reliance

This assessment was performed at the request of the Client, utilizing methods and procedures consistent with good commercial or customary practices designed to conform to acceptable industry standards. The assessment and conclusions presented in this report represent the best professional judgment of the Environmental Professional based on the conditions that existed during the assessment and the information and data available to us during the course of this assignment.

Factual information regarding operations and conditions provided by the Client, owner, or their representative has been assumed to be correct and complete.

The report may be distributed and relied upon by the Client, its successors and assigns. Reliance on the information and conclusions presented in this report by any other party or parties is not authorized without the written consent of Group Delta.



2.0 SITE DESCRIPTION

2.1 Location and Legal Description of the Site

The Site is comprised of an approximately 65-acre site located at Seaton Avenue and Cajalco Road in Riverside County, California (Figure 1). The Site is also identified by the Riverside County Assessor's Parcel Numbers (APNs): 317-080-003, 317-080-004, 317-080-005, 317-080-006, 317-080-007, 317-080-008, 317-080-013, 317-080-014, 317-080-019, 317-080-020, 317-080-021, 317-080-022, 317-080-023, 317-080-027, 317-080-028, 317-080-029, 317-090-002, 317-090-008, 317-090-003, 317-090-007, 317-090-004, 317-090-006, and 317-090-005. Addresses associated with the Site include 22655, 22675, 22687, 22695, 22697, 22765, and 22775 Cajalco Road; 19655 Camino Del Sol; and 19641, 19671, 19683, and 19701 Seaton Avenue.

2.2 Site and Vicinity General Characteristics

The Site is currently occupied by approximately twenty-six (26) single-family residential structures and one commercial structure, with vacant land as the remainder. The Site is bordered on the north by Cajalco Road, followed by J & D Multiple Services legal services and vacant land; on the east by vacant land; on the south by Hurong Sen Buddhist Temples, single-family residential structures, and vacant land; and on the west by Seaton Avenue, followed by commercial retail and equipment rental companies and vacant land.

The Site's vicinity is generally characterized by vacant land and residential use.

2.3 Current Use of the Site

The Site is currently occupied by approximately twenty-six (26) single-family residential structures and one commercial structure, with vacant land as the remainder.

Photographic documentation of the Site is provided in Appendix A.

2.4 Site Geology

The Site is located within the Peninsular Ranges geomorphic province which is characterized by a series of ranges separated by northwest trending valleys, subparallel to faults branching from the San Andreas Fault. The trend of topography is similar to the Coast Ranges, but the geology is more like the Sierra Nevada, with granitic rock intruding the older metamorphic rocks. The Peninsular Ranges extend into lower California and are bound on the east by the Colorado Desert. The Los Angeles Basin and the island group (Santa Catalina, Santa Barbara, and the distinctly terraced San Clemente and San Nicolas Islands), together with the surrounding continental shelf (cut by deep submarine fault troughs), are included in this province.



2.5 Site Hydrology

An intermittent stream is depicted at the adjacent property to the north of the Site. According to the United States Geologic Survey (USGS) 1978 topographic map of the Site and vicinity and the nearby closed Leaking Underground Storage Tank (LUST) case (23480 Rider Street), groundwater is anticipated to flow to the northeast and is expected to be encountered at approximately 160 feet below ground surface.

2.6 Current Uses of Adjacent Properties

The Site is bordered on the north by Cajalco Road, followed by J & D Multiple Services legal services and vacant land; on the east by vacant land; on the south by Hurong Sen Buddhist Temples, single-family residential structures, and vacant land; and on the west by Seaton Avenue, followed by commercial retail and equipment rental companies and vacant land.



3.0 USER PROVIDED INFORMATION

3.1 Title Records

No title records were provided by the User during this ESA.

3.2 Environmental Liens or Activity and Other Use Limitations (AUL)

No reports of environmental liens or AULs were provided by the User during this ESA or identified in the title report.

3.3 Owner/Occupant Interviews

3.3.1 Current Owners

An environmental questionnaire was provided to the Site owners on November 29, 2022. A response has not been received prior to issuance of this report.

3.3.2 Previous Owners

The previous owner of the Site was not identified during this Phase I ESA.

3.4 Reason for Performing ESA

The purpose of the ESA is to identify apparent and potential sources of contamination for the Site that, by their association or proximity to the Site, could represent an REC. This report can serve to identify environmental conditions at the Site that may impact the proposed project and may permit the User to satisfy one of the requirements to qualify for the bona fide prospective purchaser limitations on Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability (42 U.S.C. §9601). It was not the purpose of this study to determine the degree or extent of contamination, if any, but rather to identify the potential for contamination or environmental concern.

3.5 Review of Existing Site Reports

A previous Phase I ESA for the 50-acre northern parcels of the Site was prepared by Group Delta Consultants and dated July 5, 2022. Group Delta found no evidence of RECs in connection to the Site.

No other prior environmental reports at the Site were provided by the User.



4.0 ENVIRONMENTAL DATA SEARCH

4.1 Database Information on the Site and the Adjacent Properties

4.1.1 Standard Environmental Record Sources for the Site and Vicinity

Group Delta conducted a review of reasonably ascertainable environmental regulatory agency databases to identify known or suspected environmental concerns or RECs that may be associated with the Site. A search of readily available environmental records was obtained from EDR of Shelton, Connecticut (Appendix B). The purpose of the regulatory database report review was to evaluate to the extent possible whether prior activities, processes, operations, or actions on the Site, adjoining properties, and nearby locations have the potential to adversely impact the environmental integrity of the Site, are suspected sources of environmental contamination, or present RECs for the Site. The regulatory database report provides information regarding current operations and prior regulatory listings for the Site and previous owners and/or operators on the Site. The presence or absence of information about the Site does not necessarily mean that there are or are not environmental issues associated with the Site.

The regulatory database report includes a list of government databases searched, a statistical profile listing the number of properties within ASTM Standard Practice specified search radii, selected detailed information from environmental regulatory agency databases, and a map illustrating the identified properties, sites, or facilities of interest.

The regulatory database report provides a mechanism to evaluate a relatively large number of environmental regulatory agency databases and eliminate many properties, sites, operations, and/or facilities that have a low potential of adversely impacting the Site. However, it should be noted that the information included in the regulatory database report is not necessarily all-inclusive and environmental regulatory agency files may have been purged by public officials prior to release to the public. In addition, mapping errors may not reflect actual distances and directions between the Site and the properties, sites, operations, and/or facilities listed in the regulatory database report.

The regulatory database report includes information from federal, state, local, military, and tribal environmental regulatory agency databases.

4.1.2 Site Records

The Site was identified in the EDR regulatory database report and is discussed below.



Table 1 - Environmental Atlas Findings - Site Findings

Pacific Fleet Liquidators / XL Equipment Sales, Inc. (19641 Seaton Avenue)

Map Key Number 1-5

EDR Listing of Concern and Associated Databases: Multiple

The Site is listed on multiple regulatory databases. The Pacific Fleet Liquidators facility was issued EPA Identification Number (EPA ID): CAL000312081 in 2006, and the number was inactive as of 2009. The XL Equipment Sales, Inc. facility was classified as a hazardous waste handler and not a generator as of 2019. The facility was described as a new car dealer. No evidence of violations, spills, or releases in connection with these listings was found. Based on this information, these listings do not represent a REC to the Site.

4.1.3 Vicinity Records Search

The following sites were identified in the EDR database radius search for the project area.

Table 2 – Environmental Atlas Findings – Site Vicinity Findings

Alpha Resins / AOC LLC (19991 Seaton Avenue)

Map Key Number 10-13

EDR Listing of Concern and Associated Databases: Multiple

The property located approximately 0.16 mile south of the Site is listed on multiple regulatory databases. According to the listings and information provided on the DTSC EnviroStor website, Alpha Owens Corning (AOC), a division of the Alpha Corporation of Tennessee, manufactures polyester resin at the facility. The facility uses specially designed reaction vessels to accomplish esterification of glycols and di-functional organic acids and bases. AOC has been manufacturing polyester resins at the facility since 1972, when the plant was built. The property on which the facility is situated is roughly square and approximately 10 acres in size. The aqueous waste stream generated by the polyester resin manufacturing contains constituents including phenol, 1,4-dioxane, and benzene. The aqueous waste stream is processed to recover unconverted raw materials, while the remainder is incinerated in a thermal oxidizer.

Based on the March 10, 2005, field evaluation and the October 1988 AOC Resource Conservation and Recovery Act (RCRA) Facility Assessment conducted by the EPA, DTSC has determined that further investigation is needed to determine the nature and extent of any release of hazardous waste or hazardous waste constituents.

A draft Current Conditions Report (CCR) is currently being reviewed. Once review is complete a comment memorandum will be transmitted to AOC for revision. The case status is "active" as of August 12, 2009 under DTSC oversight. Based on ongoing regulatory oversight, relative distance, and the cross-gradient location with regard to the Site, this active release case does not represent a REC to the Site at this time.



4.2 Historical Use Information on the Site and Adjoining Properties

Group Delta reviewed available historical information to ascertain the historical uses of the Site and the adjoining properties. Reviewed information included Sanborn insurance maps, historic aerial photographs, historic topographic maps, and city directories.

4.2.1 Historical Aerial Photography, Topographic Map Review, Sanborn Map Review

Aerial photographs and historical topographic maps of the Site and adjoining properties were provided by EDR and reviewed to identify historical land development. Aerial photographs and historical topographic maps dating between 1901 and 2018 were reviewed. Tables 3 and 4 summarize the results of the aerial photograph and topographic map reviews. A Letter of No Coverage pertaining to Sanborn insurance maps for the Site and vicinity is included in Appendix B. Copies of the aerial photographs and topographic maps provided by EDR are included as Appendix B.

Table 3 – Summary of Aerial Photographs					
Year	Summary				
1938, 1949,	Northern parcels The Site appears to be agricultural land (row crops) with several rural residential structures in the northwestern portion of the Site and several rural residential structures in the eastern portion.				
1953, and 1959	Southern parcels The Site appears to be undeveloped land.				
	The adjoining and adjacent properties appear to be agricultural land (groves and row crops) and undeveloped land.				
	Northern parcels The Site appears to be agricultural land (row crops) with several rural residential structures in the northwestern portion of the Site, several rural residential structures in the northcentral portion, and several rural residential structures in the eastern portion.				
1961	Southern parcels The Site appears to be undeveloped land. The adjoining and adjacent properties appear to be agricultural land (groves and row crops), rural residential structures, and undeveloped land.				
1967, 1974, 1978, and 1985	Northern parcels The Site appears to be agricultural land (row crops) with several rural residential structures in the northwestern portion of the Site, several rural residential structures in the northcentral portion, several rural residential structures in the eastern portion, and several rural residential structures in the southeastern corner.				



Table 3 – Summary of Aerial Photographs				
	Southern parcels The Site appears to be undeveloped land.			
	The Site appears to be undeveloped land.			
	The adjoining and adjacent properties appear to be agricultural land (groves and row crops), rural residential structures, and undeveloped land.			
	Northern parcels			
1990	The Site appears to be vacant land with several rural residential structures in the northwestern portion of the Site, several rural residential structures in the north-central portion, several rural residential structures in the eastern portion, and several rural residential structures in the southeastern corner.			
and 2006	Southern parcels			
2000	The Site appears to be vacant land with several rural residential structures in the northwestern portion.			
	The adjoining and adjacent properties appear to be agricultural land (groves and row crops), rural residential structures, and undeveloped land.			
2009,	Northern parcels The Site and vicinity remain in the same configuration as the previous aerial photographs, except the rural residential structures in the eastern portion have been converted to commercial use with an accompanying exterior equipment yard.			
2012,	Southern parcels			
and 2016	The Site appears to be vacant land with several rural residential structures in the northern and southwestern portions.			
	The adjoining and adjacent properties appear to be agricultural land (groves and row crops), rural residential structures, and undeveloped land.			

Table 4 – Summary of Topographic Maps				
Year	Summary			
1901	The Site is depicted as undeveloped land. The Site vicinity is depicted as undeveloped land.			
1942	The Site is depicted with one structure in the northwestern portion and one structure in the			
and	eastern portion. An unimproved road traverses the southeastern portion of the Site. The			
1943	Site vicinity is depicted with structures to the north and south.			
	The Site is depicted with one structure in the eastern portion of the northern parcels. An			
1953	unimproved road bisects the northern parcels from north to south. The Site vicinity is			
	depicted as agricultural land with structures.			
	The northern parcels of the Site are depicted with two structures in the northwestern			
1967	portion, one structure in the north-central portion, one structure in the eastern portion, and			
1507	one structure in the southeastern corner. The Site vicinity is depicted as agricultural land			
	with structures.			
1973	The northern parcels of the Site are depicted with two structures in the northwestern			



Table 4 – Summary of Topographic Maps				
and	portion, four structures in the north-central portion, one structure in the eastern portion,			
1978	and one structure in the southeastern corner. The Site vicinity is depicted as agricultural			
	land with structures.			
2012,				
2015,	The Cite and visinity are denicted with no structures			
and	The Site and vicinity are depicted with no structures.			
2018				

The Site was historically used for agricultural purposes. There is a potential that agricultural chemicals, such as pesticides, herbicides and fertilizers, were used on Site. The subject property is planned for commercial development, and the entire area of the subject property will either paved over or covered by improvements that make direct contact with any potential remaining concentrations in the soil unlikely. Based on this information and the time elapsed since the Site was used for agricultural purposes (approximately 32 years), the former agricultural use on Site does not represent a REC.

Based on the date of development of the residential structures on Site (circa 1963), it is possible that the subject property was historically equipped with septic systems. Based on the residential nature of occupancy, any on-site septic systems are not expected to represent a significant environmental concern. However, if any septic systems are encountered upon future redevelopment, they should be should be addressed under local regulatory guidelines.

Representative aerial photographs and topographic maps are included in Appendix B.

4.2.2 City Directory Report

The 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. City directories generally include listings of residents or businesses organized both alphabetically and alphanumerically by street names and street addresses and are prepared for many urban and suburban areas of the United States dating back to the early 1900s.

Group Delta reviewed the city directory search prepared by EDR. The search was performed for the Site and the adjacent properties.

The Site was occupied by residential tenants in 1976, 1980, 1985, 1990, 1992, 1995, 2000, 2005, 2010, 2014, and 2017. According to the city directory, the Site vicinity has largely been occupied by residential tenants from 1976 to 2017.

Alpha Resin Corp is listed at 19991 Seaton Avenue from 1980 to 2017 and is discussed further in Section 4.1.3.



The city directory search results prepared by EDR are presented in Appendix B.



5.0 REGULATORY AGENCY RECORDS

5.1 Online Available Records

5.1.1 Department of Toxic Substances Control (DTSC)

Group Delta reviewed available files of the State of California DTSC published on the internet records database Envirostor. The purpose of this search was to identify any evidence of unauthorized releases of hazardous materials to the surface, subsurface soil, and groundwater.

The Site was not identified on the Envirostor database.

No RECs were identified as a result of the Envirostor database review.

5.1.2 State Water Resources Control Board (SWRCB)

Group Delta reviewed available files of the State Water Resources Control Board published on the internet records database GeoTracker. The purpose of this search was to identify any evidence of unauthorized releases of hazardous materials to the surface, subsurface soil, and groundwater.

The Site was not identified on the GeoTracker database.

No RECs were identified as a result of the GeoTracker database review.

5.1.3 California Geologic Energy Management Division (CalGEM)

Group Delta reviewed mapping available on the CalGEM website for oil and gas wells on or in the vicinity of the Project. The purpose of this search was to identify any evidence of oil production activities on or around the Site.

The Site was not identified on the CalGEM database.

No RECs were identified as a result of the CalGEM database review.

5.1.4 Office of California State Fire Marshall

Group Delta reviewed available files through the online National Pipeline Mapping System (NPMS) database maintained by the Office of California State Fire Marshal. NPMS is a Geographic Information System (GIS) database of pipeline information for the specific intent of emergency response. The database does not include natural gas lines or liquefied natural gas facilities.



The Site was not identified on the NPMS database.

No RECs were identified as a result of the NPMS database review.

5.2 Local Department Records

5.2.1 County of Riverside Building and Safety Department

Group Delta reviewed building permit records for the Site addresses at the Riverside County Public Land Use System online database. No environmental concerns were identified during the building permit review.

5.2.2 Riverside County Department of Environmental Health

According to a response to the records request dated July 6, 2022, no records were found for the Site address, 19641 Seaton Avenue.



6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

A site reconnaissance was performed on December 2, 2022, by Laura Botzong of Group Delta.

The purpose of the Site reconnaissance was to observe the present Site use and conditions as they relate to the possible presence of potentially hazardous substances and petroleum products. In addition, adjoining properties and roads were visually observed from the Site to identify land uses and the potential presence of structures, operations, activities, or environmental conditions that may involve the use, treatment, storage, disposal, or generation of hazardous wastes and/or petroleum products that may pose an environmental concern to the Site. Photographic documentation of the reconnaissance is included in Appendix A.

6.2 General Site Setting

The Site is currently occupied by approximately twenty-six (26) single-family residential structures and one commercial structure, with vacant land in the remainder. No evidence of distressed vegetation or odors was observed during the Site reconnaissance.

Approximately three propane aboveground storage tanks (ASTs), ranging from 500 to 1,000 gallons in size, were observed near the residential structures on Site. The propane ASTs appeared to be in good condition. Based on this information, the propane ASTs do not represent a significant environmental concern.

Several pole-mounted transformers were observed at the northern perimeter of the Site along Cajalco Road and in the southern portion of the Site along Camino Del Sol. The transformers appeared to be in good condition, with no leaking or staining observed. Based on this information, the pole-mounted transformers do not represent a significant environmental concern.

Exterior storage of construction equipment, including cranes and earthmovers, was observed at the Craneology, Inc. facility at 19641 Seaton Avenue. The storage yard was unpaved; however, minor to no staining was observed beneath the equipment. The equipment appeared to be new and in good condition. Approximately 20 lead-acid car batteries were observed on a wooden pallet and appeared to be in good condition, with no leaking or staining observed. Based on this information, the exterior equipment storage facility at 19641 Seaton Avenue does not represent a REC to the Site at this time.



6.3 Adjacent Properties Site Observations

The properties adjacent to the Site were observed from the Site to assess if they had potential to present RECs for the Site. The Site is bordered on the north by Cajalco Road, followed by J & D Multiple Services legal services and vacant land; on the east by vacant land; on the south by Hurong Sen Buddhist Temples, single-family residential structures, and vacant land; and on the west by Seaton Avenue, followed by commercial retail and equipment rental companies and vacant land. No evidence of RECs was identified at the adjacent and adjoining properties to the Site.

6.4 Site Visit Findings

No evidence of RECs was identified during the Site reconnaissance.



7.0 SIGNIFICANT DATA GAPS

7.1 Data Gaps

In general, a Data Gap is the inability to gather information as prescribed in the ASTM Standard Practice despite good faith efforts. This may include, but not be limited to, a lack of historical information, inability to interview knowledgeable individuals, or inspect portions of the Site.

Group Delta was unable to access the interior of the commercial structure at 19641 Seaton Avenue.

An environmental questionnaire was provided to the Site owners on November 29, 2022. A response has not been received prior to issuance of this report.

No other data gaps were encountered during this assessment.

7.2 Data Failures

The objective of reviewing historical information is to identify all obvious uses of the Site from first developed use or 1940, whichever is earlier, to identify the likelihood of previous uses resulting in an REC(s). Generally, a Data Failure is when all obvious uses of the site cannot be determined despite gathering and reviewing all of the standard historical sources that are reasonably ascertainable. A historical source is considered reasonably ascertainable if it is (1) publicly available, (2) obtainable within a reasonable period of time and at a reasonable cost, and (3) practically reviewable.

The Site uses were identified back to 1901. Therefore, data failure was not encountered during the course of this assessment.



8.0 FINDINGS AND CONCLUSIONS

Group Delta has performed a Phase I ESA Update for the Seaton Land Assemblage, the approximately 65-acre site at Seaton Avenue and Cajalco Road in Riverside County, California. This ESA was conducted in general accordance with the scope of work, under guidance provided by the ASTM E1527-21 standard, and in a manner generally consistent with the agreement between the Client and Group Delta for this type of report.

The information procured during this investigation was used to identify, to the extent practical and within the limitations of the Scope, RECs associated with the Site due to current or past land use.

This assessment has not revealed evidence of RECs in connection to the Site. No further investigation is recommended at this time.

Based on the age of the existing structures, there is potential for asbestos-containing materials (ACMs) and/or lead-based paint (LBP)-containing materials to be present at the Site. ACM and LBP sampling is recommended prior to demolition activities at the Site.



9.0 **DEVIATIONS**

There were no deviations to the ASTM Standard Practice associated with the preparation and development of this Phase I ESA.



10.0 REFERENCES

Group Delta Project No. EN8268

California Department of Toxic Substances Control, EnviroStor Database, December 2, 2022. www.envirostor.dtsc.ca.gov.

Department of Transportation, National Pipeline Mapping System, December 2, 2022. https://www.npms.phmsa.dot.gov/PublicViewer/,

Environmental Data Resources, Inc., The EDR Radius Map Report with GeoCheck dated December 6, 2022.

Environmental Data Resources, Inc., Certified Sanborn Map Report dated June 15, 2022.

Environmental Data Resources, Inc., Historical Topographic Map Report dated June 15, 2022.

Environmental Data Resources, Inc., The EDR-City Directory Image Report dated June 22, 2022.

Environmental Data Resources, Inc. Aerial Photo Decade Package dated June 15, 2022.

Google Maps, http://maps.google.com

Office of California State Fire Marshal, December 2, 2022. http://osfm.fire.ca.gov/pipeline/pipeline mapping.php.

State of California, Department of Conservation, Geologic Energy Management Division, December 2, 2022.

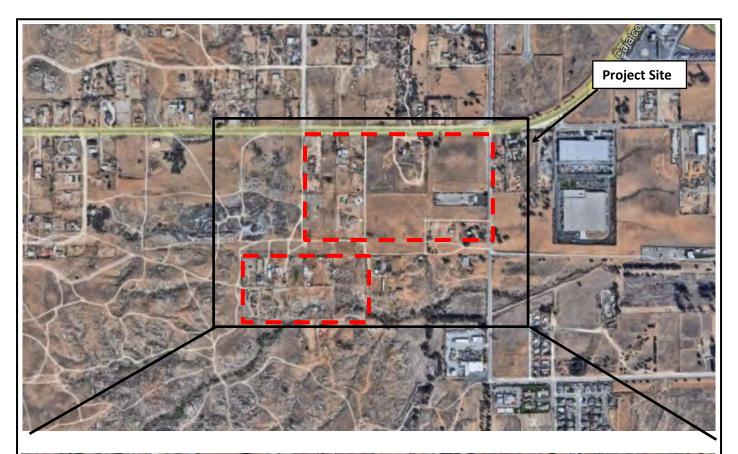
https://maps.conservation.ca.gov/doggr/wellfinder/#openModal.

State Water Resources Control Board, GeoTracker Database, December 2, 2022. http://geotracker.waterboards.ca.gov/.



Figure







Reference: Google Earth

- - - Site boundary



GDC Project No. EN8268

Project Location Map

Phase I Environmental Site Assessment Update Seaton Land Assemblage Riverside County, California

Figure 1

Appendix A

Site Photographs



Seaton Land Assemblage Riverside County, CA Date: December 2, 2022



Photograph Number 1: View from Cajalco Road, facing south



Photograph
Number 2:
View from
intersection of
Cajalco Road
and Seaton
Avenue, facing
southwest

Seaton Land Assemblage Riverside County, CA Date: December 2, 2022



Photograph
Number 3:
View of singlefamily
residential
structure in
north-central
portion of
northern Site
parcels



Photograph Number 4: Pole-mounted transformer

Seaton Land Assemblage Riverside County, CA Date: December 2, 2022



Photograph
Number 5:
View of vacant
land in central
portion of Site,
from Cajalco
Road facing
south



Photograph Number 6: View of rural residential structure in north-central portion of northern Site parcels

Seaton Land Assemblage Riverside County, CA Date: December 2, 2022



Photograph Number 7: View of vacant land in central portion of Site, from Camino Del Sol facing east



Photograph
Number 8:
View of singlefamily
residential
structure in
south-central
portion of Site

Seaton Land Assemblage Riverside County, CA Date: December 2, 2022



Photograph Number 9: View of southern Site parcels, from Camino Del Sol facing southwest



Photograph Number 10: View of singlefamily residential structure at southern Site parcels, from north facing south

Seaton Land Assemblage Riverside County, CA Date: December 2, 2022



Photograph Number 11: View from northwestern corner of southern Site parcels, facing south



Photograph Number 12: View from northwestern corner of northern Site parcels, facing southeast

Seaton Land Assemblage Riverside County, CA Date: December 2, 2022



Photograph Number 13: Commercial structure occupied by Craneology, Inc. at 19641 Seaton Avenue



Photograph Number 14: Craneology equipment storage yard (June 2022)

Seaton Land Assemblage Riverside County, CA Date: December 2, 2022



Photograph Number 15: Lead-acid battery storage (June 2022)



Photograph Number 16: Single-family residential structure in southeastern portion of northern Site parcels

Seaton Land Assemblage Riverside County, CA Date: December 2, 2022



Photograph Number 17: Adjacent property to the north



Photograph Number 18: Adjacent property to the south



PHOTOGRAPHIC DOCUMENTATION

Seaton Land Assemblage Riverside County, CA Date: December 2, 2022



Photograph Number 19: Adjacent property to the east



Photograph Number 20: Adjacent property to the west

Appendix B

Environmental Data Resources, Inc. Report (Radius Search Map, Sanborn Maps, Aerial Photographs, Topographic Maps, & City Directories)



Seaton Land Assemblage

19641 Seaton Avenue Perris, CA 92570

Inquiry Number: 7197284.2s

December 06, 2022

The EDR Radius Map™ Report



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

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GEOCHECK ADDENDUM	

GeoCheck - Not Requested

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

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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 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

19641 SEATON AVENUE PERRIS, CA 92570

COORDINATES

Latitude (North): 33.8357160 - 33⁵⁰ 8.57" Longitude (West): 117.2647310 - 117⁵³ 15' 53.03"

Universal Tranverse Mercator: Zone 11 UTM X (Meters): 475505.1 UTM Y (Meters): 3743778.2

Elevation: 1582 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 12015925 STEELE PEAK, CA

Version Date: 2018

East Map: 12015907 PERRIS, CA

Version Date: 2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140603 Source: USDA

MAPPED SITES SUMMARY

Target Property Address: 19641 SEATON AVENUE PERRIS, CA 92570

Click on Map ID to see full detail.

MAP	OUTE NAME	ADDDECO		RELATIVE	DIST (ft. & mi.)
ID A1	SITE NAME XL EQUIPMENT SALES I	ADDRESS 19641 SEATON AVE	DATABASE ACRONYMS RCRA NonGen / NLR	ELEVATION	DIRECTION TP
AT	AL EQUIPMENT SALES I	19641 SEATON AVE	RCRA NONGEN / NER		IP
A2	PACIFIC FLEET LIQUID	19641 SEATON AVE	HWTS		TP
A3	XL EQUIPMENT SALES I	19641 SEATON AVE	FINDS		TP
A4	XL EQUIPMENT SALES I	19641 SEATON AVE	HWTS		TP
A5	XL EQUIPMENT SALES I	19641 SEATON AVE	ECHO		TP
6	MWD - CHEMICAL UNLOA	19760 SEATON AVE	CERS HAZ WASTE, CHMIRS, CERS	Lower	48, 0.009, ESE
7	PHELAN DEVELOPMENT C	23031 CAJALCO RD	RCRA NonGen / NLR	Lower	133, 0.025, ENE
B8	GENISIS SUPREME RV I	23129 CAJALCO RD	RCRA NonGen / NLR	Lower	1060, 0.201, ENE
B9	WARLOCK INDUSTRIES	23129 CAJALCO RD	CERS HAZ WASTE, EMI, HAZNET, NPDES, CIWQS, CER	S, Lower	1060, 0.201, ENE
C10	AOC, L.L.C.	19991 SEATON AVE	AST	Lower	1138, 0.216, SSE
C11	AOC LLC	19991 SEATON AVE	CERS HAZ WASTE, CERS TANKS, HAZNET, CERS, HWT	S Lower	1138, 0.216, SSE
C12	AOC LLC	19991 SEATON AVENUE	CORRACTS, RCRA-TSDF, RCRA-LQG, ENVIROSTOR, H	ISTLower	1138, 0.216, SSE
C13	AOC, LLC	19991 SEATON AVE	ICIS, US AIRS, DRYCLEANERS, EMI	Lower	1138, 0.216, SSE
C14	AOC LLC	33.83098/-117.26157	PFAS ECHO	Lower	1145, 0.217, SSE
15	ECOLOGY AUTO PARTS	23332 CAJALCO RD	SWRCY, CERS HAZ WASTE, NPDES, PROC, CIWQS, CE	RS Lower	1858, 0.352, ENE
D16	MCANALLY ENTERPRISES	23480 RIDER ST	LUST, SWEEPS UST, CA FID UST, Cortese, HIST	Lower	2573, 0.487, ESE
D17	MCANALLY ENTERPRISES	23480 RIDER ST	LUST, CERS	Lower	2573, 0.487, ESE
18	VAL VERDE CONTINUATI	NEVADA AVENUE/MORGAN	ENVIROSTOR, SCH	Lower	4126, 0.781, East

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
XL EQUIPMENT SALES I 19641 SEATON AVE PERRIS, CA 92570	RCRA NonGen / NLR EPA ID:: CAL000446383	CAL000446383
PACIFIC FLEET LIQUID 19641 SEATON AVE PERRIS, CA 92570	HWTS	N/A
XL EQUIPMENT SALES I 19641 SEATON AVE PERRIS, CA 92570	FINDS	N/A
XL EQUIPMENT SALES I 19641 SEATON AVE PERRIS, CA 92570	HWTS	N/A
XL EQUIPMENT SALES I 19641 SEATON AVE PERRIS, CA 92570	ECHO Registry ID: 110070592787	N/A

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

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 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 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 INDIAN UST...... Underground Storage Tanks on Indian Land Lists of state and tribal voluntary cleanup sites 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

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Brownfield lists

TC7197284.2s EXECUTIVE SUMMARY 4

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit 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

SCH...... School Property Evaluation Program

CDL..... Clandestine Drug Labs Toxic Pits..... Toxic Pits Cleanup Act Sites

US CDL...... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST...... SWEEPS UST Listing 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 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

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

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

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 ATSDR...... PFAS Contamination Site Location Listing PFAS WQP..... Ambient Environmental Sampling for PFAS PFAS NPDES..... Clean Water Act Discharge Monitoring Information

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 Contamination Site Location Listing

AQUEOUS FOAM..... Former Fire Training Facility Assessments Listing

CA BOND EXP. PLAN..... Bond Expenditure Plan CUPA Listings..... CUPA Resources List EMI..... Emissions Inventory Data ENF..... Enforcement Action Listing

Financial Assurance Information Listing

ICE.....ICE

HWT...... Registered Hazardous Waste Transporter Database

HAZNET Facility and Manifest Data MINES..... Mines Site Location Listing

MWMP..... Medical Waste Management Program Listing

NPDES Permits Listing

PEST LIC..... Pesticide Regulation Licenses Listing

Notify 65..... Proposition 65 Records

UIC 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)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)
	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
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 Federal RCRA facilities undergoing Corrective Action

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 11/21/2022 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AOC LLC	19991 SEATON AVENUE	SSE 1/8 - 1/4 (0.216 mi.)	C12	129
EPA ID:: CAD059270975				

Lists of Federal RCRA TSD facilities

RCRA-TSDF: 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.

A review of the RCRA-TSDF list, as provided by EDR, and dated 11/21/2022 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AOC LLC	19991 SEATON AVENUE	SSE 1/8 - 1/4 (0.216 mi.)	C12	129

Lists of Federal RCRA generators

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 11/21/2022 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AOC LLC	19991 SEATON AVENUE	SSE 1/8 - 1/4 (0.216 mi.)	C12	129
FPA ID.: CAD059270975				

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 07/25/2022 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AOC LLC	19991 SEATON AVENUE	SSE 1/8 - 1/4 (0.216 mi.)	C12	129

Facility Id: 80001432 Status: Active

VAL VERDE CONTINUATI

NEVADA AVENUE/MORGAN E 1/2 - 1 (0.781 mi.)

18

222

Facility Id: 33010050 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 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MCANALLY ENTERPRISES	23480 RIDER ST	ESE 1/4 - 1/2 (0.487 mi.)	D16	217
Database: LUST REG 8, Date of G	overnment Version: 02/14/2005	, ,		
Facility Status: Case Closed				
Global ID: T0606500587				
MCANALLY ENTERPRISES	23480 RIDER ST	ESE 1/4 - 1/2 (0.487 mi.)	D17	220
Database: RIVERSIDE CO. LUST,	Date of Government Version: 07/9	07/2022		
Database LUCT Data of Covernm	ant Maraian, 00/24/2022			

Database: LUST, Date of Government Version: 08/31/2022

Status: Completed - Case Closed

Facility Id: 9915151 Global Id: T0606500587 Facility Status: 9

Lists of state and tribal registered storage tanks

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.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AOC, L.L.C.	19991 SEATON AVE	SSE 1/8 - 1/4 (0.216 mi.)	C10	57
Database: AST, Date of Government Version: 07/06/2016				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 08/31/2022 has revealed that there is 1

SWRCY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ECOLOGY AUTO PARTS Cert Id: RC262180.001	23332 CAJALCO RD	ENE 1/4 - 1/2 (0.352 mi.)	15	208

Local Lists of Hazardous waste / Contaminated Sites

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 07/18/2022 has revealed that there are 3 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MWD - CHEMICAL UNLOA	19760 SEATON AVE	ESE 0 - 1/8 (0.009 mi.)	6	13
WARLOCK INDUSTRIES	23129 CAJALCO RD	ENE 1/8 - 1/4 (0.201 mi.)	B9	26
AOC LLC	19991 SEATON AVE	SSE 1/8 - 1/4 (0.216 mi.)	C11	58

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AOC LLC	19991 SEATON AVENUE	SSE 1/8 - 1/4 (0.216 mi.)	C12	129
Facility Id: 00000019398				

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 07/18/2022 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AOC LLC	19991 SEATON AVE	SSE 1/8 - 1/4 (0.216 mi.)	C11	58

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 11/21/2022 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PHELAN DEVELOPMENT C EPA ID:: CAC003192915	23031 CAJALCO RD	ENE 0 - 1/8 (0.025 mi.)	7	21
GENISIS SUPREME RV I EPA ID:: CAL000428623	23129 CAJALCO RD	ENE 1/8 - 1/4 (0.201 mi.)	B8	24

PFAS ECHO: 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.

A review of the PFAS ECHO list, as provided by EDR, and dated 01/03/2022 has revealed that there is 1 PFAS ECHO site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AOC LLC	33.83098/-117.26157	SSE 1/8 - 1/4 (0.217 mi.)	C14	207

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 06/21/2022 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MCANALLY ENTERPRISES	23480 RIDER ST	ESE 1/4 - 1/2 (0.487 mi.)	D16	217
Cleanup Status: COMPLETED	- CASE CLOSED			

DRYCLEANERS: 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 cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

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

Lower Elevation	Address	Direction / Distance	Map ID	Page
AOC, LLC	19991 SEATON AVE	SSE 1/8 - 1/4 (0.216 mi.)	C13	190
Database: DRYCLEAN SOUTH COAST	. Date of Government Version: 08	/18/2022		

HIST 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 [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MCANALLY ENTERPRISES Rea Id: 083303464T	23480 RIDER ST	ESE 1/4 - 1/2 (0.487 mi.)	D16	217

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 08/11/2022 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AOC LLC EPA ID: CAD059270975	19991 SEATON AVENUE	SSE 1/8 - 1/4 (0.216 mi.)	C12	129
Cleanup Status: CLOSED				

PROC: A listing of certified processors.

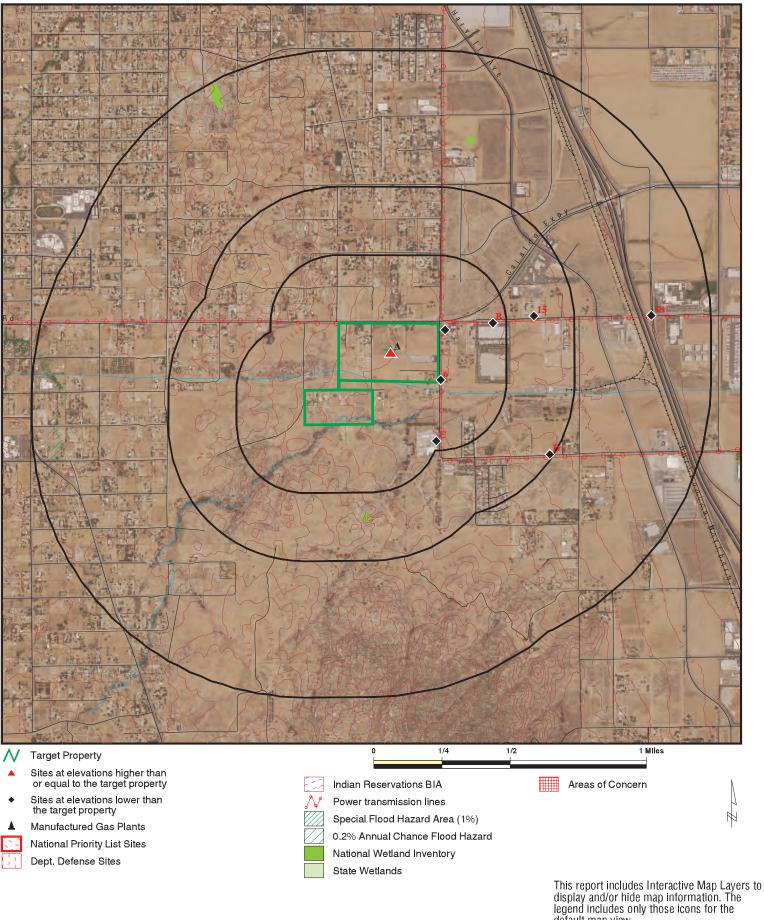
A review of the PROC list, as provided by EDR, and dated 08/31/2022 has revealed that there is 1 PROC site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ECOLOGY AUTO PARTS	23332 CAJALCO RD	ENE 1/4 - 1/2 (0.352 mi.)	15	208

Due to poor or inadequate address information, the following sites were not mapped. Count: 5 records.

Site Name	Database(s)
	CDL

OVERVIEW MAP - 7197284.2S



display and/or hide map information. The legend includes only those icons for the default map view.

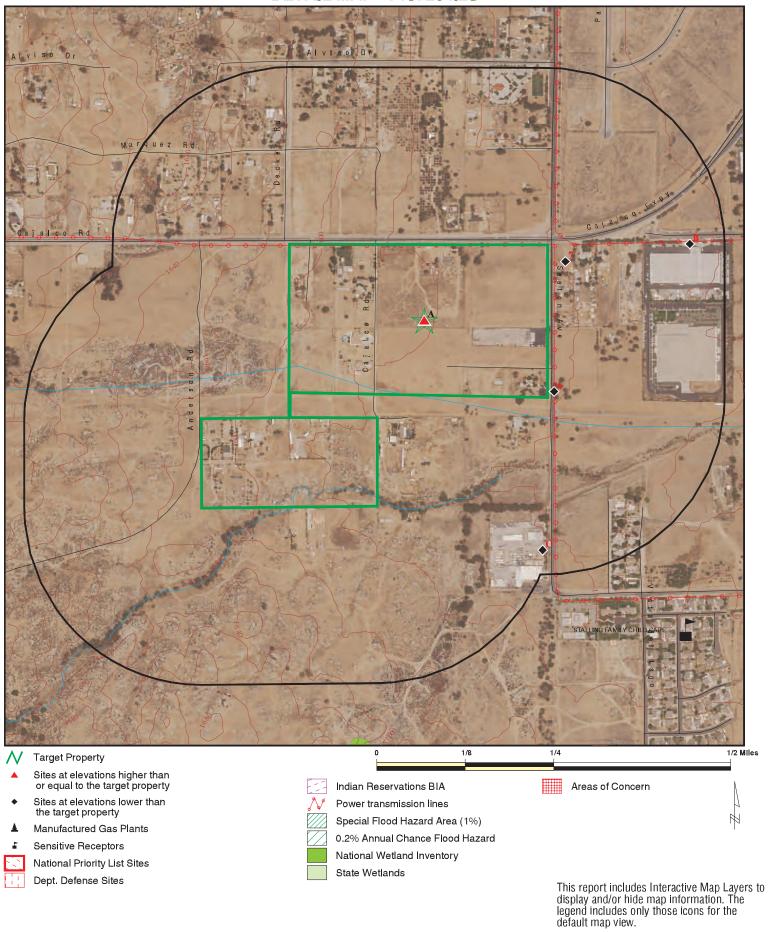
SITE NAME: Seaton Land Assemblage ADDRESS: 19641 Seaton Avenue Perris CA 92570

LAT/LONG: 33.835716 / 117.264731 CLIENT: CONTACT: Group Delta Consultants

Laura Botzong INQUIRY #: 7197284.2s

DATE: December 06, 2022 11:29 pm

DETAIL MAP - 7197284.2S



Seaton Land Assemblage 19641 Seaton Avenue SITE NAME: ADDRESS:

Perris CA 92570 LAT/LONG: 33.835716 / 117.264731 Group Delta Consultants Laura Botzong

CLIENT: CONTACT: INQUIRY#: 7197284.2s

DATE: December 06, 2022 11:30 pm

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	Total Plotted
STANDARD ENVIRONMENT	AL RECORDS							
Lists of Federal NPL (Su	perfund) site:	s						
NPL Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0
Lists of Federal Delisted	NPL sites							
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites sul CERCLA removals and C		rs						
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Lists of Federal CERCLA	sites with N	FRAP						
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA fa undergoing Corrective A								
CORRACTS	1.000		0	1	0	0	NR	1
Lists of Federal RCRA To	SD facilities							
RCRA-TSDF	0.500		0	1	0	NR	NR	1
Lists of Federal RCRA ge	enerators							
RCRA-LQG RCRA-SQG RCRA-VSQG	0.250 0.250 0.250		0 0 0	1 0 0	NR NR NR	NR NR NR	NR NR NR	1 0 0
Federal institutional con engineering controls reg								
LUCIS US ENG CONTROLS US INST CONTROLS	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent s	ites							
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilitie	es							
ENVIROSTOR	1.000		0	1	0	1	NR	2
Lists of state and tribal la and solid waste disposal								
SWF/LF	0.500		0	0	0	NR	NR	0

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 le	eaking storaç	ge tanks						
LUST INDIAN LUST CPS-SLIC	0.500 0.500 0.500		0 0 0	0 0 0	2 0 0	NR NR NR	NR NR NR	2 0 0
Lists of state and tribal re	egistered sto	rage tanks						
FEMA UST UST AST INDIAN UST	0.250 0.250 0.250 0.250		0 0 0 0	0 0 1 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 1 0
Lists of state and tribal v	oluntary clea	anup sites						
VCP INDIAN VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Lists of state and tribal b		es						
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	TAL RECORD	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites			U	Ü	Ü	NIX	IVIX	O
WMUDS/SWAT SWRCY HAULERS INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 0.001 0.500 0.500 0.500 0.500		0 0 0 0 0 0	0 0 NR 0 0	0 1 NR 0 0 0	NR NR NR NR NR NR	NR NR NR NR NR NR	0 1 0 0 0 0
Local Lists of Hazardous Contaminated Sites	waste /							
US HIST CDL HIST Cal-Sites SCH CDL Toxic Pits CERS HAZ WASTE US CDL	0.001 1.000 0.250 0.001 1.000 0.250 0.001		0 0 0 0 0 1	NR 0 0 NR 0 2 NR	NR 0 NR NR 0 NR NR	NR 0 NR NR 0 NR NR	NR NR NR NR NR NR	0 0 0 0 0 3
Local Lists of Registered	l Storage Tar	nks						
SWEEPS UST HIST UST CA FID UST CERS TANKS	0.250 0.250 0.250 0.250		0 0 0 0	0 1 0 1	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 1 0 1
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2 DEED	0.001 0.500		0 0	NR 0	NR 0	NR NR	NR NR	0 0
Records of Emergency I	Release Repo	orts						
HMIRS CHMIRS LDS MCS SPILLS 90	0.001 0.001 0.001 0.001 0.001		0 0 0 0	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0
Other Ascertainable Rec	cords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US AIRS US MINES ABANDONED MINES FINDS	0.250 1.000 1.000 0.500 0.001	1	100000000000000000000000000000000000000	1 0 0 0 NR O RRR O RR RR RR RR NR O NR NR O O O O	N O O O R R R R R R O R R R R R R R R O R R R R R O R O O O R R R R R R R R N N N N	N6	NK	3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
UXO DOCKET HWC ECHO FUELS PROGRAM PFAS NPL PFAS FEDERAL SITES PFAS TSCA	1.000 0.001 0.001 0.250 0.250 0.250 0.250	1	0 0 0 0 0	0 NR NR 0 0 0	0 NR NR NR NR NR	0 NR NR NR NR NR NR	NR NR NR NR NR NR	0 0 1 0 0 0

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	1	NR	NR	NR	1
PFAS ECHO FIRE TRAINII			Ő	Ö	NR	NR	NR	0
PFAS PART 139 AIRPORT			Õ	Ö	NR	NR	NR	Ö
AQUEOUS FOAM NRC	0.250		Ö	Ö	NR	NR	NR	Ö
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	1	NR	NR	NR	1
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	1	NR	NR	1
HWP HWT	1.000		0	1	0 ND	0	NR	1
HAZNET	0.250 0.001		0 0	0 NR	NR NR	NR NR	NR NR	0 0
MINES	0.001		0	0	NR 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		Ö	0	1	NR	NR	1
Notify 65	1.000		Ö	Ö	0	0	NR	Ô
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 CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001 0.001		0 0	NR NR	NR NR	NR NR	NR NR	0 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		Ö	NR	NR	NR	NR	Õ
WELL STIM PROJ	0.001		Ö	NR	NR	NR	NR	Ö
MINES MRDS	0.001		Ö	NR	NR	NR	NR	Ō
HWTS	TP	2	NR	NR	NR	NR	NR	2
EDR HIGH RISK HISTORICAL	RECORDS							
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0

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 EDR Hist Cleaner	0.125 0.125		0 0	NR NR	NR NR	NR NR	NR NR	0 0
EDR RECOVERED GOVERN	MENT ARCHIV	<u>ES</u>						
Exclusive Recovered Go	vt. Archives							
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals		5	2	13	6	1	0	27

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction
Distance

Elevation Site Database(s) EPA ID Number

A1 XL EQUIPMENT SALES INC RCRA NonGen / NLR 1025873257
Target 19641 SEATON AVE CAL000446383

Target 19641 SEATON AVE Property PERRIS, CA 92570

Site 1 of 5 in cluster A

Actual: RCRA Listings:

1582 ft. Date Form Received by Agency: 20190529

Handler Name: XL EQUIPMENT SALES INC

Handler Address: 19641 SEATON AVE Handler City, State, Zip: **PERRIS, CA 92570** EPA ID: CAL000446383 Contact Name: PAZ TREVINO Contact Address: 19641 SEATON AVE Contact City, State, Zip: **PERRIS, CA 92570** Contact Telephone: 818-259-3070 Contact Fax: Not reported

Contact Email: PAZ@XLEQUIP.COM

Contact Title: Not reported

EPA Region: 09

Land Type: Not reported

Federal Waste Generator Description: Not a generator, verified

Non-Notifier:

Biennial Report Cycle:

Accessibility:

Active Site Indicator:

State District Owner:

State District:

Not reported

Handler Activities

Not reported

Not reported

Not reported

Mailing Address: 19641 SEATON AVE Mailing City, State, Zip: PERRIS, CA 92570

Owner Name: PAZ TREVINO

Owner Type: Other

Operator Name: PAZ TREVINO

Operator Type: Other Short-Term Generator Activity: No Importer Activity: No Mixed Waste Generator: No Transporter Activity: No Transfer Facility Activity: No Yes Recycler Activity with Storage: 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: Yes Universal Waste Destination Facility: Yes Federal Universal Waste: No

Active Site Fed-Reg Treatment Storage and Disposal Facility:
Active Site Converter Treatment storage and Disposal Facility:
Active Site State-Reg Treatment Storage and Disposal Facility:
Not reported
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:

2018 GPRA Permit Baseline:

2018 GPRA Renewals Baseline:

Not on the Baseline

Permit Renewals Workload Universe:

Not reported

Not reported

EDR ID Number

Distance Elevation

tion Site Database(s) EPA ID Number

XL EQUIPMENT SALES INC (Continued)

1025873257

EDR ID Number

Permit Workload Universe:

Permit Progress Universe:

Post-Closure Workload Universe:

Closure Workload Universe:

Not reported
Not reported
Not reported

202 GPRA Corrective Action Baseline:

Corrective Action Workload Universe:

No Subject to Corrective Action Universe:

No Non-TSDFs Where RCRA CA has Been Imposed Universe:

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

Full Enforcement Universe:

Significant Non-Complier Universe:

Unaddressed Significant Non-Complier Universe:

No
Addressed Significant Non-Complier Universe:

No
No

Significant Non-Complier With a Compliance Schedule Universe: No

Financial Assurance Required: Not reported

Handler Date of Last Change: 20190628

Recognized Trader-Importer:

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: Operator

Owner/Operator Name: PAZ TREVINO

Legal Status: Other

Date Became Current: Not reported

Date Ended Current: Not reported

Owner/Operator Address: 19641 SEATON AVE

Owner/Operator Address.

Owner/Operator City, State, Zip:

Owner/Operator Telephone:

Owner/Operator Telephone Ext:

Owner/Operator Fax:

Owner/Operator Email:

PERRIS, CA 92570

Not reported

Not reported

Not reported

Owner/Operator Indicator: Owner

Owner/Operator Name: PAZ TREVINO

Legal Status: Other Date Became Current: Not reported Date Ended Current: Not reported Owner/Operator Address: 19641 SEATON AVE Owner/Operator City, State, Zip: **PERRIS, CA 92570** Owner/Operator Telephone: 818-259-3070 Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

XL EQUIPMENT SALES INC (Continued)

1025873257

Historic Generators:

Receive Date: 20190529

Handler Name: XL EQUIPMENT SALES INC

Federal Waste Generator Description: Not a generator, verified

State District Owner: Not reported

Large Quantity Handler of Universal Waste:

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

List of NAICS Codes and Descriptions:

NAICS Code: 441110

NAICS Description: NEW CAR DEALERS

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

A2 PACIFIC FLEET LIQUIDATORS
Target 19641 SEATON AVE
Property PERRIS, CA 92570

Site 2 of 5 in cluster A

Actual: HWTS:

1582 ft. Name: PACIFIC FLEET LIQUIDATORS

Address: 19641 SEATON AVE Address 2: Not reported **PERRIS, CA 92570** City,State,Zip: EPA ID: CAL000312081 Inactive Date: 06/30/2009 Create Date: 09/29/2006 Last Act Date: Not reported Mailing Name: Not reported Mailing Address: 19641 SEATON AVE

Mailing Address 2: Not reported

Mailing City, State, Zip: PERRIS, CA 925709270

Owner Name: PAZ TREVINO
Owner Address: 27900 WELLSTON DR

Owner Address 2: Not reported

Owner City, State, Zip: SANTA CLARITA, CA 913501947

Contact Name: PAZ TREVINO
Contact Address: 19641 SEATON AVE
Contact Address 2: Not reported

City, State, Zip: PERRIS, CA 925709270

Facility Status: Inactive
Facility Type: PERMANENT
Category: STATE
Latitude: 33.834993

HWTS

S124862570

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

PACIFIC FLEET LIQUIDATORS (Continued)

S124862570

FINDS

1025981279

N/A

Longitude: -117.261627

NAICS:

EPA ID: CAL000312081

2006-09-29 16:37:07.773 Create Date:

NAICS Code: 99999

NAICS Description: Not Otherwise Specified Issued EPA ID Date: 2006-09-29 16:37:07.72700 Inactive Date: 2009-06-30 00:00:00

Facility Name: PACIFIC FLEET LIQUIDATORS

Facility Address: 19641 SEATON AVE

Facility Address 2: Not reported Facility City: **PERRIS** Facility County: Not reported Facility State: CA Facility Zip: 925709270

XL EQUIPMENT SALES INC А3 Target 19641 SEATON AVE

PERRIS, CA 92570 Property

Site 3 of 5 in cluster A

FINDS: Actual:

1582 ft. Registry ID: 110070592787

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access

additional FINDS: detail in the EDR Site Report.

Α4 **XL EQUIPMENT SALES INC** HWTS \$124931813 **Target** 19641 SEATON AVE N/A

Property PERRIS, CA 92570

Site 4 of 5 in cluster A

Actual: HWTS:

1582 ft. Name: XL EQUIPMENT SALES INC

Address: 19641 SEATON AVE Address 2: Not reported City,State,Zip: **PERRIS, CA 92570** EPA ID: CAL000446383 Inactive Date: Not reported Create Date: 05/29/2019 Last Act Date: Not reported Mailing Name: Not reported

19641 SEATON AVE Mailing Address:

Mailing Address 2: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

XL EQUIPMENT SALES INC (Continued)

S124931813

Mailing City, State, Zip: **PERRIS, CA 92570** Owner Name: **PAZ TREVINO** Owner Address: 19641 SEATON AVE Owner Address 2: Not reported Owner City, State, Zip: **PERRIS, CA 92570** Contact Name: **PAZ TREVINO** Contact Address: 19641 SEATON AVE Contact Address 2: Not reported City,State,Zip: **PERRIS, CA 92570**

Facility Status: Active Facility Type: **PERMANENT** Category: STATE Latitude: 33.834993 Longitude: -117.261627

NAICS:

EPA ID: CAL000446383

Create Date: 2019-05-29 12:42:38.050

NAICS Code: 441110

NAICS Description: **New Car Dealers**

Issued EPA ID Date: 2019-05-29 12:42:38.03700

Inactive Date: Not reported

XL EQUIPMENT SALES INC Facility Name:

Facility Address: 19641 SEATON AVE

Facility Address 2: Not reported Facility City: **PERRIS** Facility County: Not reported

Facility State: CA Facility Zip: 92570

Α5 **XL EQUIPMENT SALES INC** 19641 SEATON AVE **Target Property PERRIS, CA 92570**

ECHO 1025912304

N/A

Site 5 of 5 in cluster A

ECHO: Actual:

1582 ft. Envid: 1025912304 Registry ID: 110070592787

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110070592787

Name: XL EQUIPMENT SALES INC Address: 19641 SEATON AVE **PERRIS, CA 92570** City, State, Zip:

CERS HAZ WASTE 6 **MWD - CHEMICAL UNLOADING FACILITY (CUF)** S123296730 **ESE**

19760 SEATON AVE **CHMIRS** N/A **CERS**

< 1/8 **PERRIS, CA 92570**

0.009 mi. 48 ft.

Relative: CERS HAZ WASTE:

Lower MWD - CHEMICAL UNLOADING FACILITY (CUF) Name:

Address: 19760 SEATON AVE Actual: **PERRIS, CA 92570** City,State,Zip: 1562 ft.

> Site ID: 50756 CERS ID: 10033822

Direction Distance

Elevation Site Database(s) **EPA ID Number**

Not reported

Not reported

MWD - CHEMICAL UNLOADING FACILITY (CUF) (Continued)

S123296730

EDR ID Number

CERS Description: Hazardous Chemical Management

MWD - CHEMICAL UNLOADING FACILITY (CUF) Name:

19760 SEATON AVE Address: City, State, Zip: **PERRIS, CA 92570**

Site ID: 50756 CERS ID: 10033822

CERS Description: Hazardous Waste Generator

CHMIRS:

Name: Not reported 19760 SEATON AVE Address:

PERRIS, CA 92570

City,State,Zip: **OES Incident Number:** 18-3487 OES notification: 05/30/2018 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 Id Number: Not reported CA DOT PUC/ICC Number: Not reported Not reported Company Name: Reporting Officer Name/ID: Not reported Report Date: Not reported Facility Telephone: Not reported Waterway Involved:

Vehicle License Number:

Vehicle State:

Waterway: Not reported Spill Site: Other

Cleanup By: Unrecoverable Containment: Not reported What Happened: Not reported Not reported Type: Measure: Not reported Other: Not reported VAPOR Type: Measure: Lbs. Other: Not reported

Date/Time: 918 Year: 2018

Metro Water District of Southern CA Agency:

E Date:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

Not reported

MWD - CHEMICAL UNLOADING FACILITY (CUF) (Continued)

S123296730

Incident Date: 05/30/2018

Admin Agency: Riverside County Environmental Health

Amount: Not reported Contained: Yes Site Type: Not reported

Chlorine Gas, 5.29 parts per million Substance:

Quantity Released: Unknown Unknown: Not reported Substance #2: Not reported Substance #3: Not reported Evacuations: Not reported Number of Injuries: Not reported Number of Fatalities: Not reported

#1 Pipeline: No #2 Pipeline: No #3 Pipeline: No #1 Vessel >= 300 Tons: No #2 Vessel >= 300 Tons: No #3 Vessel >= 300 Tons: No Evacs: No Injuries: No Fatals: No

Comments: Not reported

Description: RP states a flow meter flange gasket failed

during transloading, material vented into the atmosphere and was contained in a room and dissipated, the release was isolated at 0925 hours, the room was scrubbed and the gas was neutralized, RP handled containment and cleanup.

Name: Not reported Address: 19760 SEATON AVE

City,State,Zip: **PERRIS, CA 92570**

20-4809 OES Incident Number: OES notification: 09/01/2020 OES Date: Not reported **OES Time:** Not reported **Date Completed:** Not reported Property Use: Not reported Not reported Agency Id Number: 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 Not reported Others Number Of Injuries: Others Number Of Fatalities: Not reported Vehicle Make/year: Not reported Vehicle License Number: Not reported Vehicle State: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MWD - CHEMICAL UNLOADING FACILITY (CUF) (Continued)

S123296730

Vehicle Id Number: Not reported CA DOT PUC/ICC Number: Not reported Not reported Company Name: Reporting Officer Name/ID: Not reported Report Date: Not reported Facility Telephone: Not reported Waterway Involved: No

Waterway: Not reported Spill Site: Utilities/Substation Cleanup By: Unrecoverable Containment: Not reported Not reported What Happened: Not reported Type: Measure: Not reported Other: Not reported CHEMICAL Type: Measure: N/A Not reported

Other: Date/Time: 1538 2020 Year:

Metropolitan Water District of Southern California Agency:

Incident Date: 09/01/2020

Admin Agency: Riverside County Environmental Health

Amount: Not reported Stopped,Contained Contained: Site Type: Not reported E Date: Not reported Substance: Chlorine Quantity Released: 9.94 ppm Unknown: Not reported Substance #2: Not reported Substance #3: Not reported Evacuations: Not reported Number of Injuries: Not reported Not reported Number of Fatalities:

#1 Pipeline: No #2 Pipeline: No #3 Pipeline: No #1 Vessel >= 300 Tons: No #2 Vessel >= 300 Tons: No #3 Vessel >= 300 Tons: Nο Evacs: No Injuries: No Fatals: No

Comments: Not reported

RP states that the chlorine level reached a high Description:

level 9.94 ppm triggering the scrubber system at 1538. Employees were in the process of disconnecting a trailer the residual chlorine activated the alarm, the leak was neutralized. After 20 min the alarm went down to zero. No

release left the building.

Name: Not reported Address: 19760 SEATON AVE Citv.State.Zip: PERRIS. CA **OES Incident Number:** 18-8625

Distance Elevation

tion Site Database(s) EPA ID Number

MWD - CHEMICAL UNLOADING FACILITY (CUF) (Continued)

S123296730

EDR ID Number

OES notification: 12/19/2018 OES Date: Not reported Not reported **OES Time: Date Completed:** Not reported Property Use: Not reported Agency Id Number: Not reported Not reported Agency Incident Number: 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 Not reported Others Number Of Decontaminated: 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 Not reported Vehicle Id Number: CA DOT PUC/ICC Number: Not reported Company Name: Not reported Not reported Reporting Officer Name/ID: Report Date: Not reported Facility Telephone: Not reported Waterway Involved: No

Waterway: Not reported Spill Site: Other

Cleanup By: Unrecoverable Containment: Not reported What Happened: Not reported Not reported Type: Measure: Not reported Other: Not reported Type: **VAPOR** Measure: Lbs. Other: Not reported Date/Time: 1235 Year: 2018

Agency: Municipal Water Dist.

Incident Date: 12/18/2018

Admin Agency: Riverside County Environmental Health

Amount: Not reported
Contained: Stopped,Contained
Site Type: Not reported
E Date: Not reported

Substance: Chlorine Gas 7.9 Parts Per Million

Quantity Released:

Unknown:

Substance #2:

Substance #3:

Evacuations:

Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MWD - CHEMICAL UNLOADING FACILITY (CUF) (Continued)

S123296730

#1 Pipeline: No #2 Pipeline: No #3 Pipeline: No #1 Vessel >= 300 Tons: No #2 Vessel >= 300 Tons: No #3 Vessel >= 300 Tons: No Evacs: No Injuries: Nο Fatals: No

Comments: Not reported

Description: Per the caller the release was due to a possible loose valve resulting in the release impacting

the containment area resulting ion the release

being cleaned by the scrubber.

CERS:

MWD - CHEMICAL UNLOADING FACILITY (CUF) Name:

Address: 19760 SEATON AVE City,State,Zip: **PERRIS, CA 92570**

Site ID: 50756 CERS ID: 10033822

CERS Description: Chemical Storage Facilities

Violations:

Site ID: 50756

Site Name: MWD - Chemical Unloading Facility (CUF)

Violation Date: 07-20-2017

Citation: 19 CCR 4.5 2760.1(d)(2) - California Code of Regulations, Title 19,

Chapter 4.5, Section(s) 2760.1(d)(2)

Violation Description: Failure to document that equipment complies with recognized and

generally accepted good engineering practices.

Returned to compliance on 08/07/2017. Violation Notes: Violation Division: Riverside County Department of Env Health

Violation Program: CalARP CERS, Violation Source:

Site ID: 50756

Site Name: MWD - Chemical Unloading Facility (CUF)

Violation Date: 07-20-2017 Citation: **Un-Specified**

Violation Description: Business Plan Program - Operations/Maintenance - General Local

Ordinance

Violation Notes: Returned to compliance on 08/07/2017. Violation Division: Riverside County Department of Env Health

HMRRP Violation Program: Violation Source: CERS,

Evaluation:

Eval General Type: Compliance Evaluation Inspection

07-20-2017 Eval Date: Violations Found:

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.

Distance

Elevation Site Database(s) EPA ID Number

MWD - CHEMICAL UNLOADING FACILITY (CUF) (Continued)

S123296730

EDR ID Number

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-05-2020

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: CalARP Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 12-18-2013

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: 06-30-2021

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Facility is a water treatment plant that generates hazardous waste,

but not limited to the following; Lead Gaskets, Universal Waste

including Alkaline Batteries and Flammable Aerosols.

Eval Division: Riverside County Department of Env Health

Eval Program: HW Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 07-20-2017 Violations Found: Yes

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: 12-18-2013 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: 08-05-2020

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,

Direction Distance

Elevation Site Database(s) EPA ID Number

MWD - CHEMICAL UNLOADING FACILITY (CUF) (Continued)

S123296730

EDR ID Number

Coordinates:

Site ID: 50756

Facility Name: MWD - Chemical Unloading Facility (CUF)

Env Int Type Code:
Program ID:
Coord Name:
Ref Point Type Desc:
Latitude:
Longitude:
CalARP
10033822
Unoutled
10033822
Unknown,
33.833706
Longitude:
-117.261539

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: Parent Corporation

Entity Name: Metropolitan Water District of Southern California

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:

Affiliation Type Desc: Property Owner

Entity Name: METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Entity Title: Not reported

Affiliation Address: Post Office Box 54153 Attn: SRS/Env. Program Support

Affiliation City: Los Angeles

Affiliation State: CA

Affiliation Country: United States
Affiliation Zip: 90054-0153
Affiliation Phone: (213) 217-6000,

Affiliation Type Desc: Operator

Entity Name: Metropolitan Water District of Southern California

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: (951) 776-2701,

Affiliation Type Desc: Legal Owner

Entity Name: Metropolitan Water District of Southern California

Entity Title: Not reported

Affiliation Address: Post Office Box 54153 Attn: SRS/Env. Program Support

Affiliation City: Los Angeles

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MWD - CHEMICAL UNLOADING FACILITY (CUF) (Continued)

S123296730

Affiliation State: CA

Affiliation Country: **United States** Affiliation Zip: 90054-0153 Affiliation Phone: (213) 217-6000,

Affiliation Type Desc: **Document Preparer** Entity Name: Ramiro Avalos 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:

Affiliation Type Desc: **Environmental Contact**

Entity Name: Ramiro Avalos Entity Title: Not reported

Affiliation Address: Post Office Box 54153 Attn: SRS/Env. Program Support

Affiliation City: Los Angeles

Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 90054-0153

Affiliation Phone:

Affiliation Type Desc: **Facility Mailing Address Entity Name:** Mailing Address **Entity Title:** Not reported

Affiliation Address: Post Office Box 54153 Attn: SRS/Env. Program Support

Affiliation City: Los Angeles

Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 90054-0153

Affiliation Phone:

Affiliation Type Desc: Identification Signer Entity Name: Annette Eckhardt

Entity Title: Sr. Occupational Safety and Health Specialist

Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported

Affiliation Phone:

PHELAN DEVELOPMENT COMPANY 1027454791 RCRA NonGen / NLR CAC003192915

ENE 23031 CAJALCO RD **PERRIS, CA 92570** < 1/8

0.025 mi. 133 ft.

Relative: RCRA Listings:

Lower Date Form Received by Agency: 20220901 Handler Name: PHELAN DEVELOPMENT COMPANY

Actual: 1559 ft.

23031 CAJALCO RD Handler Address: Handler City, State, Zip: **PERRIS, CA 92570** EPA ID: CAC003192915

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

PHELAN DEVELOPMENT COMPANY (Continued)

1027454791

Contact Name: DANIEL LEE

450 NEWPORT CENTER DRIVE, SUITE 405 Contact Address:

Contact City, State, Zip: NEWPORT BEACH, CA 92660

Contact Telephone: 909-837-8602 Contact Fax: Not reported

DLEE@PHELANDEVCO.COM Contact Email:

Contact Title: Not reported

EPA Region:

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: 450 NEWPORT CENTER DRIVE, SUITE 405

Mailing City, State, Zip: NEWPORT BEACH, CA 92660

Owner Name: PHELAN DEVELOPMENT COMPANY Owner Type: Other

Operator Name: DANIEL LEE

Operator Type: Other Short-Term Generator Activity: No Importer Activity: No Mixed Waste Generator: No Transporter Activity: Nο Transfer Facility Activity: Nο Recycler Activity with Storage: No Small Quantity On-Site Burner Exemption: No Smelting Melting and Refining Furnace Exemption: No **Underground Injection Control:** Nο 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: Ν

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

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

PHELAN DEVELOPMENT COMPANY (Continued)

1027454791

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

20220902 Handler Date of Last Change: Recognized Trader-Importer: No Recognized Trader-Exporter: No Importer of Spent Lead Acid Batteries: No Exporter of Spent Lead Acid Batteries: Nο Recycler Activity Without Storage: No Manifest Broker: No Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator: Operator

Owner/Operator Name: DANIEL LEE

Legal Status: Other Date Became Current: Not reported Date Ended Current: Not reported

450 NEWPORT CENTER DRIVE, SUITE 405 Owner/Operator Address:

Owner/Operator City, State, Zip: NEWPORT BEACH, CA 92660

Owner/Operator Telephone: 909-837-8602 Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner Owner/Operator Name: PHELAN DEVELOPMENT COMPANY Legal Status: Other Date Became Current: Not reported Date Ended Current: Not reported

450 NEWPORT CENTER DRIVE, SUITE 405 Owner/Operator Address:

Owner/Operator City, State, Zip: NEWPORT BEACH, CA 92660

Owner/Operator Telephone: 909-837-8602 Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Historic Generators:

20220901 Receive Date: PHELAN DEVELOPMENT COMPANY Handler Name:

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

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

PHELAN DEVELOPMENT COMPANY (Continued)

1027454791

Spent Lead Acid Battery Exporter: No Current Record: Yes Non Storage Recycler Activity: No Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:

NAICS Code: 56291

NAICS Description: REMEDIATION SERVICES

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

No Evaluations Found Evaluations:

В8 **GENISIS SUPREME RV INC** RCRA NonGen / NLR 1025870708 CAL000428623

ENE 23129 CAJALCO RD **PERRIS, CA 92570** 1/8-1/4

0.201 mi.

Site 1 of 2 in cluster B 1060 ft.

Contact Fax:

Relative: RCRA Listings:

Lower Date Form Received by Agency: 20170620

Handler Name: GENISIS SUPREME RV INC Actual:

Handler Address: 23129 CAJALCO RD 1544 ft. Handler City, State, Zip: **PERRIS, CA 92570**

EPA ID: CAL000428623 Contact Name: MICHELLE TREANGEN Contact Address: 23129 CAJALCO RD Contact City, State, Zip: **PERRIS, CA 92570** 951-337-0254 Contact Telephone:

Not reported Contact Email: MTREANGEN@GENISISSUPREME.COM

Contact Title: Not reported EPA Region: 09

Not reported Land Type:

Federal Waste Generator Description: Not a generator, verified

Non-Notifier: Not reported Biennial Report Cycle: Not reported Accessibility: Not reported Active Site Indicator: Handler Activities State District Owner: Not reported State District: Not reported Mailing Address: 23129 CAJALCO RD Mailing City, State, Zip: **PERRIS, CA 92570**

Owner Name: GENISIS SUPREME RV INC

Owner Type: Other

Operator Name: MICHELLE TREANGEN

Other Operator Type: Short-Term Generator Activity: No Importer Activity: No Mixed Waste Generator: No Transporter Activity: No Transfer Facility Activity: No Recycler Activity with Storage: Yes

Distance
Elevation Site Database(s)

GENISIS SUPREME RV INC (Continued)

1025870708

EDR ID Number

EPA ID Number

 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:
 Yes

 Universal Waste Destination Facility:
 Yes

 Federal Universal Waste:
 No

Active Site Fed-Reg Treatment Storage and Disposal Facility:
Active Site Converter Treatment storage and Disposal Facility:
Active Site State-Reg Treatment Storage and Disposal Facility:
Not reported
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:

2018 GPRA Permit Baseline:

2018 GPRA Renewals Baseline:

Permit Renewals Workload Universe:

Permit Workload Universe:

Permit Progress Universe:

Not reported

Not reported

Not reported

Not reported

Permit Progress Universe:

Post-Closure Workload Universe:

Closure Workload Universe:

Not reported

Corrective Action Workload Universe:

No Subject to Corrective Action Universe:

Non-TSDFs Where RCRA CA has Been Imposed Universe:

TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:

TSDFs Only Subject to CA under Discretionary Auth Universe:

No

Corrective Action Priority Ranking: No NCAPS ranking

Environmental Control Indicator:

Institutional Control Indicator:

Human Exposure Controls Indicator:

Groundwater Controls Indicator:

N/A

N/A

Operating TSDF Universe:

Full Enforcement Universe:

Not reported

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:

Recognized Trader-Importer:

Recognized Trader-Exporter:

No
Importer of Spent Lead Acid Batteries:

No
Exporter of Spent Lead Acid Batteries:

No

Recycler Activity Without Storage:

Manifest Broker:

Sub-Part P Indicator:

No

Handler - Owner Operator:

Owner/Operator Indicator: Owner

Owner/Operator Name: GENISIS SUPREME RV INC

 Legal Status:
 Other

 Date Became Current:
 Not reported

 Date Ended Current:
 Not reported

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

GENISIS SUPREME RV INC (Continued)

1025870708

Owner/Operator Address:

Owner/Operator City, State, Zip:

Owner/Operator Telephone:

Owner/Operator Telephone Ext:

Owner/Operator Fax:

Owner/Operator Fax:

Owner/Operator Email:

Owner/Operator Email:

23129 CAJALCO RD
PERRIS, CA 92570
951-337-0254
Not reported
Not reported
Not reported

Owner/Operator Indicator: Operator

Owner/Operator Name: MICHELLE TREANGEN

Legal Status: Other Date Became Current: Not reported Date Ended Current: Not reported 23129 CAJALCO RD Owner/Operator Address: Owner/Operator City, State, Zip: **PERRIS, CA 92570** Owner/Operator Telephone: 951-337-0254 Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 20170620

Handler Name: GENISIS SUPREME RV INC

Federal Waste Generator Description: Not a generator, verified

State District Owner: Not reported

Large Quantity Handler of Universal Waste:

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: 56299

NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

B9 WARLOCK INDUSTRIES CERS HAZ WASTE \$113798222

ENE 23129 CAJALCO RD EMI N/A

1/8-1/4 PERRIS, CA 92570 HAZNET 0.201 mi. NPDES

1060 ft. Site 2 of 2 in cluster B CIWQS
Relative: CERS

Relative: Lower HWTS

Actual: CERS HAZ WASTE:

1544 ft. Name: GENESIS SUPREME RV INC

Address: 23129 CAJALCO RD City,State,Zip: PERRIS, CA 92570

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

Site ID: 162291 CERS ID: 10326670

CERS Description: Hazardous Waste Generator

EMI:

WARLOCK INDUSTRIES Name: Address: 23129 CAJALCO RD **PERRIS, CA 92570** City,State,Zip:

2013 Year: County Code: 33 Air Basin: SC Facility ID: 170259 Air District Name: SC SIC Code: 3713

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 1.8619129682 Reactive Organic Gases Tons/Yr: 1.84194 Carbon Monoxide Emissions Tons/Yr: 0.00136 NOX - Oxides of Nitrogen Tons/Yr: 0.00508 SOX - Oxides of Sulphur Tons/Yr: 3e-005 Particulate Matter Tons/Yr: 0.08395 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.0806036

HAZNET:

Name: LIMOS BY TIFFANY INC DBA TIFFANY COACHWORKS

Address: 23129 CAJALCO RD

Address 2: Not reported

City,State,Zip: PERRIS, CA 925707298

Contact: J POWELL Telephone: 9516572680 Mailing Name: Not reported Mailing Address: PO BOX 46

Year: 2015

Gepaid: CAL000342625 TSD EPA ID: CAD044429835

CA Waste Code: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Tons: 0.002

2014 Year:

CAL000342625 Gepaid: TSD EPA ID: NED981723513

CA Waste Code: 491 - Unspecified sludge waste

Disposal Method: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel

Tons: 0.4

Year: 2014

CAL000342625 Gepaid: TSD EPA ID: CAD044429835

CA Waste Code: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No.

Treatment/Reovery (H010-H129) Or (H131-H135)

Direction Distance

Elevation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Tons: 0.0025

Year: 2013

 Gepaid:
 CAL000342625

 TSD EPA ID:
 CAT000613893

CA Waste Code: 343 - Unspecified organic liquid mixture

Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Tons: 0.45

Year: 2013

 Gepaid:
 CAL000342625

 TSD EPA ID:
 NED981723513

CA Waste Code: 491 - Unspecified sludge waste

Disposal Method: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel

Tons: 1.1

Year: 2013

 Gepaid:
 CAL000342625

 TSD EPA ID:
 CAT000613893

CA Waste Code:

Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Tons: Not reported

Year: 2013

 Gepaid:
 CAL000342625

 TSD EPA ID:
 CAT000613893

CA Waste Code: 352 - Other organic solids

Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Tons: 0.075

Year: 2013

 Gepaid:
 CAL000342625

 TSD EPA ID:
 CAT000613893

CA Waste Code: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Tons: 0.02

Year: 2012

 Gepaid:
 CAL000342625

 TSD EPA ID:
 TXD077603371

CA Waste Code: 491 - Unspecified sludge waste

Disposal Method: H061 - Fuel Blending Prior To Energy Recovery At Another Site

Tons: 0.075

Year: 2012

Gepaid: CAL000342625 TSD EPA ID: CAT000613893

CA Waste Code: 223 - Unspecified oil-containing waste

Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Tons: 0.075

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

Click this hyperlink while viewing on your computer to access 3 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Info:

Year: 2015

Gen EPA ID: CAL000342625

Shipment Date: 20150203

Creation Date: 4/21/2015 22:14:53

Receipt Date: 20150223 Manifest ID: 004712456SKS Trans EPA ID: TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: Not reported Not reported Trans 2 Name: TSDF EPA ID: CAD044429835

Trans Name: CLEAN HARBORS WILMINGTON LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.

RCRA Code: F003

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.002 Waste Quantity: Quantity Unit: Р Additional Code 1: D039 Additional Code 2: D035 Additional Code 3: D018 Additional Code 4: D001 Additional Code 5: Not reported

Additional Info:

Year: 2014

Gen EPA ID: CAL000342625

Shipment Date: 20141110 Creation Date: 1/22/2015 22:14:45 Receipt Date: 20141129

Manifest ID: 004510763SKS Trans EPA ID: TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: CAD044429835

Trans Name: CLEAN HARBORS WILMINGTON LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.

RCRA Code:

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0025 Waste Quantity: 5 Quantity Unit: Ρ

Direction Distance

Elevation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Additional Code 1: D039
Additional Code 2: D035
Additional Code 3: D018
Additional Code 4: D001
Additional Code 5: Not reported

Shipment Date: 20141110

Creation Date: 6/24/2015 22:15:49
Receipt Date: 20141204

 Manifest ID:
 004413610SKS

 Trans EPA ID:
 TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: AZR000513770

Trans 2 Name: SLT

TSDF EPA ID: NED981723513

Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICES IN

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 491 - Unspecified sludge waste

RCRA Code: F005

Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel

Quantity Tons:0.15Waste Quantity:300Quantity Unit:PAdditional Code 1:F003Additional Code 2:D006Additional Code 3:D005Additional Code 4:D001Additional Code 5:Not reported

Shipment Date: 20140331

Creation Date: 8/19/2014 22:15:10

 Receipt Date:
 20140414

 Manifest ID:
 004144958SKS

 Trans EPA ID:
 TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: AZR000508515

Trans 2 Name: SLT

TSDF EPA ID: NED981723513

Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICES IN

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 491 - Unspecified sludge waste

RCRA Code: F005

Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel

Quantity Tons:0.2Waste Quantity:400Quantity Unit:PAdditional Code 1:F003Additional Code 2:D006Additional Code 3:D005Additional Code 4:D001Additional Code 5:Not reported

Shipment Date: 20140131

Creation Date: 7/20/2014 22:15:06

Receipt Date: 20140228

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

Manifest ID: 004136955SKS Trans EPA ID: TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: NJD986607380

Trans 2 Name: MXI

TSDF EPA ID: NED981723513

CLEAN HARBORS ENVIRONMENTAL SERVICES IN Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 491 - Unspecified sludge waste

RCRA Code: F005

Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel

Quantity Tons: 0.2 Waste Quantity: 400 Quantity Unit: Additional Code 1: F003 Additional Code 2: D006 D005 Additional Code 3: Additional Code 4: D001 Additional Code 5: Not reported

Additional Info:

Year: 2013

Gen EPA ID: CAL000342625

Shipment Date: 20131122

Creation Date: 4/24/2014 22:15:02

Receipt Date: 20131127 Manifest ID: 003939257SKS Trans EPA ID: TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: CAT000613893

SAFETY-KLEEN SYSTEMS INC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.

RCRA Code: F003

H141 - Storage, Bulking, And/Or Transfer Off Site--No Meth Code:

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.015 Waste Quantity: 30 Quantity Unit: Additional Code 1: D039 Additional Code 2: D035 Additional Code 3: D018 Additional Code 4: D001 Additional Code 5: Not reported

Shipment Date: 20131122 Creation Date: 4/24/2014 22:15:08 Receipt Date: 20131210 Manifest ID: 003939259SKS

Trans EPA ID: TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

AZR000508515 Trans 2 EPA ID:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

Trans 2 Name: SLT

TSDF EPA ID: NED981723513

CLEAN HARBORS ENVIRONMENTAL SERVICES IN Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

491 - Unspecified sludge waste Waste Code Description:

RCRA Code: F005

Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel

Quantity Tons: 0.3 Waste Quantity: 600 **Quantity Unit:** Additional Code 1: F003 Additional Code 2: D006 Additional Code 3: D005 Additional Code 4: D001 Additional Code 5: Not reported

Shipment Date: 20130930

Creation Date: 2/24/2014 22:15:07 Receipt Date: 20131011 Manifest ID: 003955100SKS Trans EPA ID: TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: CAR000187922 Trans 2 Name: **RUST AND SONS** TSDF EPA ID: NED981723513

Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICES IN

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

491 - Unspecified sludge waste Waste Code Description:

RCRA Code: F005

Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel

Quantity Tons: 0.15 Waste Quantity: 300 Р **Quantity Unit:** Additional Code 1: F003 Additional Code 2: D006 Additional Code 3: D005 Additional Code 4: D001 Additional Code 5: Not reported

Shipment Date: 20130830

Creation Date: 1/13/2014 22:15:22 Receipt Date: 20130912 Manifest ID: 003896432SKS Trans EPA ID: TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: AZR000508515 Trans 2 Name: SLT TSDF EPA ID: NED981723513

Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICES IN

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

491 - Unspecified sludge waste Waste Code Description:

RCRA Code: F005

Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel

Quantity Tons: 0.2

Direction Distance

Elevation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

 Waste Quantity:
 400

 Quantity Unit:
 P

 Additional Code 1:
 F003

 Additional Code 2:
 D006

 Additional Code 3:
 D005

 Additional Code 4:
 D001

 Additional Code 5:
 Not reported

Shipment Date: 20130731

Creation Date: 12/29/2013 22:15:17

 Receipt Date:
 20130814

 Manifest ID:
 003850387SKS

 Trans EPA ID:
 TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: MAD039322250

Trans 2 Name: CLEAN HARBORS ENVIRONMENTAL SERVICES INC

TSDF EPA ID: NED981723513

Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICES IN

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 491 - Unspecified sludge waste

RCRA Code: F005

Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel

Quantity Tons: 0.25 Waste Quantity: 500 Quantity Unit: Ρ Additional Code 1: F003 Additional Code 2: D006 Additional Code 3: D005 Additional Code 4: D001 Additional Code 5: Not reported

Shipment Date: 20130627

Creation Date: 11/16/2013 22:15:06

 Receipt Date:
 20130717

 Manifest ID:
 003826634SKS

 Trans EPA ID:
 TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

 Trans 2 EPA ID:
 MAD039322250

 Trans 2 Name:
 CLEAN HARBORS

 TSDF EPA ID:
 NED981723513

Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICES IN

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 491 - Unspecified sludge waste

RCRA Code: F005

Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel

Quantity Tons:

Waste Quantity:

Quantity Unit:

Additional Code 1:

Additional Code 2:

Additional Code 3:

Additional Code 4:

Additional Code 5:

Not reported

Shipment Date: 20130423

Direction Distance

Elevation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

 Creation Date:
 8/23/2013 22:15:19

 Receipt Date:
 20130429

 Manifest ID:
 003636931SKS

 Trans EPA ID:
 TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID:

Trans 2 Name:

TSDF EPA ID:

Not reported

Not reported

CAT000613893

Trans Name: SAFETY-KLEEN SYSTEMS INC

TSDF Alt EPA ID:

TSDF Alt Name:

Waste Code Description:

RCRA Code:

Not reported

Not reported

Not reported

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: Not reported Waste Quantity: Not reported Quantity Unit: Not reported 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

Shipment Date: 20130423

 Creation Date:
 8/23/2013 22:15:19

 Receipt Date:
 20130429

 Manifest ID:
 003569752SKS

 Trans EPA ID:
 TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAT000613893

Trans Name: SAFETY-KLEEN SYSTEMS INC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.

RCRA Code: F003

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

 Quantity Tons:
 0.005

 Waste Quantity:
 10

 Quantity Unit:
 P

 Additional Code 1:
 D039

 Additional Code 2:
 D035

 Additional Code 3:
 D018

 Additional Code 4:
 D001

Additional Code 5: Not reported

 Shipment Date:
 20130423

 Creation Date:
 8/23/2013 22:15:19

 Receipt Date:
 20130429

 Manifest ID:
 003636931SKS

 Trans EPA ID:
 TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

TSDF EPA ID: CAT000613893

SAFETY-KLEEN SYSTEMS INC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 343 - Unspecified organic liquid mixture

RCRA Code: D001

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.2 Waste Quantity: 400 Quantity Unit:

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

Shipment Date: 20130219

Creation Date: 7/12/2013 22:15:06 Receipt Date: 20130226 Manifest ID: 003636705SKS

Trans EPA ID: TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: CAT000613893

Trans Name: SAFETY-KLEEN SYSTEMS INC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: D007

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.075 150 Waste Quantity: Quantity Unit:

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

Additional Info:

Year: 2012

Gen EPA ID: CAL000342625

Shipment Date: 20121219 Creation Date: 5/4/2013 22:15:12 Receipt Date: 20121226 Manifest ID: 003111407SKS Trans EPA ID: TXR000081205

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: CAT000613893

Trans Name: SAFETY-KLEEN SYSTEMS INC

TSDF Alt EPA ID: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

TSDF Alt Name: Not reported

Waste Code Description: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.

RCRA Code: F003

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.01 Waste Quantity: 20 Quantity Unit: Ρ Additional Code 1: D039 Additional Code 2: D035 Additional Code 3: D018 Additional Code 4: D001 Additional Code 5: Not reported

Shipment Date: 20121219 Creation Date: 5/24/2013 22:15:24 Receipt Date: 20130103 Manifest ID: 003541496SKS Trans EPA ID: TXR000081205

SAFETY-KLEEN SYSTEMS INC Trans Name:

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: NVT330010000

Trans Name: **US ECOLOGY NEVADA**

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code:

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 0.075 Waste Quantity: 150 Quantity Unit:

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

Shipment Date: 20121101

Creation Date: 4/17/2013 22:15:43 Receipt Date: 20121112 Manifest ID: 003313005SKS

Trans EPA ID: TXR000081205

SAFETY-KLEEN SYSTEMS INC Trans Name:

Trans 2 EPA ID: OKD981588791

Trans 2 Name: TRIAD TRANSPORT INC

TSDF EPA ID: NVT330010000 Trans Name: US ECOLOGY NEVADA

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code:

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 0.15 Waste Quantity: 300

Direction Distance

Elevation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Quantity Unit: F

Additional Code 1:

Additional Code 2:

Additional Code 3:

Additional Code 4:

Additional Code 4:

Additional Code 5:

Not reported

Not reported

 Shipment Date:
 20120713

 Creation Date:
 6/1/2013 22:15:05

 Receipt Date:
 20120718

 Manifest ID:
 003303462SKS

 Trans EPA ID:
 TXR000050930

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAT000613893

Trans Name: SAFETY-KLEEN SYSTEMS INC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.

RCRA Code: F003

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0135 Waste Quantity: 27 Quantity Unit: Ρ Additional Code 1: D039 Additional Code 2: D035 Additional Code 3: D018 Additional Code 4: D001 Additional Code 5: Not reported

Shipment Date: 20120713

Creation Date: 5/31/2013 22:15:16

 Receipt Date:
 20120724

 Manifest ID:
 003197128SKS

 Trans EPA ID:
 TXR000050930

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: OKD981588791

Trans 2 Name: TRIAD TRANSPORT INC

TSDF EPA ID: NVT330010000

Trans Name: US ECOLOGY NEVADA

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D007

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 0.0375
Waste Quantity: 75
Quantity Unit: P

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 Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

 Shipment Date:
 20120615

 Creation Date:
 5/29/2013 22:15:15

 Receipt Date:
 20120628

 Manifest ID:
 003197127SKS

 Trans EPA ID:
 TXR000050930

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: OKD981588791

Trans 2 Name: TRIAD TRANSPORT INC

TSDF EPA ID: TXD077603371

Trans Name: SAFETY-KLEEN SYSTEMS INC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 343 - Unspecified organic liquid mixture

RCRA Code: U002

Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site

Quantity Tons:0.1Waste Quantity:200Quantity Unit:PAdditional Code 1:D001Additional Code 2:Not reportedAdditional Code 3:Not reportedAdditional Code 4:Not reportedAdditional Code 5:Not reported

Shipment Date: 20120518

Creation Date: 5/30/2013 22:15:15
Receipt Date: 20120531

 Receipt Date:
 20120531

 Manifest ID:
 003272712SKS

 Trans EPA ID:
 TXR000050930

Trans Name: SAFETY-KLEEN SYSTEMS INC

 Trans 2 EPA ID:
 OKD981588791

 Trans 2 Name:
 TRIAD TRANSPORT

 TSDF EPA ID:
 NVT330010000

 Trans Name:
 US ECOLOGY NEVADA

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D007

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons:0.05Waste Quantity:100Quantity Unit:P

Additional Code 1:

Additional Code 2:

Additional Code 3:

Additional Code 4:

Additional Code 4:

Additional Code 5:

Not reported

Not reported

Not reported

Shipment Date: 20120223

 Creation Date:
 8/22/2012 22:15:08

 Receipt Date:
 20120306

 Manifest ID:
 003157321SKS

 Trans EPA ID:
 TXR000050930

Trans Name: SAFETY-KLEEN SYSTEMS INC

 Trans 2 EPA ID:
 OKD981588791

 Trans 2 Name:
 TRIAD TRANSPORT

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

TSDF EPA ID: NVT330010000

Trans Name: US ECOLOGY NEVADA

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D007

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 0.1 Waste Quantity: 200 **Quantity Unit:**

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

Shipment Date: 20120131

Creation Date: 6/27/2012 20:30:16

Receipt Date: 20120207 Manifest ID: 003156666SKS Trans EPA ID: TXR000050930

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: CAT000613893

Trans Name: SAFETY-KLEEN SYSTEMS INC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc. Waste Code Description:

RCRA Code:

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.005 Waste Quantity: 10 Quantity Unit: Additional Code 1: D039 Additional Code 2: D035 D018 Additional Code 3: Additional Code 4: D001 Additional Code 5: Not reported

Shipment Date: 20120113

Creation Date: 5/29/2012 20:30:08 20120118 Receipt Date: Manifest ID: 003134765SKS Trans EPA ID: TXR000050930

Trans Name: SAFETY-KLEEN SYSTEMS INC

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: CAT000613893

Trans Name: SAFETY-KLEEN SYSTEMS INC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 223 - Unspecified oil-containing waste

RCRA Code: Not reported

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.075 Waste Quantity: 150 Quantity Unit:

Additional Code 1: Not reported Additional Code 2: Not reported Not reported Additional Code 3: Additional Code 4: Not reported Additional Code 5: Not reported

NPDES:

GENESIS SUPREME RV Name: 23129 CAJALCO ROAD Address: City, State, Zip: **PERRIS, CA 92570** 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 8 331027497 WDID: Regulatory Measure Type: Industrial 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: 12/04/2017 Operator Name: Genesis Supreme RV Operator Address: 23129 Cajalco Road

Operator City: Perris Operator State: California Operator Zip: 92570

NPDES as of 03/2018:

Regulatory Measure ID:

NPDES Number: CAS000001 Status: Active Agency Number: 0 Region:

97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 331027497 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 12/04/2017 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Genesis Supreme RV

490765

Distance Elevation Si

Site Database(s)

Not reported

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

EPA ID Number

Discharge Address: 23129 Cajalco Road Discharge City: Perris Discharge State: California Discharge Zip: 92570 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Not reported Operator Address: Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported Not reported **Operator Contact Phone:** Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported Not reported **Emergency Phone:** Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Not reported Constype Electrical Line Ind: Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Not reported Dir Discharge Uswater Ind: Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported

Certification Date:

Distance Elevation Site

Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Primary Sic:
Secondary Sic:
Not reported
Not reported
Tertiary Sic:
Not reported

TIFFANY COACHBUILDERS Name: 23129 CAJALCO RD Address: **PERRIS, CA 92570** City,State,Zip: 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 33NEC001529 Regulatory Measure Type: Industrial 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

Expiration Date Of Regulatory Measure:

Discharge Address:

Not reported

Operator Name: Tiffany Coachbuilders
Operator Address: 23129 Cajalco rd

Operator City: Perris
Operator State: California
Operator Zip: 92570

NPDES as of 03/2018:

NPDES Number: Not reported Status: Not reported Agency Number: Not reported

Region: Regulatory Measure ID: 463333 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 33NEC001529 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: 10/01/2016 Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported 09/18/2015 Received Date: Processed Date: 11/18/2015 Status: Terminated

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

Status Date: 01/17/2017 Place Size: Place Size Unit: Acres Contact: Ben Clymer Contact Title: Not reported 951-657-2680 Contact Phone: Not reported Contact Phone Ext: Contact Email: jim@tiffanylimo.com Tiffany Coachbuilders Operator Name: Operator Address: 23129 Cajalco rd

Operator City: Perris Operator State: California Operator Zip: 92570 **Operator Contact:** Jim Powell Operator Contact Title: Shop Mgr. Operator Contact Phone: 951-657-2680 Operator Contact Phone Ext: Not reported Jim@tiffanylimo.com Operator Contact Email:

Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported Developer Contact: Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Not reported Constype Below Ground Ind: Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Not reported Constype Utility Ind: Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Ben Clymer

Certification Date: 18-SEP-15 Primary Sic: 3711-Motor Vehicles and Passenger Car Bodies

Owner

Secondary Sic: Not reported Tertiary Sic: Not reported

CAS000001 NPDES Number: Terminated Status:

Agency Number: 0

Certifier Title:

Distance Elevation

on Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Region: 8 463333 Regulatory Measure ID: 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 33NEC001529 Industrial Program Type: Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 11/18/2015 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: 10/01/2016

Discharge Name: Tiffany Coachbuilders
Discharge Address: 23129 Cajalco rd

Discharge City: Perris Discharge State: California Discharge Zip: 92570 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Not reported Contact: Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported Not reported Operator Contact Phone: Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Not reported Constype Below Ground Ind: Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported

Not reported

Constype Other Description:

Direction Distance Elevation

evation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Constype Other Ind: Not reported Not reported Constype Recons Ind: Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Not reported Certification Date: Primary Sic: Not reported Secondary Sic: Not reported **Tertiary Sic:** Not reported

Name: GENESIS SUPREME RV Address: 23129 CAJALCO ROAD City,State,Zip: PERRIS, CA 92570

Facility Status: Active NPDES Number: CAS000001

Region: 8 Agency Number: 490765 Regulatory Measure ID: Place ID: Not reported Order Number: 97-03-DWQ WDID: 8 331027497 Regulatory Measure Type: Enrollee Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 12/04/2017 Termination Date Of Regulatory Measure: Not reported

Expiration Date Of Regulatory Measure: Not reported
Discharge Address: 23129 Cajalco Road
Discharge Name: Genesis Supreme RV

Discharge City: Perris Discharge State: California Discharge Zip: 92570 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

NPDES as of 03/2018:

NPDES Number: CAS000001 Active Status: Agency Number: 0 Region: 8 490765 Regulatory Measure ID: 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 331027497 Program Type: Industrial

Distance Elevation S

Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 12/04/2017 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Genesis Supreme RV Discharge Address: 23129 Cajalco Road

Discharge City: Perris Discharge State: California Discharge Zip: 92570 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Not reported Operator Name: Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported Operator Contact: Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Not reported Not reported Operator Contact Email: Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Not reported Developer State: Developer Zip: Not reported Developer Contact: Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported Not reported **Emergency Phone:** Emergency Phone Ext: Not reported Not reported Constype Above Ground Ind: Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported

Not reported

Constype Water Sewer Ind:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported Tertiary Sic: Not reported

CIWQS:

GENESIS SUPREME RV Name: Address: 23129 CAJALCO ROAD City, State, Zip: **PERRIS, CA 92570** Agency: Genesis Supreme RV

Agency Address: 23129 Cajalco Road, Perris, CA 92570 Place/Project Type: Industrial - Travel Trailers and Campers

SIC/NAICS: 3792 Region: **INDSTW** Program: Regulatory Measure Status: Active

Regulatory Measure Type: Storm water industrial Order Number: 2014-0057-DWQ WDID: 8 331027497 NPDES Number: CAS000001 Adoption Date: Not reported Effective Date: 12/04/2017 Termination Date: Not reported Expiration/Review Date: Not reported Not reported Design Flow: Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: 0 Violations within 5 years: O 33.8367 Latitude: Longitude: -117.25825

TIFFANY COACHBUILDERS Name: Address: 23129 CAJALCO RD **PERRIS, CA 92570** City,State,Zip: Agency: Tiffany Coachbuilders

Agency Address: 23129 Cajalco rd, Perris, CA 92570

Place/Project Type: Industrial - Motor Vehicles and Passenger Car Bodies

SIC/NAICS: 3711 Region: 8 **INDSTW** Program: Regulatory Measure Status: Terminated

Regulatory Measure Type: Storm water industrial Order Number: 2014-0057-DWQ WDID: 8 33NEC001529 NPDES Number: CAS000001 Adoption Date: Not reported 11/18/2015 Effective Date: 10/01/2016 Termination Date: Expiration/Review Date: Not reported Design Flow: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WARLOCK INDUSTRIES (Continued)

S113798222

Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: 0 Violations within 5 years: 0 Latitude: 33.8367 Longitude: -117.25825

CERS:

Name: GENESIS SUPREME RV INC

Address: 23129 CAJALCO RD City,State,Zip: **PERRIS, CA 92570**

Site ID: 162291 CERS ID: 10326670

CERS Description: Chemical Storage Facilities

Violations:

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 08-28-2017

HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter Citation:

6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material

inventory information for all reportable hazardous materials on site

at or above reportable quantities.

Violation Notes: Returned to compliance on 01/10/2018. Violation Division: Riverside County Department of Env Health

Violation Program: **HMRRP** Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 08-28-2017

Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95,

Section(s) 25507

Violation Description: Failure to adequately establish and implement a business plan when

storing/handling a hazardous material at or above reportable

quantities.

Returned to compliance on 01/10/2018. Violation Notes: Riverside County Department of Env Health Violation Division:

Violation Program: **HMRRP** Violation Source: CERS.

162291 Site ID:

Site Name: Genesis Supreme RV Inc

Violation Date: 11-28-2017

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter

6.95, Section(s) 25508(a)(1)

Violation Description: Failure to annually review and electronically certify that the

business plan is complete and accurate on or before the annual due

date.

Violation Notes: Returned to compliance on 12/21/2017. Riverside County Department of Env Health Violation Division:

Violation Program: **HMRRP** Violation Source: CERS,

Site ID: 162291 Map ID MAP FINDINGS Direction

Distance

Elevation Site **EPA ID Number** Database(s)

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Site Name: Genesis Supreme RV Inc

Violation Date: 11-20-2013

HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Citation:

Section(s) Multiple

Violation Description: Business Plan Program - Training - General Returned to compliance on 01/15/2014. Violation Notes: Riverside County Department of Env Health Violation Division:

Violation Program: **HMRRP** Violation Source: CERS.

Site ID: 162291

Site Name: Genesis Supreme RV Inc

07-29-2020 Violation Date: **Un-Specified** Citation:

Violation Description: Business Plan Program - Operations/Maintenance - General Local

Ordinance

Returned to compliance on 07/29/2020. OBSERVATION: Observed Acetylene Violation Notes:

> and Oxygen] stored in a manner which may allow for incompatible materials to combine. CORRECTIVE ACTION: Owner/operator shall store

all incompatible materials separately to prevent accidental mixing.

Oxygen and Acetylene shall be store in separate locations. **CORRECTED

ON SITE**

Violation Division: Riverside County Department of Env Health

Violation Program: **HMRRP** Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 11-20-2013

HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Citation:

Section(s) Multiple

Violation Description: Business Plan Program - Administration/Documentation - General

Violation Notes: Returned to compliance on 01/15/2014. Violation Division: Riverside County Department of Env Health

HMRRP Violation Program: Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 08-28-2017

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter

6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a business plan when

storing/handling a hazardous material at or above reportable

quantities.

Violation Notes: Returned to compliance on 01/10/2018. Riverside County Department of Env Health Violation Division:

Violation Program: **HMRRP** Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 08-28-2017

HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter Citation:

6.95, Section(s) 25508(a)(1)

Failure to establish and electronically submit an adequate emergency Violation Description:

response plan and procedures for a release or threatened release of a

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

hazardous material.

Violation Notes: Returned to compliance on 01/10/2018.

Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 08-28-2017

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter

6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all

required content.

Violation Notes: Returned to compliance on 01/10/2018.

Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 08-28-2017

Citation: 19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19,

Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit the Business Activities

Page and/or Business Owner Operator Identification Page.

Violation Notes: Returned to compliance on 01/10/2018.

Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 06-28-2021

Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter

1, Section(s) 265.173

Violation Description: Failure to meet the following container management requirements: (a) A

container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to

leak.

Violation Notes: Returned to compliance on 06/30/2021. OBSERVATION: Observed several 5

gallon buckets without cover/lid in place. CORRECTIVE ACTION: Owner/operator shall maintain all hazardous waste containers closed

when not adding/removing hazardous waste.

Violation Division: Riverside County Department of Env Health Violation Program: HW

Violation Source: CERS,
Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 11-20-2013

Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67,

Section(s) Multiple

Violation Description: Haz Waste Generator Program - Administration/Documentation - General

Violation Notes: Returned to compliance on 01/15/2014.
Violation Division: Riverside County Department of Env Health

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

Violation Program: HW Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 11-20-2013

Citation: 19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4,

Section(s) 2729.5

Violation Description: Failure to submit inventory reports (Activities, Owner/Operator,

Hazardous Materials Descriptions and Map pages, if required.

Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA

thresholds) by March 1.

Violation Notes: Returned to compliance on 01/15/2014.
Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 06-28-2021

Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter

1, Section(s) 265.31

Violation Description: Failure to maintain and operate the facility to minimize the

possibility of a fire, explosion, or any unplanned sudden or

non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or

the environment.

Violation Notes: Returned to compliance on 06/30/2021. OBSERVATION: Observed multiple 5

gallon buckets with oily water not properly closed or labeled.

CORRECTIVE ACTION: Owner/operator shall maintain all hazardous waste

materials in a closed and properly labeled container, and manage according to Title 22 hazardous waste regulations. Submit a statement and supporting documentation (photos) explaining how this waste was

managed to this department.

Violation Division: Riverside County Department of Env Health

Violation Program: HW Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 08-28-2017

Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter

6.95, Section(s) 25505(a)(4)

Violation Description: Failure to provide initial and annual training to all employees in

safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training

records for a minimum of three years. Returned to compliance on 06/13/2018.

Violation Notes: Returned to compliance on 06/13/2018.

Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 08-28-2017 Citation: Un-Specified

Direction Distance

Elevation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Violation Description: Business Plan Program - Operations/Maintenance - General Local

Ordinance

Violation Notes: Returned to compliance on 06/13/2018.
Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 08-28-2017

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter

6.95, Section(s) 25508(a)(1)

Violation Description: Failure to establish and electronically submit an adequate training

program in safety procedures in the event of a release or threatened

release of a hazardous material.

Violation Notes: Returned to compliance on 01/10/2018.

Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc

Violation Date: 08-28-2017

Citation: HSC 6.95 25505(c) - California Health and Safety Code, Chapter 6.95,

Section(s) 25505(c)

Violation Description: Failure to have a business plan readily available to personnel of the

business or the unified program facility with responsibilities for

emergency response or training.

Violation Notes: Returned to compliance on 01/10/2018.

Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Evaluation:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 07-29-2020

Violations Found: Yes

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: 08-28-2017 Violations Found: Yes

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: 11-20-2013 Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Not reported

Map ID MAP FINDINGS
Direction

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

Eval Division: Riverside County Department of Env Health

Eval Program: HMRRP Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 11-28-2017
Violations Found: Yes

Eval Type: Other, not 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: Other/Unknown Eval Date: 07-15-2014

Violations Found: No

Eval Type: Other, not 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: Other/Unknown
Eval Date: 01-15-2014

Violations Found: No

Eval Type: Other, not 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: Other/Unknown Eval Date: 01-15-2014

Violations Found: No

Eval Type: Other, not 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: 06-28-2021 Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: This facility is an RV manufacturer that generates used rags and oily

water.

Eval Division: Riverside County Department of Env Health

Eval Program: HW Eval Source: CERS,

Eval General Type: Other/Unknown Eval Date: 06-13-2018 Violations Found: No

Eval Type: Other, not routine, done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: HMRRP

Direction Distance

Elevation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 11-20-2013 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,

Enforcement Action:

Site ID: 162291

Site Name: Genesis Supreme RV Inc Site Address: 23129 CAJALCO RD

 Site City:
 PERRIS

 Site Zip:
 92570

 Enf Action Date:
 11-20-2013

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Riverside County Department of Env Health

Enf Action Program: HMRRP Enf Action Source: CERS,

Site ID: 162291

Site Name: Genesis Supreme RV Inc Site Address: 23129 CAJALCO RD

 Site City:
 PERRIS

 Site Zip:
 92570

 Enf Action Date:
 11-20-2013

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Riverside County Department of Env Health

Enf Action Program: HW
Enf Action Source: CERS,

Coordinates:

Site ID: 162291

Facility Name: Genesis Supreme RV Inc

Env Int Type Code: HWG
Program ID: 10326670
Coord Name: Not reported

Ref Point Type Desc: Center of a facility or station.,

Latitude: 33.836700 Longitude: -117.258260

Affiliation:

Affiliation Type Desc: Environmental Contact
Entity Name: Michelle Treangen
Entity Title: Not reported
Affiliation Address: 23129 Cajalco Rd

Affiliation City: Perris
Affiliation State: CA

Affiliation Country: Not reported

Distance Elevation

ation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Affiliation Zip: 92570
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 23129 Cajalco Rd

Affiliation City: Perris
Affiliation State: CA

Affiliation Country: Not reported
Affiliation Zip: 92570
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer Entity Name: Pablo Carmona

Entity Title: Owner

Affiliation Address: Not reported

Affiliation City: Not reported

Affiliation State: Not reported

Affiliation Country: Not reported

Affiliation Zip: Not reported

Affiliation Phone: ,

Affiliation Type Desc:
Entity Name:
Entity Title:
Affiliation Address:
Legal Owner
Pablo Carmona
Not reported
23129 Cajalco Rd

Affiliation City: Perris
Affiliation State: CA

Affiliation Country: United States
Affiliation Zip: 92570

Affiliation Phone: (951) 712-7051,

Affiliation Type Desc: Parent Corporation
Entity Name: Genesis Supreme R V

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: ,

Affiliation Type Desc: Property Owner
Entity Name: Pablo Carmona
Entity Title: Not reported
Affiliation Address: 23129 Cajalco Rd

Affiliation City: Perris
Affiliation State: CA

Affiliation Country: United States
Affiliation Zip: 92570
Affiliation Phone: (951) 337-0254,

Affiliation Type Desc:

Entity Name:

Entity Title:

Affiliation Address:

Operator

Pablo Carmona

Not reported

Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

EDR ID Number

Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (951) 712-7051,

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** Pablo Carmona **Entity Name:** 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:

Name: GENESIS SUPREME RV Address: 23129 CAJALCO ROAD City,State,Zip: PERRIS, CA 92570

 Site ID:
 532701

 CERS ID:
 858706

CERS Description: Industrial Facility Storm Water

Affiliation:

Affiliation Type Desc: Owner/Operator
Entity Name: Genesis Supreme RV

Entity Title: Operator
Affiliation Address: 23129 Cajalco Road

Affiliation City: Perris
Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 92570
Affiliation Phone: ,

HWTS:

Name: LIMOS BY TIFFANY INC DBA TIFFANY COACHWORKS

Address: 23129 CAJALCO RD Address 2: Not reported **PERRIS, CA 92570** City, State, Zip: EPA ID: CAL000342625 Inactive Date: 06/30/2013 Create Date: 04/28/2009 Last Act Date: Not reported Mailing Name: Not reported Mailing Address: PO BOX 46

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

WARLOCK INDUSTRIES (Continued)

S113798222

Mailing Address 2: Not reported

Mailing City, State, Zip:

Owner Name:

UMOS BY TIFFANY INC

Owner Address:

23129 CAJALCO RD

Owner Address 2: Not reported

Owner City, State, Zip: PERRIS, CA 925707298

Contact Name: J POWELL
Contact Address: 23129 CAJALCO RD

Contact Address 2: Not reported

City, State, Zip: PERRIS, CA 925707298

Facility Status: Inactive
Facility Type: PERMANENT
Category: STATE
Latitude: 33.83744
Longitude: -117.25766

NAICS:

EPA ID: CAL000342625

Create Date: 2009-04-28 13:49:05.467

NAICS Code: 336992

NAICS Description: Military Armored Vehicle, Tank, and Tank Component Manufacturing

Issued EPA ID Date: 2009-04-28 13:49:05.43300 Inactive Date: 2013-06-30 00:00:00

Facility Name: LIMOS BY TIFFANY INC DBA TIFFANY COACHWORKS

Facility Address: 23129 CAJALCO RD

Facility Address 2: Not reported Facility City: PERRIS Facility County: Not reported

Facility State: CA

Facility Zip: 925707298

C10 AOC, L.L.C. AST A100417176
SSE 19991 SEATON AVE N/A

SSE 19991 SEATON AVE 1/8-1/4 PERRIS, CA 92570

0.216 mi.

1138 ft. Site 1 of 5 in cluster C

 Relative:
 AST:

 Lower
 Name:
 AOC, L.L.C.

 Actual:
 Address:
 19991 SEATON AVE

 1562 ft.
 City/Zip:
 PERRIS,92570

Certified Unified Program Agencies: Not reported

Owner: Alpha Corporation Of Tennessee

Total Gallons:
CERSID:
10153643
Facility ID:
Business Name:
Phone:
9516575161
Fax:
9516578370
Mailing Address:
Not reported
AOC LLC
9516575161
Fax:
9516578370
19991 Seaton Ave

Mailing Address City:

Mailing Address City:

Mailing Address State:

Mailing Address Zip Code:

Operator Name:

Operator Phone:

Owner Phone:

Owner Mail Address:

Description:

19991 Seaton Ave

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC, L.L.C. (Continued) A100417176

Owner State: CA Owner Zip Code: 92570 Owner Country: **United States** 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: CAD059270975

C11 AOC LLC CERS HAZ WASTE S113001191

SSE 19991 SEATON AVE 1/8-1/4 PERRIS, CA 92370

0.216 mi.

1138 ft. Site 2 of 5 in cluster C

Relative: CERS HAZ WASTE:

Lower Name: AOC LLC

 Actual:
 Address:
 19991 SEATON AVE

 1562 ft.
 City,State,Zip:
 PERRIS, CA 92570

 Site ID:
 92587

 CERS ID:
 10153643

CERS Description: RCRA LQ HW Generator

Name: AOC LLC

Address: 19991 SEATON AVE City,State,Zip: PERRIS, CA 92570

Site ID: 92587 CERS ID: 10153643

CERS Description: Hazardous Waste Generator

Name: AOC LLC

Address: 19991 SEATON AVE City, State, Zip: PERRIS, CA 92570

 Site ID:
 92587

 CERS ID:
 10153643

CERS Description: Hazardous Waste Onsite Treatment

CERS TANKS:

Name: AOC LLC

Address: 19991 SEATON AVE City,State,Zip: PERRIS, CA 92570

 Site ID:
 92587

 CERS ID:
 10153643

CERS Description: Aboveground Petroleum Storage

HAZNET:

Name: AOC LLC

Address: 19991 SEATON AVE
Address 2: Not reported
City,State,Zip: PERRIS, CA 92570

Contact: JUAN MONTALVO EHS LEADER

Telephone: 9519439708
Mailing Name: 9519439708
Not reported

Mailing Address: 19991 SEATON AVE

EDR ID Number

CERS TANKS

HAZNET CERS

HWTS

N/A

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

AOC LLC (Continued) S113001191

Year: 2021

Gepaid: CAD059270975 TSD EPA ID: ARD981057870

CA Waste Code: 352 - Other organic solids

Disposal Method: H061 - Fuel Blending Prior To Energy Recovery At Another Site

Tons: 4.664

Year: 2021

Gepaid: CAD059270975 TSD EPA ID: NVT330010000

CA Waste Code: 343 - Unspecified organic liquid mixture

Disposal Method: H039 - Other Recovery Of Reclamation For Reuse Including Acid

Regeneration, Organics Recovery Ect

Tons: 7.004

Year: 2021

Gepaid: CAD059270975 TSD EPA ID: NVT330010000

CA Waste Code: 331 - Off-specification, aged or surplus organics

Disposal Method: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Tons: 0.775

Year: 2021

Gepaid: CAD059270975 TSD EPA ID: NVT330010000

CA Waste Code: 352 - Other organic solids

Disposal Method: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Tons: 101.2135

Year: 2020

Gepaid: CAD059270975 TSD EPA ID: NVT330010000

CA Waste Code: 352 - Other organic solids

H132 - Landfill Or Surface Impoundment That Will Be Closed As Disposal Method:

Landfill(To Include On-Site Treatment And/Or Stabilization)

Tons: 168

Year: 2019

Gepaid: CAD059270975 TSD EPA ID: NVT330010000

CA Waste Code: 352 - Other organic solids

Disposal Method: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Tons: 131.96800

Year: 2018

Gepaid: CAD059270975 TSD EPA ID: NVT330010000

CA Waste Code: 352 - Other organic solids

Disposal Method: H131 - Land Treatment Or Application(To Include On-Site Treatment

And/Or Stabilization)

Tons: 32.99200

Year: 2018

Gepaid: CAD059270975

Direction Distance Elevation

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

TSD EPA ID: NVT330010000

CA Waste Code: 352 - Other organic solids

Disposal Method: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Tons: 98.97600

Year: 2018

 Gepaid:
 CAD059270975

 TSD EPA ID:
 IND000646943

CA Waste Code: 141 - Off-specification, aged or surplus inorganics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Tons: 0.17000

Year: 2018

 Gepaid:
 CAD059270975

 TSD EPA ID:
 IND000646943

CA Waste Code: 331 - Off-specification, aged or surplus organics

Disposal Method: H061 - Fuel Blending Prior To Energy Recovery At Another Site

Tons: 0.45900

Click this hyperlink while viewing on your computer to access 360 additional CA HAZNET: record(s) in the EDR Site Report.

Detail Two:

Year: 2020

EM Manifest ID: 827c9ba8-3c98-400e-bb41-b9fa96ed9a13

 Shipment Date:
 5/6/2020

 Receipt Date:
 5/26/2020

 Manifest Number:
 021600142JJK

 Generator EPA ID:
 CAD059270975

 Name:
 AOC LLC

Address: 19991 SEATON AVENUE

Address 2: Not reported PERRIS City: Zip: 92570 Telephone: 800-388-7242 Contact: Not reported Contact Telephone: 951-657-5161 Transporter 1 EPA ID: TXR000084869 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586

Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: AZD982403586
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT & RECYCLING LLC

TSDF Address 1: 4343 KENNEDY AVE
TSDF Address 2: Not reported
TSDF City: EAST CHICAGO

 TSDF Zip:
 46312

 TSDF Telephone:
 219-397-3951

Federal:

Year: 2020

EM Manifest ID: 827c9ba8-3c98-400e-bb41-b9fa96ed9a13

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2020-05-06

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Manifest Number: 021600142JJK

 Line Number:
 1

 Method Code:
 H020

 Quantity Tons:
 1.16500

 Quantity Waste:
 2330.000000

Quantity Unit: F
Number of Containers: 5

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

 Year:
 2020

 EM Manifest ID:
 1133425

 Shipment Date:
 2/6/2020

 Receipt Date:
 2/18/2020

 Manifest Number:
 020643306JJK

 Generator EPA ID:
 CAD059270975

 Name:
 AOC LLC

Address: 19991 SEATON AVENUE

Address 2: Not reported City: **PERRIS** Zip: 92570 Telephone: 800-388-7242 Contact: Not reported 951-657-5161 Contact Telephone: Transporter 1 EPA ID: CAR000047696 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586 Transporter 2 Emergency Number: Not reported TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT & RECYCLING LLC

TSDF Address 1: 4343 KENNEDY AVE
TSDF Address 2: Not reported
TSDF City: EAST CHICAGO

TSDF Zip: 46312 TSDF Telephone: 219-397-3951

Federal:

 Year:
 2020

 EM Manifest ID:
 1133425

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2020-02-06

 Manifest Number:
 020643306JJK

 Line Number:
 1

 Method Code:
 H141

 Quantity Tons:
 0.20100

 Quantity Waste:
 402.000000

Quantity Unit: P
Number of Containers: 1

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

 Year:
 2020

 EM Manifest ID:
 1133425

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2020-02-06

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Manifest Number: 020643306JJK

Line Number: 3 H020 Method Code: **Quantity Tons:** 1.28800 2576.000000 **Quantity Waste:**

Quantity Unit: Number of Containers:

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

Year: 2020

EM Manifest ID: e28aef3e-7403-4d08-a72d-b48612201f91

Shipment Date: 10/28/2020 Receipt Date: 11/3/2020 Manifest Number: 022041598JJK Generator EPA ID: CAD059270975 Name: AOC LLC

19991 SEATON AVENUE Address:

Address 2: Not reported City: **PERRIS** Zip: 92570 Telephone: 800-388-7242 Contact: Not reported 951-657-5161 Contact Telephone: Transporter 1 EPA ID: TXR000084869 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586

Transporter 2 Emergency Number: Not reported TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: 4343 KENNEDY AVENUE

TSDF Address 2: Not reported TSDF City: EAST CHICAGO TSDF Zip: 46312

TSDF Telephone: 219-397-3951

Federal:

2020 Year:

EM Manifest ID: e28aef3e-7403-4d08-a72d-b48612201f91

Generator EPA ID: CAD059270975 Shipment Date: 2020-10-28 Manifest Number: 022041598JJK

Line Number: Method Code: H141 1.80000 Quantity Tons: Quantity Waste: 3600.000000

Quantity Unit: Number of Containers:

Type of Container: Fiberboard or plastic drums, barrels, kegs

Quantity Type: Pounds Federal Code: U147

2020 Year:

EM Manifest ID: e28aef3e-7403-4d08-a72d-b48612201f91

Generator EPA ID: CAD059270975 Shipment Date: 2020-10-28

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Manifest Number: 022041598JJK

 Line Number:
 1

 Method Code:
 H141

 Quantity Tons:
 1.80000

 Quantity Waste:
 3600.00000

Quantity Unit: P Number of Containers: 8

Type of Container: Fiberboard or plastic drums, barrels, kegs

Quantity Type: Pounds Federal Code: U190

Year: 2020

EM Manifest ID: e28aef3e-7403-4d08-a72d-b48612201f91

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2020-10-28

 Manifest Number:
 022041598JJK

 Line Number:
 2

 Method Code:
 H020

 Quantity Tons:
 9.52650

 Quantity Waste:
 19053.000000

Quantity Unit: P Number of Containers: 42

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

Detail Two:

 Year:
 2019

 EM Manifest ID:
 632743

 Shipment Date:
 8/16/2019

 Receipt Date:
 9/16/2019

 Manifest Number:
 020567904JJK

 Generator EPA ID:
 CAD059270975

 Name:
 AOC LLC

Address: 19991 SEATON AVENUE

Address 2: Not reported City: **PERRIS** Zip: 92570 Telephone: 800-388-7242 Contact: Not reported Contact Telephone: 951-657-5161 Transporter 1 EPA ID: CAR000114330 Transporter 1 Emergency Number: Not reported

Transporter 2 EPA ID: AZD982403586
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT & RECYCLING LLC

TSDF Address 1: 4343 KENNEDY AVE TSDF Address 2: Not reported TSDF City: EAST CHICAGO

TSDF Zip: 46312 TSDF Telephone: 219-397-3951

Federal:

Year: 2019 EM Manifest ID: 632743

Direction Distance

Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Generator EPA ID: CAD059270975 2019-08-16 Shipment Date: Manifest Number: 020567904JJK

Line Number: Method Code: H141 Quantity Tons: 1.19000 Quantity Waste: 2380.000000

Quantity Unit: Number of Containers:

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

Year: 2019 EM Manifest ID: 632743 Generator EPA ID: CAD059270975 Shipment Date: 2019-08-16 020567904JJK Manifest Number:

Line Number: H020 Method Code: Quantity Tons: 0.91250 1825.000000 Quantity Waste:

Quantity Unit: Number of Containers:

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

Year: 2019 EM Manifest ID: 431885 Shipment Date: 5/22/2019 Receipt Date: 6/4/2019 020646366JJK Manifest Number: Generator EPA ID: CAD059270975 AOC LLC Name:

Address: 19991 SEATON AVENUE

Address 2: Not reported **PERRIS** City: Zip: 92570 Telephone: 800-388-7242 Contact: Not reported Contact Telephone: 951-657-5161 CAR000047696 Transporter 1 EPA ID: Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586 Transporter 2 Emergency Number: Not reported

TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT & RECYCLING LLC

TSDF Address 1: 4343 KENNEDY AVE TSDF Address 2: Not reported TSDF City: **EAST CHICAGO** TSDF Zip: 46312 TSDF Telephone: 219-397-3951

Federal:

Year: 2019 EM Manifest ID: 431885

Direction Distance Elevation

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2019-05-22

 Manifest Number:
 020646366JJK

 Line Number:
 2

 Method Code:
 H020

 Quantity Tons:
 2.41750

 Quantity Waste:
 4835.000000

Quantity Unit: P
Number of Containers: 12

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

Year: 2019

EM Manifest ID: 018340494JJK20180326_D_1

Shipment Date: 3/26/2018 4/3/2018 Receipt Date: Manifest Number: 018340494JJK CAD059270975 Generator EPA ID: Name: AOC LLC Address: Not reported Address 2: Not reported City: Not reported Not reported Zip: Telephone: Not reported Contact: Not reported Contact Telephone: Not reported CAR000047696 Transporter 1 EPA ID: Transporter 1 Emergency Number: Not reported

Transporter 2 EPA ID: AZD982403586
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: Not reported TSDF Address 2: Not reported TSDF City: Not reported TSDF Zip: Not reported TSDF Telephone: Not reported

Federal:

Year: 2019

EM Manifest ID: 018340494JJK20180326_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-03-26

 Manifest Number:
 018340494JJK

 Line Number:
 1

 Method Code:
 H020

 Quantity Tons:
 0.22500

 Quantity Waste:
 450.00000

Quantity Unit:PNumber of Containers:1Type of Container:NULLQuantity Type:NULLFederal Code:D001

State:

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Year: 2019

EM Manifest ID: 018340494JJK20180326_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-03-26

 Manifest Number:
 018340494JJK

 Line Number:
 1

 Method Code:
 H020

 Quantity Tons:
 0.22500

 Quantity Waste:
 450.00000

Quantity Unit:PNumber of Containers:1Type of Container:NULLQuantity Type:NULLState Code:352

Year: 2019

EM Manifest ID: 018340495JJK20180326_D_1

Shipment Date: 3/26/2018 4/3/2018 Receipt Date: Manifest Number: 018340495JJK Generator EPA ID: CAD059270975 Name: AOC LLC Address: Not reported Not reported Address 2: City: Not reported Zip: Not reported Telephone: Not reported Contact: Not reported Contact Telephone: Not reported Transporter 1 EPA ID: CAR000047696 Transporter 1 Emergency Number: Not reported

Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: AZD982403586
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: Not reported TSDF Address 2: Not reported TSDF City: Not reported TSDF Zip: Not reported TSDF Telephone: Not reported

Federal:

Year: 2019

EM Manifest ID: 018340495JJK20180326_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-03-26

 Manifest Number:
 018340495JJK

 Line Number:
 1

 Method Code:
 H020

 Quantity Tons:
 0.91450

 Quantity Waste:
 1829.00000

Quantity Unit:PNumber of Containers:6Type of Container:NULLQuantity Type:NULLFederal Code:D001

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

State:

Year: 2019

EM Manifest ID: 018340495JJK20180326_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2018-03-26 018340495JJK Manifest Number:

Line Number: H020 Method Code: Quantity Tons: 0.91450 Quantity Waste: 1829.000000

Quantity Unit: Number of Containers: 6 Type of Container: NULL Quantity Type: NULL State Code: 352

Year: 2019

EM Manifest ID: 018340495JJK20180326_D_1

Generator EPA ID: CAD059270975 2018-03-26 Shipment Date: Manifest Number: 018340495JJK

Line Number: Method Code: H110 2.02200 Quantity Tons: Quantity Waste: 4044.000000

Quantity Unit: Number of Containers: Type of Container: **NULL** Quantity Type: **NULL** State Code: 134

Year: 2019

EM Manifest ID: 018342003JJK20180326_D_1

Shipment Date: 3/26/2018 4/3/2018 Receipt Date: Manifest Number: 018342003JJK Generator EPA ID: CAD059270975 AOC LLC Name: Address: Not reported Address 2: Not reported City: Not reported Zip: Not reported Not reported Telephone: Contact: Not reported Contact Telephone: Not reported CAR000047696 Transporter 1 EPA ID: Transporter 1 Emergency Number: Not reported AZD982403586 Transporter 2 EPA ID:

Transporter 2 Emergency Number: Not reported TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: Not reported TSDF Address 2: Not reported TSDF City: Not reported TSDF Zip: Not reported TSDF Telephone: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Federal:

2019 Year:

EM Manifest ID: 018342003JJK20180326_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2018-03-26 018342003JJK Manifest Number:

Line Number: Method Code: H020 Quantity Tons: 0.08650 Quantity Waste: 173.000000 Р

Quantity Unit: Number of Containers: 11 Type of Container: NULL Quantity Type: NULL Federal Code: D001

State:

Year: 2019

EM Manifest ID: 018342003JJK20180326_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2018-03-26 Manifest Number: 018342003JJK

Line Number: H020 Method Code: Quantity Tons: 0.08650 Quantity Waste: 173.000000

Quantity Unit: Number of Containers: 11 Type of Container: **NULL** Quantity Type: NULL State Code: 214

Year:

EM Manifest ID: 018342003JJK20180326_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2018-03-26 Manifest Number: 018342003JJK

Line Number: 2 H141 Method Code: 0.17000 Quantity Tons: Quantity Waste: 340.000000

Quantity Unit: Ρ Number of Containers: Type of Container: NULL Quantity Type: NULL State Code: 141

2019 Year: EM Manifest ID: 315647 Shipment Date: 2/26/2019 Receipt Date: 3/8/2019 Manifest Number: 019812801JJK Generator EPA ID: CAD059270975 Name: AOC LLC

Address: 19991 SEATON AVENUE

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Address 2: Not reported **PERRIS** City: 92570 Zip: Telephone: 800-388-7242 Contact: Not reported 951-657-5161 Contact Telephone: Transporter 1 EPA ID: CAR000047696 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586

Transporter 2 Emergency Number: Not reported TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT & RECYCLING LLC

TSDF Address 1: 4343 KENNEDY AVE TSDF Address 2: Not reported TSDF City: EAST CHICAGO

TSDF Zip: 46312 TSDF Telephone: 219-397-3951

Federal:

 Year:
 2019

 EM Manifest ID:
 315647

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2019-02-26

 Manifest Number:
 019812801JJK

 Line Number:
 2

 Method Code:
 H020

 Quantity Tons:
 5.33950

 Quantity Waste:
 10679.00000

Quantity Unit: P Number of Containers: 27

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

 Year:
 2019

 EM Manifest ID:
 739901

 Shipment Date:
 11/12/2019

 Receipt Date:
 11/19/2019

 Manifest Number:
 020568379JJK

 Generator EPA ID:
 CAD059270975

 Name:
 AOC LLC

Address: 19991 SEATON AVENUE

Address 2: Not reported City: **PERRIS** Zip: 92570 800-388-7242 Telephone: Contact: Not reported Contact Telephone: 951-657-5161 Transporter 1 EPA ID: CAR000114330 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586

Transporter 2 EPA ID: AZD982403586
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT & RECYCLING LLC

TSDF Address 1: 4343 KENNEDY AVE TSDF Address 2: Not reported TSDF City: EAST CHICAGO

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

TSDF Zip: 46312 TSDF Telephone: 219-397-3951

Federal:

Year: 2019 EM Manifest ID: 739901

CAD059270975 Generator EPA ID: Shipment Date: 2019-11-12 Manifest Number: 020568379JJK

Line Number: Method Code: H141 Quantity Tons: 0.17000 Quantity Waste: 340.000000 Ρ

Quantity Unit: Number of Containers:

Type of Container: Fiberboard or plastic drums, barrels, kegs

Quantity Type: Pounds Federal Code: U147

Year: 2019 EM Manifest ID: 739901 Generator EPA ID: CAD059270975 Shipment Date: 2019-11-12 Manifest Number: 020568379JJK

Line Number: Method Code: H141 Quantity Tons: 0.17000 Quantity Waste: 340.000000

Quantity Unit: Ρ Number of Containers:

Type of Container: Fiberboard or plastic drums, barrels, kegs

020568379JJK

Quantity Type: Pounds Federal Code: U190

Year: 2019 EM Manifest ID: 739901 CAD059270975 Generator EPA ID: 2019-11-12 Shipment Date:

Line Number: 3 H020 Method Code: Quantity Tons: 1.19500 Quantity Waste: 2390.000000

Quantity Unit: Number of Containers:

Manifest Number:

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

2019 Year: EM Manifest ID: 682194 Shipment Date: 10/14/2019 Receipt Date: 10/15/2019 Manifest Number: 020786331JJK Generator EPA ID: CAD059270975 Name: AOC LLC

19991 SEATON AVENUE Address:

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Address 2: Not reported **PERRIS** City: 92370-0000 Zip: Telephone: 800-424-9300 Contact: Not reported Contact Telephone: 951-943-9708 Transporter 1 EPA ID: CAR000276295 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: CAR000297531

Transporter 2 Emergency Number: Not reported TSDF EPA ID: NVT330010000

TSDF Name: US ECOLOGY NEVADA, INC TSDF Address 1: HWY 95 11 MI S OF BEATTY

TSDF Address 2: Not reported TSDF City: BEATTY TSDF Zip: 89003 TSDF Telephone: 800-839-3975

State:

 Year:
 2019

 EM Manifest ID:
 682194

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2019-10-14

 Manifest Number:
 020786331JJK

 Line Number:
 1

 Method Code:
 H132

 Quantity Tons:
 33.71200

 Quantity Waste:
 40.000000

Quantity Unit: Your Number of Containers: 1

Type of Container: Metal boxes, cartons, cases (including roll offs)

Quantity Type: Cubic Yards State Code: 352

Detail Two:

 Year:
 2018

 EM Manifest ID:
 160178

 Shipment Date:
 9/6/2018

 Receipt Date:
 9/18/2018

 Manifest Number:
 018753100JJK

 Generator EPA ID:
 CAD059270975

 Name:
 AOC LLC

Address: 19991 SEATON AVENUE

Address 2: Not reported **PERRIS** City: Zip: 92570 Telephone: 800-388-7242 Contact: Not reported Contact Telephone: 951-657-5161 Transporter 1 EPA ID: CAR000047696 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586

Transporter 2 Emergency Number: Not reported TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT & RECYCLING LLC

TSDF Address 1: 4343 KENNEDY AVE

Direction Distance

Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

TSDF Address 2: Not reported EAST CHICAGO TSDF City: TSDF Zip: 46312 TSDF Telephone: 219-397-3951

Federal:

Year: 2018 EM Manifest ID: 160178

CAD059270975 Generator EPA ID: Shipment Date: 2018-09-06 Manifest Number: 018753100JJK

Line Number: 1 Method Code: H020 Quantity Tons: 0.75000 1500.000000 Quantity Waste:

Quantity Unit: Ρ Number of Containers:

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

2018 Year: EM Manifest ID: 160178 Generator EPA ID: CAD059270975 Shipment Date: 2018-09-06 Manifest Number: 018753100JJK

Line Number: Method Code: H020 Quantity Tons: 2.25000 4500.000000 **Quantity Waste:**

Quantity Unit: Р Number of Containers: 12

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

Year:

EM Manifest ID: 018754827JJK20180621_D_1

Shipment Date: 6/21/2018 Receipt Date: 6/29/2018 Manifest Number: 018754827JJK Generator EPA ID: CAD059270975 Name: AOC LLC Address: Not reported Address 2: Not reported Not reported City: Zip: Not reported Telephone: Not reported Contact: Not reported Not reported Contact Telephone: Transporter 1 EPA ID: CAR000047696 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586

Transporter 2 Emergency Number: Not reported TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

TSDF Address 2: Not reported TSDF City: Not reported TSDF Zip: Not reported TSDF Telephone: Not reported

Federal:

Year: 2018

EM Manifest ID: 018754827JJK20180621_D_1

CAD059270975 Generator EPA ID: Shipment Date: 2018-06-21 Manifest Number: 018754827JJK

Line Number: Method Code: H020 Quantity Tons: 1.20000 2400.000000 Quantity Waste:

Quantity Unit: Number of Containers: 6 Type of Container: NULL Quantity Type: NULL Federal Code: D001

State:

TSDF EPA ID:

Year: 2018

EM Manifest ID: 018754827JJK20180621_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2018-06-21 Manifest Number: 018754827JJK

Line Number: Method Code: H020 Quantity Tons: 1.20000 Quantity Waste: 2400.000000

Quantity Unit: Number of Containers: Type of Container: **NULL** Quantity Type: NULL State Code: 352

Year: 2018

EM Manifest ID: 018754000JJK20180615_D_1

IND000646943

Shipment Date: 6/15/2018 Receipt Date: 6/26/2018 Manifest Number: 018754000JJK CAD059270975 Generator EPA ID: AOC LLC Name: Address: Not reported Address 2: Not reported City: Not reported Zip: Not reported Telephone: Not reported Not reported Contact: Contact Telephone: Not reported Transporter 1 EPA ID: CAR000047696 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586 Transporter 2 Emergency Number: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: Not reported TSDF Address 2: Not reported TSDF City: Not reported TSDF Zip: Not reported TSDF Telephone: Not reported

Federal:

Year: 2018

EM Manifest ID: 018754000JJK20180615_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-06-15

 Manifest Number:
 018754000JJK

 Line Number:
 1

 Method Code:
 H020

 Quantity Tons:
 0.60000

 Quantity Waste:
 1200.000000

Quantity Unit:PNumber of Containers:3Type of Container:NULLQuantity Type:NULLFederal Code:D001

Year: 2018

EM Manifest ID: 018754000JJK20180615_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-06-15

 Manifest Number:
 018754000JJK

 Line Number:
 2

 Method Code:
 H020

 Quantity Tons:
 5.93750

 Quantity Waste:
 11875.000000

Quantity Unit:PNumber of Containers:27Type of Container:NULLQuantity Type:NULLFederal Code:D001

State:

Year: 2018

EM Manifest ID: 018754000JJK20180615_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-06-15

 Manifest Number:
 018754000JJK

 Line Number:
 1

 Method Code:
 H020

 Quantity Tons:
 0.60000

 Quantity Waste:
 1200.000000

Quantity Unit:PNumber of Containers:3Type of Container:NULLQuantity Type:NULLState Code:352

Year: 2018

EM Manifest ID: 018754000JJK20180615_D_1

Generator EPA ID: CAD059270975

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Shipment Date: 2018-06-15 Manifest Number: 018754000JJK

 Line Number:
 2

 Method Code:
 H020

 Quantity Tons:
 5.93750

 Quantity Waste:
 11875.000000

Quantity Unit:PNumber of Containers:27Type of Container:NULLQuantity Type:NULLState Code:352

Year: 2018

EM Manifest ID: 018754000JJK20180615_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-06-15

 Manifest Number:
 018754000JJK

Line Number: 3

Method Code: Not reported Quantity Tons: 2.86800 Quantity Waste: 5736.000000

Quantity Unit: P
Number of Containers: 14
Type of Container: NULL
Quantity Type: NULL
State Code: 134

Year: 2018

EM Manifest ID: 010435349FLE20170413_D_1

Shipment Date: 4/13/2017 Receipt Date: 4/25/2017 Manifest Number: 010435349FLE Generator EPA ID: CAD059270975 **AOC LLC** Name: Address: Not reported Address 2: Not reported City: Not reported Not reported Zip: Telephone: Not reported Contact: Not reported Contact Telephone: Not reported Transporter 1 EPA ID: CAR000047696 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586

Transporter 2 EPA ID: AZD982403586
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: Not reported TSDF Address 2: Not reported TSDF City: Not reported TSDF Zip: Not reported TSDF Telephone: Not reported

Federal:

Year: 2018

EM Manifest ID: 010435349FLE20170413_D_1

Generator EPA ID: CAD059270975

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Shipment Date: 2017-04-13 Manifest Number: 010435349FLE

Line Number: 1 Method Code: H020 Quantity Tons: 0.90000 Quantity Waste: 1800.000000

Quantity Unit: Number of Containers: 6 Type of Container: NULL Quantity Type: NULL Federal Code: D001

Year: 2018

EM Manifest ID: 010435349FLE20170413_D_1

CAD059270975 Generator EPA ID: Shipment Date: 2017-04-13 010435349FLE Manifest Number:

Line Number: Method Code: H020 6.09250 Quantity Tons: Quantity Waste: 12185.000000

Quantity Unit: Number of Containers: 31 Type of Container: **NULL** Quantity Type: NULL Federal Code: D001

State:

Year: 2018

EM Manifest ID: 010435349FLE20170413_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2017-04-13 010435349FLE Manifest Number:

Line Number: Method Code: H020 Quantity Tons: 0.90000 Quantity Waste: 1800.000000

Quantity Unit: Number of Containers: 6 Type of Container: NULL Quantity Type: NULL State Code: 352

Year:

EM Manifest ID: 010435349FLE20170413_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2017-04-13 Manifest Number: 010435349FLE

Line Number: 2 H020 Method Code: Quantity Tons: 6.09250 Quantity Waste: 12185.000000

Quantity Unit: Number of Containers: 31 Type of Container: NULL Quantity Type: NULL State Code: 352

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Year: 2018

EM Manifest ID: 010431987FLE20170310_D_1

Shipment Date: 3/10/2017 Receipt Date: 3/21/2017 Manifest Number: 010431987FLE Generator EPA ID: CAD059270975 AOC LLC Name: Address: Not reported Address 2: Not reported City: Not reported Not reported Zip: Telephone: Not reported Contact: Not reported Contact Telephone: Not reported Transporter 1 EPA ID: CAR000047696 Not reported

Transporter 1 Emergency Number: Transporter 2 EPA ID: AZD982403586 Transporter 2 Emergency Number: Not reported TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: Not reported TSDF Address 2: Not reported TSDF City: Not reported TSDF Zip: Not reported TSDF Telephone: Not reported

Federal:

2018 Year:

EM Manifest ID: 010431987FLE20170310 D 1

Generator EPA ID: CAD059270975 Shipment Date: 2017-03-10 Manifest Number: 010431987FLE

Line Number: 1 Method Code: H020 Quantity Tons: 6.25000 Quantity Waste: 12500.000000

Quantity Unit: Number of Containers: 20 Type of Container: **NULL** Quantity Type: **NULL** Federal Code: D001

State:

Year: 2018

EM Manifest ID: 010431987FLE20170310_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2017-03-10 010431987FLE Manifest Number:

Line Number: Method Code:

H020 **Quantity Tons:** 6.25000 Quantity Waste: 12500.000000

Quantity Unit: Number of Containers: 20 Type of Container: **NULL** Quantity Type: NULL State Code: 352

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

 Year:
 2018

 EM Manifest ID:
 230677

 Shipment Date:
 12/5/2018

 Receipt Date:
 12/10/2018

 Manifest Number:
 019418286JJK

 Generator EPA ID:
 CAD059270975

 Name:
 AOC LLC

Address: 19991 SEATON AVENUE

Address 2: Not reported City: **PERRIS** 92370-0000 Zip: Telephone: 800-424-9300 Contact: Not reported Contact Telephone: 951-943-9708 Transporter 1 EPA ID: CAR000276295 Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: CAD982030173 Transporter 2 Emergency Number: Not reported

TSDF EPA ID: Not reported CAT000646117

TSDF Name: CHEMICAL WASTE MANAGEMENT INC KETTLEMAN

TSDF Address 1: 35251 OLD SKYLINE ROAD

TSDF Address 2: Not reported
TSDF City: KETTLEMAN CITY
TSDF Zip: 93210-0000
TSDF Telephone: Not reported

State:

 Year:
 2018

 EM Manifest ID:
 230677

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-12-05

 Manifest Number:
 019418286JJK

 Line Number:
 1

Method Code: H132
Quantity Tons: 0.56000
Quantity Waste: 1120.000000
Quantity Unit: P

Number of Containers: 1

Type of Container: Burlap, cloth, paper, or plastic bags

Quantity Type: Pounds State Code: 352

 Year:
 2018

 EM Manifest ID:
 225946

 Shipment Date:
 11/29/2018

 Receipt Date:
 12/20/2018

 Manifest Number:
 019812062JJK

 Generator EPA ID:
 CAD059270975

 Name:
 AOC LLC

Address: 19991 SEATON AVENUE

 Address 2:
 Not reported

 City:
 PERRIS

 Zip:
 92570

 Telephone:
 800-388-7242

 Contact:
 Not reported

 Contact Telephone:
 951-657-5161

 Transporter 1 EPA ID:
 CAR000047696

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Transporter 1 Emergency Number: Not reported AZD982403586 Transporter 2 EPA ID: Transporter 2 Emergency Number: Not reported TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT & RECYCLING LLC

TSDF Address 1: 4343 KENNEDY AVE TSDF Address 2: Not reported TSDF City: EAST CHICAGO

TSDF Zip: 46312 TSDF Telephone: 219-397-3951

Federal:

Year: 2018 EM Manifest ID: 225946 CAD059270975 Generator EPA ID:

Shipment Date: 2018-11-29 Manifest Number: 019812062JJK

Line Number: Method Code: H020 Quantity Tons: 3.85150 Quantity Waste: 7703.000000

Quantity Unit: Number of Containers: 20

Type of Container: Metal drums, barrels, kegs

Quantity Type: Pounds Federal Code: D001

Year: 2018

EM Manifest ID: 009831794FLE20171005_D_1

Shipment Date: 10/5/2017 Receipt Date: 10/17/2017 Manifest Number: 009831794FLE Generator EPA ID: CAD059270975 AOC LLC Name: Address: Not reported Address 2: Not reported City: Not reported Zip: Not reported Not reported Telephone: Contact: Not reported Contact Telephone: Not reported Transporter 1 EPA ID: CAR000047696 Transporter 1 Emergency Number: Not reported

AZD982403586 Transporter 2 EPA ID: Transporter 2 Emergency Number: Not reported TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: Not reported TSDF Address 2: Not reported TSDF City: Not reported TSDF Zip: Not reported TSDF Telephone: Not reported

Federal:

Year: 2018

EM Manifest ID: 009831794FLE20171005 D 1

Generator EPA ID: CAD059270975

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Shipment Date: 2017-10-05 009831794FLE Manifest Number:

Line Number: 1 Method Code: H020 Quantity Tons: 3.40000 Quantity Waste: 6800.000000

Quantity Unit: Р Number of Containers: 18 Type of Container: NULL Quantity Type: NULL Federal Code: D001

State:

Year: 2018

EM Manifest ID: 009831794FLE20171005_D_1

Generator EPA ID: CAD059270975 2017-10-05 Shipment Date: Manifest Number: 009831794FLE

Line Number: H020 Method Code: Quantity Tons: 3.40000 Quantity Waste: 6800.000000

Quantity Unit: Number of Containers: 18 Type of Container: NULL Quantity Type: **NULL** State Code: 352

2018 Year:

EM Manifest ID: 010985265FLE20180102_D_1

Shipment Date: 1/2/2018 Receipt Date: 1/16/2018 Manifest Number: 010985265FLE Generator EPA ID: CAD059270975 AOC LLC Name: Address: Not reported Address 2: Not reported City: Not reported Not reported Zip: Telephone: Not reported Contact: Not reported Contact Telephone: Not reported CAR000047696 Transporter 1 EPA ID: Transporter 1 Emergency Number: Not reported

Transporter 2 EPA ID: AZD982403586 Transporter 2 Emergency Number: Not reported TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: Not reported TSDF Address 2: Not reported TSDF City: Not reported TSDF Zip: Not reported TSDF Telephone: Not reported

Federal:

Year: 2018

Direction Distance Elevation

tance EDR ID Number vation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

EM Manifest ID: 010985265FLE20180102_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-01-02

 Manifest Number:
 010985265FLE

 Line Number:
 1

 Method Code:
 H141

 Quantity Tons:
 0.04400

 Quantity Waste:
 88.000000

 Quantity Unit:
 P

Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D001

Year: 2018

EM Manifest ID: 010985265FLE20180102_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-01-02

 Manifest Number:
 010985265FLE

 Line Number:
 2

 Method Code:
 H061

 Quantity Tons:
 0.45900

 Quantity Waste:
 918.000000

Quantity Unit: P
Number of Containers: 10
Type of Container: NULL
Quantity Type: NULL
Federal Code: D001

State:

Year: 2018

EM Manifest ID: 010985265FLE20180102_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-01-02

 Manifest Number:
 010985265FLE

 Line Number:
 1

 Method Code:
 H141

 Quantity Tons:
 0.04400

 Quantity Waste:
 88.000000

Quantity Unit:PNumber of Containers:1Type of Container:NULLQuantity Type:NULLState Code:212

Year: 2018

EM Manifest ID: 010985265FLE20180102_D_1

 Generator EPA ID:
 CAD059270975

 Shipment Date:
 2018-01-02

 Manifest Number:
 010985265FLE

 Line Number:
 2

 Method Code:
 H061

 Quantity Tons:
 0.45900

 Quantity Waste:
 918.000000

Quantity Unit: P
Number of Containers: 10
Type of Container: NULL

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

NULL Quantity Type: State Code: 331

Year: 2018

EM Manifest ID: 009809958FLE20170119_D_1

1/19/2017 Shipment Date: Receipt Date: 1/31/2017 Manifest Number: 009809958FLE Generator EPA ID: CAD059270975 AOC LLC Name: Address: Not reported Address 2: Not reported City: Not reported Not reported Zip: Not reported Telephone: Contact: Not reported Contact Telephone: Not reported CAR000047696 Transporter 1 EPA ID: Transporter 1 Emergency Number: Not reported Transporter 2 EPA ID: AZD982403586 Transporter 2 Emergency Number: Not reported

TSDF EPA ID: IND000646943

TSDF Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Address 1: Not reported TSDF Address 2: Not reported TSDF City: Not reported TSDF Zip: Not reported TSDF Telephone: Not reported

Federal:

Year: 2018

EM Manifest ID: 009809958FLE20170119 D 1

Generator EPA ID: CAD059270975 Shipment Date: 2017-01-19 Manifest Number: 009809958FLE

Line Number:

Method Code: H020 **Quantity Tons:** 1.20800 Quantity Waste: 2416.000000

Quantity Unit: Number of Containers: Type of Container: **NULL** Quantity Type: **NULL** Federal Code: D001

Year:

EM Manifest ID: 009809958FLE20170119_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2017-01-19 009809958FLE Manifest Number:

Line Number: 2 Method Code: H010 Quantity Tons: 3.78550 Quantity Waste: 7571.000000

Quantity Unit: Number of Containers: 18 Type of Container: NULL

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

NULL Quantity Type: D001 Federal Code:

State:

Year: 2018

EM Manifest ID: 009809958FLE20170119_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2017-01-19 Manifest Number: 009809958FLE

Line Number: Method Code: H020 1.20800 Quantity Tons: Quantity Waste: 2416.000000

Quantity Unit: Number of Containers: 7 Type of Container: NULL Quantity Type: NULL State Code: 352

Year: 2018

EM Manifest ID: 009809958FLE20170119_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2017-01-19 009809958FLE Manifest Number:

Line Number: H010 Method Code: Quantity Tons: 3.78550 **Quantity Waste:** 7571.000000

Quantity Unit: 18 Number of Containers: Type of Container: NULL Quantity Type: NULL State Code: 352

2018 Year:

EM Manifest ID: 009809958FLE20170119_D_1

Generator EPA ID: CAD059270975 Shipment Date: 2017-01-19 009809958FLE Manifest Number:

Line Number: 3 Method Code: H110 Quantity Tons: 1.47550 Quantity Waste: 2951.000000

Quantity Unit: Number of Containers: 6 Type of Container: NULL Quantity Type: NULL State Code: 134

Additional Info:

Year: 2017

Gen EPA ID: CAD059270975

Shipment Date: 20171117

Creation Date: 10/16/2018 18:31:07

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Receipt Date: 20171120 Manifest ID: 017998042JJK Trans EPA ID: CAR000045963 Trans Name: ARO TRUCKING Trans 2 EPA ID: Not reported Not reported Trans 2 Name: TSDF EPA ID: NVT330010000 **US ECOLOGY** Trans Name: TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

Not reported RCRA Code:

H132 - Landfill Or Surface Impoundment That Will Be Closed As Meth Code:

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 33.712 Waste Quantity: 40 Quantity Unit:

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

Shipment Date: 20171005

Creation Date: 7/30/2018 18:30:10

Receipt Date: 20171017 Manifest ID: 009831794FLE Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

ENGLUND EQUIPMENT CO Trans 2 Name:

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 3.4 Waste Quantity: 6800 Quantity Unit:

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

Shipment Date: 20170919

Creation Date: 10/18/2018 18:30:10

Receipt Date: 20170920 Manifest ID: 017361715JJK Trans EPA ID: CAR000045963 Trans Name: ARO TRUCKING Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: NVT330010000 Trans Name: **US ECOLOGY**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

TSDF Alt EPA ID: Not reported Not reported TSDF Alt Name:

352 - Other organic solids Waste Code Description:

RCRA Code: Not reported

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 33.712 Waste Quantity: 40 Quantity Unit: Υ

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

20170710 Shipment Date:

Creation Date: 7/27/2018 18:30:18 Receipt Date: 20170714 Manifest ID: 010985703FLE Trans EPA ID: AZD982403586

Trans Name: **ENGLUND EQUIPMENT CO**

Trans 2 EPA ID: Not reported Not reported Trans 2 Name: TSDF EPA ID: IND000646943

TRADEBE TREATMENT AND RECYCLING LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 0.675 Waste Quantity: 1350 Quantity Unit:

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

Shipment Date: 20170710

Creation Date: 7/17/2018 18:30:34

Receipt Date: 20170712 Manifest ID: 015817050JJK Trans EPA ID: CAR000045963 Trans Name: **ARO TRUCKING** Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: NVT330010000 Trans Name: **US ECOLOGY** TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: Not reported

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 33.712 Waste Quantity: 40

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Quantity Unit:

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

Shipment Date: 20170710

Creation Date: 7/27/2018 18:30:18

Receipt Date: 20170714 Manifest ID: 010985703FLE Trans EPA ID: AZD982403586

ENGLUND EQUIPMENT CO Trans Name:

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported IND000646943 TSDF EPA ID:

TRADEBE TREATMENT AND RECYCLING LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 18.75 Waste Quantity: 37500 Quantity Unit:

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

Shipment Date: 20170420

Creation Date: 5/12/2018 18:31:59

Receipt Date: 20170421 Manifest ID: 017035269JJK Trans EPA ID: CAR000045963 Trans Name: ARO TRUCKING Trans 2 EPA ID: Not reported Trans 2 Name: Not reported NVT330010000 TSDF EPA ID: Trans Name: **US ECOLOGY** TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: Not reported

H132 - Landfill Or Surface Impoundment That Will Be Closed As Meth Code:

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 33.712 Waste Quantity: 40 Quantity Unit:

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

Shipment Date: 20170413

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

 Creation Date:
 7/25/2018 18:30:29

 Receipt Date:
 20170425

 Manifest ID:
 010435349FLE

 Trans EPA ID:
 CAR000047696

 Trans Name:
 UNIVAR USA INC

 Trans 2 EPA ID:
 AZD982403586

Trans 2 Name: ENGLUND EQUIPMENT CO

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons:6.0925Waste Quantity:12185Quantity Unit:P

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

Shipment Date: 20170413

Creation Date: 7/25/2018 18:30:29

 Receipt Date:
 20170425

 Manifest ID:
 010435349FLE

 Trans EPA ID:
 CAR000047696

 Trans Name:
 UNIVAR USA INC

 Trans 2 EPA ID:
 AZD982403586

Trans 2 Name: ENGLUND EQUIPMENT CO

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 0.9
Waste Quantity: 1800
Quantity Unit: P

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

 Shipment Date:
 20170310

 Creation Date:
 8/1/2018 18:31:24

 Receipt Date:
 20170321

 Manifest ID:
 010431987FLE

 Trans EPA ID:
 CAR000047696

 Trans Name:
 UNIVAR USA INC

 Trans 2 EPA ID:
 AZD982403586

Trans 2 Name: ENGLUND EQUIPMENT CO

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

TSDF Alt EPA ID: Not reported Not reported TSDF Alt Name:

352 - Other organic solids Waste Code Description:

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 6.25 12500 Waste Quantity: Quantity Unit:

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

Additional Info:

Year: 2016

Gen EPA ID: CAD059270975

Shipment Date: 20151203

Creation Date: 6/10/2016 18:32:33

Receipt Date: 20151203 Manifest ID: 014911072JJK Trans EPA ID: CAR000188201

ENVIRONMENTAL RECOVERY SERVICES INC Trans Name:

Trans 2 EPA ID: CAR000045963 Trans 2 Name: A R O TRUCKING TSDF EPA ID: NVT330010000 Trans Name: **US ECOLOGY** TSDF Alt EPA ID: Not reported Not reported TSDF Alt Name:

352 - Other organic solids Waste Code Description:

RCRA Code: Not reported

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 33.712 40 Waste Quantity: Quantity Unit:

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

Shipment Date: 20151117

Creation Date: 9/27/2016 18:30:52

Receipt Date: 20151202 Manifest ID: 014377379JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Meth Code:

Quantity Tons:

Waste Quantity:

Quantity Unit:

- Not reported
0.525

1050

P

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

Shipment Date: 20151116

Creation Date: 9/27/2016 18:30:52

 Receipt Date:
 20151202

 Manifest ID:
 014377105JJK

 Trans EPA ID:
 CAR000047696

 Trans Name:
 UNIVAR USA INC

 Trans 2 EPA ID:
 AZD982403586

Trans 2 Name: ENGLUND EQUIPMENT CO

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code:- Not reportedQuantity Tons:1.284Waste Quantity:2568Quantity Unit:P

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

Shipment Date: 20151116

Creation Date: 9/27/2016 18:30:52

 Receipt Date:
 20151202

 Manifest ID:
 014377378JJK

 Trans EPA ID:
 CAR000047696

 Trans Name:
 UNIVAR USA INC

 Trans 2 EPA ID:
 AZD982403586

Trans 2 Name: ENGLUND EQUIPMENT CO

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 223 - Unspecified oil-containing waste

RCRA Code: Not reported

Meth Code: - Not reported

Quantity Tons:

Waste Quantity: 2000 Quantity Unit: P

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 Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Shipment Date: 20151116

9/27/2016 18:30:52 Creation Date:

Receipt Date: 20151202 Manifest ID: 014377105JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 134 - Aqueous solution with <10% total organic residues

RCRA Code: Not reported Meth Code: - Not reported 5.1995 Quantity Tons: Waste Quantity: 10399 Quantity Unit:

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

Shipment Date: 20151116

Creation Date: 9/27/2016 18:30:52

Receipt Date: 20151202 Manifest ID: 014377105JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001 - Not reported Meth Code: Quantity Tons: 9.096 Waste Quantity: 18192 Quantity Unit:

Additional Code 1: Not reported Additional Code 2: Not reported Not reported Additional Code 3: Additional Code 4: Not reported Additional Code 5: Not reported

Shipment Date: 20150909 Creation Date: 2/5/2016 22:15:23 Receipt Date: 20150909 Manifest ID: 015052982JJK Trans EPA ID: CAR000045963 Trans Name: ARO TRKG Trans 2 EPA ID: Not reported Not reported Trans 2 Name: TSDF EPA ID: NVT330010000

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Trans Name: **US ECOLOGY** TSDF Alt EPA ID: Not reported Not reported TSDF Alt Name:

Waste Code Description: 352 - Other organic solids

RCRA Code: Not reported

H132 - Landfill Or Surface Impoundment That Will Be Closed As Meth Code:

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 33.712 Waste Quantity: 40 Quantity Unit: Υ

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

Shipment Date: 20150818

Creation Date: 2/26/2016 22:15:15

Receipt Date: 20150901 Manifest ID: 014367594JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

TRADEBE TREATMENT AND RECYCLING LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 0.9085 Waste Quantity: 1817 **Quantity Unit:**

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

Shipment Date: 20150818

Creation Date: 2/26/2016 22:15:15

Receipt Date: 20150901 Manifest ID: 014367594JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

TRADEBE TREATMENT AND RECYCLING LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 0.286 Waste Quantity: 572

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Quantity Unit:

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

Shipment Date: 20150818

Creation Date: 2/26/2016 22:15:15

Receipt Date: 20150901 Manifest ID: 014367594JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

TRADEBE TREATMENT AND RECYCLING LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

134 - Aqueous solution with <10% total organic residues Waste Code Description:

RCRA Code: Not reported

Meth Code: H110 - Not reported

Quantity Tons: 5.466 Waste Quantity: 10932 Quantity Unit:

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

Additional Info:

Year: 2015

Gen EPA ID: CAD059270975

Shipment Date: 20151203

Creation Date: 6/10/2016 18:32:33 Receipt Date: 20151203 Manifest ID: 014911072JJK Trans EPA ID: CAR000188201

ENVIRONMENTAL RECOVERY SERVICES INC Trans Name:

Trans 2 EPA ID: CAR000045963 Trans 2 Name: A R O TRUCKING TSDF EPA ID: NVT330010000 **US ECOLOGY** Trans Name: TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: Not reported

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 33.712 40 Waste Quantity: Quantity Unit: Υ

Additional Code 1: Not reported Additional Code 2: Not reported Additional Code 3: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Additional Code 4: Not reported Additional Code 5: Not reported

Shipment Date: 20151117

Creation Date: 9/27/2016 18:30:52 Receipt Date: 20151202 Manifest ID: 014377379JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

ENGLUND EQUIPMENT CO Trans 2 Name:

TSDF EPA ID: IND000646943

TRADEBE TREATMENT AND RECYCLING LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

D001 RCRA Code:

Meth Code: - Not reported Quantity Tons: 0.525 1050 Waste Quantity: Quantity Unit:

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

Shipment Date: 20151116

Creation Date: 9/27/2016 18:30:52

Receipt Date: 20151202 Manifest ID: 014377378JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

ENGLUND EQUIPMENT CO Trans 2 Name:

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 223 - Unspecified oil-containing waste

RCRA Code: Not reported Meth Code: - Not reported

Quantity Tons: 2000 Waste Quantity: Quantity Unit:

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

Shipment Date: 20151116

9/27/2016 18:30:52 Creation Date:

Receipt Date: 20151202 Manifest ID: 014377105JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Trans 2 EPA ID: AZD982403586

ENGLUND EQUIPMENT CO Trans 2 Name:

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

134 - Aqueous solution with <10% total organic residues Waste Code Description:

RCRA Code: Not reported Meth Code: - Not reported Quantity Tons: 5.1995 10399 Waste Quantity: Quantity Unit:

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

Shipment Date: 20151116

9/27/2016 18:30:52 Creation Date: Receipt Date: 20151202 Manifest ID: 014377105JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: D001 Meth Code: - Not reported **Quantity Tons:** 1.284 2568 Waste Quantity: Quantity Unit: Additional Code 1:

Not reported Additional Code 2: Not reported Additional Code 3: Not reported Not reported Additional Code 4: Additional Code 5: Not reported

Shipment Date: 20151116

Creation Date: 9/27/2016 18:30:52 Receipt Date: 20151202 Manifest ID: 014377105JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC

Trans 2 EPA ID: AZD982403586 Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943 Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: - Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Quantity Tons: 9.096 Waste Quantity: 18192 Quantity Unit:

Additional Code 1: Not reported Additional Code 2: Not reported Not reported Additional Code 3: Additional Code 4: Not reported Additional Code 5: Not reported

Shipment Date: 20150909 Creation Date: 2/5/2016 22:15:23 Receipt Date: 20150909 015052982JJK Manifest ID: Trans EPA ID: CAR000045963 Trans Name: **ARO TRKG** Trans 2 EPA ID: Not reported Trans 2 Name: Not reported NVT330010000 TSDF EPA ID: Trans Name: **US ECOLOGY** TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: Not reported

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

33.712 Quantity Tons: Waste Quantity: 40 Quantity Unit:

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

Shipment Date: 20150818

Creation Date: 2/26/2016 22:15:15

Receipt Date: 20150901 Manifest ID: 014367594JJK CAR000047696 Trans EPA ID: Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 134 - Aqueous solution with <10% total organic residues

RCRA Code: Not reported Meth Code: H110 - Not reported

5.466 Quantity Tons: Waste Quantity: 10932 Quantity Unit:

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

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Shipment Date: 20150818 2/26/2016 22:15:15 Creation Date: Receipt Date: 20150901 Manifest ID: 014367594JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported Not reported TSDF Alt Name:

352 - Other organic solids Waste Code Description:

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 0.9085 Waste Quantity: 1817 Quantity Unit:

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

Shipment Date: 20150818 Creation Date: 2/26/2016 22:15:15 Receipt Date: 20150901 Manifest ID: 014367594JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

AZD982403586

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 0.286 Waste Quantity: 572 Quantity Unit:

Additional Code 1: Not reported Not reported Additional Code 2: Not reported Additional Code 3: Additional Code 4: Not reported Additional Code 5: Not reported

Additional Info:

Trans 2 EPA ID:

Year: 2014

Gen EPA ID: CAD059270975

Shipment Date: 20141231

Creation Date: 6/25/2015 22:16:11 Receipt Date: 20150112 Manifest ID: 013691568JJK Trans EPA ID: CAR000188201

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Trans Name: **ENVIRONMENTAL RECOVERY SERVICES INC**

CAR000093906 Trans 2 EPA ID: Trans 2 Name: ZAMORA TRUCKING TSDF EPA ID: NVT330010000 Trans Name: **US ECOLOGY** TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: Not reported

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 33.712 Waste Quantity: 40 Quantity Unit:

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

Shipment Date: 20141209

Creation Date: 6/23/2015 22:15:22 Receipt Date: 20141216 Manifest ID: 013004043JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 134 - Aqueous solution with <10% total organic residues

RCRA Code: Not reported Meth Code: - Not reported Quantity Tons: 9.35 18700 Waste Quantity:

Quantity Unit: 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

Shipment Date: 20141209

Creation Date: 6/23/2015 22:15:22

Receipt Date: 20141216 Manifest ID: 013004043JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

Not reported TSDF Alt EPA ID: TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

RCRA Code: D001

H020 - Solvents Recovery Meth Code:

Quantity Tons: 1.35 Waste Quantity: 2700 Quantity Unit:

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

Shipment Date: 20141209 Creation Date: 6/23/2015 22:15:22

Receipt Date: 20141216 Manifest ID: 013004043JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

Trans 2 Name: **ENGLUND EQUIPMENT CO**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.9 1800 Waste Quantity: Quantity Unit:

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

Shipment Date: 20141209 Creation Date: 6/23/2015 22:15:22

Receipt Date: 20141216 Manifest ID: 013004043JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

ENGLUND EQUIPMENT CO Trans 2 Name:

TSDF EPA ID: IND000646943

TRADEBE TREATMENT AND RECYCLING LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 272 - Polymeric resin waste

RCRA Code: D001 Meth Code: H020 - Solvents Recovery

Quantity Tons: 2.925 5850 Waste Quantity: Quantity Unit:

Additional Code 1: Not reported Additional Code 2: Not reported Additional Code 3: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Additional Code 4: Not reported Additional Code 5: Not reported

Shipment Date: 20141001

Creation Date: 2/13/2015 22:15:17 Receipt Date: 20141001 Manifest ID: 013367543JJK Trans EPA ID: CAR000093906 Trans Name: ZAMORA TRUCKING

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: NVT330010000 **US ECOLOGY** Trans Name: TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: Not reported

H132 - Landfill Or Surface Impoundment That Will Be Closed As Meth Code:

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 33.712 Waste Quantity: 40 Quantity Unit:

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

Shipment Date: 20140911

Creation Date: 2/13/2015 22:15:12

Receipt Date: 20140923 Manifest ID: 013004549JJK Trans EPA ID: CAR000047696 Trans Name: UNIVAR USA INC Trans 2 EPA ID: AZD982403586

ENGLUND EQUIPMENT CO Trans 2 Name:

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 181 - Other inorganic solid waste Organics

RCRA Code: U190

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135) 0.1

Quantity Tons: Waste Quantity: 200 Quantity Unit: U147 Additional Code 1: Additional Code 2: Not reported Additional Code 3: Not reported Additional Code 4: Not reported Additional Code 5: Not reported

Shipment Date: 20140911

Creation Date: 2/13/2015 22:15:12

Receipt Date: 20140923 Manifest ID: 013004549JJK

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

 Trans EPA ID:
 CAR000047696

 Trans Name:
 UNIVAR USA INC

 Trans 2 EPA ID:
 AZD982403586

Trans 2 Name: ENGLUND EQUIPMENT CO

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons:0.875Waste Quantity:1750Quantity Unit:P

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

Shipment Date: 20140911

Creation Date: 2/13/2015 22:15:12

 Receipt Date:
 20140923

 Manifest ID:
 013004549JJK

 Trans EPA ID:
 CAR000047696

 Trans Name:
 UNIVAR USA INC

 Trans 2 EPA ID:
 AZD982403586

Trans 2 Name: ENGLUND EQUIPMENT CO

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons:0.45Waste Quantity:900Quantity Unit:P

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

Shipment Date: 20140911

Creation Date: 2/13/2015 22:15:12

 Receipt Date:
 20140923

 Manifest ID:
 013004549JJK

 Trans EPA ID:
 CAR000047696

 Trans Name:
 UNIVAR USA INC

 Trans 2 EPA ID:
 AZD982403586

Trans 2 Name: ENGLUND EQUIPMENT CO

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Waste Code Description: 134 - Aqueous solution with <10% total organic residues

RCRA Code: Not reported - Not reported Meth Code:

Quantity Tons: 3.25 Waste Quantity: 6500 **Quantity Unit:**

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

Additional Info:

Year: 2013

Gen EPA ID: CAD059270975

Shipment Date: 20131213 Creation Date: 6/6/2014 22:15:25 Receipt Date: 20140111 Manifest ID: 012154620JJK Trans EPA ID: CAR000163097

Trans Name: K-VAC ENVIRONMENTAL SERVICES

Trans 2 EPA ID: CAR000187922

Trans 2 Name: **RUST & SONS TRUCKING**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported Waste Code Description: - Not reported Not reported RCRA Code:

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0625 Waste Quantity: 125 Quantity Unit: 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

Shipment Date: 20131213 Creation Date: 6/6/2014 22:15:25 Receipt Date: 20140111 Manifest ID: 012154620JJK Trans EPA ID: CAR000163097

Trans Name: K-VAC ENVIRONMENTAL SERVICES

Trans 2 EPA ID: CAR000187922

RUST & SONS TRUCKING Trans 2 Name:

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported Not reported TSDF Alt Name: - Not reported Waste Code Description: RCRA Code: Not reported

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Quantity Tons: 0.04 Waste Quantity: 80 Quantity Unit:

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

Shipment Date: 20131213 Creation Date: 6/6/2014 22:15:25 Receipt Date: 20140111 Manifest ID: 012154620JJK Trans EPA ID: CAR000163097

Trans Name: K-VAC ENVIRONMENTAL SERVICES

Trans 2 EPA ID: CAR000187922

Trans 2 Name: **RUST & SONS TRUCKING**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 272 - Polymeric resin waste

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 0.15 Waste Quantity: 300 Quantity Unit:

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

Shipment Date: 20131213 6/6/2014 22:15:25 Creation Date: Receipt Date: 20140111 Manifest ID: 012154620JJK Trans EPA ID: CAR000163097

K-VAC ENVIRONMENTAL SERVICES Trans Name:

Trans 2 EPA ID: CAR000187922

Trans 2 Name: **RUST & SONS TRUCKING**

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code:

Meth Code: H020 - Solvents Recovery

Quantity Tons:

Waste Quantity: 2000 Quantity Unit:

Additional Code 1: Not reported Not reported Additional Code 2: Additional Code 3: Not reported Additional Code 4: Not reported Additional Code 5: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Shipment Date: 20131017 3/6/2014 22:15:09 Creation Date: Receipt Date: 20131023 Manifest ID: 011615377JJK Trans EPA ID: CAR000188201

ENVIRONMENTAL RECOVERY SERVICES INC Trans Name:

Trans 2 EPA ID: CAR000189928 Trans 2 Name: **NV TRANSPORT** TSDF EPA ID: NVT330010000 Trans Name: **US ECOLOGY** TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: Not reported

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 16.856 Waste Quantity: 20 Quantity Unit:

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

Shipment Date: 20130913 Creation Date: 8/5/2015 14:35:08 Receipt Date: 20130926 Manifest ID: 011905282JJK Trans EPA ID: CAR000163097

K-VAC ENVIRONMENTAL SERVICES Trans Name:

Trans 2 EPA ID: CAR000187922

Trans 2 Name: **RUST & SON'S TRUCKING**

TSDF EPA ID: TND000772186

TRADEBE TREATMENT AND RECYCLING OF TN LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site

Quantity Tons: 0.2 Waste Quantity: 400 Quantity Unit:

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

Shipment Date: 20130913 Creation Date: 8/5/2015 14:35:08 Receipt Date: 20130926 Manifest ID: 011905282JJK Trans EPA ID: CAR000163097

K-VAC ENVIRONMENTAL SERVICES Trans Name:

Trans 2 EPA ID: CAR000187922

Trans 2 Name: **RUST & SON'S TRUCKING**

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

TSDF EPA ID: TND000772186

Trans Name: TRADEBE TREATMENT AND RECYCLING OF TN LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 134 - Aqueous solution with <10% total organic residues

RCRA Code: Not reported
Meth Code: - Not reported

Quantity Tons:7.2Waste Quantity:14400Quantity Unit:P

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

 Shipment Date:
 20130913

 Creation Date:
 8/5/2015 14:35:08

 Receipt Date:
 20130926

 Manifest ID:
 011905282JJK

 Trans EPA ID:
 CAR000163097

Trans Name: K-VAC ENVIRONMENTAL SERVICES

Trans 2 EPA ID: CAR000187922
Trans 2 Name: RUST & SON'S TRUCKING

TSDF EPA ID: TND000772186

Trans Name: TRADEBE TREATMENT AND RECYCLING OF TN LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site

Quantity Tons:0.79Waste Quantity:1580Quantity Unit:P

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 Not reported

 Shipment Date:
 20130913

 Creation Date:
 8/5/2015 14:35:08

 Receipt Date:
 20130926

 Manifest ID:
 011905282JJK

 Trans EPA ID:
 CAR000163097

Trans Name: K-VAC ENVIRONMENTAL SERVICES

Trans 2 EPA ID: CAR000187922

Trans 2 Name: RUST & SON'S TRUCKING

TSDF EPA ID: TND000772186

Trans Name: TRADEBE TREATMENT AND RECYCLING OF TN LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site

Quantity Tons: 1.125
Waste Quantity: 2250

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Quantity Unit:

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

Shipment Date: 20130821 Creation Date: 1/7/2014 22:15:14 Receipt Date: 20130903 Manifest ID: 011905005JJK Trans EPA ID: CAR000163087

K-VAC ENVIRONMENTAL SERVICES Trans Name:

Trans 2 EPA ID: CAR000187922

Trans 2 Name: **RUST & SONS TRUCKING**

TSDF EPA ID: TND000772186

TRADEBE TREATMENT AND RECYCLING OF TN LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 272 - Polymeric resin waste

RCRA Code: D001

Meth Code: - Not reported

Quantity Tons: 0.45 Waste Quantity: 900 Quantity Unit:

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

Additional Info:

Year: 2012

Gen EPA ID: CAD059270975

Shipment Date: 20121220

Creation Date: 1/28/2014 22:15:08 Receipt Date: Not reported Manifest ID: 010775431JJK Trans EPA ID: OKD981588791 Trans Name: TRIAD TRANSPORT Trans 2 EPA ID: Not reported

Trans 2 Name: Not reported TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001 Meth Code: - Not reported Quantity Tons: 1.225 2450 Waste Quantity: Quantity Unit:

Additional Code 1: Not reported Additional Code 2: Not reported Additional Code 3: Not reported Additional Code 4: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Additional Code 5: Not reported

Shipment Date: 20121220

Creation Date: 1/28/2014 22:15:08 Receipt Date: Not reported Manifest ID: 010775431JJK Trans EPA ID: OKD981588791 Trans Name: TRIAD TRANSPORT

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: D001

Meth Code: - Not reported

Quantity Tons: 0.9 Waste Quantity: 1800 Р **Quantity Unit:**

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

Shipment Date: 20121220

Creation Date: 1/28/2014 22:15:08 Receipt Date: Not reported 010775431JJK Manifest ID: Trans EPA ID: OKD981588791 TRIAD TRANSPORT Trans Name:

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported TSDF EPA ID: IND000646943

TRADEBE TREATMENT AND RECYCLING LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 272 - Polymeric resin waste

RCRA Code: D001

Meth Code: - Not reported

Quantity Tons: 2.2 Waste Quantity: 4400 Quantity Unit:

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

Shipment Date: 20121220

Creation Date: 1/28/2014 22:15:08 Not reported Receipt Date: Manifest ID: 010775431JJK Trans EPA ID: OKD981588791 Trans Name: TRIAD TRANSPORT

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Trans 2 Name: Not reported IND000646943 TSDF EPA ID:

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

134 - Aqueous solution with <10% total organic residues Waste Code Description:

Not reported RCRA Code: Meth Code: - Not reported **Quantity Tons:** 1.925 Waste Quantity: 3850 **Quantity Unit:**

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

Shipment Date: 20121026

Creation Date: 3/22/2013 22:15:17 Receipt Date: 20121031 010563617JJK Manifest ID: Trans EPA ID: CAR000188201

Trans Name: **ENVIRONMENTAL RECOVERY SERVICES INC**

Trans 2 EPA ID: CAR000189928 Trans 2 Name: **NV TRANSPORT** TSDF EPA ID: NVT330010000 Trans Name: **US ECOLOGY** TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

352 - Other organic solids Waste Code Description:

RCRA Code: Not reported

Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As

Landfill(To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 33.712 40 Waste Quantity: Quantity Unit:

Additional Code 1: Not reported Additional Code 2: Not reported Additional Code 3: Not reported Not reported Additional Code 4: Additional Code 5: Not reported

Shipment Date: 20120928

Creation Date: 4/3/2013 22:15:15 Receipt Date: 20121015 Manifest ID: 007726190JJK Trans EPA ID: OKD981588791

Trans Name: TRIAD TRANSPORT INC

Trans 2 EPA ID: INR000123497

Trans 2 Name: THUNDERBIRD TRUCKING LLC

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Quantity Tons: 0.295 Waste Quantity: 590 Quantity Unit:

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

Shipment Date: 20120928

Creation Date: 3/26/2013 22:15:29

Receipt Date: 20121008 Manifest ID: 007726187JJK Trans EPA ID: OKD981588791

Trans Name: TRIAD TRANSPORT INC

Trans 2 EPA ID: Not reported Trans 2 Name: Not reported IND000646943 TSDF EPA ID:

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 0.4 Waste Quantity: 800 Quantity Unit:

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

Shipment Date: 20120928 4/3/2013 22:15:15 Creation Date: Receipt Date: 20121015 Manifest ID: 007726190JJK Trans EPA ID: OKD981588791

TRIAD TRANSPORT INC Trans Name:

Trans 2 EPA ID: INR000123497

THUNDERBIRD TRUCKING LLC Trans 2 Name:

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported Waste Code Description: - Not reported

RCRA Code:

Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site

Quantity Tons: 1.8025 Waste Quantity: 3605 Quantity Unit:

Additional Code 1: Not reported Not reported Additional Code 2: Additional Code 3: Not reported Additional Code 4: Not reported Additional Code 5: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Shipment Date: 20120928 4/3/2013 22:15:15 Creation Date: Receipt Date: 20121015 Manifest ID: 007726190JJK Trans EPA ID: OKD981588791

TRIAD TRANSPORT INC Trans Name:

Trans 2 EPA ID: INR000123497

Trans 2 Name: THUNDERBIRD TRUCKING LLC

TSDF EPA ID: IND000646943

Trans Name: TRADEBE TREATMENT AND RECYCLING LLC

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 181 - Other inorganic solid waste Organics

RCRA Code: U190

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.4495 Waste Quantity: 899 Quantity Unit:

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

Shipment Date: 20120928 Creation Date: 4/3/2013 22:15:15 Receipt Date: 20121015 Manifest ID: 007726190JJK Trans EPA ID: OKD981588791

TRIAD TRANSPORT INC Trans Name:

Trans 2 EPA ID: INR000123497

Trans 2 Name: THUNDERBIRD TRUCKING LLC

TSDF EPA ID: IND000646943

TRADEBE TREATMENT AND RECYCLING LLC Trans Name:

TSDF Alt EPA ID: Not reported TSDF Alt Name: Not reported

Waste Code Description: 352 - Other organic solids

RCRA Code: D001

Meth Code: H020 - Solvents Recovery

Quantity Tons: 0.7485 Waste Quantity: 1497 Quantity Unit:

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

CERS:

Name: AOC LLC

19991 SEATON AVE Address: **PERRIS, CA 92570** City,State,Zip:

Site ID: 92587 CERS ID: 10153643

CERS Description: Chemical Storage Facilities

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Violations:

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 08-13-2015

Citation: HSC 6.67 25270.6(b) - California Health and Safety Code, Chapter 6.67,

Section(s) 25270.6(b)

Violation Description: Failure to pay the APSA Program fee.

Violation Notes: Returned to compliance on 09/12/2017. Verified permit fees paid

Violation Division: Riverside County Department of Env Health

Violation Program: APSA Violation Source: CERS,

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 08-13-2015

Citation: HSC 6.11 25404.1 - California Health and Safety Code, Chapter 6.11,

Section(s) 25404.1

Violation Description: Failure to maintain a valid permit.

Violation Notes: Returned to compliance on 09/12/2017. Verified permit fees paid

Violation Division: Riverside County Department of Env Health

Violation Program: APSA
Violation Source: CERS,

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 01-06-2009

Citation: HSC 6.67 Multiple Sections - California Health and Safety Code,

Chapter 6.67, Section(s) Multiple Sections

Violation Description: RCRA Large Quantity Generator Program - Administration/Documentation -

General

Violation Notes: Returned to compliance on 03/06/2009.
Violation Division: Riverside County Department of Env Health

Violation Program: HWLQG Violation Source: CERS,

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 10-22-2019

 Citation:
 Un-Specified

Violation Description: Business Plan Program - Operations/Maintenance - General Local

Ordinance

Violation Notes: Returned to compliance on 11/07/2019. OBSERVATION: Required NFPA-704

signs were not posted. CORRECTIVE ACTION: Owner/operator shall research chemical safety data sheets and post proper NFPA-704 signs. Signs shall be posted on maintenance building and the propane rack and faded Propane label on storage rack needs to be replaced. Submit

photos to this department.

Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 92587
Site Name: AOC LLC
Violation Date: 10-22-2019
Citation: Un-Specified

Violation Description: Business Plan Program - Operations/Maintenance - General Local

Ordinance

Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Violation Notes: Returned to compliance on 11/07/2019. OBSERVATION: Required NFPA-704

signs were not posted. CORRECTIVE ACTION: Owner/operator shall research chemical safety data sheets and post proper NFPA-704 signs. Signs shall be posted on the maintenance building and the Propane

storage rack. Submit photos to this department. Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Evaluation:

Violation Division:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-13-2015

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: HWLQG Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-22-2019

Violations Found: N

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: 08-13-2015

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,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-13-2015

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Inspection with Joe

Eval Division: Riverside County Department of Env Health

Eval Program: CE Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-13-2015 Violations Found: Yes

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: 10-22-2019

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: CE **Eval Source:** CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-22-2019 Violations Found:

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: 01-06-2009

Violations Found: Yes

Routine done by local agency Eval Type:

Eval Notes: Inspector Name: Riverside County

Eval Division: Riverside County Department of Env Health

Eval Program: **HWLQG** Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-22-2019

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: **HWLQG Eval Source:** CERS.

Enforcement Action:

92587 Site ID: Site Name: AOC LLC

Site Address: 19991 SEATON AVE

Site City: **PERRIS** Site Zip: 92570 Enf Action Date: 01-06-2009

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Riverside County Department of Env Health

Enf Action Program: **HWLQG** Enf Action Source: CERS,

Site ID: 92587 Site Name: AOC LLC

Site Address: 19991 SEATON AVE

Site City: **PERRIS** Site Zip: 92570 Enf Action Date: 08-13-2015

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Direction Distance Elevation

evation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Enf Action Division: Riverside County Department of Env Health

Enf Action Program: APSA Enf Action Source: CERS,

Coordinates:

 Site ID:
 92587

 Facility Name:
 AOC LLC

 Env Int Type Code:
 APSA

 Program ID:
 10153643

 Coord Name:
 Not reported

Ref Point Type Desc: Center of a facility or station.,

Latitude: 33.830990 Longitude: -117.262730

Affiliation:

Affiliation Type Desc: Company Official

Entity Name:

Entity Title:

Plant Manager

Affiliation Address:

Not reported

Affiliation City:

Not reported

Affiliation State:

Not reported

Not reported

Affiliation Country:

Not reported

Affiliation Zip:

92570

Affiliation Phone: ,

Affiliation Type Desc: Facility Contact

Entity Name: JUAN MONTALVO EHS LEADER

Entity Title: Not reported
Affiliation Address: 19991 SEATON AVE

Affiliation City: PERRIS
Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 92570
Affiliation Phone: 9519439708,

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: Facility Mailing Address

Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 19991 SEATON AVE

Affiliation City: PERRIS
Affiliation State: CA
Affiliation Country: Not reported

Affiliation Zip: Not reported 92570-0818

Affiliation Phone: ,

Affiliation Type Desc: Legal Owner

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

THE ALPHA CORPORATION OF TENNESSEE Entity Name:

Entity Title: Not reported Affiliation Address: 950 HWY 57 STREET Affiliation City: COLLIERVILLE

Affiliation State: TN

Affiliation Country: **United States** Affiliation Zip: 38017-0818 Affiliation Phone: (901) 854-2800,

Affiliation Type Desc: Operator **Entity Name:** AOC, LLC Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Not reported Affiliation Country: Affiliation Zip: Not reported Affiliation Phone: (951) 943-9708,

Affiliation Type Desc: **Property Owner**

THE ALPHA CORPORATION OF TENNESSEE **Entity Name:**

Entity Title: Not reported

Affiliation Address: 950 HWY 57 STREET Affiliation City: COLLIERVILLE Affiliation State: ΤN Affiliation Country: **United States** 38017-0818 Affiliation Zip:

Affiliation Phone: (901) 854-2800, Affiliation Type Desc: **Environmental Contact**

Entity Name: Juan Montalvo **Entity Title:** Not reported

Affiliation Address: 19991 SEATON AVENUE

Affiliation City: **PERRIS** Affiliation State: Affiliation Country: Not reported Affiliation Zip: 92570 Affiliation Phone:

Affiliation Type Desc: **Facility Owner**

THE ALPHA CORPORATION OF TENNESSEE Entity Name:

Entity Title: Not reported

Affiliation Address: 950 HWY 57 STREET COLLIERVILLE Affiliation City:

Affiliation State: TN

Affiliation Country: Not reported Affiliation Zip: 380170818 9018542850, Affiliation Phone:

Affiliation Type Desc: Identification Signer Entity Name: Juan Montalvo

Entity Title: Environmental Health and Safety Leader

Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported

Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Affiliation Phone:

Affiliation Type Desc: **Public Contact** Entity Name: JIM EARL **Entity Title:** Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: 92570 9519439702, Affiliation Phone:

Affiliation Type Desc: **Document Preparer Entity Name:** JUAN MONTALVO 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:

Affiliation Type Desc: Onsite Treatment Unit Owner Operator

Entity Name: Juan Montalvo

Entity Title: Environmental Health and Safety Leader

Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported

Affiliation Phone: ,

Affiliation Type Desc: Parent Company THE ALPHA CORP **Entity Name:** Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: 92570 Affiliation Phone:

Affiliation Type Desc: Parent Corporation

Entity Name: AOC LLC
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: ,

Affiliation Type Desc: Technical Contact
Entity Name: JUAN MONTALVO
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: 92570
Affiliation Phone: 9519439708,

Name: AOC LLC

Address: 19991 SEATON AVE City,State,Zip: PERRIS, CA 92570

Site ID: 92587

CERS ID: CAD059270975
CERS Description: Hazardous Waste

Violations:

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 08-13-2015

Citation: HSC 6.67 25270.6(b) - California Health and Safety Code, Chapter 6.67,

Section(s) 25270.6(b)

Violation Description: Failure to pay the APSA Program fee.

Violation Notes: Returned to compliance on 09/12/2017. Verified permit fees paid

Violation Division: Riverside County Department of Env Health

Violation Program: APSA Violation Source: CERS,

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 08-13-2015

Citation: HSC 6.11 25404.1 - California Health and Safety Code, Chapter 6.11,

Section(s) 25404.1

Violation Description: Failure to maintain a valid permit.

Violation Notes: Returned to compliance on 09/12/2017. Verified permit fees paid

Violation Division: Riverside County Department of Env Health

Violation Program: APSA Violation Source: CERS,

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 01-06-2009

Citation: HSC 6.67 Multiple Sections - California Health and Safety Code,

Chapter 6.67, Section(s) Multiple Sections

Violation Description: RCRA Large Quantity Generator Program - Administration/Documentation -

General

Violation Notes: Returned to compliance on 03/06/2009. Violation Division: Riverside County Department of Env Health

Violation Program: HWLQG Violation Source: CERS,

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 10-22-2019

 Citation:
 Un-Specified

Violation Description: Business Plan Program - Operations/Maintenance - General Local

Ordinance

Violation Notes: Returned to compliance on 11/07/2019. OBSERVATION: Required NFPA-704

signs were not posted. CORRECTIVE ACTION: Owner/operator shall research chemical safety data sheets and post proper NFPA-704 signs. Signs shall be posted on maintenance building and the propane rack and

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

faded Propane label on storage rack needs to be replaced. Submit

photos to this department.

Riverside County Department of Env Health Violation Division:

Violation Program: **HMRRP** Violation Source: CERS,

Site ID: 92587 Site Name: AOC LLC Violation Date: 10-22-2019 Citation: **Un-Specified**

Violation Description: Business Plan Program - Operations/Maintenance - General Local

Ordinance

Returned to compliance on 11/07/2019. OBSERVATION: Required NFPA-704 Violation Notes:

> signs were not posted. CORRECTIVE ACTION: Owner/operator shall research chemical safety data sheets and post proper NFPA-704 signs. Signs shall be posted on the maintenance building and the Propane

storage rack. Submit photos to this department.

Violation Division: Riverside County Department of Env Health

Violation Program: **HMRRP** Violation Source: CERS,

Evaluation:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-13-2015

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: **HWLQG** Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-22-2019

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** CERS, **Eval Source:**

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-13-2015

Violations Found:

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: **HMRRP** CERS, Eval Source:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-13-2015

Violations Found:

Eval Type: Routine done by local agency

Eval Notes: Inspection with Joe

Eval Division: Riverside County Department of Env Health

Eval Program: CE **Eval Source:** CERS,

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-13-2015 Violations Found: Yes

violations Found: Yes

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: 10-22-2019

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: CE Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-22-2019

Violations Found: Yes

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: 01-06-2009 Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Inspector Name: Riverside County

Eval Division: Riverside County Department of Env Health

Eval Program: HWLQG Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-22-2019 Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: HWLQG Eval Source: CERS,

Enforcement Action:

Site ID: 92587 Site Name: AOC LLC

Site Address: 19991 SEATON AVE

 Site City:
 PERRIS

 Site Zip:
 92570

 Enf Action Date:
 01-06-2009

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Riverside County Department of Env Health

Enf Action Program: HWLQG

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Enf Action Source: CERS,

Site ID: 92587 Site Name: AOC LLC

Site Address: 19991 SEATON AVE

 Site City:
 PERRIS

 Site Zip:
 92570

 Enf Action Date:
 08-13-2015

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Riverside County Department of Env Health

Enf Action Program: APSA Enf Action Source: CERS,

Coordinates:

Site ID: 92587
Facility Name: AOC LLC
Env Int Type Code: APSA
Program ID: 10153643
Coord Name: Not reported

Ref Point Type Desc: Center of a facility or station.,

Latitude: 33.830990 Longitude: -117.262730

Affiliation:

Affiliation Type Desc: Company Official Entity Name: Jim Earl Entity Title: Plant Manager Affiliation Address: Not reported Not reported Affiliation City: Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: 92570 Affiliation Phone:

Affiliation Type Desc: Facility Contact

Entity Name: JUAN MONTALVO EHS LEADER

Entity Title: Not reported
Affiliation Address: 19991 SEATON AVE

Affiliation City: PERRIS
Affiliation State: CA

Affiliation Country: Not reported
Affiliation Zip: 92570
Affiliation Phone: 9519439708,

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,

Direction Distance

Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Affiliation Type Desc: Facility Mailing Address Mailing Address **Entity Name:** Entity Title: Not reported Affiliation Address: 19991 SEATON AVE

PERRIS Affiliation City: Affiliation State: CA

Affiliation Country: Not reported 92570-0818 Affiliation Zip:

Affiliation Phone:

Affiliation Type Desc: Legal Owner

Entity Name: THE ALPHA CORPORATION OF TENNESSEE

Entity Title: Not reported

Affiliation Address: 950 HWY 57 STREET Affiliation City: COLLIERVILLE

Affiliation State: TN

Affiliation Country: **United States** 38017-0818 Affiliation Zip: Affiliation Phone: (901) 854-2800,

Affiliation Type Desc: Operator AOC, LLC **Entity Name: 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: (951) 943-9708,

Affiliation Type Desc: Property Owner

Entity Name: THE ALPHA CORPORATION OF TENNESSEE

Entity Title: Not reported

950 HWY 57 STREET Affiliation Address: COLLIERVILLE Affiliation City:

Affiliation State: TN

Affiliation Country: **United States** Affiliation Zip: 38017-0818 (901) 854-2800, Affiliation Phone:

Environmental Contact Affiliation Type Desc: Entity Name: Juan Montalvo

Entity Title: Not reported

19991 SEATON AVENUE Affiliation Address:

Affiliation City: **PERRIS** Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 92570

Affiliation Phone:

Facility Owner Affiliation Type Desc:

Entity Name: THE ALPHA CORPORATION OF TENNESSEE

Entity Title: Not reported Affiliation Address: 950 HWY 57 STREET COLLIERVILLE Affiliation City:

Affiliation State: TN

Affiliation Country: Not reported

Direction Distance Elevation

ion Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

 Affiliation Zip:
 380170818

 Affiliation Phone:
 9018542850,

Affiliation Type Desc: Identification Signer Entity Name: Juan Montalvo

Entity Title: Environmental Health and Safety Leader

Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported

Affiliation Phone:

Affiliation Type Desc: **Public Contact** Entity Name: JIM EARL Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: 92570 Affiliation Phone: 9519439702,

Affiliation Type Desc: **Document Preparer** JUAN MONTALVO Entity Name: 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: ,

Affiliation Type Desc: Onsite Treatment Unit Owner Operator

Entity Name: Juan Montalvo

Entity Title: Environmental Health and Safety Leader

Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported

Affiliation Phone: ,

Affiliation Type Desc: Parent Company
Entity Name: THE ALPHA CORP

Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: 92570
Affiliation Phone: ,

Affiliation Type Desc: Parent Corporation

Entity Name: AOC LLC
Entity Title: Not reported
Affiliation Address: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported

Affiliation Phone: ,

Technical Contact Affiliation Type Desc: JUAN MONTALVO Entity Name: Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: 92570 Affiliation Phone: 9519439708,

Name: AOC LLC

Address: 19991 SEATON AVE City,State,Zip: PERRIS, CA 92570

Site ID: 92587

CERS ID: 92370LPHRS19991
CERS Description: Toxic Release Inventory

Violations:

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 08-13-2015

Citation: HSC 6.67 25270.6(b) - California Health and Safety Code, Chapter 6.67,

Section(s) 25270.6(b)

Violation Description: Failure to pay the APSA Program fee.

Violation Notes: Returned to compliance on 09/12/2017. Verified permit fees paid

Violation Division: Riverside County Department of Env Health

Violation Program: APSA Violation Source: CERS,

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 08-13-2015

Citation: HSC 6.11 25404.1 - California Health and Safety Code, Chapter 6.11,

Section(s) 25404.1

Violation Description: Failure to maintain a valid permit.

Violation Notes: Returned to compliance on 09/12/2017. Verified permit fees paid

Violation Division: Riverside County Department of Env Health

Violation Program: APSA Violation Source: CERS,

 Site ID:
 92587

 Site Name:
 AOC LLC

 Violation Date:
 01-06-2009

Citation: HSC 6.67 Multiple Sections - California Health and Safety Code,

Chapter 6.67, Section(s) Multiple Sections

Violation Description: RCRA Large Quantity Generator Program - Administration/Documentation -

General

Violation Notes: Returned to compliance on 03/06/2009.
Violation Division: Riverside County Department of Env Health

Violation Program: HWLQG Violation Source: CERS,

Direction Distance

Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Site ID: 92587 Site Name: AOC LLC Violation Date: 10-22-2019 Citation: **Un-Specified**

Violation Description: Business Plan Program - Operations/Maintenance - General Local

Returned to compliance on 11/07/2019. OBSERVATION: Required NFPA-704 Violation Notes:

signs were not posted. CORRECTIVE ACTION: Owner/operator shall research chemical safety data sheets and post proper NFPA-704 signs. Signs shall be posted on maintenance building and the propane rack and faded Propane label on storage rack needs to be replaced. Submit

photos to this department.

Riverside County Department of Env Health Violation Division:

Violation Program: **HMRRP** Violation Source: CERS,

Site ID: 92587 Site Name: AOC LLC Violation Date: 10-22-2019 Citation: **Un-Specified**

Violation Description: Business Plan Program - Operations/Maintenance - General Local

Ordinance

Violation Notes: Returned to compliance on 11/07/2019, OBSERVATION: Required NFPA-704

> signs were not posted. CORRECTIVE ACTION: Owner/operator shall research chemical safety data sheets and post proper NFPA-704 signs. Signs shall be posted on the maintenance building and the Propane

storage rack. Submit photos to this department. Riverside County Department of Env Health

Violation Program: **HMRRP** Violation Source: CERS,

Evaluation:

Violation Division:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-13-2015

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: HWLQG Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-22-2019 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** CERS. Eval Source:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-13-2015

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**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Eval Source: CERS.

Eval General Type: Compliance Evaluation Inspection

Eval Date: 08-13-2015

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Inspection with Joe

Eval Division: Riverside County Department of Env Health

Eval Program: CE Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

08-13-2015 Eval Date: Violations Found:

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: 10-22-2019

Violations Found:

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Riverside County Department of Env Health

Eval Program: CE **Eval Source:** CERS.

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-22-2019 Violations Found:

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

01-06-2009 Eval Date: Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Inspector Name: Riverside County

Riverside County Department of Env Health **Eval Division:**

Eval Program: **HWLQG** Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-22-2019

Violations Found:

Eval Type: Routine done by local agency

Eval Notes: Not reported

Riverside County Department of Env Health Eval Division:

Eval Program: **HWLQG Eval Source:** CERS.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Enforcement Action:

92587 Site ID: Site Name: AOC LLC

Site Address: 19991 SEATON AVE

Site City: **PERRIS** Site Zip: 92570 Enf Action Date: 01-06-2009

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Riverside County Department of Env Health

Enf Action Program: **HWLQG** CERS. Enf Action Source:

Site ID: 92587 Site Name: AOC LLC

Site Address: 19991 SEATON AVE

Site City: **PERRIS** Site Zip: 92570 Enf Action Date: 08-13-2015

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Riverside County Department of Env Health Enf Action Division:

APSA Enf Action Program: Enf Action Source: CERS,

Coordinates:

Site ID: 92587 Facility Name: AOC LLC Env Int Type Code: APSA Program ID: 10153643 Coord Name: Not reported

Ref Point Type Desc: Center of a facility or station.,

Latitude: 33.830990 Longitude: -117.262730

Affiliation:

Affiliation Type Desc: Company Official Entity Name: Jim Earl **Entity Title:** Plant Manager Affiliation Address: Not reported Not reported Affiliation City: Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: 92570 Affiliation Phone:

Facility Contact Affiliation Type Desc:

Entity Name: JUAN MONTALVO EHS LEADER

Entity Title: Not reported

Affiliation Address: 19991 SEATON AVE **PERRIS**

Affiliation City: Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 92570

Direction Distance

Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Affiliation Phone: 9519439708,

Affiliation Type Desc: **CUPA** District

Entity Name: Riverside Cnty Env Health

Entity Title: Not reported

Affiliation Address: 4065 County Circle Drive, Room 104

Riverside Affiliation City: Affiliation State: CA Affiliation Country:

Not reported 92503 Affiliation Zip:

(951) 358-5055, Affiliation Phone:

Affiliation Type Desc: **Facility Mailing Address** Entity Name: Mailing Address Entity Title: Not reported

19991 SEATON AVE Affiliation Address:

PERRIS Affiliation City: Affiliation State: CA

Affiliation Country: Not reported 92570-0818 Affiliation Zip:

Affiliation Phone:

Affiliation Type Desc: Legal Owner

Entity Name: THE ALPHA CORPORATION OF TENNESSEE

Entity Title: Not reported Affiliation Address: 950 HWY 57 STREET Affiliation City: COLLIERVILLE

Affiliation State: TN

Affiliation Country: **United States** 38017-0818 Affiliation Zip: Affiliation Phone: (901) 854-2800,

Affiliation Type Desc: Operator **Entity Name:** AOC, LLC 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: (951) 943-9708,

Affiliation Type Desc: **Property Owner**

Entity Name: THE ALPHA CORPORATION OF TENNESSEE

Entity Title: Not reported

Affiliation Address: 950 HWY 57 STREET Affiliation City: **COLLIERVILLE** Affiliation State: TN

Affiliation Country: **United States** Affiliation Zip: 38017-0818 Affiliation Phone: (901) 854-2800.

Affiliation Type Desc: **Environmental Contact** Entity Name: Juan Montalvo Entity Title: Not reported

Affiliation Address: 19991 SEATON AVENUE

Affiliation City: **PERRIS**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

Affiliation State: CA

Not reported Affiliation Country: Affiliation Zip: 92570 Affiliation Phone:

Affiliation Type Desc: **Facility Owner**

THE ALPHA CORPORATION OF TENNESSEE Entity Name:

Entity Title: Not reported

Affiliation Address: 950 HWY 57 STREET Affiliation City: COLLIERVILLE

Affiliation State: TN

Affiliation Country: Not reported 380170818 Affiliation Zip: Affiliation Phone: 9018542850,

Affiliation Type Desc: Identification Signer **Entity Name:** Juan Montalvo

Entity Title: Environmental Health and Safety Leader

Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported

Affiliation Phone:

Affiliation Type Desc: **Public Contact Entity Name:** JIM EARL **Entity Title:** Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Not reported Affiliation Country: Affiliation Zip: 92570 Affiliation Phone: 9519439702,

Document Preparer Affiliation Type Desc: Entity Name: JUAN MONTALVO **Entity Title:** Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported

Onsite Treatment Unit Owner Operator Affiliation Type Desc:

Entity Name: Juan Montalvo

Entity Title: Environmental Health and Safety Leader

Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Not reported Affiliation Zip:

Affiliation Phone:

Affiliation Phone:

Affiliation Type Desc: Parent Company Entity Name: THE ALPHA CORP

Direction Distance Elevation

on Site Database(s) EPA ID Number

AOC LLC (Continued) S113001191

Entity Title:

Affiliation Address:

Affiliation City:

Affiliation State:

Affiliation Country:

Affiliation Country:

Affiliation Zip:

Affiliation Phone:

Not reported

Affiliation Type Desc: Parent Corporation

Entity Name: AOC LLC
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:

Affiliation Type Desc: Technical Contact Entity Name: JUAN MONTALVO

Entity Title:

Affiliation Address:

Affiliation City:

Affiliation State:

Affiliation Country:

Affiliation Country:

Affiliation Zip:

Affiliation Phone:

Not reported

Not reported

Not reported

Not reported

92570

92570

Affiliation Phone:

Name: AOC LLC

Address: 19991 SEATON AVE
City,State,Zip: PERRIS, CA 923700000

Site ID:606059CERS ID:80001432CERS Description:Corrective Action

Affiliation:

Affiliation Type Desc: Lead Project Manager Entity Name: Viktoriya Anashkina

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: ,

Affiliation Type Desc: Supervisor Entity Name: JOSE DIAZ Not reported Entity Title: Not reported Affiliation Address: Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported

Affiliation Phone:

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) S113001191

HWTS:

AOC LLC Name:

Address: 19991 SEATON AVE Address 2: Not reported City, State, Zip: **PERRIS, CA 92570** CAD059270975 EPA ID: Inactive Date: Not reported 07/23/1982 Create Date: Last Act Date: Not reported Mailing Name: Not reported

Mailing Address: 19991 SEATON AVE

Mailing Address 2: Not reported

Mailing City, State, Zip: PERRIS, CA 925700818

THE ALPHA CORPORATION OF TENNESSEE Owner Name:

Owner Address: 950 HWY 57 STREET

Owner Address 2: Not reported

Owner City, State, Zip: COLLIERVILLE, TN 380170818 Contact Name: JUAN MONTALVO EHS LEADER

Contact Address: 19991 SEATON AVE

Contact Address 2: Not reported City,State,Zip: **PERRIS, CA 92570**

Facility Status: Active Facility Type: **PERMANENT** Category: **FEDERAL** Latitude: 33.830512 Longitude: -117.261636

NAICS:

EPA ID: CAD059270975

Create Date: 2002-03-14 16:36:26.000

NAICS Code: 325211

NAICS Description: Plastics Material and Resin Manufacturing

Issued EPA ID Date: 1982-07-23 00:00:00 Inactive Date: Not reported

AOC LLC Facility Name:

Facility Address: 19991 SEATON AVE

Facility Address 2: Not reported Facility City: **PERRIS** Facility County: Not reported

Facility State: CA

923700000 Facility Zip:

C12 **AOC LLC** CORRACTS 1000238960 CAD059270975

SSE 19991 SEATON AVENUE RCRA-TSDF 1/8-1/4 **PERRIS, CA 92570 RCRA-LQG**

0.216 mi. **ENVIROSTOR**

1138 ft. Site 3 of 5 in cluster C **HIST UST RAATS** Relative: **EMI** Lower **HWP** Actual: **NPDES** 1562 ft. CIWQS

CORRACTS:

AOC LLC Name:

Address: 19991 SEATON AVENUE **CERS**

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Address 2: Not reported
EPA ID: CAD059270975
Area Name: ENTIRE FACILITY
Corrective Action: LEAD AGENCY DETERMINATION

Actual Date: 19900101

Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: AOC LLC

Address: 19991 SEATON AVENUE

Address 2: Not reported EPA ID: CAD059270975 Area Name: ENTIRE FACILITY

Corrective Action: RFA COMPLETED
Actual Date: 19881024
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: AOC LLC

Address: 19991 SEATON AVENUE

Address 2: Not reported
EPA ID: CAD059270975
Area Name: ENTIRE FACILITY

Corrective Action: CA PRIORITIZATION-LOW CA PRIORITY

Actual Date: 19920716
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: AOC LLC

Address: 19991 SEATON AVENUE

Address 2: Not reported EPA ID: CAD059270975 Area Name: ENTIRE FACILITY

Corrective Action: STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO

STABILIZATION

Actual Date: 19920716
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: AOC LLC

Address: 19991 SEATON AVENUE

Address 2: Not reported
EPA ID: CAD059270975
Area Name: ENTIRE FACILITY
Corrective Action: CA PROCESS IS TERMINATED

Actual Date: 19881024
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported

Distance
Elevation Site Database(s)

AOC LLC (Continued) 1000238960

Yes

Surface Water Release Indicator: Not reported

RCRA TSDF:

Treatment Storage and Disposal Type: Incineration, Storage

Full Enforcement Universe: Not reported

Corrective Action Workload Universe: No

Permit Renewals Workload Universe:

Permit Workload Universe:

Not reported

Not reported

Permit Progress Universe:

Incineration, Storage

Post-Closure Workload Universe:

Closure Workload Universe:

Operating TSDF Universe:

Commercial TSD Indicator:

Not reported

Not reported

Not reported

Not reported

Active Site Fed-Reg Treatment Storage and Disposal Facility:

Not reported Not repo

Active Site State-Reg Treatment Storage and Disposal Facility:

Not reported
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:

No

TSDFs Only Subject to CA under Discretionary Auth Universe:

Biennial: List of Years

Year: 2019

Click Here for Biennial Reporting System Data: Year: 2017

Click Here for Biennial Reporting System Data: Year: 2015

Click Here for Biennial Reporting System Data: Year: 2013

Click Here for Biennial Reporting System Data: Year: 2011

Click Here for Biennial Reporting System Data: Year: 2009

Click Here for Biennial Reporting System Data: Year: 2007

Click Here for Biennial Reporting System Data:
Year: 2005

Click Here for Biennial Reporting System Data: Year: 2001

Click Here for Biennial Reporting System Data:

RCRA Listings:

Date Form Received by Agency: 20220118

Handler Name: AOC LLC

Handler Address: Handler City, State, Zip:

EPA ID:
Contact Name:
Contact Address:

JUAN F MONTALVO SEATON AVENUE

19991 SEATON AVENUE

PERRIS, CA 92570

CAD059270975

EDR ID Number

EPA ID Number

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Contact City, State, Zip: **PERRIS, CA 92570** Contact Telephone: 951-943-9708 951-657-8370 Contact Fax:

Contact Email: JUAN.MONTALVO@AOCRESINS.COM

Contact Title: **ENVIRONMENTAL HEALTH AND SAFETY LEADER** EPA Region: Land Type: Private

Federal Waste Generator Description: Large Quantity Generator

Non-Notifier: Not reported Biennial Report Cycle: 2021 Accessibility: Not reported Active Site Indicator: Handler Activities State District Owner: Not reported State District: Not reported **SEATON AVENUE** Mailing Address: Mailing City, State, Zip: **PERRIS, CA 92570**

Owner Name: THE ALPHA CORPORATION

Owner Type: Private

Operator Name: AOC, LLC

Private Operator Type: Short-Term Generator Activity: No Importer Activity: No Mixed Waste Generator: No Transporter Activity: No Transfer Facility Activity: No Recycler Activity with Storage: Nο Small Quantity On-Site Burner Exemption: Nο 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: Ν

Sub-Part K Indicator: Not reported Commercial TSD Indicator: Nο

Treatment Storage and Disposal Type: Incineration, Storage 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: Incineration, Storage

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: Yes 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: Yes Corrective Action Priority Ranking: Low **Environmental Control Indicator:** No

Distance Elevation

ation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Institutional Control Indicator:

Human Exposure Controls Indicator:

N/A

Groundwater Controls Indicator:

N/A

Operating TSDF Universe:

Full Enforcement Universe:

Not reported
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:

Recognized Trader-Importer:

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: 2019

Click Here for Biennial Reporting System Data: Year: 2017

Click Here for Biennial Reporting System Data: Year: 2015

Click Here for Biennial Reporting System Data: Year: 2013

Click Here for Biennial Reporting System Data: Year: 2011

Click Here for Biennial Reporting System Data: Year: 2009

Click Here for Biennial Reporting System Data: Year: 2007

Click Here for Biennial Reporting System Data: Year: 2005

Click Here for Biennial Reporting System Data: Year: 2001

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code: D001

Waste Description: IGNITABLE WASTE

Waste Code: D009
Waste Description: MERCURY

Waste Code: U107

Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Waste Description: 1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER (OR) DI-N-OCTYL PHTHALATE

Waste Code: U147

Waste Description: 2,5-FURANDIONE (OR) MALEIC ANHYDRIDE

Waste Code: U190

Waste Description: 1,3-ISOBENZOFURANDIONE (OR) PHTHALIC ANHYDRIDE

Handler - Owner Operator:

Owner/Operator Indicator: Operator

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status: Private Date Became Current: 19970501 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: AOC, LLC

Private Legal Status: Date Became Current: 19970501 Date Ended Current: Not reported Not reported Owner/Operator Address: 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: AOC, LLC

Legal Status: Private
Date Became Current: 19970501
Date Ended Current: Not reported

Owner/Operator Address: 19991 SEATON AVENUE Owner/Operator City,State,Zip: PERRIS, CA 92570-0000

Owner/Operator Telephone: 951-943-9708
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: 951-657-8370

Owner/Operator Email: JMONTALVO@AOC-RESINS.COM

Owner/Operator Indicator: Owner

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status:PrivateDate Became Current:19970501Date Ended Current:Not reported

Owner/Operator Address: 950 HIGHWAY 57 EAST
Owner/Operator City, State, Zip: COLLIERVILLE, TN 38017

Owner/Operator Telephone:

Owner/Operator Telephone Ext:

Owner/Operator Fax:

Owner/Operator Email:

Not reported

Not reported

Not reported

Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Owner/Operator Indicator: Operator

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status: Private Date Became Current: 19970501 **Date Ended Current:** Not reported Not reported Owner/Operator Address: Not reported Owner/Operator City, State, Zip: Not reported Owner/Operator Telephone: Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status:PrivateDate Became Current:19970501Date Ended Current:Not reported

Owner/Operator Address: 950 HIGHWAY 57 EAST
Owner/Operator City, State, Zip: COLLIERVILLE, TN 38017

Owner/Operator Telephone: 901-854-2850
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported

Owner/Operator Email: JUAN.MONTALVO@AOCRESINS.COM

Owner/Operator Indicator: Owner

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status: Private
Date Became Current: 19970501
Date Ended Current: Not reported

Owner/Operator Address: 950 HIGHWAY 57 EAST
Owner/Operator City, State, Zip: COLLIERVILLE, TN 38017

Owner/Operator Telephone: 901-854-2850
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status: Private
Date Became Current: 19970501
Date Ended Current: Not reported

Owner/Operator Address: 950 HIGHWAY 57 EAST Owner/Operator City, State, Zip: COLLIERVILLE, TN 38017

Owner/Operator Telephone: 901-854-2850
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator

Owner/Operator Name: AOC, LLC

Legal Status:PrivateDate Became Current:19970501Date Ended Current:Not reported

Owner/Operator Address: 19991 SEATON AVENUE Owner/Operator City,State,Zip: PERRIS, CA 92370-0000

Owner/Operator Telephone: 951-943-9708
Owner/Operator Telephone Ext: Not reported

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Owner/Operator Fax: 951-657-8370

JMONTALVO@AOC-RESINS.COM Owner/Operator Email:

Owner/Operator Indicator: Owner/Operator Name: ALPHA OWENS CORNING L L C Legal Status: Private Date Became Current: Not reported **Date Ended Current:** Not reported Owner/Operator Address: **PO BOX 610**

Owner/Operator City, State, Zip: COLLIERVILLE, TN 38027-0610

Owner/Operator Telephone: 901-854-2800 Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status: Private Date Became Current: 19970501 Date Ended Current: Not reported

950 HIGHWAY 57 EAST Owner/Operator Address: Owner/Operator City, State, Zip: COLLIERVILLE, TN 38017

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: THE ALPHA CORPORATION

Legal Status: Private Date Became Current: 19970501 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: Owner

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status: Private Date Became Current: 19970501 **Date Ended Current:** Not reported

950 HIGHWAY 57 EAST Owner/Operator Address: Owner/Operator City, State, Zip: COLLIERVILLE, TN 38017

Owner/Operator Telephone: 901-854-2850 Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported

Owner/Operator Email: JMONTALVO@AOC-RESINS.COM

Owner/Operator Indicator:

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status: Private Date Became Current: 19970501 Date Ended Current: Not reported

Owner/Operator Address: 950 HIGHWAY 57 EAST

Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Owner/Operator City, State, Zip: COLLIER VILLE, TN 38017

Owner/Operator Telephone:

Owner/Operator Telephone Ext:

Owner/Operator Fax:

Owner/Operator Email:

Not reported

Not reported

Not reported

Owner/Operator Indicator: Owner

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status:PrivateDate Became Current:19970501Date Ended Current:Not reported

Owner/Operator Address: 950 HIGHWAY 57 EAST
Owner/Operator City, State, Zip: COLLIER VILLE, TN 38017

Owner/Operator Telephone: 901-854-2850
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner

Owner/Operator Name: THE ALPHA CORP

Legal Status: Private
Date Became Current: 19970501
Date Ended Current: Not reported

Owner/Operator Address: 950 HIGHWAY 57 EAST
Owner/Operator City, State, Zip: COLLIERVILLE, TN 38017

Owner/Operator Telephone: 901-854-2859
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator

Owner/Operator Name: AOC LLC

Legal Status: Private Date Became Current: 19970501 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: Owner

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status: Private
Date Became Current: 19970501
Date Ended Current: Not reported

Owner/Operator Address: 950 HIGHWAY 57 EAST Owner/Operator City, State, Zip: COLLIERVILLE, TN 38017

Owner/Operator Telephone: 901-854-2850
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported

Owner/Operator Email: JMONTALVO@AOC-RESINS.COM

Owner/Operator Indicator: Operator

Owner/Operator Name: AOC, LLC

Legal Status: Private

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Date Became Current: 19970501 Date Ended Current: Not reported

Owner/Operator Address: 19991 SEATON AVENUE Owner/Operator City, State, Zip: PERRIS, CA 92570-0000

Owner/Operator Telephone: 951-943-9708 Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: 951-657-8370

Owner/Operator Email: JUAN.MONTALVO@AOCRESINS.COM

Owner/Operator Indicator: Operator

Owner/Operator Name: AOC, LLC

Legal Status: Private Date Became Current: 19970501 Date Ended Current: Not reported

19991 SEATON AVENUE Owner/Operator Address: Owner/Operator City, State, Zip: **PERRIS, CA 92570** 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: ALPHA CHEMICAL CORPORATION Legal Status: Private Date Became Current: Not reported Date Ended Current: Not reported Owner/Operator Address: PO DRAWER A

Owner/Operator City, State, Zip: CITY NOT REPORTED, TN 99999

Owner/Operator Telephone: 901-853-2450 Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator

Owner/Operator Name: THE ALPHA CORPORATION

Legal Status: Private Date Became Current: 19970501 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: 20100208

AOC, LLC Handler Name:

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

Not reported Non Storage Recycler Activity:

Direction Distance Elevation

Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Electronic Manifest Broker: Not reported

Receive Date: 20120228

Handler Name: AOC, LLC
Federal Waste Generator Description: Large Quantity Generator

State District Owner: Not reported

Large Quantity Handler of Universal Waste:

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: 20140301

Handler Name: AOC, LLC

Federal Waste Generator Description: Large Quantity Generator

State District Owner: Not reported

Large Quantity Handler of Universal Waste:

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: 20160119

Handler Name: AOC, LLC

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: 20180125

Handler Name: AOC LLC

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: Nο Current Record: No Non Storage Recycler Activity: No Electronic Manifest Broker: No

Receive Date: 20201001

Handler Name: AOC LLC

Federal Waste Generator Description: Large Quantity Generator

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

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: Nο Electronic Manifest Broker: No

Receive Date: 20220118

Handler Name: AOC LLC

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: No Electronic Manifest Broker: No

Receive Date: 19960901

Handler Name: ALPHA OWENS CORNING L L C

Federal Waste Generator Description: Large Quantity Generator

State District Owner:

CA
Large Quantity Handler of Universal Waste:

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: 20060227

Handler Name: AOC, L.L.C.

Federal Waste Generator Description: Small Quantity Generator

State District Owner: Not reported

Large Quantity Handler of Universal Waste:

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:

Electronic Manifest Broker:

Not reported
Not reported

Receive Date: 19941017

Handler Name: ALPHA OWENS CORNING L L C

Federal Waste Generator Description: Small Quantity Generator

State District Owner:

CA

Large Quantity Handler of Universal Waste:

No

Recognized Trader Importer:

No

Recognized Trader Exporter:

No

Spent Lead Acid Battery Importer:

No

Direction Distance Elevation

ation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Spent Lead Acid Battery Exporter: No Current Record: No

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

Receive Date: 19900412

Handler Name: ALPHA RESINS

Federal Waste Generator Description: Large Quantity Generator

State District Owner: Not reported

Large Quantity Handler of Universal Waste:

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: 19920226

Handler Name: ALPHA RESINS

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: 19940329

Handler Name: ALPHA RESINS CORP

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: 19990304

Handler Name: ALPHA/OWENS-CORNING L.L.C

Federal Waste Generator Description: Large Quantity Generator

State District Owner: Not reported

Large Quantity Handler of Universal Waste:

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

Direction Distance Elevation

ance EDR ID Number ation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Receive Date: 20020301

Handler Name: AOC, L.L.C.
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: 20060227

Handler Name: AOC, L.L.C.

Federal Waste Generator Description: Large Quantity Generator

State District Owner: Not reported

Large Quantity Handler of Universal Waste:

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: 20080227

Handler Name: AOC, L.L.C.

Federal Waste Generator Description: Large Quantity Generator

State District Owner: Not reported

Large Quantity Handler of Universal Waste:

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

List of NAICS Codes and Descriptions:

NAICS Code: 325211

NAICS Description: PLASTICS MATERIAL AND RESIN MANUFACTURING

Facility Has Received Notices of Violation:

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined: 19890111 Actual Return to Compliance Date: 19890512 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: 19890324 Enforcement Identifier: 001 19890224 Date of Enforcement Action: Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported

Distance Elevation

Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Not reported

Enforcement Attorney: Not reported

Corrective Action Component: No

Appeal Initiated Date: Not reported Appeal Resolution Date: Not reported Disposition Status Date: Not reported **Disposition Status:** Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

WRITTEN INFORMAL **Enforcement Type:** Enforcement Responsible Person: R9STA Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Not reported Proposed Amount: Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported

Found Violation: No

Final Amount:

Agency Which Determined Violation: Not reported Violation Short Description: Not reported Date Violation was Determined: Not reported Actual Return to Compliance Date: Not reported Return to Compliance Qualifier: Not reported Violation Responsible Agency: Not reported Scheduled Compliance Date: Not reported Enforcement Identifier: Not reported Not reported Date of Enforcement Action: Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported Enforcement Attorney: Not reported Corrective Action Component: Not reported Not reported Appeal Initiated Date: Appeal Resolution Date: Not reported Disposition Status Date: Not reported Disposition Status: Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person: Not reported Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported

Distance Elevation

Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

SEP Type Description:

Proposed Amount:

Final Monetary Amount:

Paid Amount:

Final Count:

Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined: 20090106 Actual Return to Compliance Date: 20090306 Return to Compliance Qualifier: Documented Violation Responsible Agency: State Scheduled Compliance Date: 20090306 Enforcement Identifier: 601 20090106 Date of Enforcement Action: Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported **Enforcement Attorney:** Not reported

Corrective Action Component: No

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: WRITTEN INFORMAL

Enforcement Responsible Person: Not reported Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Proposed Amount: Not reported Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: LDR - General Date Violation was Determined: 19890111 Actual Return to Compliance Date: 19890324 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: Not reported Enforcement Identifier: Not reported Date of Enforcement Action: Not reported Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported

Direction Distance Elevation

n Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Enforcement Attorney:

Corrective Action Component:

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person:

Enforcement Responsible Sub-Organization:

Not reported

Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Not reported Proposed Amount: Final Monetary Amount: Not reported Not reported Paid Amount: Final Count: Not reported Final Amount: Not reported

Found Violation: Yes Agency Which Determined Violation: EPA

Violation Short Description: Generators - Pre-transport

Date Violation was Determined:20090106Actual Return to Compliance Date:20090219Return to Compliance Qualifier:DocumentedViolation Responsible Agency:EPA

Scheduled Compliance Date: Not reported Not reported Enforcement Identifier: Not reported Date of Enforcement Action: Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported Enforcement Attorney: Not reported Not reported Corrective Action Component: Not reported Appeal Initiated Date: Appeal Resolution Date: Not reported Disposition Status Date: Not reported Disposition Status: Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person:

Not reported Enforcement Responsible Sub-Organization:

Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount:

SEP Scheduled Completion Date:

SEP Actual Date:

SEP Defaulted Date:

SEP Type:

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

SEP Type Description:

Proposed Amount:

Final Monetary Amount:

Paid Amount:

Final Count:

Not reported

Found Violation: No

Agency Which Determined Violation: Not reported Violation Short Description: Not reported Date Violation was Determined: Not reported Actual Return to Compliance Date: Not reported Return to Compliance Qualifier: Not reported Violation Responsible Agency: Not reported Scheduled Compliance Date: Not reported Enforcement Identifier: Not reported Not reported Date of Enforcement Action: Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported **Enforcement Attorney:** Not reported Corrective Action Component: Not reported Appeal Initiated Date: Not reported Appeal Resolution Date: Not reported Disposition Status Date: Not reported Disposition Status: Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person:

Enforcement Responsible Sub-Organization:

Not reported

Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Not reported Proposed Amount: Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: Yes Agency Which Determined Violation: EPA

Violation Short Description: TSD IS-Container Use and Management

Date Violation was Determined: 20090106
Actual Return to Compliance Date: 20090219
Return to Compliance Qualifier: Documented
Violation Responsible Agency: FPA

Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported

Distance Elevation

Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

LDR - General

Enforcement Attorney:

Corrective Action Component:

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person:

Not reported

Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Not reported Proposed Amount: Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description:

Date Violation was Determined: 19880607 Actual Return to Compliance Date: 19880801 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: Not reported Not reported Enforcement Identifier: Not reported Date of Enforcement Action: Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported Enforcement Attorney: Not reported Not reported Corrective Action Component: Not reported Appeal Initiated Date: Appeal Resolution Date: Not reported Disposition Status Date: Not reported Disposition Status: Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person:

Not reported Enforcement Responsible Sub-Organization:

Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount:

SEP Scheduled Completion Date:

SEP Actual Date:

SEP Defaulted Date:

SEP Type:

Not reported

Not reported

Not reported

Not reported

Distance Elevation

ion Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

SEP Type Description:

Proposed Amount:

Final Monetary Amount:

Paid Amount:

Final Count:

Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined: 20090106 Actual Return to Compliance Date: 20090306 Return to Compliance Qualifier: Documented Violation Responsible Agency: State Scheduled Compliance Date: 20090306 Enforcement Identifier: 601 Date of Enforcement Action: 20090106 Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported **Enforcement Attorney:** Not reported

Corrective Action Component: No

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: WRITTEN INFORMAL

Enforcement Responsible Person: Not reported Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Proposed Amount: Not reported Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA

Violation Short Description: TSD IS-Preparedness and Prevention

Date Violation was Determined: 20090106
Actual Return to Compliance Date: 20090219
Return to Compliance Qualifier: Documented
Violation Responsible Agency: EPA

Scheduled Compliance Date:

Enforcement Identifier:

Not reported
Date of Enforcement Action:

Enforcement Responsible Agency:

Not reported

Direction Distance Elevation

tance EDR ID Number vation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Enforcement Attorney:

Corrective Action Component:

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person:

Enforcement Responsible Sub-Organization:

Not reported

Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Proposed Amount: Not reported Final Monetary Amount: Not reported Not reported Paid Amount: Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined: 19921202 Actual Return to Compliance Date: 19930107 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: 19921217 Enforcement Identifier: 002 19921202 Date of Enforcement Action: Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported Enforcement Attorney: Not reported

Corrective Action Component: No

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported Enforcement Type: INITIAL 3008(A) COMPLIANCE Enforcement Responsible Person: R9STA Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount:
SEP Scheduled Completion Date:
SEP Actual Date:
SEP Defaulted Date:
SEP Type:
Not reported
Not reported
Not reported
Not reported
Not reported
Not reported

Distance
Elevation Site Database(s)

AOC LLC (Continued) 1000238960

SEP Type Description:

Proposed Amount:

Final Monetary Amount:

Paid Amount:

Final Count:

Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Transporters - General

19890111 Date Violation was Determined: Actual Return to Compliance Date: 19890512 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: 19890324 Enforcement Identifier: 001 19890224 Date of Enforcement Action: Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported **Enforcement Attorney:** Not reported

Corrective Action Component: No

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Proposed Amount: Not reported Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Transporters - General

19880607 Date Violation was Determined: Actual Return to Compliance Date: 19880801 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: Not reported Enforcement Identifier: Not reported Date of Enforcement Action: Not reported Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported

EDR ID Number

EPA ID Number

Direction Distance Elevation

on Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

19880607

Enforcement Attorney:

Corrective Action Component:

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person:

Enforcement Responsible Sub-Organization:

Not reported

Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Not reported Proposed Amount: Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Date Violation was Determined:

Violation Short Description: Generators - General

Actual Return to Compliance Date: 19880801 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: Not reported Enforcement Identifier: Not reported Not reported Date of Enforcement Action: Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported Enforcement Attorney: Not reported Not reported Corrective Action Component: Not reported Appeal Initiated Date: Appeal Resolution Date: Not reported Disposition Status Date: Not reported Disposition Status: Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person:

Not reported Enforcement Responsible Sub-Organization:

Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount:

SEP Scheduled Completion Date:

SEP Actual Date:

SEP Defaulted Date:

SEP Type:

Not reported

Not reported

Not reported

Not reported

Not reported

Distance Elevation

on Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

SEP Type Description:

Proposed Amount:

Final Monetary Amount:

Paid Amount:

Final Count:

Not reported

Found Violation: No

Agency Which Determined Violation: Not reported Violation Short Description: Not reported Date Violation was Determined: Not reported Actual Return to Compliance Date: Not reported Return to Compliance Qualifier: Not reported Violation Responsible Agency: Not reported Scheduled Compliance Date: Not reported Enforcement Identifier: Not reported Not reported Date of Enforcement Action: Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported **Enforcement Attorney:** Not reported Corrective Action Component: Not reported Appeal Initiated Date: Not reported Appeal Resolution Date: Not reported Disposition Status Date: Not reported Disposition Status: Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person: Not reported

Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Proposed Amount: Not reported Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: No

Agency Which Determined Violation: Not reported Violation Short Description: Not reported Date Violation was Determined: Not reported Actual Return to Compliance Date: Not reported Return to Compliance Qualifier: Not reported Violation Responsible Agency: Not reported Scheduled Compliance Date: Not reported Enforcement Identifier: Not reported Date of Enforcement Action: Not reported Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

20041104

Enforcement Attorney: Not reported Not reported Corrective Action Component: Not reported Appeal Initiated Date: Appeal Resolution Date: Not reported Disposition Status Date: Not reported **Disposition Status:** Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person: Not reported Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Not reported Proposed Amount: Final Monetary Amount: Not reported Not reported Paid Amount: Final Count: Not reported Final Amount: Not reported

Found Violation: Yes Agency Which Determined Violation: State

Date Violation was Determined:

Violation Short Description: Generators - General

Actual Return to Compliance Date: 20041203 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: Not reported Enforcement Identifier: 501 20041104 Date of Enforcement Action: Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported Enforcement Attorney: Not reported

Corrective Action Component: No

Not reported Appeal Initiated Date: Appeal Resolution Date: Not reported Disposition Status Date: Not reported Disposition Status: Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: WRITTEN INFORMAL

Enforcement Responsible Person: Not reported Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported

Distance Elevation Site

Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

SEP Type Description:

Proposed Amount:

Final Monetary Amount:

Paid Amount:

Final Count:

Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined: 19921202 Actual Return to Compliance Date: 19930107 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: 19921217 Enforcement Identifier: 002 19921202 Date of Enforcement Action: Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported **Enforcement Attorney:** Not reported

Corrective Action Component: No

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount:

SEP Scheduled Completion Date:

Not reported
SEP Actual Date:

Not reported
SEP Defaulted Date:

Not reported
SEP Type:

Not reported
SEP Type Description:

Not reported
Proposed Amount:

Final Monetary Amount:

Paid Amount:

Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined: 20090106 Actual Return to Compliance Date: 20090306 Return to Compliance Qualifier: Documented Violation Responsible Agency: State 20090306 Scheduled Compliance Date: Enforcement Identifier: 601 Date of Enforcement Action: 20090106 Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported

Direction Distance Elevation

Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Enforcement Attorney: Not reported

Corrective Action Component: No

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: WRITTEN INFORMAL

Enforcement Responsible Person:

Enforcement Responsible Sub-Organization:

Not reported

Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Proposed Amount: Not reported Final Monetary Amount: Not reported Not reported Paid Amount: Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined: 20090106 Actual Return to Compliance Date: 20090306 Return to Compliance Qualifier: Documented Violation Responsible Agency: State Scheduled Compliance Date: 20090306 Enforcement Identifier: 601 20090106 Date of Enforcement Action: Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported Enforcement Attorney: Not reported

Corrective Action Component: No

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: WRITTEN INFORMAL

Enforcement Responsible Person:

Not reported
Enforcement Responsible Sub-Organization:

Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount:

SEP Scheduled Completion Date:

SEP Actual Date:

SEP Defaulted Date:

SEP Type:

Not reported

Not reported

Not reported

Not reported

Not reported

Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

SEP Type Description:

Proposed Amount:

Final Monetary Amount:

Paid Amount:

Final Count:

Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: LDR - General Date Violation was Determined: 19890111 Actual Return to Compliance Date: 19890512 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: Not reported Enforcement Identifier: Not reported Not reported Date of Enforcement Action: Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported **Enforcement Attorney:** Not reported Corrective Action Component: Not reported Appeal Initiated Date: Not reported Appeal Resolution Date: Not reported Disposition Status Date: Not reported Disposition Status: Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person: Not reported

Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Proposed Amount: Not reported Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined: 20090106 Actual Return to Compliance Date: 20090306 Return to Compliance Qualifier: Documented Violation Responsible Agency: State 20090306 Scheduled Compliance Date: Enforcement Identifier: 601 Date of Enforcement Action: 20090106 Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

LDR - General

Enforcement Attorney: Not reported

Corrective Action Component: No

Appeal Initiated Date: Not reported Appeal Resolution Date: Not reported Disposition Status Date: Not reported **Disposition Status:** Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

WRITTEN INFORMAL **Enforcement Type:**

Enforcement Responsible Person: Not reported Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Not reported Proposed Amount: Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: Yes Agency Which Determined Violation: State

Violation Short Description:

Date Violation was Determined: 19880607 Actual Return to Compliance Date: 19880801 Return to Compliance Qualifier: Observed Violation Responsible Agency: State Scheduled Compliance Date: Not reported Not reported Enforcement Identifier: Not reported Date of Enforcement Action: Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported Enforcement Attorney: Not reported Not reported Corrective Action Component: Not reported Appeal Initiated Date: Appeal Resolution Date: Not reported Disposition Status Date: Not reported Disposition Status: Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person: Not reported Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported

Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

SEP Type Description:

Proposed Amount:

Not reported
Prinal Monetary Amount:

Paid Amount:

Not reported
Paid Amount:

Not reported
Pinal Count:

Not reported
Pinal Amount:

Not reported
Not reported
Not reported

Evaluation Action Summary:

Evaluation Date: 19890111
Evaluation Responsible Agency: State
Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: R9STA Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19890512 19890324 Scheduled Compliance Date: Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 19890109
Evaluation Responsible Agency: State
Found Violation: No

Evaluation Type Description: FINANCIAL RECORD REVIEW

Evaluation Responsible Person Identifier: R9STA Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: Not reported Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 20090106
Evaluation Responsible Agency: State
Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: Not reported Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 20090306 Scheduled Compliance Date: 20090306 Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 19890111
Evaluation Responsible Agency: State
Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier:

Evaluation Responsible Sub-Organization:

Actual Return to Compliance Date:

Scheduled Compliance Date:

Date of Request:

Date Response Received:

Not reported

Not reported

Not reported

Distance
Elevation Site Database(s)

AOC LLC (Continued) 1000238960

Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 20090106
Evaluation Responsible Agency: EPA
Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: **CMCDO** Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 20090219 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 20191022
Evaluation Responsible Agency: State
Found Violation: No

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: Not reported Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: Not reported Scheduled Compliance Date: Not reported Not reported Date of Request: Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 20090106
Evaluation Responsible Agency: EPA
Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: **CMCDO** Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 20090219 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 19880607
Evaluation Responsible Agency: State
Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: R9STA Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19880801 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Not reported Request Agency: Former Citation: Not reported

Evaluation Date: 20090106 Evaluation Responsible Agency: State **EDR ID Number**

EPA ID Number

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Found Violation: Yes

COMPLIANCE EVALUATION INSPECTION ON-SITE **Evaluation Type Description:**

Evaluation Responsible Person Identifier: Not reported Evaluation Responsible Sub-Organization: Not reported 20090306 Actual Return to Compliance Date: Scheduled Compliance Date: 20090306 Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 20090106 Evaluation Responsible Agency: **EPA** Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: **CMCDO** Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 20090219 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

19921019 **Evaluation Date:** Evaluation Responsible Agency: State Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: R9STA Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19930107 Scheduled Compliance Date: 19921217 Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported

Evaluation Date: 19890111 Evaluation Responsible Agency: State Found Violation: Yes

Former Citation:

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation Type Description:

Not reported

Evaluation Responsible Person Identifier: R9STA Evaluation Responsible Sub-Organization: Not reported 19890512 Actual Return to Compliance Date: Scheduled Compliance Date: 19890324 Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 19880607 Evaluation Responsible Agency: State Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: R9STA Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19880801

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Scheduled Compliance Date: Not reported Not reported Date of Request: Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 19880607 Evaluation Responsible Agency: State Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: R9STA Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19880801 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 20150813 Evaluation Responsible Agency: State Found Violation: No

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: Not reported Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: Not reported Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 19921106 Evaluation Responsible Agency: State Found Violation: No

Evaluation Type Description: FINANCIAL RECORD REVIEW

Evaluation Responsible Person Identifier: R9STA Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: Not reported Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

20041104 **Evaluation Date:**

Evaluation Responsible Agency: State Contractor/Grantee

Found Violation:

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation Type Description:

Evaluation Responsible Person Identifier: Not reported Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 20041203 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Evaluation Date: 19921019 Evaluation Responsible Agency: State Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: R9STA Not reported **Evaluation Responsible Sub-Organization:** Actual Return to Compliance Date: 19930107 Scheduled Compliance Date: 19921217 Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 20090106 Evaluation Responsible Agency: State Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: Not reported Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 20090306 Scheduled Compliance Date: 20090306 Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 20090106 Evaluation Responsible Agency: State Found Violation: Yes

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation Type Description:

Evaluation Responsible Person Identifier: Not reported Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 20090306 Scheduled Compliance Date: 20090306 Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

19890111 **Evaluation Date:** Evaluation Responsible Agency: State Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: R9STA Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19890512 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

20090106 **Evaluation Date:** Evaluation Responsible Agency: State Found Violation:

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: Not reported Map ID
Direction

MAP FINDINGS

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Evaluation Responsible Sub-Organization:

Actual Return to Compliance Date:

Scheduled Compliance Date:

Date of Request:

Date Response Received:

Request Agency:

Former Citation:

Not reported

Not reported

Not reported

Not reported

Evaluation Date: 19880607
Evaluation Responsible Agency: State
Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: R9STA Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19880801 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

ENVIROSTOR:

Name: AOC LLC

19991 SEATON AVE Address: City,State,Zip: PERRIS, CA 923700000

Facility ID: 80001432 Status: Active 08/12/2009 Status Date: Site Code: 401231

Site Type: Corrective Action Site Type Detailed: Corrective Action

Acres: 10 NPL: NO Regulatory Agencies: **SMBRP** Lead Agency: WM

Program Manager: Viktoriya Anashkina

Supervisor: Jose Diaz

Cleanup Chatsworth Division Branch:

Assembly: Senate: 31

Special Program: Not reported

Restricted Use: NO

NONE SPECIFIED Site Mamt Reg: Funding: Not reported 33.83099 Latitude: -117.2627 Longitude: 317090029 APN:

MANUFACTURING - CHEMICALS Past Use:

Potential COC: Diethylene glycol, monobutyl ether Diethylene glycol, monoethyl

> ether Ethylene glycol Ethylene glycol, monobutyl ether Phthalic anhydride Propylene glycol Propylene glycol, monoethyl ether

Propylene glycol, monomethyl ether

Confirmed COC: NONE SPECIFIED OTH, SED, SOIL, SURFW Potential Description:

Alias Name: 317090029 Alias Type: APN Alias Name: CAD059270975

Alias Type: **EPA Identification Number**

110000479385 Alias Name: Alias Type: EPA (FRS #) 401231 Alias Name:

Project Code (Site Code) Alias Type:

Alias Name: 80001432

Alias Type: **Envirostor ID Number**

Completed Info:

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported

Completed Document Type: Interim Measures Questionnaire

Completed Date: 07/16/1992 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

RCRA Facility Assessment Report Completed Document Type:

Completed Date: 10/24/1988 Comments: Not reported

Direction Distance Elevation

nce EDR ID Number tition Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: * CA Process is Terminated

Completed Date: 10/24/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/04/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 08/27/2021

Comments: Fieldwork completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Project Management

Completed Date: 06/30/2021

Comments: PM task completed for FY20/21

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 10/12/2021

Comments: Cost Estimate Letter is uploaded.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/19/1980
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Date: 03/30/1981
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/10/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 03/09/2021
Comments: RFI Requested

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

AOC LLC (Continued) 1000238960

Completed Date: 01/11/2005

DTSC issued a letter to RP submitting a copy of the RCRA Facility Comments:

Assessment report dated October 1988

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 12/16/2014 Comments: Not reported

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Completed Document Type: Correspondence Completed Date: 09/19/2006 Comments: Not reported

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported

Completed Document Type: RCRA Facility Assessment Report

Completed Date: 10/01/1988

Comments: RCRA FA was conducted by A. T. Kearney on behalf of the U.S.EPA

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Litigation Support Completed Date: 09/15/2006

Comments: DTSC issued a letter on September 15, 2006 responding a letter

request, dated April 24, 2006, to provide additional information on: 1) summary report related to the DTSC March 10, 2005 on-site evaluation; 2) copies of figures indicating the location of the new areas of concerns (AOCs) identified, as referenced in Section 3 of the draft corrective action consent agreement (CACA); and 3)

clarification of table 2.3 of the draft CACA

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Pre-HARP Form Completed Document Type: Completed Date: 01/25/2005

Comments: Signed HARP is not available in the file room

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Correspondence Completed Date: 03/07/2007

Comments: DTSC concurred with AOC's proposed schedule for submittal of the

Letter Report on Current Condition at the AOC LLC Facility

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Correspondence Completed Document Type: Completed Date: 04/30/1990

Comments: DHS issued a letter on April 30, 1990 on which acknowledged the

Certification of Closure Report dated December 28, 1989, for the hazardous waste incinerator that operated at the Alpha Resins Corporation. The acknowledgment of Facility closure was not a certification that the Facility did not pose any environmental or public health threat, nor did release the owner/operator from

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

responsibilities and liabilities associated with past hazardous waste

management practices that occurred at the site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 09/10/2015

Comments: Cost estimate completed

Future Area Name: PROJECT WIDE Future Sub Area Name: Not reported RFI Report Future Document Type: Future Due Date: 2023 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

HIST UST:

ALPHA RESINS Name: Address: 19991 SEATON AVE City, State, Zip: **PERRIS, CA 92370**

File Number: 0001F9FE

URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001F9FE.pdf

Region: STATE Facility ID: 00000019398 Facility Type: Other

RESIN PLANT Other Type: Contact Name: JOHN HUGHES Telephone: 7146575161

Owner Name: THE ALPHA CORPORATION Owner Address: HIGHWAY 57 EAST Owner City, St, Zip: COLLIERVILLE, TN 38017

Total Tanks: 0003

Tank Num: 001 Container Num: 01

Not reported Year Installed: Tank Capacity: 00010000 Tank Used for: **PRODUCT** Type of Fuel: **DIESEL** Container Construction Thickness: 1/4

Leak Detection: Stock Inventor

002 Tank Num: Container Num: 02

Not reported Year Installed: 00010000 Tank Capacity: Tank Used for: WASTE Type of Fuel: Not reported

Container Construction Thickness: 1/4 Visual Leak Detection:

003 Tank Num: Container Num: 03

Not reported Year Installed:

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: Not reported

Container Construction Thickness: 1/4

Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

RAATS:

Entry No:

Facility ID: CAD059270975
Type: Not reported
Docket No: RCRA-09-85-0001

Region: 09

Issue Date: Not reported
Final Date: 10/12/1984
Status: Complaint Issued
Additional: Not reported

Action ID: 522 3008 (A) Action: Not reported Violation No: Viol No Cited: 1 3005 Total No Cited: Not reported Federal Reg Type: Prop. Penalty: .00 Final Penalty: .00 Total Prop. Penalty: .00

Comments: Not reported

Entry No: 1

Facility ID: CAD059270975
Type: Not reported
Docket No: RCRA-09-85-0001

Region: 09

Issue Date: Not reported Final Date: 10/12/1984 Status: Complaint Issued Additional: Not reported Action ID: 522 3008 (A) Action: Violation No: Not reported Viol No Cited: 2 270.10(E)(4) Total No Cited: Not reported

Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00

Comments: Not reported

EMI:

Name: AOC, LLC

Address: 19991 SEATON AVE City, State, Zip: PERRIS, CA 92370

 Year:
 2002

 County Code:
 33

 Air Basin:
 SC

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Facility ID: 117140 Air District Name: SC SIC Code: 2821

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 15 Reactive Organic Gases Tons/Yr: 10 Carbon Monoxide Emissions Tons/Yr: 1 NOX - Oxides of Nitrogen Tons/Yr: 2 0 SOX - Oxides of Sulphur Tons/Yr: Particulate Matter Tons/Yr: 0 Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: AOC, LLC

Address: 19991 SEATON AVE **PERRIS, CA 92370** City, State, Zip:

Year: 2003 County Code: SC Air Basin: 117140 Facility ID: Air District Name: SC SIC Code: 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 15 Reactive Organic Gases Tons/Yr: 10 Carbon Monoxide Emissions Tons/Yr: 1 NOX - Oxides of Nitrogen Tons/Yr: 2 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: 0 Part. Matter 10 Micrometers and Smllr Tons/Yr:0

AOC, LLC Name:

19991 SEATON AVE Address: **PERRIS, CA 92370** City, State, Zip:

Year: 2004 County Code: 33 Air Basin: SC Facility ID: 117140 Air District Name: SC SIC Code: 2821

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 14.9067966 Reactive Organic Gases Tons/Yr: 9.82 Carbon Monoxide Emissions Tons/Yr: 1.2297 NOX - Oxides of Nitrogen Tons/Yr: 2.2815 SOX - Oxides of Sulphur Tons/Yr: 0.029756 Particulate Matter Tons/Yr: 0.26499

Name: AOC, LLC

Part. Matter 10 Micrometers and Smllr Tons/Yr:0.23

19991 SEATON AVE Address: City, State, Zip: **PERRIS, CA 92370**

Direction Distance Elevation

ation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

 Year:
 2005

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: .889675 Reactive Organic Gases Tons/Yr: .549064262 Carbon Monoxide Emissions Tons/Yr: 1.2121 NOX - Oxides of Nitrogen Tons/Yr: 2.184545 SOX - Oxides of Sulphur Tons/Yr: .02143 Particulate Matter Tons/Yr: .261165 Part. Matter 10 Micrometers and Smllr Tons/Yr:.23025594

Name: AOC, LLC

Address: 19991 SEATON AVE City, State, Zip: PERRIS, CA 92370

 Year:
 2006

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 9.432175151723743611

Reactive Organic Gases Tons/Yr: 5.853
Carbon Monoxide Emissions Tons/Yr: 1.365
NOX - Oxides of Nitrogen Tons/Yr: 2.26
SOX - Oxides of Sulphur Tons/Yr: .023
Particulate Matter Tons/Yr: .294
Part. Matter 10 Micrometers and Smllr Tons/Yr:.2641

Name: AOC, LLC

Address: 19991 SEATON AVE City, State, Zip: PERRIS, CA 92370

 Year:
 2007

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 9.430036548942120371

Reactive Organic Gases Tons/Yr: 5.853
Carbon Monoxide Emissions Tons/Yr: 1.365
NOX - Oxides of Nitrogen Tons/Yr: 2.26
SOX - Oxides of Sulphur Tons/Yr: .023
Particulate Matter Tons/Yr: .294
Part. Matter 10 Micrometers and Smllr Tons/Yr:.2641

Direction Distance Elevation

ce EDR ID Number ion Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Name: AOC, LLC

Address: 19991 SEATON AVE City, State, Zip: PERRIS, CA 92570

 Year:
 2008

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2295

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 15.07811376000858083 Reactive Organic Gases Tons/Yr: 9.963154663978917988

Carbon Monoxide Emissions Tons/Yr: .9653995

NOX - Oxides of Nitrogen Tons/Yr: 4.40242296085028655

SOX - Oxides of Sulphur Tons/Yr: .014278975
Particulate Matter Tons/Yr: .194995375
Part. Matter 10 Micrometers and Smllr Tons/Yr:.19497979

Name: AOC, LLC

Address: 19991 SEATON AVE City,State,Zip: PERRIS, CA 92570

 Year:
 2009

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2295

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

 Total Organic Hydrocarbon Gases Tons/Yr:
 8.0821268014842804

 Reactive Organic Gases Tons/Yr:
 5.1635499999999999

 Carbon Monoxide Emissions Tons/Yr:
 0.68061000000000005

 NOX - Oxides of Nitrogen Tons/Yr:
 3.1142699999999999

SOX - Oxides of Sulphur Tons/Yr: 0.0122285

Name: AOC, LLC

Address: 19991 SEATON AVE City,State,Zip: PERRIS, CA 92570

 Year:
 2010

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2295

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 5.7045807250007101
Reactive Organic Gases Tons/Yr: 3.666459999999998
Carbon Monoxide Emissions Tons/Yr: 0.72604000000000002

NOX - Oxides of Nitrogen Tons/Yr: 1.3524 SOX - Oxides of Sulphur Tons/Yr: 0.01336795

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Particulate Matter Tons/Yr: 0.15657974999999999
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.14263007150000001

Name: AOC, LLC

Address: 19991 SEATON AVE City, State, Zip: PERRIS, CA 92570

 Year:
 2011

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2295

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported 5.8255886653 Total Organic Hydrocarbon Gases Tons/Yr: Reactive Organic Gases Tons/Yr: 3.70706 Carbon Monoxide Emissions Tons/Yr: 0.86354 NOX - Oxides of Nitrogen Tons/Yr: 1.65961 SOX - Oxides of Sulphur Tons/Yr: 0.01689 Particulate Matter Tons/Yr: 0.18962 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.17000252

Name: AOC, LLC

Address: 19991 SEATON AVE City,State,Zip: PERRIS, CA 92570

 Year:
 2012

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2295

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 5.7202886107 Reactive Organic Gases Tons/Yr: 3.73289 Carbon Monoxide Emissions Tons/Yr: 0.77024 NOX - Oxides of Nitrogen Tons/Yr: 1.4247 SOX - Oxides of Sulphur Tons/Yr: 0.01286 Particulate Matter Tons/Yr: 0.16742 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.14213816

Name: AOC, LLC

Address: 19991 SEATON AVE City, State, Zip: PERRIS, CA 92570

 Year:
 2013

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 5.7592429067 Reactive Organic Gases Tons/Yr: 3.81681

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Carbon Monoxide Emissions Tons/Yr: 1.98159
NOX - Oxides of Nitrogen Tons/Yr: 1.48536
SOX - Oxides of Sulphur Tons/Yr: 0.01438
Particulate Matter Tons/Yr: 0.17037
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.1417864

Name: AOC, LLC

Address: 19991 SEATON AVE City, State, Zip: PERRIS, CA 92570

 Year:
 2014

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 6.4971263252 Reactive Organic Gases Tons/Yr: 4.63982 Carbon Monoxide Emissions Tons/Yr: 0.70304 NOX - Oxides of Nitrogen Tons/Yr: 0.70898 SOX - Oxides of Sulphur Tons/Yr: 0.01108 Particulate Matter Tons/Yr: 0.14849 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.12351596

Name: AOC, LLC

Address: 19991 SEATON AVE City,State,Zip: PERRIS, CA 92570

 Year:
 2015

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 12.673498909 Reactive Organic Gases Tons/Yr: 11.77189445 Carbon Monoxide Emissions Tons/Yr: 0.900319 NOX - Oxides of Nitrogen Tons/Yr: 0.9924485 SOX - Oxides of Sulphur Tons/Yr: 0.01402181 Particulate Matter Tons/Yr: 0.18722315 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.161949201

Name: AOC, LLC

Address: 19991 SEATON AVE City, State, Zip: PERRIS, CA 92570

 Year:
 2016

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 117140

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 1.7742614136 Reactive Organic Gases Tons/Yr: 1.00127321 Carbon Monoxide Emissions Tons/Yr: 0.8260817 NOX - Oxides of Nitrogen Tons/Yr: 0.77

SOX - Oxides of Sulphur Tons/Yr: 0.0127233242 Particulate Matter Tons/Yr: 0.15259185 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.1294313376

Name: AOC, LLC

Address: 19991 SEATON AVE City,State,Zip: **PERRIS, CA 92570**

Year: 2017 County Code: Air Basin: SC Facility ID: 117140 Air District Name: SC SIC Code: 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 1.8833343432 Reactive Organic Gases Tons/Yr: 1.0516311 Carbon Monoxide Emissions Tons/Yr: 0.787559 NOX - Oxides of Nitrogen Tons/Yr: 1.4439181 SOX - Oxides of Sulphur Tons/Yr: 0.012990141 Particulate Matter Tons/Yr: 0.15292615 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.129653644

HWP:

EPA ID: CAD059270975 Name: AOC LLC

Address: 19991 SEATON AVE

Cleanup Status: CLOSED Latitude: 33.83099 Longitude: -117.2627

Historical - Non-Operating Facility Type:

Facility Size: Not reported Supervisor: Not reported Site Code: 401231, TBD

Senate District: 31 Assembly District: 61

Public Information Officer: Not reported Commercial Offsite Facility Types: Not reported

Active facility - undergoing corrective action: Alpha Owens Corning Quarterly Update:

(AOC), a division of the Alpha Corporation of Tennessee, manufactures polyester resin at the facility located in Perris, California. The Facility uses specially designed reaction vessels to accomplish esterification of glycols and difunctional organic acids and bases. AOC has been manufacturing polyester resins at the facility since 1972, when the plant was built. The property on which the facility is situated is roughly square and approximately 10 acres in size. The aqueous waste stream generated by the polyester resin manufacturing contains constituents including phenol, 1, 4-dioxane, and benzene. The aqueous waste stream is processed to recover unconverted raw materials, while the remainder is incinerated in a thermal oxidizer. Alpha Resins filed a Part A permit application on November 17, 1980,

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

and received interim status from the Department of Health Services on March 30, 1981. A visual site inspection (VSI) was conducted on September 14, 1988. A total of sixteen (16) solid waste management units (SWMUs) and three areas of concerns (AOCs) were identified in the RFA report. In a re-inspection of the facility on March 10, 2005, twenty three (23) areas of concerns (AOCs) were identified for further investigation. A draft corrective action consent agreement (CACA) has been prepared and is undergoing review by DTSC s Office of Legal

EDR ID Number

Counsel.

Project Manager Lead: Not reported Project Manager: Not reported Permit Type: **RCRA** Permit Effective Date: Not reported Permit Expiration Date: Not reported Calenviroscreen Score: 91-95% Total Planned Hours: Not reported Total Planned Amount: Not reported **Total Actual Hours:** Not reported

Activities:

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED

Activity Type: New Operating Permit

Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: 1989-06-21 00:00:00

Type: RCRA

Title Description: Initial Permit Application - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: New Operating Permit - APPLICATION PART A RECEIVED

Actual Date: 11/19/1980

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED

Activity Type: New Operating Permit

Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: 1989-06-21 00:00:00

Type: RCRA

Title Description: Initial Permit Application - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: New Operating Permit - 1ST NOTICE OF DEFICIENCY ISSUED

Actual Date: 02/14/1984

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

EPA ID: CAD059270975

Historical - Non-Operating Facility Type:

Facility Name: AOC LLC Project Manager: Not reported Project Manager Lead: Not reported Supervisor: Not reported CLOSED Facility Status:

Activity Type: **New Operating Permit**

Permit Being Renewed: Not reported Permit Being Modified: Not reported 1989-06-21 00:00:00 Final Date:

RCRA Type:

Title Description: Initial Permit Application - Units - INCIN1 and Tankstr1

Due Date: Not reported Comments: Not reported INCIN1, TANKSTR1 Unit Names:

Event Description: New Operating Permit - CALL-IN LETTER ISSUED

Actual Date: 09/30/1982

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: **AOC LLC** Project Manager: Not reported Project Manager Lead: Not reported Not reported Supervisor: CLOSED Facility Status:

Activity Type: **New Operating Permit**

Permit Being Renewed: Not reported Permit Being Modified: Not reported

1989-06-21 00:00:00 Final Date:

RCRA Type:

Title Description: Initial Permit Application - Units - INCIN1 and Tankstr1

Due Date: Not reported

Comments: Application to withdraw (OP180FC) and close all waste handling units

submitted 1/1/1989. Application to withdraw approved (OP190AR) dated

6/21/1989.

Unit Names: INCIN1, TANKSTR1

New Operating Permit - 2ND NOTICE OF DEFICIENCY ISSUED **Event Description:**

Actual Date: 10/23/1984

EPA ID: CAD059270975

Historical - Non-Operating Facility Type:

Facility Name: AOC LLC Project Manager: Not reported Project Manager Lead: Not reported Not reported Supervisor: Facility Status: CLOSED

Activity Type: **New Operating Permit**

Permit Being Renewed: Not reported Permit Being Modified: Not reported

1989-06-21 00:00:00 Final Date:

Type: **RCRA** Title Description: PERMIT1 Not reported Due Date:

INTENDS/CLOSED ALL WASTE HANDLING FACILITY, INTENDS/CLOSED ALL WASTE Comments:

HANDLING FACILITY, Approved Request

Unit Names: INCIN1, TANKSTR1

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST RECEIVED

Actual Date: 01/01/1989

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED

Activity Type: New Operating Permit

Permit Being Renewed: Not reported Permit Being Modified: Not reported

Final Date: 1989-06-21 00:00:00

Type: RCRA
Title Description: PERMIT1
Due Date: Not reported

Comments: INTENDS/CLOSED ALL WASTE HANDLING FACILITY, INTENDS/CLOSED ALL WASTE

HANDLING FACILITY, Approved Request

Unit Names: INCIN1, TANKSTR1

Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST ACKNOWLEDGED

Actual Date: 06/21/1989

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name:

Project Manager:

Project Manager Lead:

Supervisor:

Facility Status:

AOC LLC

Not reported

Not reported

CLOSED

Activity Type: New Operating Permit

Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: 1989-06-21 00:00:00

Type: RCRA

Title Description: Initial Permit Application - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: New Operating Permit - RESPONSE TO 1ST NOD RECEIVED

Actual Date: 03/28/1984

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED

Activity Type: New Operating Permit

Permit Being Renewed: Not reported Permit Being Modified: Not reported

Final Date: 1989-06-21 00:00:00

Type: RCRA
Title Description: PERMIT1
Due Date: Not reported
Comments: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Unit Names: INCIN1, TANKSTR1

Event Description: New Operating Permit - CALL-IN LETTER ISSUED

Actual Date: 09/30/1982

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED

Activity Type: New Operating Permit

Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: 1989-06-21 00:00:00

Type: RCRA

Title Description: Initial Permit Application - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST ACKNOWLEDGED

Actual Date: 06/21/1989

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED

Activity Type: New Operating Permit

Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: 1989-06-21 00:00:00

Type: RCRA

Title Description: Initial Permit Application - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: New Operating Permit - APPLICATION PART B RECEIVED

Actual Date: 05/02/1983

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED

Activity Type: New Operating Permit

Permit Being Renewed: Not reported Permit Being Modified: Not reported

Final Date: 1989-06-21 00:00:00

Type: RCRA
Title Description: PERMIT1
Due Date: Not reported
Comments: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Unit Names: INCIN1, TANKSTR1

Event Description: New Operating Permit - APPLICATION PART B RECEIVED

Actual Date: 05/02/1983

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED

Activity Type: New Operating Permit

Permit Being Renewed: Not reported Permit Being Modified: Not reported

Final Date: 1989-06-21 00:00:00

Type: RCRA
Title Description: PERMIT1
Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: New Operating Permit - APPLICATION PART A RECEIVED

Actual Date: 11/19/1980

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED

Activity Type: New Operating Permit

Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: 1989-06-21 00:00:00

Type: RCRA

Title Description: Initial Permit Application - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST RECEIVED

Actual Date: 01/01/1989

Closure:

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC Project Manager: Not reported Project Manager Lead: Not reported Supervisor: Not reported Not reported Facility Size: Facility Status: CLOSED Activity Type: Closure Final Final Date: Not reported **RCRA** Type:

Title Description: Closure1 - Units - INCIN1 and Tankstr1

Due Date: Not reported Comments: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Unit Names: INCIN1, TANKSTR1

Event Description: Closure Final - RECEIVE CLOSURE CERTIFICATION

Actual Date: 12/28/1989

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC Project Manager: Not reported Project Manager Lead: Not reported Supervisor: Not reported Facility Size: Not reported Facility Status: CLOSED Activity Type: Closure Final Final Date: Not reported Type: **RCRA**

Title Description: Closure1 - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: Closure Final - CLOSURE PLAN RECEIVED

Actual Date: 02/19/1985

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC Project Manager: Not reported Not reported Project Manager Lead: Supervisor: Not reported Facility Size: Not reported Facility Status: CLOSED Activity Type: Closure Final Final Date: Not reported Type: **RCRA**

Title Description: Closure1 - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: Closure Final - PUBLIC COMMENT (END)

Actual Date: 03/08/1989

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC Project Manager: Not reported Project Manager Lead: Not reported Supervisor: Not reported Facility Size: Not reported Facility Status: CLOSED Activity Type: Closure Final Final Date: Not reported Type: **RCRA**

Title Description: Closure1 - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: Closure Final - PUBLIC COMMENT (BEGIN)

Actual Date: 02/06/1989

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC Project Manager: Not reported Project Manager Lead: Not reported Supervisor: Not reported Facility Size: Not reported Facility Status: CLOSED Activity Type: Closure Final Final Date: Not reported Type: **RCRA**

Title Description: Closure1 - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: Closure Final - CLOSURE PLAN APPROVED

Actual Date: 06/21/1989

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC Project Manager: Not reported Project Manager Lead: Not reported Supervisor: Not reported Facility Size: Not reported CLOSED Facility Status: Activity Type: Closure Final Final Date: Not reported **RCRA** Type:

Title Description: Closure1 - Units - INCIN1 and Tankstr1

Due Date: Not reported
Comments: Not reported
Unit Names: INCIN1, TANKSTR1

Event Description: Closure Final - ISSUE CLOSURE VERIFICATION

Actual Date: 04/30/1990

Alias:

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name:

Facility Name:

Facility Status:

Project Manager:

Project Manager Lead:

Supervisor:

Alias Type:

AOC LLC

CLOSED

Not reported

Not reported

Not reported

FRS

Alias: 110000479385

EPA ID: CAD059270975

Facility Type: Historical - Non-Operating

Facility Name: AOC LLC
Facility Status: CLOSED
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported

Alias Type: Project Code (Site Code)

Alias: 401231

Direction Distance

Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

EPA ID: CAD059270975

Historical - Non-Operating Facility Type:

Facility Name: AOC LLC Facility Status: CLOSED Project Manager: Not reported Project Manager Lead: Not reported Not reported Supervisor:

Alias Type: Project Code (Site Code)

Alias:

NPDES:

AOC LLC Name:

19991 SEATON AVENUE Address: City,State,Zip: **PERRIS, CA 92570** 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 331001426 Regulatory Measure Type: Industrial 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 Not reported

Discharge Address: Discharge Name: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Status: Active Status Date: 03/27/1992 Operator Name: AOC LLC

Operator Address: 19991 Seaton Avenue

Operator City: Perris Operator State: California Operator Zip: 92570

NPDES as of 03/2018:

Agency Number:

NPDES Number: Not reported Status: Not reported Not reported

Region:

Regulatory Measure ID: 210684 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 331001426 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Map ID MAP FINDINGS
Direction

Distance Elevation

n Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Discharge Name: Not reported Not reported Discharge Address: Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Received Date: 05/09/2008 Processed Date: 03/27/1992 Status: Active Status Date: 03/27/1992 Place Size: 10 Place Size Unit: Acres

Contact: Juan Montalvo

Contact Title: Environmental Health Safety Leader

Contact Phone: 951-943-9708
Contact Phone Ext: Not reported

Contact Email: jmontalvo@aoc-resins.com

Operator Name: AOC LLC

Operator Address: 19991 Seaton Avenue

Operator City: Perris
Operator State: California
Operator Zip: 92570

Operator Contact:

Operator Contact Title:

Operator Contact Phone:

Operator Contact Phone Ext:

JUAN MONTALVO
EHS Leader
951-943-9708
Not reported

Operator Contact Email: jmontalvo@aoc-resins.com

Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Not reported Constype Linear Utility Ind: **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Not reported Constype Gas Line Ind: Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported

Dir Discharge Uswater Ind: N Receiving Water Name: Perris

Certifier: JUAN MONTALVO
Certifier Title: EHS LEADER

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Certification Date: 05-MAR-15

Primary Sic: 2821-Plastics Material and Synthetic Resins, and Nonvulcanizable

Elastomers

Secondary Sic: Not reported Tertiary Sic: Not reported

NPDES Number: CAS000001 Status: Active Agency Number: 0 Region: 8 210684 Regulatory Measure ID: 97-03-DWQ Order Number: Enrollee Regulatory Measure Type: Place ID: Not reported WDID: 8 331001426 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 03/27/1992 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: AOC LLC

Discharge Address: 19991 Seaton Avenue

Discharge City: Perris
Discharge State: California
Discharge Zip: 92570
Received Date: Not reported
Processed Date: Not reported

Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Not reported Place Size Unit: Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Not reported Contact Phone Ext: Not reported Contact Email: Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported

Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported Not reported Operator Contact Phone: Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported **Developer State:** Not reported Developer Zip: Not reported **Developer Contact:** Not reported

Developer Contact Title:

Constype Linear Utility Ind:

Emergency Phone:

Emergency Phone Ext:

Not reported

Not reported

Not reported

Direction Distance Elevation

ance EDR ID Number vation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Constype Above Ground Ind: Not reported Not reported Constype Below Ground Ind: Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Not reported Constype Gas Line Ind: Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Not reported Secondary Sic: **Tertiary Sic:** Not reported

Name: AOC LLC

Address: 19991 SEATON AVENUE City, State, Zip: PERRIS, CA 92570

Facility Status: Active
NPDES Number: CAS000001

Region: 8 Agency Number: Regulatory Measure ID: 210684 Not reported Place ID: Order Number: 97-03-DWQ WDID: 8 331001426 Regulatory Measure Type: Enrollee Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 03/27/1992 Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported

Discharge Address: 19991 Seaton Avenue

Discharge Name: AOC LLC Discharge City: Perris Discharge State: California Discharge Zip: 92570 Status: Not reported Status Date: Not reported Operator Name: Not reported Operator Address: Not reported Not reported Operator City: Operator State: Not reported Operator Zip: Not reported

NPDES as of 03/2018:

NPDES Number: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Status: Not reported Not reported Agency Number: Region: Regulatory Measure ID: 210684 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 331001426 Not reported Program Type: Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported

Discharge Address: Not reported Not reported Discharge City: Discharge State: Not reported Discharge Zip: Not reported Received Date: 05/09/2008 Processed Date: 03/27/1992 Status: Active Status Date: 03/27/1992 Place Size: 10 Place Size Unit: Acres

Contact: Juan Montalvo

Contact Title: Environmental Health Safety Leader

Contact Phone: 951-943-9708
Contact Phone Ext: Not reported

Contact Email: jmontalvo@aoc-resins.com

Operator Name: AOC LLC

Operator Address: 19991 Seaton Avenue

Operator City: Perris
Operator State: California
Operator Zip: 92570

Operator Contact:

Operator Contact Title:

Operator Contact Phone:

Operator Contact Phone:

Operator Contact Phone Ext:

UAN MONTALVO
EHS Leader
951-943-9708
Not reported

Operator Contact Email: jmontalvo@aoc-resins.com

Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported California Developer State: Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Constype Industrial Ind: Not reported Not reported Constype Other Description: Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported

Dir Discharge Uswater Ind: Receiving Water Name: Perris

Certifier: JUAN MONTALVO Certifier Title: **EHS LEADER** Certification Date: 05-MAR-15

Primary Sic: 2821-Plastics Material and Synthetic Resins, and Nonvulcanizable

Elastomers

Secondary Sic: Not reported Tertiary Sic: Not reported

NPDES Number: CAS000001 Active Status: Agency Number: 0 Region: Regulatory Measure ID: 210684 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 331001426 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 03/27/1992 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: AOC LLC

19991 Seaton Avenue Discharge Address:

Discharge City: Perris Discharge State: California Discharge Zip: 92570 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Not reported Place Size Unit: Not reported Contact: Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Not reported Operator State: Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Map ID MAP FINDINGS
Direction

Distance Elevation

n Site Database(s) EPA ID Number

AOC LLC (Continued) 1000238960

Operator Contact Phone Ext: Not reported Not reported Operator Contact Email: Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Not reported Constype Residential Ind: Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Not reported Receiving Water Name: Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Not reported Primary Sic: Secondary Sic: Not reported Tertiary Sic: Not reported

CIWQS:

Name: AOC LLC

Address: 19991 SEATON AVENUE City, State, Zip: PERRIS, CA 92570

Agency: AOC LLC

Agency Address: 19991 Seaton Avenue, Perris, CA 92570

Place/Project Type: Industrial - Plastics Material and Synthetic Resins, and

Nonvulcanizable Elastomers

SIC/NAICS:2821Region:8Program:INDSTWRegulatory Measure Status:Active

Regulatory Measure Type:

Order Number:

WDID:

NPDES Number:

Adoption Date:

Effective Date:

Storm water industrial
2014-0057-DWQ
8 33I001426
CAS000001
Not reported
03/27/1992

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Termination Date: Not reported Not reported Expiration/Review Date: Design Flow: Not reported Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: 0 Violations within 5 years: 0 33.83092 Latitude: Longitude: -117.26161

CERS:

AOC LLC Name:

19991 SEATON AVENUE Address: City,State,Zip: PERRIS, CA 92570-8724

Site ID: 451612 CERS ID: 110000479385

CERS Description: US EPA Air Emission Inventory System (EIS)

Affiliation:

Affiliation Type Desc: **Environmental Contact** JUAN F MONTALVO **Entity Name:**

Entity Title: ENVIRONMENTAL HEALTH AND SAFETY LEADER

Affiliation Address: 19991 SEATON AVENUE

Affiliation City: **PERRIS** Affiliation State: CA Affiliation Country: Not reported Affiliation Zip: Not reported

Affiliation Phone:

Public Contact Affiliation Type Desc: Entity Name: JAMES EARL Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported

AOC LLC Name:

Address: 19991 SEATON AVENUE **PERRIS, CA 92570** City,State,Zip:

526382 Site ID: CERS ID: 205955

CERS Description: Industrial Facility Storm Water

Violations:

Affiliation Phone:

Site ID: 526382 AOC LLC Site Name: Violation Date: 01-01-2020

Citation: 2014-0057-DWQ - Industrial General Permit

Violation Description: SW - Late Report

Violation Notes: Failure to submit the Level 1 ERA report for Zinc for the reporting

period of July 1, 2018 to June 30, 2019. This report was due on January 1, 2020. The discharger has not requested an automatic

extension to July 1, 2020 for this report.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1000238960

Violation Division: Water Boards Violation Program: **INDSTW** Violation Source: SMARTS,

Evaluation:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 02-18-2020

Violations Found: No

Eval Type: Industrial Storm Water Compliance Evaluation

A site inspection was conducted by regional board staff Keith Elliott **Eval Notes:**

and Reyna Mendoza. Environmental Health & Safety Leader Juan Montalvo was present during the inspection. Housekeeping appeared in good condition. The site sampling point is in the grass area on the north side of the property. The SWPPP was reviewed along with the most recent BMP monthly inspection which was on January 28, 2020.

Water Boards **Eval Division: INDSTW** Eval Program: Eval Source: SMARTS,

Affiliation:

Affiliation Type Desc: Owner/Operator Entity Name: AOC LLC **Entity Title:** Operator

19991 Seaton Avenue Affiliation Address:

Affiliation City: Perris Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 92570 Affiliation Phone:

C13 AOC, LLC ICIS 1000983391

SSE 19991 SEATON AVE **US AIRS** N/A

1/8-1/4 **PERRIS, CA 92570 DRYCLEANERS** 0.216 mi. **EMI**

Site 4 of 5 in cluster C 1138 ft.

Relative: ICIS:

Lower CASCAA200140330 Enforcement Action ID: FRS ID: 110000479385 Actual:

Action Name: NOV P62808 ISSUED ON 6/17/2016 FOR RULES 3003 & 3002(c)(1) 1562 ft.

> Facility Name: AOC, LLC

Facility Address: 19991 SEATON AVE

PERRIS, CA 92570

Enforcement Action Type: Notice of Violation **RIVERSIDE** Facility County:

Program System Acronym: **AIR** Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV Facility SIC Code: 2821 Federal Facility ID: Not reported Latitude in Decimal Degrees: 33.8311 Longitude in Decimal Degrees: -117.26157 Permit Type Desc: Not reported

CASCA00006065C0859 Program System Acronym:

Facility NAICS Code: 325211 Tribal Land Code: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC, LLC (Continued) 1000983391

Enforcement Action ID: CASCAA000006065C085900021

FRS ID: 110000479385

Action Name: AOC, LLC 06065C085900021

Facility Name: AOC, LLC

Facility Address: 19991 SEATON AVE

PERRIS, CA 92570

Enforcement Action Type: Administrative Order

Facility County: RIVERSIDE

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO
Facility SIC Code: 2821
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.8311
Longitude in Decimal Degrees: -117.26157
Permit Type Desc: Not reported

Program System Acronym: CASCA00006065C0859

Facility NAICS Code: 325211
Tribal Land Code: Not reported

Enforcement Action ID: CASCAA000006065C085900020

FRS ID: 110000479385

Action Name: AOC, LLC 06065C085900020

Facility Name: AOC, LLC

Facility Address: 19991 SEATON AVE

PERRIS, CA 92570 Notice of Violation

Facility County: RIVERSIDE Program System Acronym: AIR

Enforcement Action Type:

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV
Facility SIC Code: 2821
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.8311
Longitude in Decimal Degrees: -117.26157
Permit Type Desc: Not reported

Program System Acronym: CASCA00006065C0859

Facility NAICS Code: 325211
Tribal Land Code: Not reported

Enforcement Action ID: CASCAA000006065C085900010

FRS ID: 110000479385

Action Name: AOC, LLC 06065C085900010

Facility Name: AOC, LLC

Facility Address: 19991 SEATON AVE

PERRIS, CA 92570

Enforcement Action Type: Administrative Order Facility County: RIVERSIDE

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO
Facility SIC Code: 2821
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.8311
Longitude in Decimal Degrees: -117.26157
Permit Type Desc: Not reported

Program System Acronym: CASCA00006065C0859

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC, LLC (Continued) 1000983391

Facility NAICS Code: 325211
Tribal Land Code: Not reported

Enforcement Action ID: CASCAA000006065C085900009

FRS ID: 110000479385

Action Name: AOC, LLC 06065C085900009

Facility Name: AOC, LLC

Facility Address: 19991 SEATON AVE

PERRIS, CA 92570 Notice of Violation

Enforcement Action Type: Notice of Viola Facility County: RIVERSIDE

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV
Facility SIC Code: 2821
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.8311
Longitude in Decimal Degrees: -117.26157
Permit Type Desc: Not reported

Program System Acronym: CASCA00006065C0859

Facility NAICS Code: 325211
Tribal Land Code: Not reported

Enforcement Action ID: CASCAA000006065C085900005

FRS ID: 110000479385

Action Name: AOC, LLC 06065C085900005

Facility Name: AOC, LLC

Facility Address: 19991 SEATON AVE

PERRIS, CA 92570 Administrative Order

Enforcement Action Type: Administrativ
Facility County: RIVERSIDE

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO
Facility SIC Code: 2821
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.8311
Longitude in Decimal Degrees: -117.26157
Permit Type Desc: Not reported

Program System Acronym: CASCA00006065C0859

Facility NAICS Code: 325211
Tribal Land Code: Not reported

Enforcement Action ID: CASCAA000006065C085900004

FRS ID: 110000479385

Action Name: AOC, LLC 06065C085900004

Facility Name: AOC, LLC

Facility Address: 19991 SEATON AVE PERRIS, CA 92570

Enforcement Action Type: Notice of Violation Facility County: RIVERSIDE

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV
Facility SIC Code: 2821
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.8311

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC, LLC (Continued) 1000983391

Longitude in Decimal Degrees: -117.26157
Permit Type Desc: -0.117.26157
Not reported

Program System Acronym: CASCA00006065C0859

Facility NAICS Code: 325211
Tribal Land Code: Not reported

US AIRS (AFS):

Region Code: 09 County Code: CA065

Programmatic ID: AIR CASCA00006065C0859

Facility Registry ID: 110000479385
D and B Number: Not reported
Facility Site Name: AOC, LLC
Primary SIC Code: 2821
NAICS Code: 325211
Default Air Classification Code: MAJ
Facility Type of Ownership Code: POF
Air CMS Category Code: TVM

HPV Status: Not reported

US AIRS (AFS):

Region Code: 09

Programmatic ID: AIR CASCA00006065C0859

Facility Registry ID: 110000479385

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits

Activity Date: 2016-08-25 00:00:00

Activity Status Date: 2016-09-06 11:16:08

Activity Group: Compliance Monitoring

Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2016-08-25 00:00:00
Activity Status Date: 2016-09-06 11:16:08
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: Title V Permits

Activity Date: 2016-08-25 00:00:00

Activity Status Date: 2016-10-04 16:54:06

Activity Group: Compliance Monitoring

Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2015-09-04 00:00:00
Activity Status Date: 2015-09-09 17:58:36
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: Title V Permits

Direction Distance Elevation

vation Site Database(s) EPA ID Number

AOC, LLC (Continued) 1000983391

Activity Date: 2015-09-04 00:00:00
Activity Status Date: 2015-09-09 17:58:36
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2015-08-19 00:00:00
Activity Status Date: 2015-09-09 17:57:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: Title V Permits
Activity Date: 2015-08-19 00:00:00
Activity Status Date: 2015-09-09 17:57:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: Title V Permits
Activity Date: 2015-07-15 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2014-11-12 00:00:00
Activity Status Date: 2015-01-13 12:39:58
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2014-11-12 00:00:00
Activity Status Date: 2015-01-13 12:42:31
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: Title V Permits
Activity Date: 2014-11-12 00:00:00
Activity Status Date: 2015-01-13 12:39:58
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: Title V Permits
Activity Date: 2014-11-12 00:00:00
Activity Status Date: 2015-01-13 12:42:31
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Active

Air Program: Title V Permits
Activity Date: 2014-07-11 00:00:00

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC, LLC (Continued) 1000983391

Activity Status Date: 2015-01-13 12:41:35 Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Active

Title V Permits Air Program: Activity Date: 2014-06-06 00:00:00 Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2014-06-06 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits 2013-12-27 00:00:00 **Activity Date:**

Not reported Activity Status Date:

Compliance Monitoring Activity Group: Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2013-12-27 00:00:00

Activity Status Date: Not reported

Activity Group: **Compliance Monitoring** Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits 2013-12-26 00:00:00 Activity Date: Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2013-12-26 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits Activity Date: 2013-07-08 00:00:00 Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2013-07-08 00:00:00

Activity Status Date: Not reported Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

AOC, LLC (Continued) 1000983391

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2012-11-28 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2012-11-28 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2012-11-26 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2012-11-26 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2012-07-18 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2012-07-18 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2012-03-27 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2012-03-27 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring

Map ID MAP FINDINGS
Direction

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

AOC, LLC (Continued) 1000983391

Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2011-08-11 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2011-08-11 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2011-08-10 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2011-08-10 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2011-07-25 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2011-07-25 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2011-03-17 00:00:00

Activity Status Date: Not reported
Activity Group: Compliance Monito

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2011-03-17 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC, LLC (Continued) 1000983391

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2010-09-15 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Inspection/Evaluation Activity Type:

Activity Status: Not reported

Air Program: Title V Permits Activity Date: 2010-09-15 00:00:00 Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

2010-07-29 00:00:00 Activity Date:

Activity Status Date: Not reported

Compliance Monitoring Activity Group: Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits 2010-07-29 00:00:00 **Activity Date:**

Activity Status Date: Not reported Activity Group: Compliance Monitoring

Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits Activity Date: 2010-04-08 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2010-04-08 00:00:00

Activity Status Date: Not reported

Activity Group: **Compliance Monitoring** Inspection/Evaluation Activity Type:

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2009-08-20 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits Activity Date: 2009-08-20 00:00:00 Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported Map ID MAP FINDINGS
Direction

Distance Elevation Site EDR ID Number

EDR ID Number

EDR ID Number

EPA ID Number

AOC, LLC (Continued) 1000983391

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2009-08-19 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2009-08-19 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2009-08-14 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2009-08-14 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2009-01-15 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2009-01-15 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2008-09-01 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits
Activity Date: 2008-08-27 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC, LLC (Continued) 1000983391

Activity Date: 2008-08-27 00:00:00 Activity Status Date: Not reported

Compliance Monitoring Activity Group: Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2008-07-06 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits **Activity Date:** 2008-07-06 00:00:00 Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits **Activity Date:** 2008-05-16 00:00:00 Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2008-05-16 00:00:00

Activity Status Date: Not reported

Activity Group: **Compliance Monitoring** Activity Type: Inspection/Evaluation

Activity Status: Not reported

Title V Permits Air Program: Activity Date: 2007-08-10 00:00:00 Activity Status Date: 2007-08-10 00:00:00 Activity Group: **Enforcement Action** Activity Type: Administrative - Formal **Activity Status:** Final Order Issued

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2007-08-10 00:00:00 Activity Status Date: 2007-08-10 00:00:00 Activity Group: **Enforcement Action** Activity Type: Administrative - Formal Activity Status: Final Order Issued

Title V Permits Air Program: Activity Date: 2007-08-09 00:00:00 Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2007-08-09 00:00:00

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC, LLC (Continued) 1000983391

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation Activity Status: Not reported

Title V Permits Air Program: Activity Date: 2007-08-05 00:00:00 Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2007-08-05 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Inspection/Evaluation Activity Type:

Activity Status: Not reported

Title V Permits Air Program: 2006-09-21 00:00:00 **Activity Date:** Activity Status Date: 2006-09-21 00:00:00 Activity Group: **Enforcement Action** Activity Type: Administrative - Informal

Activity Status: Achieved

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2006-09-21 00:00:00 Activity Status Date: 2006-09-21 00:00:00 Activity Group: **Enforcement Action** Activity Type: Administrative - Informal

Activity Status: Achieved

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

2006-09-06 00:00:00 Activity Date:

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits Activity Date: 2006-09-06 00:00:00 Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2006-05-25 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits Activity Date: 2006-05-25 00:00:00 Activity Status Date: Not reported

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC, LLC (Continued) 1000983391

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits 2001-11-30 00:00:00 Activity Date: Activity Status Date: 2001-11-30 00:00:00 Activity Group: **Enforcement Action** Activity Type: Administrative - Formal **Activity Status:** Final Order Issued

Air Program: Title V Permits **Activity Date:** 2001-07-26 00:00:00 Activity Status Date: 2001-07-26 00:00:00 Activity Group: **Enforcement Action** Activity Type: Administrative - Informal

Activity Status: Achieved

Air Program: Title V Permits 2000-02-11 00:00:00 **Activity Date:** Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits Activity Date: 1998-10-02 00:00:00 Activity Status Date: 1998-10-02 00:00:00 Activity Group: **Enforcement Action** Activity Type: Administrative - Formal Activity Status: Final Order Issued

Air Program: Title V Permits Activity Date: 1998-06-19 00:00:00 Activity Status Date: 1998-06-19 00:00:00 Activity Group: **Enforcement Action** Activity Type: Administrative - Informal

Activity Status: Achieved

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1997-10-14 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: Title V Permits **Activity Date:** 1997-10-14 00:00:00 Activity Status Date: Not reported

Compliance Monitoring Activity Group: Activity Type: Inspection/Evaluation

Activity Status: Not reported

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1996-12-12 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC, LLC (Continued) 1000983391

Activity Type: Inspection/Evaluation Not reported Activity Status:

DRYCLEAN SOUTH COAST:

ALPHA/OWENS-CORNING, L.L.C. Name:

19991 SEATON AVE Address: **PERRIS, CA 92570** City,State,Zip:

Facility ID: 21837 Application Number: 01481E Permit Number: E03812

Status:

Representative Name: P ERIC PADILLA Representative Telephone: 951 6575161 Permit Status: **INACTIVE BCAT Number:** 279701

BCAT Description: POLYESTER, REACTION ORGAN ADD

CCAT Number:

ADSORBER (DRY CLEANING) REGENERATIVE **CCAT Description:**

475.59899902 UTM East: UTM North: 3742.0620117 12/31/9999 Application Date: PO Issue Date: 06/04/1980 NAICS Code: 325211 SIC Code: 2821

ALPHA/OWENS-CORNING. L.L.C. Name:

Address: 19991 SEATON AVE City,State,Zip: **PERRIS, CA 92570**

Facility ID: 21837 Application Number: 02022E Permit Number: E04340

Status:

Representative Name: P ERIC PADILLA Representative Telephone: 951 6575161 Permit Status: **INACTIVE BCAT Number:** 287900

BCAT Description: STORAGE TANK RECLAIMABLE SOLVENTS

CCAT Number:

CCAT Description: ADSORBER (DRY CLEANING), NON-REGENERATIV

475.59899902 **UTM East:** UTM North: 3742.0620117 Application Date: 12/31/9999 PO Issue Date: 01/15/1981 NAICS Code: 325211 SIC Code: 2821

ALPHA/OWENS-CORNING, L.L.C. Name:

Address: 19991 SEATON AVE **PERRIS, CA 92570** City,State,Zip:

Facility ID: 21837 Application Number: 02525R Permit Number: 02342R Status:

P ERIC PADILLA Representative Name: Representative Telephone: 951 6575161 Permit Status: **INACTIVE**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC, LLC (Continued) 1000983391

BCAT Number: 324902

STORAGE TANK FX RF W/CTL STYRENE **BCAT Description:**

CCAT Number:

CCAT Description: ADSORBER (DRY CLEANING), NON-REGENERATIV

UTM East: 475.59899902 **UTM North:** 3742.0620117 Application Date: 12/31/9999 PO Issue Date: 08/13/1974 NAICS Code: 325211 SIC Code: 2821

EMI:

ALPHA CHEM CORP Name:

Address: 19991 SEATON AVE & RIDER ST,

City,State,Zip: **PERRIS, CA 92370**

Year: 1987 County Code: 33 Air Basin: SC Facility ID: 21837 Air District Name: SC SIC Code: 2821

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: Reactive Organic Gases Tons/Yr: 4 Carbon Monoxide Emissions Tons/Yr: 0 NOX - Oxides of Nitrogen Tons/Yr: 5 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: 13 Part. Matter 10 Micrometers and Smllr Tons/Yr:12

ALPHA RESINS CORP Name:

Address: 19991 SEATON AVE/RIDER ST

PERRIS, CA 92370 City,State,Zip:

1990 Year: County Code: 33 Air Basin: SC Facility ID: 21837 Air District Name: SC SIC Code: 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 13 Reactive Organic Gases Tons/Yr: 1 Carbon Monoxide Emissions Tons/Yr: 3 NOX - Oxides of Nitrogen Tons/Yr: 9 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: Part. Matter 10 Micrometers and Smllr Tons/Yr:1

ALPHA/OWENS-CORNING, L.L.C. Name: Address: 19991 SEATON AVE/RIDER ST

PERRIS, CA 92370 City,State,Zip:

Year: 1993 County Code: 33

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC, LLC (Continued) 1000983391

Air Basin: SC 21837 Facility ID: Air District Name: SC SIC Code: 2821

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 16 Reactive Organic Gases Tons/Yr: 1 Carbon Monoxide Emissions Tons/Yr: 1 NOX - Oxides of Nitrogen Tons/Yr: 4 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: 0 Part. Matter 10 Micrometers and Smllr Tons/Yr:0

ALPHA/OWENS-CORNING, L.L.C. Name: 19991 SEATON AVE/RIDER ST Address:

PERRIS, CA 92370 City, State, Zip:

Year: 1995 County Code: 33 Air Basin: SC Facility ID: 21837 Air District Name: SC SIC Code: 2821

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 16 Reactive Organic Gases Tons/Yr: 1 Carbon Monoxide Emissions Tons/Yr: 1 NOX - Oxides of Nitrogen Tons/Yr: 4 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: Part. Matter 10 Micrometers and Smllr Tons/Yr:0

ALPHA/OWENS-CORNING, L.L.C. Name:

Address: 19991 SEATON AVE City, State, Zip: **PERRIS, CA 92370**

Year: 1996 County Code: 33 Air Basin: SC Facility ID: 21837 Air District Name: SC SIC Code: 2821

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: Reactive Organic Gases Tons/Yr: 1 Carbon Monoxide Emissions Tons/Yr: 2 NOX - Oxides of Nitrogen Tons/Yr: 6 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: ALPHA/OWENS-CORNING, L.L.C. Address: 19991 SEATON AVE/RIDER ST

Direction Distance

Elevation Site Database(s) EPA ID Number

AOC, LLC (Continued) 1000983391

City,State,Zip: PERRIS, CA 92370

 Year:
 1997

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 21837

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 17
Reactive Organic Gases Tons/Yr: 12
Carbon Monoxide Emissions Tons/Yr: 1
NOX - Oxides of Nitrogen Tons/Yr: 5
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: ALPHA/OWENS-CORNING, L.L.C. Address: 19991 SEATON AVE/RIDER ST

City,State,Zip: PERRIS, CA 92370

 Year:
 1998

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 21837

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 17
Reactive Organic Gases Tons/Yr: 12
Carbon Monoxide Emissions Tons/Yr: 1
NOX - Oxides of Nitrogen Tons/Yr: 5
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: ALPHA/OWENS-CORNING, L.L.C. Address: 19991 SEATON AVE/RIDER ST

City,State,Zip: PERRIS, CA 92370

 Year:
 1999

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 21837

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 17
Reactive Organic Gases Tons/Yr: 12
Carbon Monoxide Emissions Tons/Yr: 1
NOX - Oxides of Nitrogen Tons/Yr: 5
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

EDR ID Number

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

AOC, LLC (Continued) 1000983391

Name: ALPHA/OWENS-CORNING, L.L.C. Address: 19991 SEATON AVE/RIDER ST

City,State,Zip: PERRIS, CA 92370

 Year:
 2000

 County Code:
 33

 Air Basin:
 SC

 Facility ID:
 21837

 Air District Name:
 SC

 SIC Code:
 2821

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 17
Reactive Organic Gases Tons/Yr: 12
Carbon Monoxide Emissions Tons/Yr: 1
NOX - Oxides of Nitrogen Tons/Yr: 5
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

C14 AOC LLC PFAS ECHO 1027326091 SSE 33.83098/-117.26157 N/A

SSE 33.83098/-117.26157 1/8-1/4 PERRIS, CA

0.217 mi.

1145 ft. Site 5 of 5 in cluster C

Relative: PFAS ECHO:
Lower Name: AOC LLC

Actual: Address: 33.83098/-117.26157

1562 ft. City,State,Zip: PERRIS, CA

 Latitude:
 33.83098

 Longitude:
 -117.26157

 Count:
 -1

 County:
 RIVERSIDE

 Status:
 Active

Region: 09

Industry: Plastics and Resins

ECHO Facility Report: https://echo.epa.gov/detailed-facility-report?fid=110000479385

Facility Percent Minority: 87.248

Facility Derived Tribes: Soboba Band of Luiseno Indians, California - 18.4 mile(s), Soboba Band

of Luiseno Indians, California - 19.5 mile(s), Morongo Band of Mission Indians, California - 20.4 mile(s), San Manuel Band of Mission

Indians, California - 21.9 mile(s), San Manuel Ban

Facility Population: 1154.71

EJSCREEN Flag US: Y

EJSCREEN Report: https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%

7B%22x%22:-117.26157,%22y%22:33.83098,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

EPA Programs: CAA; CWA; RCRA

Federal Facility: No

Federal Agency:

Facility FIPS Code:

Facility Indian Country Flag:

Not reported
06065

N

Facility Collection Method: ADDRESS MATCHING-HOUSE NUMBER

Facility Derived HUC: 18070202 Facility Derived WBD: 180702020305

Facility Derived CD113: 41

Facility Derived CB2010: 060650429043019

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AOC LLC (Continued) 1027326091

Facility Major Flag: Υ Facility Active Flag: Υ Facility Inspection Count: 6

Facility Date Last Inspection: 12/3/2020 Facility Days Last Inspection: 394 Facility Informal Count: Facility Date Last Informal Action:

6/17/2016

Facility Formal Action Count:

Facility Date Last Formal Action: 8/10/2007

Facility Total Penalties:

Facility Penalty Count: Not reported Facility Date Last Penalty: 8/10/2007 Facility Last Penalty AMT: 50,000 Facility QTRS With NC: Facility Programs With SNC:

Facility Compliance Status: No Violation Identified

Facility SNC Flag: Ν AIR Flag: NPDES Flag: Υ SDWIS Flag: Ν RCRA Flag: Υ TRI Flag: GHG Flag: Ν

CASCA00006065C0859 AIR IDS:

CAA Permit Types: Major Emissions

325211 CAA NAICS: CAA SICS: 2821 NPDES IDS: CAZ210684 CWA Permit Types: Minor CWA NAICS: Not reported CWA SICS: 2821

RCRA IDS: CAD059270975

RCRA Permit Types: LQG RCRA NAICS: 325211 SDWA IDS: Not reported SDWA System Types: Not reported SDWA Compliance Status: Not reported

SDWA SNC Flag:

92370LPHRS19991 TRI IDS:

TRI Releases Transfers: 69950 TRI On Site Releases: 2,652 TRI Off Site Transfers: 67,298 TRI Reporter:

Facility IMP Water Flag: Not reported

S121636026 15 **ECOLOGY AUTO PARTS SWRCY ENE** 23332 CAJALCO RD **CERS HAZ WASTE** N/A

1/4-1/2 **PERRIS, CA 40703**

PROC 0.352 mi. 1858 ft. **CIWQS CERS** Relative:

Lower SWRCY: AIM RECYCLING PERRIS Name: Actual:

Address: 23332 CAJALCO RD 1529 ft. City,State,Zip: **PERRIS, CA 92570**

Reg Id: 262180 Cert Id: RC262180.001 **NPDES**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ECOLOGY AUTO PARTS (Continued)

S121636026

Mailing Address: 13750 Imperial Hwy Santa Fe Springs Mailing City:

Mailing State: CA Mailing Zip Code: 90670 Website: Not reported Email: Not reported Phone Number: (562) 921-9974

Rural:

Operation Begin Date: 10/01/2017

Aluminium: Υ Glass: Plastic: Υ Bimetal:

Hours of Operation: Mon - Fri 8:00 am - 4:30 pm; Sat 8:00 am - 3:00 pm; Sun Closed

Organization ID:

Organization Name: Ecology Recycling Services LLC

CERS HAZ WASTE:

ECOLOGY RECYCLING SERVICES, LLC Name:

Address: 23332 CAJALCO RD **PERRIS, CA 92570** City,State,Zip:

Site ID: 177550 CERS ID: 10570762

CERS Description: Hazardous Waste Generator

NPDES:

Status Date:

Name: **ECOLOGY AUTO PARTS** Address: 23332 CAJALCO RD PERRIS, CA 40703 City,State,Zip: 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: Not reported Regulatory Measure Type: Industrial 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: Returned

Ecology Auto Parts Inc Operator Name:

06/01/2010

1450 Vine PI Operator Address: Operator City: Cerritos Operator State: California Operator Zip: 90701

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ECOLOGY AUTO PARTS (Continued)

S121636026

PROC:

AIM RECYCLING PERRIS Name: Address: 23332 CAJALCO RD City,State,Zip: **PERRIS, CA 92570** Reg Id: Not reported Cert Id: Not reported Organization Id: Not reported

Organization Name: Ecology Recycling Services LLC

Mailing Address: 13750 Imperial Hwy Mailing City: Santa Fe Springs Mailing State: CA

Mailing Zip Code: 90670 Website: Not reported Email: Not reported Phone Number: (562) 921-9974

Rural: N/A Operation Begin Date: 10/18/2019 Aluminium: Not reported Glass: Not reported Plastic: Not reported Not reported Bimetal:

Hours of Operation: Mon - Fri 8:00 am - 4:30 pm; Sat 8:00 am - 3:00 pm; Sun Closed

CIWQS:

Name: **ECOLOGY AUTO PARTS** Address: 23332 CAJALCO RD City, State, Zip: **PERRIS, CA 90703** Agency: **Ecology Auto Parts**

Agency Address: 14150 Vine PI, Cerritos, CA 90701

Place/Project Type: Industrial - Terminal and Joint Terminal Maintenance Facilities for

Motor Freight Transportation

SIC/NAICS: 4231 Region: **INDSTW** Program: Regulatory Measure Status: Terminated

Regulatory Measure Type: Storm water industrial Order Number: 2014-0057-DWQ WDID: 8 331022658 NPDES Number: CAS000001 Adoption Date: Not reported Effective Date: 06/02/2010 Termination Date: 08/09/2012 Not reported Expiration/Review Date: Not reported Design Flow: Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported Enforcement Actions within 5 years: 0

Violations within 5 years: 0 Latitude: 33.8389 Longitude: -117.25603

CERS:

ECOLOGY RECYCLING SERVICES, LLC Name:

Address: 23332 CAJALCO RD **PERRIS, CA 92570** City,State,Zip:

Direction Distance

Elevation Site Database(s) EPA ID Number

ECOLOGY AUTO PARTS (Continued)

S121636026

EDR ID Number

Site ID: 177550 CERS ID: 10570762

CERS Description: Chemical Storage Facilities

Violations:

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Violation Date: 01-14-2016

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter

6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material

inventory information for all reportable hazardous materials on site

at or above reportable quantities.

Violation Notes: Returned to compliance on 04/05/2016.
Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Violation Date: 01-14-2016

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter

6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all

required content.

Violation Notes: Returned to compliance on 04/05/2016.

Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Violation Date: 01-14-2016

Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22,

Chapter 12, Section(s) 66262.40(a)

Violation Description: Failure to maintain uniform hazardous waste manifest, consolidated

manifest, or bills of lading copies for three years.

Violation Notes: Returned to compliance on 04/05/2016.
Violation Division: Riverside County Department of Env Health

Violation Program: HW
Violation Source: CERS,
Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Violation Date: 05-06-2022

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: OBSERVATION: No manifests for Freon and Mercury switches available for

2021 or 2022 during the inspection. CORRECTIVE ACTION: Owner/operator shall obtain all manifests for Freon and Mercury which occurred in the last 2 years. Manifests shall be made available for inspection. Copies

of the Bill of Ladings can be emailed to kstewart@rivco.org.

Violation Division: Riverside County Department of Env Health

Direction Distance

Elevation Site Database(s) EPA ID Number

ECOLOGY AUTO PARTS (Continued)

S121636026

EDR ID Number

Violation Program: HW Violation Source: CERS,

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Violation Date: 01-14-2016

Citation: HSC 6.95 25508.1(a)-(e) - California Health and Safety Code, Chapter

6.95, Section(s) 25508.1(a)-(e)

Violation Description: Failure to electronically update business plan within 30 days of any

one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or

business name.

Violation Notes: Returned to compliance on 04/05/2016.
Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Violation Date: 01-14-2016

Citation: HSC 6.5 25250.19(c) - California Health and Safety Code, Chapter 6.5,

Section(s) 25250.19(c)

Violation Description: Failure to retain paperwork documenting disposal of used oil for three

years.

Violation Notes: Returned to compliance on 04/05/2016.

Violation Division: Riverside County Department of Env Health

Violation Program: HW
Violation Source: CERS,

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Violation Date: 01-14-2016

Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22,

Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers with

the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous

Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 04/05/2016.
Violation Division: Riverside County Department of Env Health

Violation Program: HW Violation Source: CERS,

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Violation Date: 01-14-2016

Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95,

Section(s) 25508(d)

Violation Description: Failure to complete and/or electronically submit a business plan when

storing/handling a hazardous material at or above reportable

quantities.

Violation Notes: Returned to compliance on 04/05/2016.
Violation Division: Riverside County Department of Env Health

Violation Program: HMRRP Violation Source: CERS,

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

ECOLOGY AUTO PARTS (Continued)

S121636026

EDR ID Number

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Violation Date: 01-14-2016

Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter

6.67, Section(s) 25270.4.5(a)

Violation Description: Failure to provide training regarding: 1. The operation and

maintenance of equipment to prevent discharges. 2. Discharge procedure

protocols. 3. Applicable pollution control laws, rules, and

regulations. 4. General facility operations. AND 5. The contents of

the SPCC Plan.

Violation Notes: Returned to compliance on 04/05/2016.
Violation Division: Riverside County Department of Env Health

Violation Program: APSA Violation Source: CERS,

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Violation Date: 01-14-2016

Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5,

Section(s) 25160.2

Violation Description: Failure to meet any of the following consolidated manifest

requirements: 1) Legible receipts for each quantity of hazardous waste that is received from a generator, 2) The generator's information (name, address, identification number, contact person, telephone number of the generator, the signature of the generator or the generator's representative), 3) Date of the shipment, 4) The manifest number, 5) The volume or quantity of each waste stream received, 6) The name, address, and identification number of the authorized facility to which the hazardous waste will be transported, 7) The transporter's information (name, address, and identification number, the driver's signature), 8) A statement, signed by the generator, certifying that the generator has established a program to reduce the volume or quantity and toxicity of the hazardous waste to the degree economically practicable. 9) The generator shall retain each receipt

for at least three years.

Violation Notes: Returned to compliance on 04/05/2016.

Violation Division: Riverside County Department of Env Health

Violation Program: HW
Violation Source: CERS,

Evaluation:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 01-14-2016 Violations Found: Yes

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: 05-06-2022 Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: This facility is a metal recycling center that generates Mercury

switches, Freon, and used oil.

Eval Division: Riverside County Department of Env Health

Direction Distance

Elevation Site Database(s) EPA ID Number

ECOLOGY AUTO PARTS (Continued)

S121636026

EDR ID Number

Eval Program: HW Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 01-14-2016 Violations Found: Yes

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: 01-14-2016 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: 05-21-2019

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: 05-06-2022 Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: This facility is a metal recycling center that handles lubricating

oil.

Eval Division: Riverside County Department of Env Health

Eval Program: HMRRP Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

Eval Date: 05-21-2019 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,

Enforcement Action:

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Site Address: 23332 CAJALCO RD

Site City: PERRIS
Site Zip: 92570
Enf Action Date: 01-14-2016

Enf Action Type: Notice of Violation (Unified Program)

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ECOLOGY AUTO PARTS (Continued)

S121636026

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Riverside County Department of Env Health Enf Action Division:

Enf Action Program: APSA Enf Action Source: CERS,

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

Site Address: 23332 CAJALCO RD

Site City: **PERRIS** Site Zip: 92570 Enf Action Date: 01-14-2016

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Riverside County Department of Env Health

Enf Action Program: **HMRRP** Enf Action Source: CERS.

Site ID: 177550

Site Name: Ecology Recycling Services, LLC

23332 CAJALCO RD Site Address:

Site City: **PERRIS** Site Zip: 92570 01-14-2016 Enf Action Date:

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Riverside County Department of Env Health

Enf Action Program: HWEnf Action Source: CERS,

Coordinates:

177550 Site ID:

Facility Name: Ecology Recycling Services, LLC

Env Int Type Code: HWG 10570762 Program ID: Coord Name: Not reported

Ref Point Type Desc: Center of a facility or station.,

Latitude: 33.837540 -117.254920 Longitude:

Affiliation:

Affiliation Type Desc: **Document Preparer** Entity Name: JOHN DANG **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:

Affiliation Type Desc: **Facility Mailing Address** Entity Name: Mailing Address **Entity Title:** Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ECOLOGY AUTO PARTS (Continued)

S121636026

EDR ID Number

Affiliation Address: 13750 E. IMPERIAL HWY
Affiliation City: SANTA FE SPRINGS

Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 90670
Affiliation Phone: ,

Affiliation Type Desc: Property Owner
Entity Name: DIEGO GAGNON
Entity Title: Not reported

Affiliation Address: dgagnon@aim-recycling.com

Affiliation City: SANTA FE SPRINGS

Affiliation State: CA

Affiliation Country: United States
Affiliation Zip: 90670
Affiliation Phone: (954) 901-9562,

Affiliation Type Desc: Environmental Contact

Entity Name: JOHN DANG
Entity Title: Not reported
Affiliation Address: 785 E. M STREET

Affiliation City: COLTON

Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 92324
Affiliation Phone:

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: Legal Owner
Entity Name: Diego Gagnon
Entity Title: Not reported

Affiliation Address: 13750 E. IMPERIAL HWY
Affiliation City: SANTA FE SPRINGS

Affiliation State: CA

Affiliation Country: United States
Affiliation Zip: 90670

Affiliation Phone: (954) 901-9562,

Affiliation Type Desc: Operator

Entity Name: Ecology Recycling Services, LLC.

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: (562) 921-9974,

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MCANALLY ENTERPRISES

ECOLOGY AUTO PARTS (Continued)

S121636026

S101590216

N/A

LUST

SWEEPS UST

HIST CORTESE

CA FID UST

Cortese

Affiliation Type Desc: Parent Corporation

Ecology Recycling Services, LLC. **Entity Name:**

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:

Affiliation Type Desc: Identification Signer Entity Name: JOHN DANG Entity Title: **EHS MANAGER** Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported

Affiliation Phone:

D16 **MCANALLY ENTERPRISES**

23480 RIDER ST ESE 1/4-1/2 **PERRIS, CA 92570**

0.487 mi.

Relative:

Lower

2573 ft. Site 1 of 2 in cluster D

> LUST REG 8: Name:

Address: 23480 RIDER ST Actual:

City: **PERRIS** 1544 ft.

Region: 8

Riverside County:

Regional Board: Santa Ana Region Facility Status: Case Closed Case Number: 083303464T Local Case Num: 99-15151 Soil only Case Type: Substance: Diesel Qty Leaked: Not reported Abate Method: Not reported Cross Street: **HWY 215** Enf Type: Not reported Funding: Not reported Tank Closure How Discovered: How Stopped: Not reported UNK Leak Cause: Leak Source: UNK

T0606500587 Global ID: How Stopped Date: 6/25/1998 Enter Date: 5/14/1999 Date Confirmation of Leak Began: 4/22/1999 Date Preliminary Assessment Began: Not reported Discover Date: 4/22/1999 **Enforcement Date:** Not reported 8/4/2000 Close Date: Date Prelim Assessment Workplan Submitted: 5/11/1999 Date Pollution Characterization Began: 1/19/2000

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MCANALLY ENTERPRISES (Continued)

S101590216

Date Remediation Plan Submitted: Not reported Not reported Date Remedial Action Underway: Date Post Remedial Action Monitoring: Not reported Enter Date: 5/14/1999 **GW Qualifies:** Not reported Soil Qualifies: Not reported Operator: Not reported Not reported Facility Contact: Interim: Not reported Oversite Program: LUST 33.8302077 Latitude: -117.2522718 Longitude: MTBE Date: Not reported Max MTBE GW: Not reported

MTBE Concentration: Max MTBE Soil: .026 MTBE Fuel:

MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected

MTBE Class:

NOM Staff: Staff Initials: UNK

Lead Agency: Local Agency

Local Agency: 33000L

SAN JACINTO (8-5) Hydr Basin #:

Beneficial: Not reported Priority: Not reported Cleanup Fund Id: Not reported Work Suspended: Not reported

Summary: Not reported

SWEEPS UST:

Name: **FEED MILL** 23480 RIDER ST Address:

PERRIS City: Status: Active 59854 Comp Number: Number:

Board Of Equalization: 44-018415 10-29-92 Referral Date: Action Date: 10-29-92 Created Date: 01-26-89 Owner Tank Id: 000495

SWRCB Tank Id: 33-000-059854-000001

Tank Status: Capacity: 10000 Active Date: 11-23-92 Tank Use: M.V. FUEL

STG: **DIESEL** Content: Number Of Tanks:

Name: FEED MILL 23480 RIDER ST Address:

PERRIS City: Status: Active Comp Number: 59854 Number: 1

Direction Distance

Elevation Site Database(s) **EPA ID Number**

MCANALLY ENTERPRISES (Continued)

S101590216

EDR ID Number

Board Of Equalization: 44-018415 Referral Date: 10-29-92 Action Date: 10-29-92 Created Date: 01-26-89 Owner Tank Id: 000495

SWRCB Tank Id: 33-000-059854-000002

Tank Status: Α 10000 Capacity: Active Date: 11-23-92 Tank Use: M.V. FUEL STG: DIESEL Content: Number Of Tanks:

CA FID UST:

33006812 Facility ID: UTNKA Regulated By: Regulated ID: Not reported Cortese Code: Not reported SIC Code: Not reported Facility Phone: 7146573987 Mail To: Not reported

Mailing Address: 12215 SEVENTH/POBOX 1129

Not reported

Mailing Address 2: Not reported Mailing City, St, Zip: **PERRIS 92370** Contact: Not reported Contact Phone: Not reported **DUNs Number:** Not reported NPDES Number: Not reported Not reported EPA ID: Not reported Comments: Status: Active

CORTESE:

MCANALLY ENTERPRISES Name:

Address: 23480 RIDER ST City, State, Zip: **PERRIS, CA 92570**

Region: CORTESE Envirostor Id: Not reported Global ID: T0606500587

Site/Facility Type: LUST CLEANUP SITE

Cleanup Status: **COMPLETED - CASE CLOSED** Status Date: Not reported

Not reported Site Code: 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

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

MCANALLY ENTERPRISES (Continued)

S101590216

Waste Management Uit Name: Not reported File Name: Active Open

HIST CORTESE:

edr_fname: MCANALLY ENTERPRISES

edr_fadd1: 23480

City, State, Zip: PERRIS, CA 92370

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 083303464T

 D17
 MCANALLY ENTERPRISES
 LUST
 \$106410452

 ESE
 23480 RIDER ST
 CERS
 N/A

1/4-1/2 PERRIS, CA 92570

0.487 mi.

2573 ft. Site 2 of 2 in cluster D

Relative: LUST:

Lower Name: MCANALLY ENTERPRISES

 Actual:
 Address:
 23480 RIDER ST

 1544 ft.
 City,State,Zip:
 PERRIS, CA 92570

Lead Agency: RIVERSIDE COUNTY LOP

Case Type: LUST Cleanup Site

Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500587

 Global Id:
 T0606500587

 Latitude:
 33.8306219725169

 Longitude:
 -117.247480338449

 Status:
 Completed - Case Closed

 Status Date:
 08/04/2000

 Case Worker:
 RIV

 RB Case Number:
 083303464T

Local Agency: RIVERSIDE COUNTY LOP File Location: Local Agency Warehouse

Local Case Number: 9915151

Potential Media Affect: Soil

Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:

Global Id: T0606500587

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:
 T0606500587

 Action Type:
 Other

 Date:
 04/22/1999

 Action:
 Leak Discovery

Global Id: T0606500587 Action Type: ENFORCEMENT

Direction
Distance

Elevation Site Database(s) EPA ID Number

MCANALLY ENTERPRISES (Continued)

S106410452

EDR ID Number

Date: 08/01/2000

Action: Closure/No Further Action Letter - #Riv Co Closure

 Global Id:
 T0606500587

 Action Type:
 ENFORCEMENT

 Date:
 07/31/2000

Action: File review - #RCDEH upload site file 8/27/2015

 Global Id:
 T0606500587

 Action Type:
 Other

 Date:
 04/22/1999

 Action:
 Leak Reported

 Global Id:
 T0606500587

 Action Type:
 Other

 Date:
 06/25/1998

 Action:
 Leak Stopped

LUST:

Global Id: T0606500587

Status: Open - Case Begin Date

Status Date: 06/25/1998

Global Id: T0606500587

Status: Open - Site Assessment

Status Date: 04/22/1999

Global Id: T0606500587

Status: Open - Site Assessment

Status Date: 05/11/1999

Global Id: T0606500587

Status: Open - Site Assessment

Status Date: 01/19/2000

Global Id: T0606500587

Status: Completed - Case Closed

Status Date: 08/04/2000

RIVERSIDE CO. LUST:

Name: MCANALLY ENTERPRISE

Address: 23480 RIDER ST
City,State,Zip: PERRIS, CA
Region: RIVERSIDE
Facility ID: 9915151

Employee: Boltinghous-LOP

Site Closed: Yes
Case Type: Soil only

Facility Status: closed/action completed
Casetype Decode: Soil only is impacted
Fstatus Decode: Closed/Action completed

CERS:

Name: MCANALLY ENTERPRISES

Address: 23480 RIDER ST

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

MCANALLY ENTERPRISES (Continued)

S106410452

City, State, Zip: PERRIS, CA 92570

 Site ID:
 246878

 CERS ID:
 T0606500587

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,

18 VAL VERDE CONTINUATION HIGH SCHOOL East NEVADA AVENUE/MORGAN STREET ENVIROSTOR S105628757 SCH N/A

1/2-1 PERRIS, CA 92571

0.781 mi. 4126 ft.

Relative: ENVIROSTOR:

 Lower
 Name:
 VAL VERDE CONTINUATION HIGH SCHOOL

 Actual:
 Address:
 NEVADA AVENUE/MORGAN STREET

1499 ft. City,State,Zip: PERRIS, CA 92571-3103

 Facility ID:
 33010050

 Status:
 No Further Action

 Status Date:
 05/23/2002

 Site Code:
 404250

Site Type: School Investigation

Site Type Detailed: School
Acres: 18
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Not reported
Supervisor: Javier Hinojosa

Division Branch: Southern California Schools & Brownfields Outreach

Assembly: 61 Senate: 31

Special Program: Not reported

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 33.8217
Longitude: -117.204

APN: NONE SPECIFIED

Past Use: AGRICULTURAL - ROW CROPS

Potential COC: Arsenic Aldrin Chlordane DDD DDE DDT Dieldrin Endosulfan Endrin HCH

(alpha HCH (beta HCH (gamma) Lindane HCH-technical Heptachlor

Heptachlor epoxide Mirex Toxaphene

Confirmed COC: 30001-NO 30004-NO 30006-NO 30007-NO 30008-NO 30010-NO 30309-NO

30313-NO 30314-NO 30315-NO 30316-NO 30207-NO 30400-NO 30261-NO

30043-NO 30308-NO 30023-NO

Potential Description: SOIL

Alias Name: MORGAN STREET HIGH SCHOOL SITE

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

VAL VERDE CONTINUATION HIGH SCHOOL (Continued)

S105628757

Alias Type: Alternate Name

VAL VERDE CONTINUATION HIGH SCHOOL Alias Name:

Alias Type: Alternate Name

Alias Name: VAL VERDE UNIFIED SCHOOL DISTRICT

Alias Type: Alternate Name

VAL VERDE USD-CONTINUATION SCHOOL Alias Name:

Alias Type: Alternate Name

Alias Name: VAL VERDE USD-PRPSD VAL VERDE CONT. HS

Alias Type: Alternate Name

Alias Name: 404242

Alias Type: Project Code (Site Code)

404250 Alias Name:

Alias Type: Project Code (Site Code)

Alias Name: 33010050

Alias Type: **Envirostor ID Number**

Completed Info:

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported

Completed Document Type: **Environmental Oversight Agreement**

Completed Date: 07/13/2001 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Site Inspections/Visit (Non LUR)

Completed Date: 09/18/2001 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: * Workplan Completed Date: 12/05/2001 Comments: Not reported

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Endangerment Assessment Report

Completed Date: 05/23/2002 Comments: Not reported

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:

VAL VERDE CONTINUATION HIGH SCHOOL Name: Address: NEVADA AVENUE/MORGAN STREET

PERRIS, CA 92571-3103 Citv.State.Zip:

Facility ID: 33010050

Direction Distance

Elevation Site Database(s) EPA ID Number

VAL VERDE CONTINUATION HIGH SCHOOL (Continued)

S105628757

EDR ID Number

Site Type: School Investigation

Site Type Detail: School

Site Mgmt. Req.: NONE SPECIFIED

Acres: 18
National Priorities List: NO
Cleanup Oversight Agencies: DTSC
Lead Agency: DTSC
Lead Agency Description: * DTSC
Project Manager: * DTSC
Supervisor: Not reported
Javier Hinojosa

Division Branch: Southern California Schools & Brownfields Outreach

 Site Code:
 404250

 Assembly:
 61

 Senate:
 31

Special Program Status: Not reported
Status: No Further Action
Status Date: 05/23/2002

Restricted Use: NO

Funding: School District
Latitude: 33.8217
Longitude: -117.204

APN: NONE SPECIFIED

Past Use: AGRICULTURAL - ROW CROPS

Potential COC: Arsenic, Aldrin, Chlordane, DDD, DDE, DDT, Dieldrin, Endosulfan,

Endrin, HCH (alpha, HCH (beta, HCH (gamma) Lindane, HCH-technical,

Heptachlor, Heptachlor epoxide, Mirex, Toxaphene

Confirmed COC: 30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, 30010-NO,

 $30309\text{-NO},\,30313\text{-NO},\,30314\text{-NO},\,30315\text{-NO},\,30316\text{-NO},\,30207\text{-NO},\,30400\text{-NO},$

30261-NO, 30043-NO, 30308-NO, 30023-NO

Potential Description: SOIL

Alias Name: MORGAN STREET HIGH SCHOOL SITE

Alias Type: Alternate Name

Alias Name: VAL VERDE CONTINUATION HIGH SCHOOL

Alias Type: Alternate Name

Alias Name: VAL VERDE UNIFIED SCHOOL DISTRICT

Alias Type: Alternate Name

Alias Name: VAL VERDE USD-CONTINUATION SCHOOL

Alias Type: Alternate Name

Alias Name: VAL VERDE USD-PRPSD VAL VERDE CONT. HS

Alias Type: Alternate Name

Alias Name: 404242

Alias Type: Project Code (Site Code)

Alias Name: 404250

Alias Type: Project Code (Site Code)

Alias Name: 33010050

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Environmental Oversight Agreement

Completed Date: 07/13/2001 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Site Inspections/Visit (Non LUR)

Completed Date: 09/18/2001

Map ID MAP FINDINGS Direction

Comments:

Distance
Elevation Site Database(s)

VAL VERDE CONTINUATION HIGH SCHOOL (Continued)

S105628757

EDR ID Number

EPA ID Number

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Workplan
Completed Date: 12/05/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Endangerment Assessment Report

Not reported

Completed Date: 05/23/2002 Comments: Not reported

Future Area Name: Not reported Future Sub Area Name: Not reported Not reported Future Document Type: 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

Count: 5 records. ORPHAN SUMMARY

City	EDR ID Site Name	Site Address	Zip Database(s)
CORONA	S107537948	CAJALCO RD, 3 MI E OF TEMESCAL	92570 CDL
EL CERRITO	S107537950	CAJALCO RD./200 YDS E OF EAGLE	92570 CDL
LAKE MATHEWS	S107526584	1.5 MI S OF CAJALCO RD	92570 CDL
MEAD VALLEY	S108407462	LOUNSBERRY RD, 1/2 MI S OF CAJ	92570 CDL
MEAD VALLEY	S107540984	VACANT LOT NEAR RIOS AVENUE AN	92570 CDL

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: 10/27/2022 Source: EPA
Date Data Arrived at EDR: 11/01/2022 Telephone: N/A

Number of Days to Update: 14 Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 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: 10/27/2022 Source: EPA
Date Data Arrived at EDR: 11/01/2022 Telephone: N/A

Date Made Active in Reports: 11/15/2022 Last EDR Contact: 12/01/2022

Number of Days to Update: 14 Next Scheduled EDR Contact: 01/09/2023
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: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: EPA Telephone: N/A

Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 01/09/2023 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: 08/25/2022 Date Data Arrived at EDR: 09/06/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 90

Source: Environmental Protection Agency

Telephone: 703-603-8704 Last EDR Contact: 09/06/2022

Next Scheduled EDR Contact: 01/10/2023 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: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 01/23/2023 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: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 01/23/2023 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: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 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: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 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: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 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: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 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: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 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: 08/16/2022 Date Data Arrived at EDR: 08/22/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 63

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 11/01/2022

Next Scheduled EDR Contact: 02/20/2023 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: 08/15/2022 Date Data Arrived at EDR: 08/17/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 68

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 11/16/2022

Next Scheduled EDR Contact: 03/06/2023 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: 08/15/2022 Date Data Arrived at EDR: 08/17/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 68

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 11/16/2022

Next Scheduled EDR Contact: 03/06/2023

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: 06/14/2022 Date Data Arrived at EDR: 06/15/2022 Date Made Active in Reports: 06/21/2022

Number of Days to Update: 6

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 09/20/2022

Next Scheduled EDR Contact: 01/02/2023 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: 07/25/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 10/05/2022

Number of Days to Update: 72

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 10/24/2022

Next Scheduled EDR Contact: 02/06/2023 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: 07/25/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 10/05/2022

Number of Days to Update: 72

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 10/24/2022

Next Scheduled EDR Contact: 02/06/2023 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 inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/08/2022 Date Data Arrived at EDR: 08/08/2022 Date Made Active in Reports: 10/20/2022

Number of Days to Update: 73

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320 Last EDR Contact: 11/03/2022

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

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: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: see region list Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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

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 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 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 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 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

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: 04/08/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 04/11/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 04/20/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 06/02/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/31/2022

Number of Days to Update: 79

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 04/28/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 04/20/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 04/28/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 04/14/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 10/14/2021 Date Data Arrived at EDR: 11/05/2021 Date Made Active in Reports: 02/01/2022

Number of Days to Update: 88

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 09/27/2022

Next Scheduled EDR Contact: 01/16/2023 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: 08/24/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/21/2022

Number of Days to Update: 82

Source: State Water Resources Control Board

Telephone: 916-327-7844 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/28/2022

Number of Days to Update: 89

Source: SWRCB Telephone: 916-341-5851 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 09/07/2022

Next Scheduled EDR Contact: 12/26/2022

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: 04/28/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023

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: 04/20/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023

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: 04/07/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 04/14/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 06/02/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/31/2022

Number of Days to Update: 79

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023

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: 04/08/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 04/11/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 04/20/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

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: 07/25/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 10/05/2022

Number of Days to Update: 72

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 10/24/2022

Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Quarterly

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: 09/13/2022

Next Scheduled EDR Contact: 01/02/2023

Data Release Frequency: Varies

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: 06/21/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 09/08/2022

Number of Days to Update: 79

Source: State Water Resources Control Board

Telephone: 916-323-7905 Last EDR Contact: 09/19/2022

Next Scheduled EDR Contact: 01/02/2023 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: 02/23/2022 Date Data Arrived at EDR: 03/10/2022 Date Made Active in Reports: 03/10/2022

Number of Days to Update: 0

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 09/09/2022

Next Scheduled EDR Contact: 12/26/2022 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: 10/20/2022

Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/18/2022

Number of Days to Update: 79

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 Data Release Frequency: Quarterly

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

Date of Government Version: 08/12/2022 Date Data Arrived at EDR: 08/16/2022 Date Made Active in Reports: 08/26/2022

Number of Days to Update: 10

Source: Integrated Waste Management Board

Telephone: 916-341-6422 Last EDR Contact: 11/15/2022

Next Scheduled EDR Contact: 02/20/2023 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: 10/20/2022

Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Varies

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: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 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

Telephone: 301-443-1452

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

te Made Active in Reports: 01/29/2015 Last EDR Contact: 10/28/2022
mber of Days to Update: 176 Next Scheduled EDR Contact: 02/06/2023

Number of Days to Update: 176 Next Scheduled EDR Contact: 02
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: 07/29/2022 Date Data Arrived at EDR: 08/18/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 67

Source: Drug Enforcement Administration

Source: Department of Health & Human Serivces, Indian Health Service

Telephone: 202-307-1000 Last EDR Contact: 11/16/2022

Next Scheduled EDR Contact: 03/06/2023 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: 07/25/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 10/05/2022

Number of Days to Update: 72

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 10/24/2022

Next Scheduled EDR Contact: 02/06/2023 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: 12/31/2019 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: 11/23/2022

Next Scheduled EDR Contact: 02/13/2023

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: 07/18/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 74

Source: CalEPA

Telephone: 916-323-2514 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 07/29/2022 Date Data Arrived at EDR: 08/18/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 67

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 11/16/2022

Next Scheduled EDR Contact: 03/06/2023 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: 08/04/2022 Date Data Arrived at EDR: 08/04/2022 Date Made Active in Reports: 10/20/2022

Number of Days to Update: 77

Source: San Francisco County Department of Public Health

Telephone: 415-252-3896 Last EDR Contact: 10/26/2022

Next Scheduled EDR Contact: 02/16/2023

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: 07/18/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 74

Source: California Environmental Protection Agency

Telephone: 916-323-2514 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 08/23/2022 Date Data Arrived at EDR: 08/24/2022 Date Made Active in Reports: 11/14/2022

Number of Days to Update: 82

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 11/23/2022

Next Scheduled EDR Contact: 03/13/2023

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: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 01/09/2023 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: 08/25/2022 Date Data Arrived at EDR: 08/25/2022 Date Made Active in Reports: 11/14/2022

Number of Days to Update: 81

Source: DTSC and SWRCB Telephone: 916-323-3400 Last EDR Contact: 11/29/2022

Next Scheduled EDR Contact: 03/13/2023 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: 09/19/2022 Date Data Arrived at EDR: 09/19/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 11

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 09/19/2022

Next Scheduled EDR Contact: 01/02/2023 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: 06/30/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 74

Source: Office of Emergency Services

Telephone: 916-845-8400 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Qualilty Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 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: 08/11/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 50

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 11/10/2022

Next Scheduled EDR Contact: 02/27/2023

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: 10/13/2022

Next Scheduled EDR Contact: 01/23/2023

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: 10/03/2022

Next Scheduled EDR Contact: 01/16/2023

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: 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: 11/03/2022

Next Scheduled EDR Contact: 02/20/2023 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: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 08/31/2022

Number of Days to Update: 71

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 09/20/2022

Next Scheduled EDR Contact: 01/02/2023 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: 10/28/2022

Next Scheduled EDR Contact: 02/16/2023 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: 10/28/2022

Next Scheduled EDR Contact: 02/16/2023 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: 12/31/2016 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: 09/12/2022

Next Scheduled EDR Contact: 12/26/2022 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: 11/01/2022

Next Scheduled EDR Contact: 02/27/2023 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: 07/18/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 07/29/2022

Number of Days to Update: 11

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 10/18/2022

Next Scheduled EDR Contact: 01/30/2023 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: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 03/13/2023 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: 10/27/2022

Next Scheduled EDR Contact: 01/30/2023 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: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 02/16/2023 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: 01/20/2022 Date Data Arrived at EDR: 01/20/2022 Date Made Active in Reports: 03/25/2022

Number of Days to Update: 64

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 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: 09/27/2022

Next Scheduled EDR Contact: 01/16/2023 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: 10/26/2022 Date Data Arrived at EDR: 11/22/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 13

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 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: 11/29/2022

Next Scheduled EDR Contact: 03/13/2023 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: 11/23/2022

Next Scheduled EDR Contact: 03/13/2023

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: 11/03/2022

Next Scheduled EDR Contact: 02/13/2023 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: 09/21/2022

Next Scheduled EDR Contact: 01/10/2023 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: 10/24/2022

Next Scheduled EDR Contact: 02/06/2023 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: 06/30/2022 Date Data Arrived at EDR: 07/21/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 71

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 09/27/2022

Next Scheduled EDR Contact: 01/16/2023 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: 12/31/2019 Date Data Arrived at EDR: 03/02/2022 Date Made Active in Reports: 03/25/2022

Number of Days to Update: 23

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 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: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 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: 10/27/2022

Next Scheduled EDR Contact: 02/16/2023 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: 11/09/2022

Next Scheduled EDR Contact: 02/27/2023 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 01/09/2023 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: 08/01/2022 Date Data Arrived at EDR: 08/02/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 59

Source: DOL, Mine Safety & Health Admi

Telephone: 202-693-9424 Last EDR Contact: 11/28/2022

Next Scheduled EDR Contact: 03/13/2023 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: 08/03/2022 Date Data Arrived at EDR: 08/17/2022 Date Made Active in Reports: 08/31/2022

Number of Days to Update: 14

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 11/17/2022

Next Scheduled EDR Contact: 03/06/2023 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: 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: 11/21/2022

Next Scheduled EDR Contact: 03/06/2023

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: 11/21/2022

Next Scheduled EDR Contact: 03/06/2023 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: 09/13/2022 Date Data Arrived at EDR: 09/14/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 82

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 11/30/2022

Next Scheduled EDR Contact: 03/20/2023 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: 08/03/2022 Date Data Arrived at EDR: 08/25/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 60

Source: EPA

Telephone: (415) 947-8000 Last EDR Contact: 11/29/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 01/11/2022 Date Made Active in Reports: 02/14/2022

Number of Days to Update: 34

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 10/05/2022

Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Varies

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: 11/15/2022

Next Scheduled EDR Contact: 03/06/2023 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: 06/25/2022 Date Data Arrived at EDR: 07/01/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 91

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 09/30/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Quarterly

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: 08/11/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 50

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 11/10/2022

Next Scheduled EDR Contact: 02/27/2023 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: 10/04/2022

Next Scheduled EDR Contact: 01/16/2023 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: 02/23/2022 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: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 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: 10/04/2022

Next Scheduled EDR Contact: 01/16/2023 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: 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: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 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: 10/28/2022

Next Scheduled EDR Contact: 02/06/2023 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: 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: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 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: 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: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 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: 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: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 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: 08/22/2018 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: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023

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: 08/22/2018 Date Data Arrived at EDR: 10/26/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 13

Source: Environmental Protection Agency

Telephone: 202-272-0167 Last EDR Contact: 10/26/2022

Next Scheduled EDR Contact: 01/16/2023 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: 02/23/2022 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: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 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: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 10/31/2022

Number of Days to Update: 61

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 09/06/2022 Date Data Arrived at EDR: 09/06/2022 Date Made Active in Reports: 10/26/2022

Number of Days to Update: 50

Source: State Water Resources Control Board

Telephone: 916-341-5455 Last EDR Contact: 09/06/2022

Next Scheduled EDR Contact: 12/19/2022 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: 06/21/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 09/08/2022

Number of Days to Update: 79

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-3400 Last EDR Contact: 09/19/2022

Next Scheduled EDR Contact: 01/02/2023 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: 11/10/2022

Next Scheduled EDR Contact: 02/20/2023 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: 08/18/2022 Date Data Arrived at EDR: 08/29/2022 Date Made Active in Reports: 11/14/2022

Number of Days to Update: 77

Source: South Coast Air Quality Management District

Telephone: 909-396-3211 Last EDR Contact: 11/15/2022

Next Scheduled EDR Contact: 03/06/2023

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: 11/07/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: Annually

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: 05/25/2022 Date Data Arrived at EDR: 05/26/2022 Date Made Active in Reports: 08/11/2022

Number of Days to Update: 77

Source: Antelope Valley Air Quality Management District

Telephone: 661-723-8070 Last EDR Contact: 11/14/2022

Next Scheduled EDR Contact: 03/13/2023

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: 09/16/2022

Next Scheduled EDR Contact: 12/26/2022

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: 07/12/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 09/29/2022

Number of Days to Update: 73

Source: State Water Resoruces Control Board

Telephone: 916-445-9379 Last EDR Contact: 10/19/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 07/06/2022 Date Data Arrived at EDR: 07/21/2022 Date Made Active in Reports: 10/03/2022

Number of Days to Update: 74

Source: Department of Toxic Substances Control

Telephone: 916-255-3628 Last EDR Contact: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 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: 08/09/2022 Date Data Arrived at EDR: 08/10/2022 Date Made Active in Reports: 08/30/2022

Number of Days to Update: 20

Source: California Integrated Waste Management Board

Telephone: 916-341-6066 Last EDR Contact: 11/15/2022

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: Varies

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/11/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 10/28/2022

Number of Days to Update: 78

Source: Department of Toxic Subsances Control

Telephone: 877-786-9427 Last EDR Contact: 11/10/2022

Next Scheduled EDR Contact: 02/27/2023 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: 08/11/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 10/28/2022

Number of Days to Update: 78

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 11/10/2022

Next Scheduled EDR Contact: 02/27/2023 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: 07/05/2022 Date Data Arrived at EDR: 07/05/2022 Date Made Active in Reports: 09/19/2022

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-440-7145 Last EDR Contact: 10/03/2022

Next Scheduled EDR Contact: 01/16/2023 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: 09/27/2022

Next Scheduled EDR Contact: 01/16/2023 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: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/18/2022

Number of Days to Update: 79

Source: Department of Conservation Telephone: 916-322-1080 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 08/08/2022 Date Data Arrived at EDR: 08/25/2022 Date Made Active in Reports: 11/14/2022

Number of Days to Update: 81

Source: Department of Public Health Telephone: 916-558-1784 Last EDR Contact: 11/29/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/08/2022 Date Data Arrived at EDR: 08/08/2022 Date Made Active in Reports: 10/20/2022

Number of Days to Update: 73

Source: State Water Resources Control Board

Telephone: 916-445-9379 Last EDR Contact: 11/03/2022

Next Scheduled EDR Contact: 02/20/2023 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: 08/25/2022 Date Data Arrived at EDR: 08/25/2022 Date Made Active in Reports: 11/14/2022

Number of Days to Update: 81

Source: Department of Pesticide Regulation

Telephone: 916-445-4038 Last EDR Contact: 11/29/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: Quarterly

PROC: Certified Processors Database A listing of certified processors.

> Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/18/2022

Number of Days to Update: 79

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 09/07/2022 Date Data Arrived at EDR: 09/08/2022 Date Made Active in Reports: 11/29/2022

Number of Days to Update: 82

Source: State Water Resources Control Board

Telephone: 916-445-3846 Last EDR Contact: 09/07/2022

Next Scheduled EDR Contact: 12/26/2022 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: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/18/2022

Number of Days to Update: 79

Source: Deaprtment of Conservation Telephone: 916-445-2408

Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023

Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resource Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023

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: 11/08/2022

Next Scheduled EDR Contact: 02/27/2023 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: 09/13/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023

Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023

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: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/18/2022

Number of Days to Update: 79

Source: State Water Resources Control Board

Telephone: 916-341-5810 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 08/16/2022 Date Data Arrived at EDR: 08/17/2022 Date Made Active in Reports: 08/18/2022

Number of Days to Update: 1

Source: State Water Resources Control Board

Telephone: 866-794-4977 Last EDR Contact: 11/29/2022

Next Scheduled EDR Contact: 03/13/2023 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: 07/18/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 74

Source: California Environmental Protection Agency

Telephone: 916-323-2514 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023

Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023

Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023

Data Release Frequency: Varies

SAMPLING POINT: Sampling Point? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 08/31/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/17/2022

Number of Days to Update: 78

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 11/22/2022

Next Scheduled EDR Contact: 03/06/2023 Data Release Frequency: Varies

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: 09/28/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

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: 09/28/2022

Next Scheduled EDR Contact: 01/16/2023

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: 10/03/2022

Next Scheduled EDR Contact: 01/16/2023

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: 09/28/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

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 Source: EDR, Inc.

Date Data Arrived at EDR: N/A Telephone: N/A

Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: 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: 09/27/2022 Next Scheduled EDR Contact: 01/16/2023

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/29/2022 Date Data Arrived at EDR: 06/29/2022 Date Made Active in Reports: 07/21/2022

Number of Days to Update: 22

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 09/27/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 07/22/2022 Date Data Arrived at EDR: 07/27/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 5

Source: Amador County Environmental Health

Telephone: 209-223-6439 Last EDR Contact: 10/26/2022

Next Scheduled EDR Contact: 02/13/2023

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: 09/27/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 06/14/2022 Date Data Arrived at EDR: 06/15/2022 Date Made Active in Reports: 09/02/2022

Number of Days to Update: 79

Source: Calveras County Environmental Health

Telephone: 209-754-6399 Last EDR Contact: 09/27/2022

Next Scheduled EDR Contact: 01/02/2023 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: 10/26/2022

Next Scheduled EDR Contact: 02/16/2023 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: 07/20/2022 Date Data Arrived at EDR: 07/20/2022 Date Made Active in Reports: 10/03/2022

Number of Days to Update: 75

Source: Contra Costa Health Services Department

Telephone: 925-646-2286 Last EDR Contact: 10/20/2022

Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List

Cupa Facility list

Date of Government Version: 05/04/2022 Date Data Arrived at EDR: 05/06/2022 Date Made Active in Reports: 07/28/2022

Number of Days to Update: 83

Source: Del Norte County Environmental Health Division

Telephone: 707-465-0426 Last EDR Contact: 10/20/2022

Next Scheduled EDR Contact: 02/06/2023

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: 10/20/2022

Next Scheduled EDR Contact: 02/06/2023

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: 09/30/2022

Next Scheduled EDR Contact: 01/09/2023 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: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 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: 11/08/2022

Next Scheduled EDR Contact: 02/27/2023 Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List

Cupa facility list.

Date of Government Version: 07/13/2022 Date Data Arrived at EDR: 07/14/2022 Date Made Active in Reports: 09/29/2022

Number of Days to Update: 77

Source: San Diego Border Field Office

Telephone: 760-339-2777 Last EDR Contact: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023

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: 11/08/2022

Next Scheduled EDR Contact: 02/27/2023

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: 05/06/2022 Date Data Arrived at EDR: 05/12/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 81

Source: Kern County Public Health Telephone: 661-321-3000 Last EDR Contact: 10/05/2022

Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 05/06/2022 Date Data Arrived at EDR: 05/12/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 81

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700 Last EDR Contact: 10/05/2022

Next Scheduled EDR Contact: 02/16/2023 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: 11/08/2022

Next Scheduled EDR Contact: 02/27/2023 Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 07/22/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 10/05/2022

Number of Days to Update: 72

Source: Lake County Environmental Health

Telephone: 707-263-1164 Last EDR Contact: 10/04/2022

Next Scheduled EDR Contact: 01/23/2023

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: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023

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

Date Made Active in Reports: 10/23/2

Number of Days to Update: 206

Source: N/A Telephone: N/A

Last EDR Contact: 09/07/2022

Next Scheduled EDR Contact: 12/26/2022 Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/06/2022 Date Data Arrived at EDR: 07/07/2022 Date Made Active in Reports: 09/21/2022

Number of Days to Update: 76

Source: Department of Public Works Telephone: 626-458-3517

Last EDR Contact: 09/27/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

> Date of Government Version: 07/11/2022 Date Data Arrived at EDR: 07/11/2022 Date Made Active in Reports: 09/23/2022

Number of Days to Update: 74

Source: La County Department of Public Works

Telephone: 818-458-5185 Last EDR Contact: 10/07/2022

Next Scheduled EDR Contact: 01/23/2023

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: 01/01/2022 Date Data Arrived at EDR: 01/21/2022 Date Made Active in Reports: 04/11/2022

Number of Days to Update: 80

Source: Engineering & Construction Division

Telephone: 213-473-7869 Last EDR Contact: 10/04/2022

Next Scheduled EDR Contact: 01/23/2023 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: 09/19/2022

Next Scheduled EDR Contact: 01/02/2023

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: 10/04/2022

Next Scheduled EDR Contact: 01/23/2023 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: 01/13/2022 Date Data Arrived at EDR: 03/21/2022 Date Made Active in Reports: 06/15/2022

Number of Days to Update: 86

Source: Los Angeles Fire Department

Telephone: 213-978-3800 Last EDR Contact: 09/20/2022

Next Scheduled EDR Contact: 01/02/2023

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: 03/22/2022

Date Data Arrived at EDR: 06/24/2022 Date Made Active in Reports: 09/08/2022

Number of Days to Update: 76

Source: Los Angeles Fire Department

Telephone: 213-978-3800 Last EDR Contact: 09/20/2022

Next Scheduled EDR Contact: 01/02/2023 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: 10/20/2022

Next Scheduled EDR Contact: 01/30/2023 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: 10/04/2022

Next Scheduled EDR Contact: 01/23/2023 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: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 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: 04/22/2022 Date Data Arrived at EDR: 07/19/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 73

Source: City of Torrance Fire Department

Telephone: 310-618-2973 Last EDR Contact: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 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: 11/08/2022

Next Scheduled EDR Contact: 02/27/2023 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: 09/21/2022

Next Scheduled EDR Contact: 01/10/2023 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: 11/15/2022

Next Scheduled EDR Contact: 03/06/2023 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: 11/08/2022

Next Scheduled EDR Contact: 02/27/2023

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: 11/15/2022

Next Scheduled EDR Contact: 03/06/2023 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: 11/15/2022

Next Scheduled EDR Contact: 01/09/2023

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: 11/15/2022

Next Scheduled EDR Contact: 03/06/2023 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: 11/15/2022

Next Scheduled EDR Contact: 03/06/2023 Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 07/21/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 07/28/2022

Number of Days to Update: 3

Source: Community Development Agency

Telephone: 530-265-1467 Last EDR Contact: 10/20/2022

Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/24/2022 Date Data Arrived at EDR: 08/09/2022 Date Made Active in Reports: 10/28/2022

Number of Days to Update: 80

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/03/2022

Next Scheduled EDR Contact: 02/13/2023 Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 04/08/2022 Date Data Arrived at EDR: 05/18/2022 Date Made Active in Reports: 08/03/2022

Number of Days to Update: 77

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/03/2022

Next Scheduled EDR Contact: 02/13/2023 Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/24/2022 Date Data Arrived at EDR: 08/01/2022 Date Made Active in Reports: 10/20/2022

Number of Days to Update: 80

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/03/2022

Next Scheduled EDR Contact: 02/13/2023 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: 11/22/2022

Next Scheduled EDR Contact: 03/13/2023 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: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 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: 07/07/2022 Date Data Arrived at EDR: 07/08/2022 Date Made Active in Reports: 09/21/2022

Number of Days to Update: 75

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 09/07/2022

Next Scheduled EDR Contact: 12/26/2022 Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 07/07/2022 Date Data Arrived at EDR: 07/08/2022 Date Made Active in Reports: 09/21/2022

Number of Days to Update: 75

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 09/07/2022

Next Scheduled EDR Contact: 12/26/2022 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: 06/18/2021 Date Data Arrived at EDR: 09/28/2021 Date Made Active in Reports: 12/14/2021

Number of Days to Update: 77

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 09/30/2022

Next Scheduled EDR Contact: 01/09/2023 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: 05/04/2022 Date Data Arrived at EDR: 06/30/2022 Date Made Active in Reports: 07/05/2022

Number of Days to Update: 5

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 09/26/2022

Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 07/27/2022 Date Data Arrived at EDR: 07/27/2022 Date Made Active in Reports: 10/11/2022

Number of Days to Update: 76

Source: San Benito County Environmental Health

Telephone: N/A

Last EDR Contact: 10/26/2022

Next Scheduled EDR Contact: 02/16/2023 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: 08/22/2022 Date Data Arrived at EDR: 08/23/2022 Date Made Active in Reports: 11/11/2022

Number of Days to Update: 80

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041 Last EDR Contact: 10/28/2022

Next Scheduled EDR Contact: 02/16/2023 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: 08/25/2022 Date Data Arrived at EDR: 08/25/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 82

Source: Hazardous Materials Management Division

Telephone: 619-338-2268 Last EDR Contact: 11/29/2022

Next Scheduled EDR Contact: 03/13/2023 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: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 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: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 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: 11/22/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing Cupa facilities

Date of Government Version: 08/04/2022 Date Data Arrived at EDR: 08/04/2022 Date Made Active in Reports: 10/20/2022

Number of Days to Update: 77

Source: San Francisco County Department of Environmental Health

Telephone: 415-252-3896 Last EDR Contact: 10/26/2022

Next Scheduled EDR Contact: 02/16/2023 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: 10/26/2022

Next Scheduled EDR Contact: 02/16/2023 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: 08/04/2022 Date Data Arrived at EDR: 08/04/2022 Date Made Active in Reports: 10/20/2022

Number of Days to Update: 77

Source: Department of Public Health

Telephone: 415-252-3920 Last EDR Contact: 10/26/2022

Next Scheduled EDR Contact: 02/13/2023 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: 01/18/2022 Date Data Arrived at EDR: 01/20/2022 Date Made Active in Reports: 04/27/2022

Number of Days to Update: 97

Source: San Francisco Planning Telephone: 628-652-7483 Last EDR Contact: 10/07/2022

Next Scheduled EDR Contact: 01/30/2023 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: 09/07/2022

Next Scheduled EDR Contact: 12/26/2022 Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List

Cupa Facility List.

Date of Government Version: 08/10/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 10/28/2022

Number of Days to Update: 78

Source: San Luis Obispo County Public Health Department

Telephone: 805-781-5596 Last EDR Contact: 11/08/2022

Next Scheduled EDR Contact: 02/27/2023

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: 09/09/2022

Next Scheduled EDR Contact: 12/19/2022 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: 11/30/2022

Next Scheduled EDR Contact: 03/20/2023 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: 11/08/2022

Next Scheduled EDR Contact: 02/27/2023 Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 05/16/2022 Date Data Arrived at EDR: 05/18/2022 Date Made Active in Reports: 08/04/2022

Number of Days to Update: 78

Source: Department of Environmental Health

Telephone: 408-918-1973 Last EDR Contact: 10/28/2022

Next Scheduled EDR Contact: 02/27/2023

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.

 $\label{lem:leaking} \mbox{Leaking underground storage tanks are now handled by the Department of Environmental Health.}$

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: 11/15/2022

Next Scheduled EDR Contact: 03/06/2023 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: 10/26/2022

Next Scheduled EDR Contact: 02/16/2023 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: 11/08/2022

Next Scheduled EDR Contact: 02/27/2023

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: 11/08/2022

Next Scheduled EDR Contact: 02/27/2023

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: 11/22/2022

Next Scheduled EDR Contact: 03/13/2023 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: 11/22/2022

Next Scheduled EDR Contact: 03/13/2023 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: 09/13/2022

Next Scheduled EDR Contact: 01/02/2023 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: 09/13/2022

Next Scheduled EDR Contact: 01/02/2023 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: 10/04/2022

Next Scheduled EDR Contact: 01/23/2023

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: 11/23/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 07/27/2022 Date Data Arrived at EDR: 07/27/2022 Date Made Active in Reports: 10/11/2022

Number of Days to Update: 76

Source: Tehama County Department of Environmental Health

Telephone: 530-527-8020 Last EDR Contact: 11/08/2022

Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 07/13/2022 Date Data Arrived at EDR: 07/14/2022 Date Made Active in Reports: 09/29/2022

Number of Days to Update: 77

Source: Department of Toxic Substances Control

Telephone: 760-352-0381 Last EDR Contact: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 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: 10/05/2022

Next Scheduled EDR Contact: 02/16/2023

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: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023

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: 05/26/2022 Date Data Arrived at EDR: 07/21/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 71

Source: Ventura County Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 09/21/2022

Next Scheduled EDR Contact: 01/10/2023 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: 11/01/2022

Next Scheduled EDR Contact: 02/20/2023 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: 05/26/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 10/05/2022

Number of Days to Update: 72

Source: Ventura County Resource Management Agency

Telephone: 805-654-2813 Last EDR Contact: 10/17/2022

Next Scheduled EDR Contact: 01/30/2023 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: 08/29/2022 Date Data Arrived at EDR: 08/31/2022 Date Made Active in Reports: 11/21/2022

Number of Days to Update: 82

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 12/02/2022

Next Scheduled EDR Contact: 03/20/2023 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: 06/22/2022 Date Data Arrived at EDR: 06/30/2022 Date Made Active in Reports: 09/14/2022

Number of Days to Update: 76

Source: Yolo County Department of Health

Telephone: 530-666-8646 Last EDR Contact: 09/21/2022

Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 10/25/2022 Date Data Arrived at EDR: 10/26/2022 Date Made Active in Reports: 10/31/2022

Number of Days to Update: 5

Source: Yuba County Environmental Health Department

Telephone: 530-749-7523 Last EDR Contact: 10/20/2022

Next Scheduled EDR Contact: 02/06/2023

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: 08/08/2022 Date Data Arrived at EDR: 08/08/2022 Date Made Active in Reports: 10/21/2022

Number of Days to Update: 74

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 11/16/2022

Next Scheduled EDR Contact: 02/20/2023 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: 10/03/2022

Next Scheduled EDR Contact: 01/16/2023 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

acility.

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: 10/28/2022

Next Scheduled EDR Contact: 02/06/2023 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: 10/05/2022

Next Scheduled EDR Contact: 01/23/2023 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: 11/28/2022

Next Scheduled EDR Contact: 02/27/2023 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: 12/01/2022

Next Scheduled EDR Contact: 03/20/2023 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

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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Seaton Avenue and Cajalco Road 19641 Seaton Avenue Perris, CA 92570

Inquiry Number: 7020834.3

June 15, 2022

Certified Sanborn® Map Report



Certified Sanborn® Map Report

06/15/22

Site Name: Client Name:

Seaton Avenue and Cajalco Rc 19641 Seaton Avenue Perris, CA 92570 EDR Inquiry # 7020834.3 Group Delta Consultants 32 Mauchly Irvine. CA 92618

Contact: Laura Botzong



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Group Delta Consultants 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 # 713E-404D-BDA8

PO# EN8220

Project Seaton Avenue and Cajalco Road

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 #: 713E-404D-BDA8

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

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Seaton Avenue and Cajalco Road

19641 Seaton Avenue Perris, CA 92570

Inquiry Number: 7020834.8

June 15, 2022

The EDR Aerial Photo Decade Package



EDR Aerial Photo Decade Package

06/15/22

Site Name: Client Name:

Seaton Avenue and Cajalco Rc Group Delta Consultants 19641 Seaton Avenue 32 Mauchly

Perris, CA 92570 Irvine, CA 92618

EDR Inquiry # 7020834.8 Contact: Laura Botzong



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:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	Source
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
1990	1"=500'	Flight Date: September 06, 1990	USDA
1985	1"=500'	Flight Date: February 24, 1985	USDA
1978	1"=500'	Flight Date: September 20, 1978	USDA
1974	1"=500'	Flight Date: November 06, 1974	USGS
1967	1"=500'	Flight Date: May 15, 1967	USDA
1961	1"=500'	Flight Date: June 14, 1961	USDA
1959	1"=500'	Flight Date: October 15, 1959	USDA
1953	1"=500'	Flight Date: September 22, 1953	USDA
1949	1"=500'	Flight Date: May 06, 1949	USDA
1938	1"=500'	Flight Date: June 14, 1938	USDA

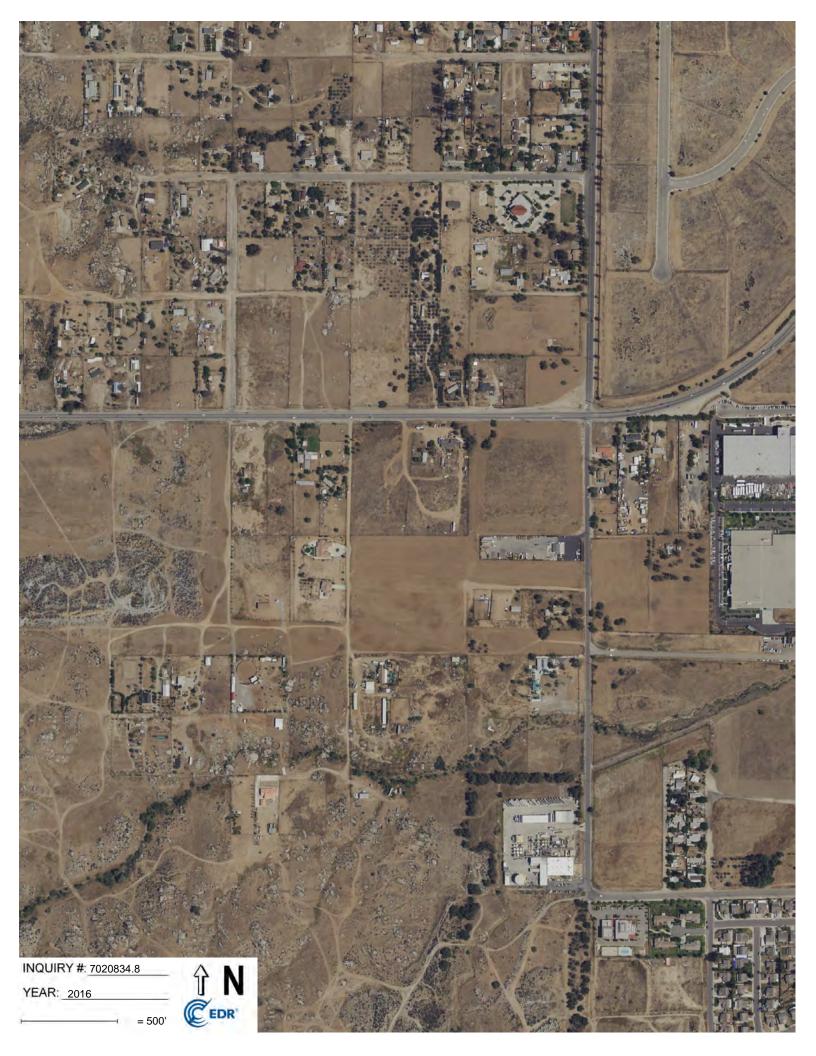
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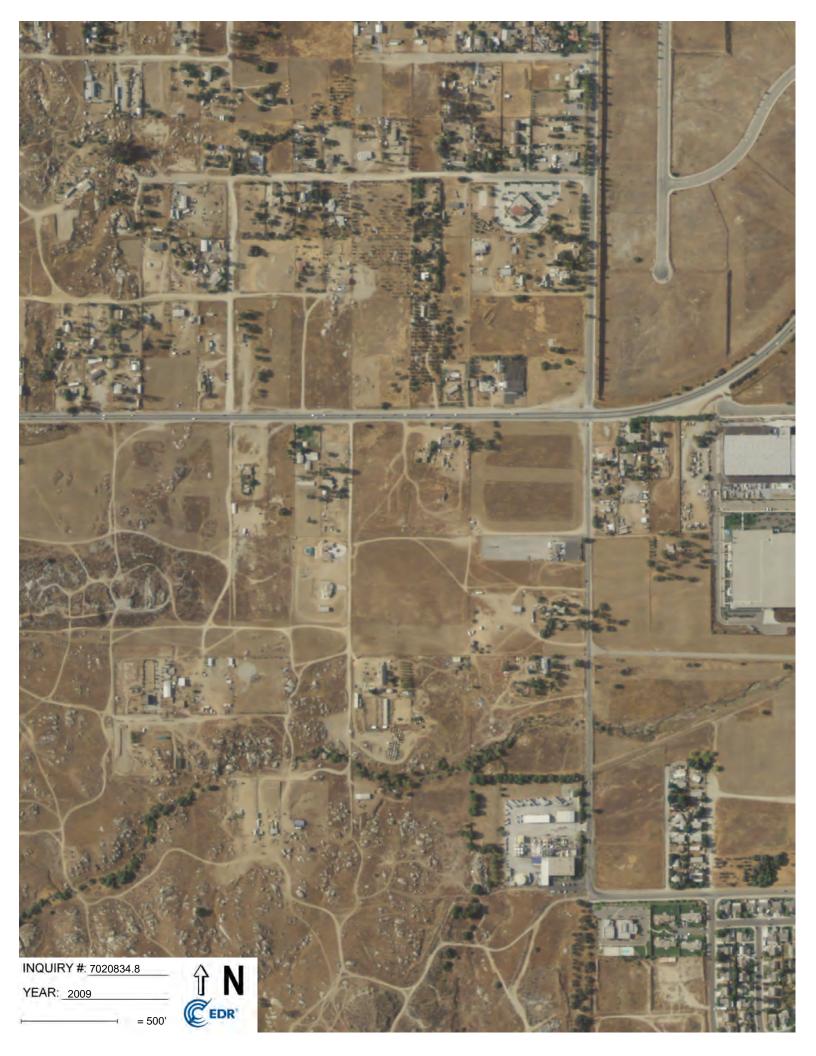
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INQUIRY #: 7020834.8

YEAR: 1959









Seaton Avenue and Cajalco Road 19641 Seaton Avenue Perris, CA 92570

Inquiry Number: 7020834.4

June 15, 2022

EDR Historical Topo Map Report

with QuadMatch™



EDR Historical Topo Map Report

06/15/22

Site Name: Client Name:

Seaton Avenue and Cajalco Ro 19641 Seaton Avenue Perris, CA 92570

EDR Inquiry # 7020834.4

Group Delta Consultants

32 Mauchly Irvine, CA 92618

Contact: Laura Botzong



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Group Delta Consultants 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:		Coordinates:	
P.O.#	EN8220	Latitude:	33.835503 33° 50' 8" North
Project:	Seaton Avenue and Cajalco Ro	Longitude:	-117.264731 -117° 15' 53" West
-	ŕ	UTM Zone:	Zone 11 North
		UTM X Meters:	475505.61
		UTM Y Meters:	3743948.63
		Elevation:	1580.49' above sea level

Maps Provided:

2018	1942
2015	1901
2012	
1978	
1973	
1967	
1953	
1947	

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Topo Sheet Key

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

2018 Source Sheets



Steele Peak 2018 7.5-minute, 24000



Perris 2018 7.5-minute, 24000

2015 Source Sheets



Steele Peak 2015 7.5-minute, 24000



Perris 2015 7.5-minute, 24000

2012 Source Sheets



Steele Peak 2012 7.5-minute, 24000



Perris 2012 7.5-minute, 24000

1978 Source Sheets



Steele Peak 1978 7.5-minute, 24000 Aerial Photo Revised 1978

Topo Sheet Key

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

1973 Source Sheets



Steele Peak 1973 7.5-minute, 24000 Aerial Photo Revised 1973



Perris 1973 7.5-minute, 24000 Aerial Photo Revised 1973

1967 Source Sheets



Steele Peak 1967 7.5-minute, 24000 Aerial Photo Revised 1966



Perris 1967 7.5-minute, 24000 Aerial Photo Revised 1966

1953 Source Sheets



Steele Peak 1953 7.5-minute, 24000 Aerial Photo Revised 1951



Perris 1953 7.5-minute, 24000 Aerial Photo Revised 1951

1947 Source Sheets



RIVERSIDE 1947 15-minute, 50000

Topo Sheet Key

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

1942 Source Sheets





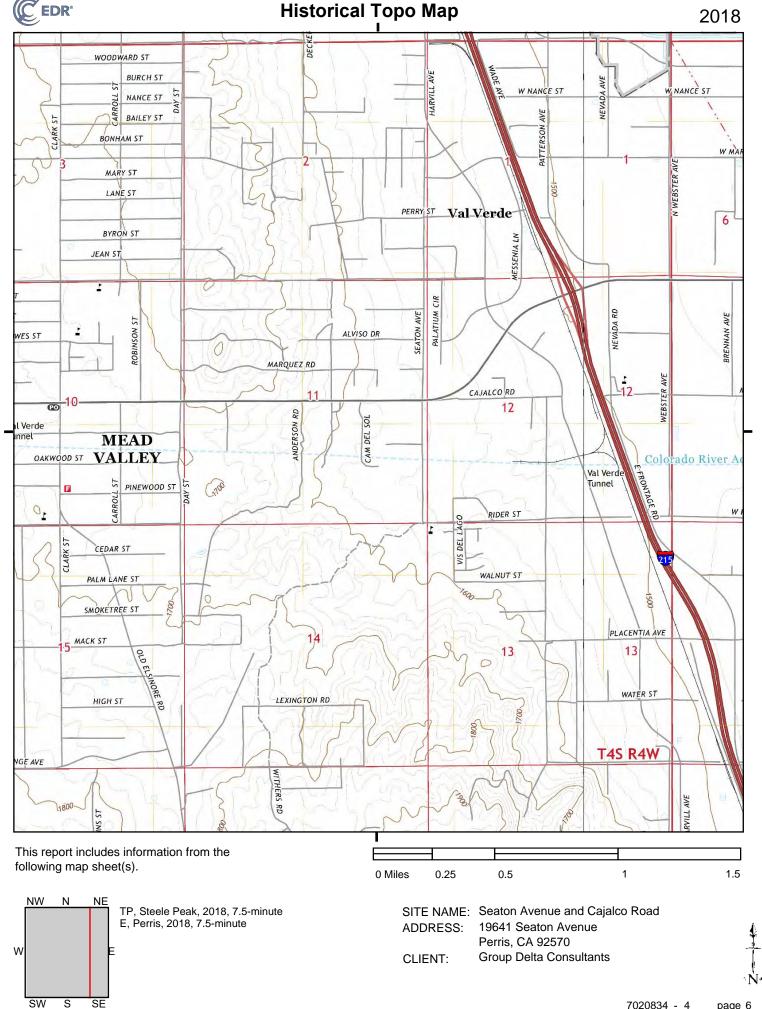


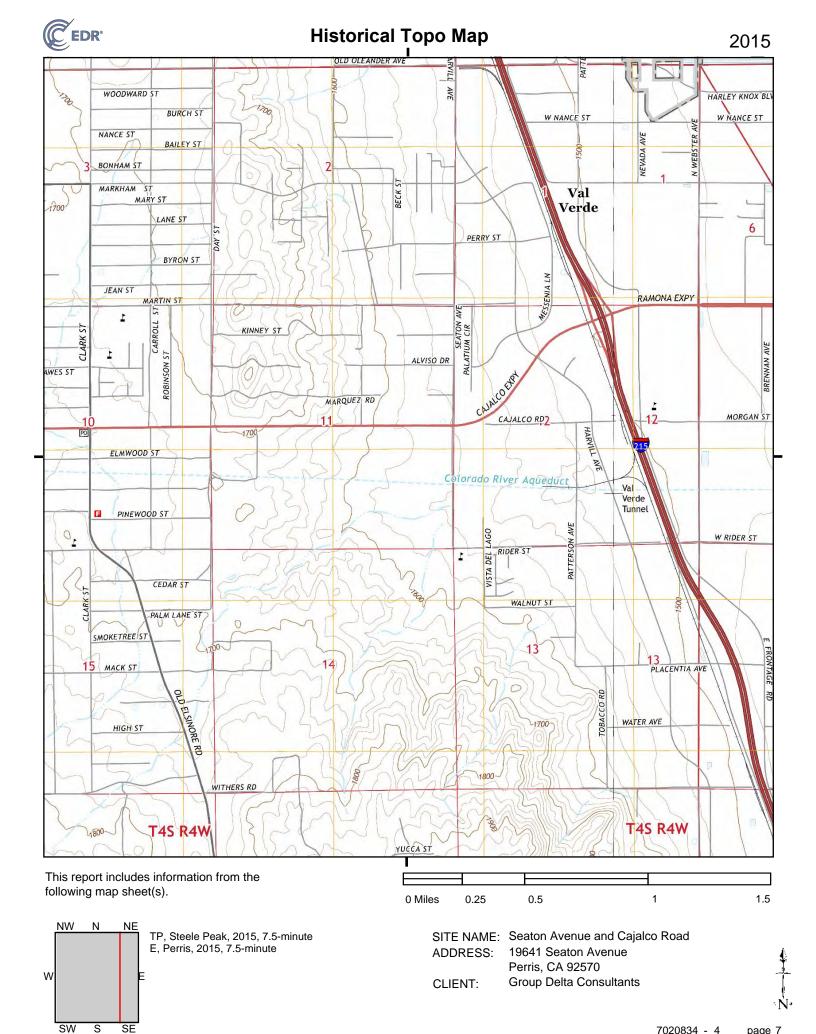
Riverside 1942 15-minute, 62500 Aerial Photo Revised 1939

1901 Source Sheets



Riverside 1901 15-minute, 62500





W

SW

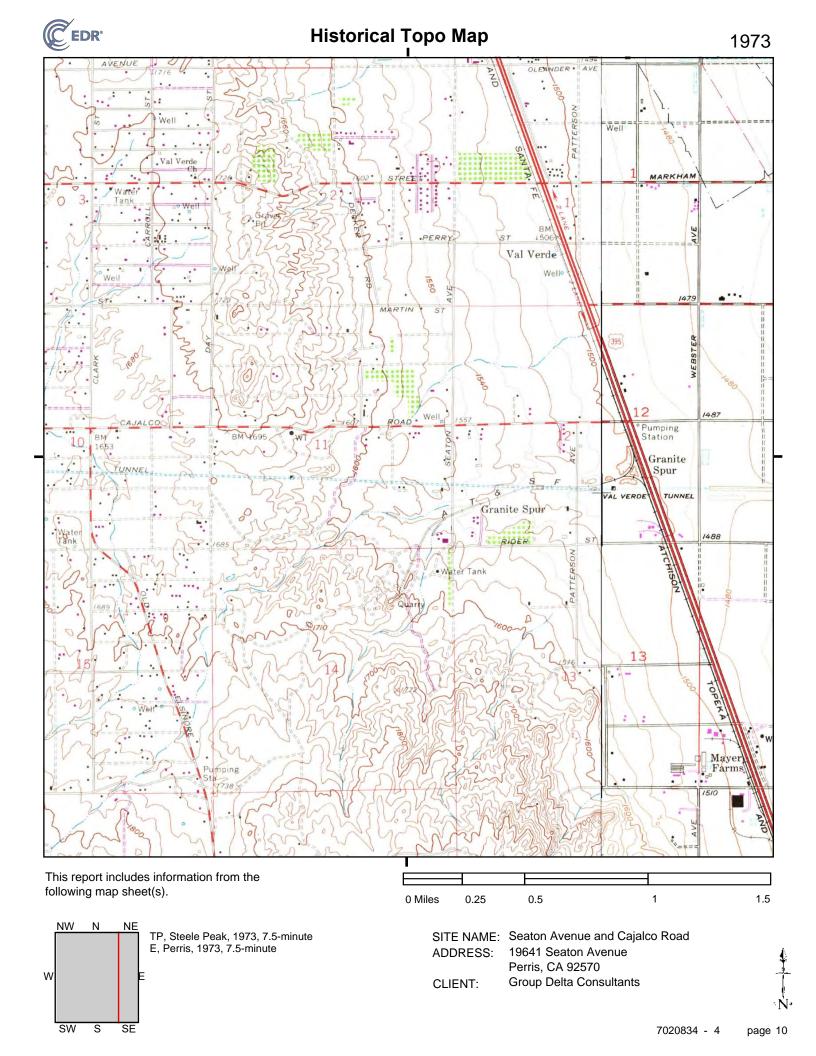
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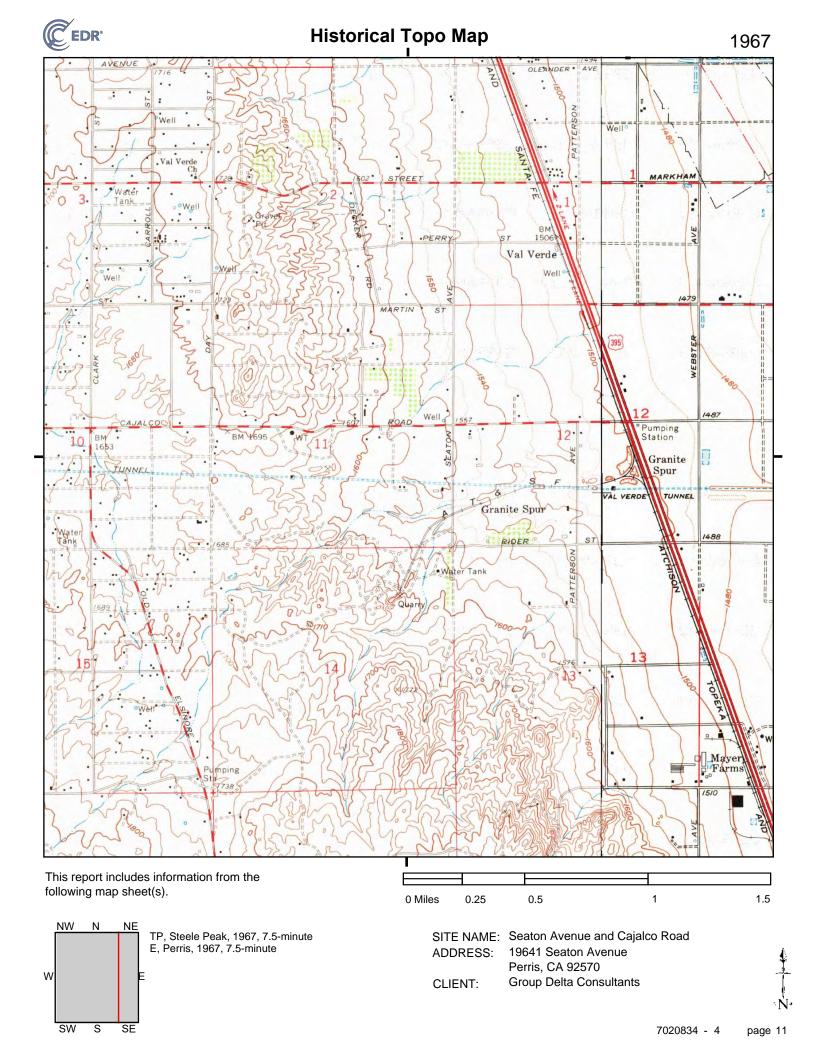
Perris, CA 92570

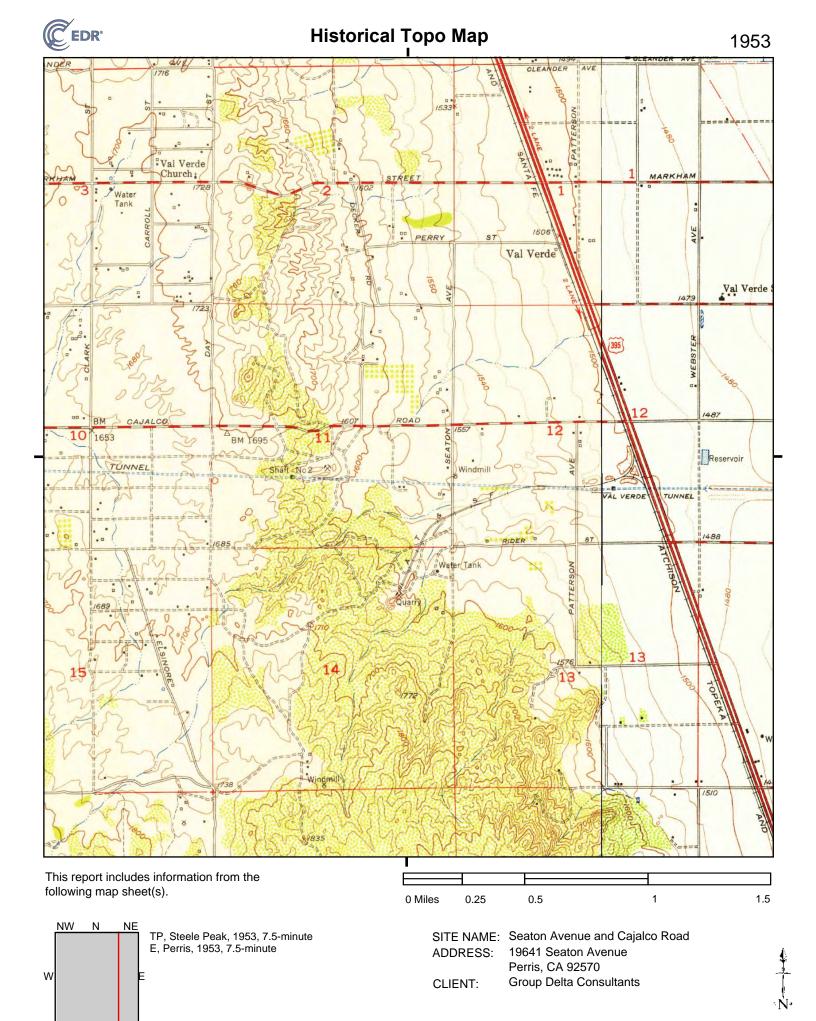
CLIENT:

Group Delta Consultants

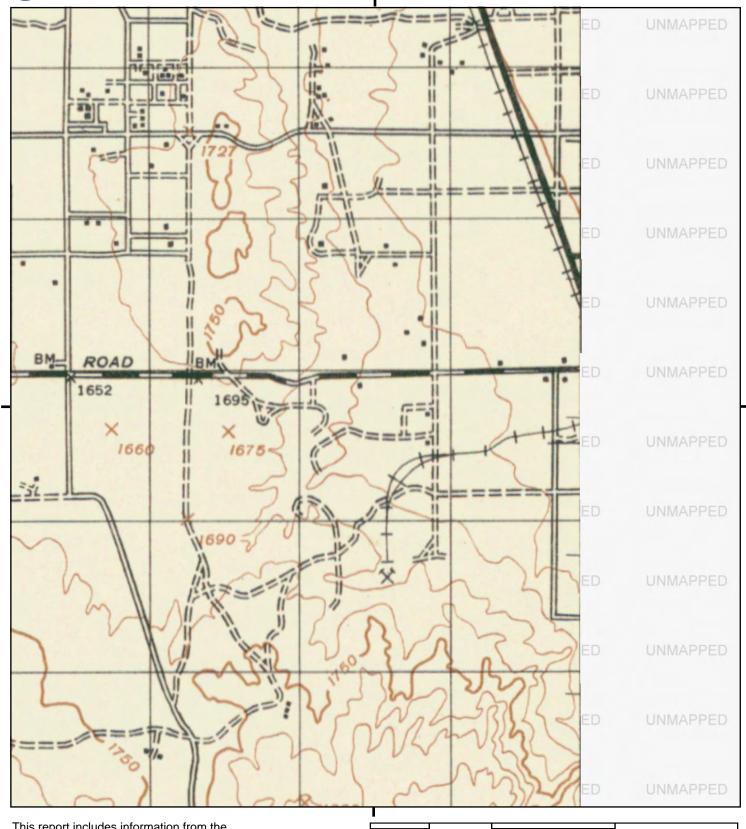
SW



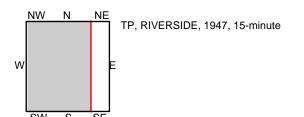




SW



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



0 Miles 0.25 0.5 1 1.5

SITE NAME: Seaton Avenue and Cajalco Road

ADDRESS: 19641 Seaton Avenue

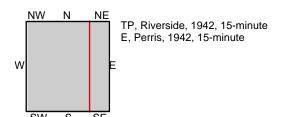
Perris, CA 92570

CLIENT: Group Delta Consultants



0 Miles

0.25



following map sheet(s).

SITE NAME: Seaton Avenue and Cajalco Road

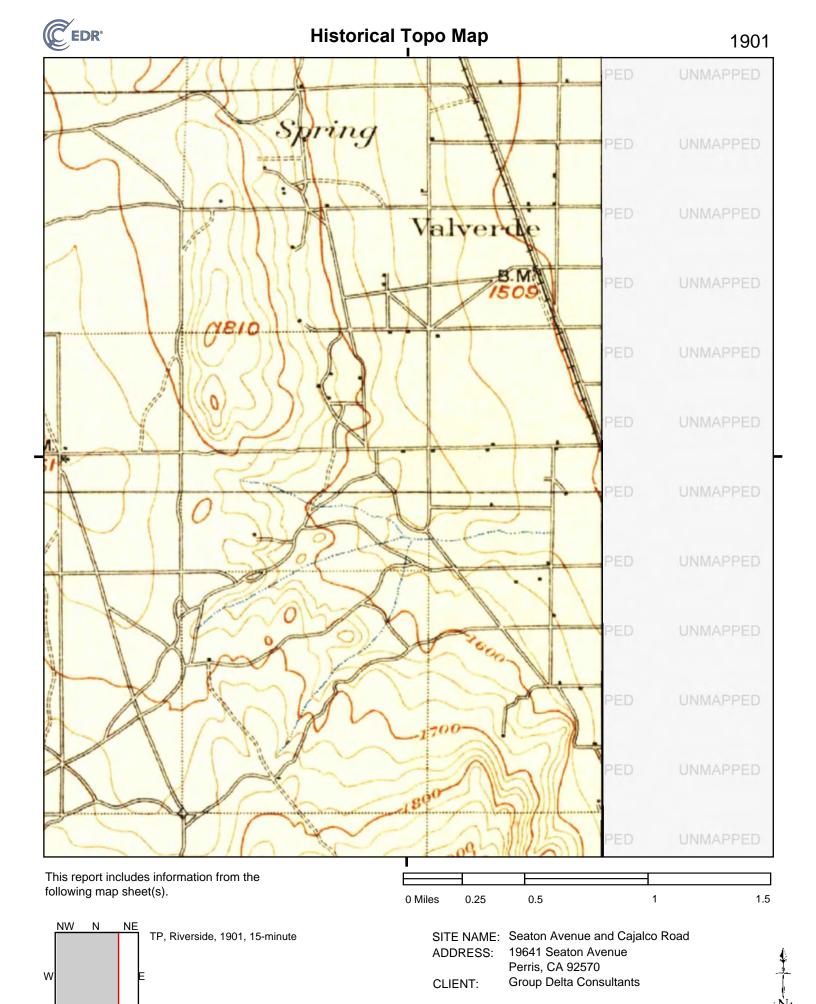
ADDRESS: 19641 Seaton Avenue

0.5

Perris, CA 92570

CLIENT: Group Delta Consultants

1.5



Seaton Avenue and Cajalco Road

19641 Seaton Avenue Perris, CA 92570

Inquiry Number: 7020834.5

June 22, 2022

The EDR-City Directory Image Report



TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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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 & Brad street. 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.

<u>Year</u>	Target Street	Cross Street	<u>Source</u>
2017		$\overline{\checkmark}$	EDR Digital Archive
2014	$\overline{\checkmark}$		EDR Digital Archive
2010	$\overline{\checkmark}$		EDR Digital Archive
2005	$\overline{\checkmark}$		EDR Digital Archive
2000	$\overline{\checkmark}$		EDR Digital Archive
1995	$\overline{\checkmark}$		EDR Digital Archive
1992	$\overline{\checkmark}$		EDR Digital Archive
1990	$\overline{\checkmark}$		Haines Criss-Cross Directory
1985	$\overline{\checkmark}$		Haines Criss-Cross Directory
1980	$\overline{\checkmark}$		Haines Criss-Cross Directory
1976	$\overline{\checkmark}$		Haines Criss-Cross Directory
1971			Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

19641 Seaton Avenue Perris, CA 92570

<u>Year</u>	CD Image	Source	
SEATON AVE			
2017	pg A5	EDR Digital Archive	
2014	pg A10	EDR Digital Archive	
2010	pg A15	EDR Digital Archive	
2005	pg A20	EDR Digital Archive	
2000	pg A23	EDR Digital Archive	
1995	pg A27	EDR Digital Archive	
1992	pg A30	EDR Digital Archive	
1990	pg A33	Haines Criss-Cross Directory	
1990	pg A34	Haines Criss-Cross Directory	
1985	pg A36	Haines Criss-Cross Directory	
1980	pg A38	Haines Criss-Cross Directory	
1976	pg A40	Haines Criss-Cross Directory	
1971	-	Haines Criss-Cross Directory	Street not listed in Source

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FINDINGS

CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>	
CAJALCO RD			
2017	pg. A2	EDR Digital Archive	
2014	pg.A6	EDR Digital Archive	
2010	pg.A11	EDR Digital Archive	
2005	pg. A16	EDR Digital Archive	
2000	pg. A21	EDR Digital Archive	
1995	pg. A24	EDR Digital Archive	
1992	pg. A28	EDR Digital Archive	
1990	pg. A31	Haines Criss-Cross Directory	
1990	pg. A32	Haines Criss-Cross Directory	
1985	pg. A35	Haines Criss-Cross Directory	
1980	pg. A37	Haines Criss-Cross Directory	
1976	pg. A39	Haines Criss-Cross Directory	
1971	-	Haines Criss-Cross Directory	Street not listed in Source

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CAJALCO RD 2017

40005	LAKE MATUENO MULTI OPEOLEO DEO
13225	LAKE MATHEWS MULTI SPECIES RES
13245	FLEMING, CHERRY
13385 13391	MOTTA, SKIP BAUMANN, STEPHEN
13425	FRIEDL, DARREN L
13445	MENDOZA, EDDIE
13515	FRAUSTO, JESUS A
13515	RADWAY, JEFFREY W
13531	ELLIOTT, EUGENIA K
13535	
13539	
13580	KNOWLES, RONALD R
16111	DELIA, DOUG D
17679	LAKE MATHEWS FEED & PET SUPPLY
17079	LAKE MATHEWS TELD & PET SOFFET
17779	LICEA, TEODORO G
17801	THOMAS, PEGGY
17805	STAKE, MARILYN J
17817	JONES, WILLIAM A
17853	RODRIGUEZ, DAVID
17885	NOLASCO, SAMUEL M
17895	MENDEZ, DAVID
17898	AHMAD, ZAHUR
17911	HOWELL, BRYAN D
17940	BERARDINI, VITO
18100	SNOW, MARION V
18160	MOSCOSO, MARIA
18164	SAUCEDO, REYNALDO S
18168	SALAS, DAVID
18174	EMERY, KEVIN T
18178	HUFFMAN, JOHN
18180	NORRIS, PHILLIP A
18186	BROWN, TRINA
18194	VARGAS, SYLVIA
18200	GARCIA, ROLANDO G
18210	TRUJILLO, ERICA
18220	ROCHIN, MARTHA P
18260	CARRILLO, MARIA
18270	KEY, RENEE
18276	RODRIGUEZ, MARIA V
18282	GRACIA, RAMON
18286	JIMENEZ, FERNANDO
18294	GAONA, MIGUEL A
18310	LUBERSKI INC
18318	RYE, JAMES C
18800	SAND HAVEN PINES
20195	RAMIREZ, FRANCISCO M
20211	ALVAREZ, GUADALUPE M
20221	CERVANTES MARIA E

20245 MANZO, JOSE

CAJALCO RD 2017 (Cont'd)

20253	MARTINEZ, GREGORIO F
20281	OCHOA, MOISES MARTINEZ, RENE M
20295	
20337	GONZALES, EDWIN
20385	DEMPSEY, ROGER D
20415 20433	SERVILLON, ROBERTO Y
20443	VELASCO, ALFONSO ZAMORA, EDUARDO
20475	•
20505 20555	DUBOIS, DOLORES DICKERSON, HATTIE D
20555	COAXUM, MATTHEW
20572	
	MARREN, THOMAS
20601 20645	WALTER, DAVID P
20659	ZEBALLOS, ATILIANO VAZQUEZ, JOSE C
20673 20701	
	SHIREY, TIM S RODRIGEZ, JOSE G
20761	BEASLEY, MATTIE M
20794 20810	GARCIA, JOSE
20815	GUSTAFSON, JANE A
20835	ROSALES, NIRETA
20835	•
20843	WHITE, RENE
20900	ARAIZA, DANIEL
20900	BRAVO, EVA
20931	DOMINGUEZ, MARIA
20934	•
20950	
21110	MEAD VALLEY MKT
21166	JOHNSON, VICTOR J
21314	DURANT, JAMES E
21381	BOOST MOBILE
2.00.	BREEDS MARKET & LIQUORS
	EXPRESSWAY COMPUTERS
21415	PALM LANE COGIC
21454	
21621	HARB, SALWA
21623	MEAD VALLEY FEED
	TERRAZAS, LISA
21705	BARBER, ARTHUR
21830	WALES, MARGARTET
21858	MILLER, EDITH
21871	HOLMES, MARCELLUS
21885	PEARSON, DONNA
21909	RAVEN, BRANDI
21912	MELENDREZ, ALDO P
21962	
22024	MAYTORENA, VICTOR
	- ,

CAJALCO RD 2017 (Cont'd)

	0/10/1200 Itb
22050	ROMERO, JERRY B
22080	LEE, IM S
22115	BREWSTER, JONATHAN W
22113	LYONS, DALTON J
_	
22160	BAUTISTA, MIGUEL F
22175	RABAGO, SONIA Y
22185	ELLIS, HELENA
22191	MORALES, JOSE T PERAZA, MICHAEL
22220 22260	TREJO, ROBERT T
22290	ARMENDARIZ, JOHNNY J
	SICAIROS, CARLOS
22330	CHANDLER, ROBERT A
22370 22460	
22530	MORENO, SOCCORO KLUCK, LEANNA
22655	DELACRUZ, STREET
22683	ALVAREZ, HECTOR
22765	HARRIS, BREJETTE
22775	FRAIRE, ROBERT J
22113	GRAYSON, ADRIANA
	STEPHENS, MICHAEL
22791	BAKER, GREGORY P
22820	MCANLIS, JOHN A
22840	VILLALOBOS, JOSE
23031	GUERRERO, ANDREA
23050	PUENTE, HERIBERTO
	VALLE, HERIBERTO P
23051	VALDASO, BLANCA
23052	FLORES, ANA
23113	ESPINOSA, CAREY E
23129	LIMOS BY TIFFANY
	TIFFANY COACHWORKS INC
23261	AMPM
	ARCO TRAVEL ZONE CENTER
	CLEAN ENERGY
	FRONTERA INVESTMENT INC
	UHAUL
23320	WARNER, PAUL N
23325	NCS FORMING INC
23332	ECOLOGY AUTO PARTS
23447	TRUSSED INC
23451	AGUILAR, RODRIGO
23453	,
	TC CONSTRUCTION COMPANY INC
23459	•
23471	,
23473	,
23665	
	RIVERSIDE RIVERSIDE REPAIR

Target Street Cross Street Source

→ EDR Digital Archive

SEATON AVE 2017

18240	CASTANEDA, M
18399	PERALEZ, LORI A
18431	RAYMOND, KEN D
18605	MAGALLON, SANDRA
18775	SANDOVAL, AGUSTIN U
18795	PADILLA, MARIA
18890	DESIGNER SASH & DOOR
18916	UNIVERSAL WASTE SYSTEMS INC
	WHITE HOUSE SANITATION
	WHITE HOUSE SEPTIC TANK PUMPING & SP
19081	RAMIREZ, FRANCISCO
19091	VANOEL, JASON J
19101	BORNT, JAMES F
19111	ZACARIAS, BASILIO
19165	VELO, LORENA
19195	EZ TAX BOOKEEPING
	FLORES, JUVENAL
19201	SILVA, MANUEL L
19249	HOROWITZ, MIMI
	WARNER WATER WORKS
19355	FUERSTENBERG, CARLOTTA A
19580	GUEVARA, RAYMUNDO
19600	PEREZ, SONIA
19701	PEREZ, RUBEN J
19991	ALPHA OWENS CORNING
	AOC LLC

EDR Digital Archive

CAJALCO RD 2014

13225	LAKE MATHEWS MULTI SPECIES RES
13245	FLEMING, CHERRY
13385	MOTTA, MARION R
13391	•
	BAUMANN, STEPHEN
13425	FRIEDL, DARREN L
13440	OCCUPANT UNKNOWN,
13445	MENDOZA, EDDIE
13515	FRAUSTO, RALPH A
13521	STOLTENBERG, RONALD L
13531	BARTELS, THOMAS F
13539	BELLEPERCHE, BRAD
13580	KNOWLES, RONALD R
13586	PARRISH, CINDY S
13859	MIRON, MARIO
15953	OCCUPANT UNKNOWN,
16111	BLOKZYL, PRISCILLA
16265	OCCUPANT UNKNOWN,
17650	COUNTY OF RIVERSIDE
17662	,
17679	LAKE MATHEWS FEED & PET SUPPLY
17770	LAKE MATHEWS GENERAL STORE
17779	HOOD, ANNABELLE
17801	THOMAS, NANCE M
17805	STAKE, LOWELL F
17817	JONES, WILLIAM A
17831	OCCUPANT UNKNOWN,
17853	SHAW, NATHANIAL
17885	NOLASCO, SAMUEL M
17895	ALCARAZ, CAROLINA
17898	OCCUPANT UNKNOWN,
17911	GETZ, DANIEL F
17940	BERARDINI, VITO
17941	MILLAR, SARA
47004	MILLER, ADAM J
17981	MIELDAZIS, GEORGE A
18100	SNOW, MARION V
18160	MENDEZ, BENITO
18164	SAUCEDO, REYNALDO S
18168	OCCUPANT UNKNOWN,
18178	ADAMS, MICHAEL P
18180	NORRIS, PHILLIP A
18184	REYES, MANUEL R
18186	BROWN, TRINA
18200	OCCUPANT UNKNOWN,
18210	TRUJILLO, ERICA
18220	MORALES, MARTHA P
18260	CARRILLO, MARIA
18270	MCCALL, TISHELLE
18276	RODRIGUEZ, MARIA V

18282 CHAVEZ, RAMONA S

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EDR Digital Archive

CAJALCO RD 2014 (Cont'd)

	CAJA
18286	DECABALLERO, FRANCISCA
18294	GAONA, MIGUEL A
18310	COLLINS, ANNETTE
18318	RYE, JAMES C
18800	SAND HAVEN PINES
19207	MARTIN, STEVE
19455	OCCUPANT UNKNOWN,
20050	OCCUPANT UNKNOWN,
20195	RAMIREZ, FRANCISCO M
20211	ALVAREZ, GUADALUPE M
20221	
20231	
20245	
20253	·
20275	OCCUPANT UNKNOWN,
20281	OCHOA, MOISES
20295	•
20355	•
20385	
20415	SERVILLON, ROBERTO Y
20443	
20475	·
20495	
20505	
20551	HARVEY, STEVE J
20555	DICKERSON, HATTIE D
20572	BURROWS, JOHN
20581	BROWN, PAT
20601	
20645	
20659	
20673	VAZQUEZ, JOSE M
20701	•
20721	
20761	
20780	•
20794	,
20795	
20810	•
20815	,
20835	•
20845	,
20858	,
20875	•
20900	•
20914	•
20931	•
20934	ALDRIDGE, JAMES R

20950 GONZALEZ, JIMENEZ M21110 MEAD VALLEY MKT

CAJALCO RD 2014 (Cont'd)

21166	JOHNSON, LULA
21258	SALAZAR, JOSE L
21274	TOVAR, ABDON
21314	DURANT, JAMES E
21321	MORAN, CARLOS
21381	BREEDS MARKET & LIQUORS
2.00.	EXPRESSWAY COMPUTERS
21415	
21454	,
21621	•
21623	BOOST MOBILE
	MEAD VALLEY FEED
	OCCUPANT UNKNOWN,
21705	BARBER, ARTHUR
21805	OCCUPANT UNKNOWN,
21820	PUENTE, MANUEL
21830	MAIAVA, ELISE
21858	TOWNSEND, MONICA K
21871	HOLMES, MARCELLUS
21885	LEDLFLE, F
	•
21909	•
21912	
21962	•
22024	MAYTORENA, VICTOR
22050	RODRIGUEZ, MELISSA
22080	LEE, IM S
22095	CARREON, SALVADOR R
22105	VALENZUELA, MANUEL
22113	LEWIS, TASHIANNA
22115	RANSON, WILLIAM
22120	LYONS, DALTON J
22135	PENA, MAGDALENA
22160	RIVERA, OSMIN
22175	
22180	OCCUPANT UNKNOWN,
22220	PERAZA, MICHAEL
22260	•
	TREJO, ROBERT T
22290	ARMENDARIZ, JOHNNY J
22330	,
22370	, -
22460	,
22530	RAMSEY, EDGAR K
22647	SUN, JING
22655	DELACRUZ, STREET
22675	MOLINA, BENEDICTO D
22683	ALVAREZ, HECTOR
22697	•
22761	MENDOZA, SALVADOR
22765	MULDREW, DJUAN A
22775	FRAIRE, ROBERT
22110	TO UIL, NODEKI

Target Street Cross Street Source
- Source EDR Digital Archive

CAJALCO RD 2014 (Cont'd)

22775	STEPHENS, MICHAEL
22791	BAKER, GREGORY P
22810	CAMPOS, RAUL
22820	MCANLIS, JOHN A
22840	RODRIGUEZ, DIANA
22920	OCCUPANT UNKNOWN,
23031	GUERRERO, VERONICA
23050	NAJAR, ANA
	PUENTE, HERIBERTO
	VALLE, HERIBERTO P
23051	VALDASO, BLANCA
23052	FLORES, ANA
23113	ZUNIGA, DAVID R
23129	LIMOS BY TIFFANY
	TIFFANY COACHWORKS INC
23261	ARCO TRAVEL ZONE CENTER
	FRONTERA INVESTMENT INC
	UHAUL
23320	WARNER, PAUL N
23325	NCS FORMING INC
23330	CANNABLISS COOPERATIVE INC
23332	ECOLOGY AUTO PARTS
23447	TRUSSED INC
23451	CRUZ, JOSE R
23453	,
	TC CONSTRUCTION COMPANY INC
23455	FANN, DAVID M
23459	PANTOJA, FRANCISCO J
23471	BARRERA, JOSEFINA
23473	,
23665	CALIFORNIA TRUSS CO

Target Street Cross Street Source

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SEATON AVE 2014

18240	CASTANEDA, M
18399	PERALEZ, LORI A
18431	RAYMOND, KEN
18463	TODOROVITCH, JIM
18605	MAGALLON, SANDRA
18775	SANDOVAL, AGUSTIN U
18795	PADILLA, MARIA
18890	DESIGNER SASH & DOOR
18901	OCCUPANT UNKNOWN,
18910	INCE, GINNY
18916	UNIVERSAL WASTE SYSTEMS INC
	WHITE HOUSE SANITATION
40004	WHITE HOUSE SEPTIC TANK PUMPING & SP
19081	RAMIREZ, FRANCISCO
19091	VANOEL, JASON J
19101	BORNT, JAMES F
19111	ZACARIAS, BASILIO
19121	LIERENA, FRANCES M
19165	AGUIRRE, ARMANDO
19195	EZ TAX BOOKEEPING
40004	OCCUPANT UNKNOWN,
19201	SILVA, MANUEL L
19249	OCCUPANT UNKNOWN,
10051	WARNER WATER WORKS
19351	OCCUPANT UNKNOWN,
19355	FUERSTENBERG, CARLOTTA A
19600	PEREZ, SONIA
19641	TREVINO, PAZ
19683	PORRAS, JAMES
19691	DEALBA, MAYRA
19701	PEREZ, RUBEN J
19783	OCCUPANT UNKNOWN,
19865	PHAM, NGOC D
19991	AOC LLC

CAJALCO RD 2010

40005	LAKE MATUEWO MULTI OREGIEO
13225	LAKE MATHEWS MULTI SPECIES
10045	OCCUPANT UNKNOWN,
13245	FLEMING, CHERRY
13385	MOTTA, MARION R
13391	BAUMANN, STEPHEN
13425	FRIEDL, DARREN L
13440	VILLANUEVA, R A
13515	FRAUSTO, J
13521	RADWAY, JEFFREY W
13531	BARTELS CONSTRUCTION
40505	BARTELS, THOMAS F
13535	FLEMING, DONALD A
13539	BELLEPERCHE, JAMIE A
13586	HIRDLER, GARY J
13859	MIRON, MARIO
15953	OCCUPANT UNKNOWN,
16111	OCCUPANT UNKNOWN,
16577	OCCUPANT UNKNOWN,
17650	CAJALCO FIRE STATION
17662	OCCUPANT UNKNOWN,
17679	LAKE MATHEWS FEED & PET SUPPLY
	LAND OF THE HAWK REALTY
17770	TSAI, JAMES C
17779	HOOD, DEANNA M
17805	STAKE, LOWELL F
17817	JONES, WILLIAM A
17831	OCCUPANT UNKNOWN,
17853	OCCUPANT UNKNOWN,
17885	NOLASCO, SAMUEL A
17898	OCCUPANT UNKNOWN,
17911	GETZ, DANIEL F
17940	GRISELDA, M
17941	MILLER, ADAM
17981	MIELDAZIS, NANCY A
18100	SNOW, MARION V
18160	MENDEZ, BENITO
18164	SAUCEDO, REYNALDO S
18168	EDWARDS, KIRK
18178	WISE, BRUCE A
18180	NORRIS, PHILLIP A
40404	PHIL NORRIS PROFESSIONAL TRMPT
18184	SOTELO, JOAQUIN M
18186	OCCUPANT UNKNOWN,
18194	CARREON, ISRAEL
18200	OCCUPANT UNKNOWN,
18210	MARTINEZ, CONRADO
18220	KNIGHT, BRENDA
18260	HUNT, CALLIE
18270	WHITEHEAD, RICHARD A
18276	CREGGER, WESLEY J

<u>Source</u> EDR Digital Archive

CAJALCO RD 2010 (Cont'd)

	OAG
18282	CHAVEZ, RAMONA S
18286	CABALLECA, RAYMUNDO
18294	LOPEZ, EDDY R
18318	RYE, JAMES C
18591	LEE, SANG W
18800	SAND HAVEN PINES
19203	OCCUPANT UNKNOWN,
19207	OCCUPANT UNKNOWN,
19401	PAYAN, JOSE
20050	BONILLA, GERRY
20195	RAMIREZ, FRANCISCO M
20211	ALVAREZ, GUADALUPE M
20221	OCCUPANT UNKNOWN,
20231	OCCUPANT UNKNOWN,
20245	SOLORZA, RICARDO
20253	MARTINEZ, GREGORIO F
20275	OCCUPANT UNKNOWN,
20281	ESPINOZA, JAIME
20295	
20337	
20385	
20303	·
20413	SCHWANZ, R
20433	OCCUPANT UNKNOWN,
20443	·
	<i>'</i>
20495	SERRANO, CARLOS
20505	FORD, JASON
20551	VARGAS, MIGUEL R
20555	DICKERSON, HATTIE D
20572	COAXUM, ROBIN H
20581	BROWN, PAT
20601	CARROLL, THERESA
20645	WALTER, ROBERT R
20659	OCCUPANT UNKNOWN,
20673	VAZQUEZ, JOSE M
20701	SHIREY, TIM A
20721	OCCUPANT UNKNOWN,
20761	RODRIGEZ, JOSE G
20775	TROUT, JERRY E
20780	MARTIN, N
20794	OCCUPANT UNKNOWN,
20795	OCCUPANT UNKNOWN,
20810	CARRILLO, MARIA
20815	GUSTAFSON, JANE A
20835	ROSALES, CRISPIN S
20845	BARAJAS, ALFREDO
20875	GARCIA, RAFAEL
20895	WILKERSON, WELDON J
20900	OCCUPANT UNKNOWN,

20914 BRAVO, EVA

CAJALCO RD 2010 (Cont'd)

20931	SANCHEZ, JOSE A
20950	•= ,
21110	
21166	JOHNSON, BEVERLY L
21258	SALAZAR, JOSE L
21274	MARQUEZ, MARIA B
21314	,
21381	
	EXPRESSWAY COMPUTERS
21415	
21419	TURNER, DONNIE O
21425	99 CENT STORE
21623	
	VALLELY, NATASHA L
21705	•
21805	,
21858	TOWNSEND, MONICA K
21871	FERENENDEZ, FRANK G
21909	- ,
21912	ALVARADO, DIANNA
21962	OCCUPANT UNKNOWN,
22024	KEETON, ADAM
22050	HERNANDEZ, CONNIE B
22080	LEE, IM S
22095	OCCUPANT UNKNOWN,
22113	OCCUPANT UNKNOWN,
22115	RANSON, WILLIAM
22120	LYONS, DALTON J
22135	PENA, MAGDALENA
22160	RIVERA, OSMIN
22175	SHANKS, LYNN
22180	PEREZ, ARACELY E
22185	ELLIS, ALBERT W
22191	JARAMILLO, GEORGE
22200	OCCUPANT UNKNOWN,
22220	MARQUEZ, RODOLFO
	PERAZA CONCRETE TRANSPORT
22260	TREJO, ROBERT T
22290	ARMENDARIZ, JOHNNY J
22330	GONZALEZ, PEDRO
22370	BOB CHANDLER STEERING
	CHANDLER, ROBERT A
22460	VALADEZ, A
22490	LEDESMA, ESPERANZA P
22530	RAMSEY, EDGAR K
22655	DELACRUZ, STREET
22675	PEREZ, R
22685	EVANS, LARRY
22691	WORTHLEY, DON
22697	OCCUPANT UNKNOWN,
	,

Target Street Cross Street Source
- EDR Digital Archive

CAJALCO RD 2010 (Cont'd)

22761	MENDOZA, SALVADOR
22765	LYNCH, TIFFANY
22775	STEPHENS, HENRIETTA L
22791	BAKER, GREGORY P
22810	CAMPOS, RAUL
22820	MCANLIS, JOHN A
22840	
22920	MARTINEZ, TOMAS G
	TROPICAL GARDENS UNIQUE ORCHID
23031	PENA, CLAUDIA
23050	•
	PEREZ, CYNTHIA
	VALLE, HERIBERTO P
23051	VALDASO, BLANCA
23052	
23113	
23129	LIMOS BY TIFFANY
23261	AMPM
	FRONTERA FINANCIAL SVC
23320	
23325	
23330	ACEVEDO, ENRIQUE E
23332	
23451	REYES, VIRGINIA
23453	PACHECO, MANUEL
	T C CONSTRUCTION CO INC
23455	POWERS, CHRISTOPHER J
23459	PIERCY, AMANDA
23471	OCCUPANT UNKNOWN,
23473	- , -
23510	OCCUPANT UNKNOWN,
23665	CALIFORNIA TRUSS CO INC

Target Street Cross Street Source

→ EDR Digital Archive

SEATON AVE 2010

18240 WILSON, SANDRA M	
18391 MARTINEZ, PETE G	
18399 PERALEZ, LORI A	
18431 RAYMOND, KEN	
18463 TODOROVITCH, JIM G	
18775 SANDOVAL, AGUSTIN U	
18795 PADILLA, MARIA	
18890 DESIGNER SASH & DOOR	
18901 OCCUPANT UNKNOWN,	
18910 INCE, GINNY	
19053 SMITH, FLETCHER E	
19081 MAGANA, REYNALDO C	
19083 SMITH, JIMMIE L	
19091 HURTADO, DEBBI A	
19101 BORNT, JAMES F	
19111 ZACARIAS, BASILIO	
19121 OCCUPANT UNKNOWN,	
19165 OCCUPANT UNKNOWN,	
19195 ZELEDON, GILMA	
19201 SILVA, MANUEL L	
19249 KELLEY, ERIC J	
19351 TRUJILLO, WAYNE S	
19355 FUERSTENBERG, CARLOT	TA
19580 GUEVARA, ULISES	
19600 PEREZ, SONIA	
19641 TREVINO, PAZ	
19654 OCCUPANT UNKNOWN,	
19683 OCCUPANT UNKNOWN,	
19691 DEALBA, MAYRA	
19701 PEREZ, JOSHUA	
19783 PLUMMER BROTHERS & F	AMILY
ROGERS, ANGEL	
19991 AOCLLC	

EDR Digital Archive

CAJALCO RD 2005

10045	DODOON MICHAEL
13245	ROBSON, MICHAEL
13385	MOTTA, MARION R
13391	BAUMANN, STEPHEN
13425	FRIEDL, DARREN
13440	VILLANUEVA, ALBERT A
13515	FRAUSTO, MARIA D
13521	RADWAY, JEFFREY W
13531	BARTELS, THOMAS F
13535	FLEMING, DONALD A
13539	BELLEPERCHE, JAMIE A
13570	SATHER, EDWARD T
13580	KNOWLES, RONALD R
13586	JAZZ CONNECTION THE
	SANDIDGE, DAVID C
13833	EAKIN, JARMILLA A
13859	MIRON, MARIO
13871	MASON, TERRY
15953	OCCUPANT UNKNOWN,
16035	,
16111	FURMAN, PAUL C
16577	OCCUPANT UNKNOWN,
17662	OCCUPANT UNKNOWN,
17679	LAKE MATHEWS FEED & PET SUPPLY
	LAKE MATHEWS GENERAL STORE
17770	TSAI, JAMES C
17779	HOOD, DEANNA M
17801	OCCUPANT UNKNOWN,
17805	STAKE, LOWELL F
17817	JONES, WILLIAM A
17831	ARREOLA, VICTOR M
17853	SNETSINGER, MARK A
17885	NOLASCO, SAMUEL A
17895	STEFFEN, GEORGE E
17898	AHMAD, ZAHUR
17911	GETZ, DANIEL F
17940	CHAPIN, DON
17941	ALVIDREZ, RICK N
17981	MIELDAZIS, GEORGE A
18100	SNOW, MARION V
18164	SAUCEDO, REYNALDO
18168	OCCUPANT UNKNOWN,
18174	HICKS, RICHARD L
18178	SPINNATO, LUANN J
18180	MORRIS, PHILLIP A
18184	REYES, MANUEL
18194	CARREON, SYLVIA
18200	PETERSON, CHARLES J
18220	HODGE, JANICE
18260	VELEZ, MIGDALIA
18276	CREGGER, WESLEY L

CAJALCO RD 2005 (Cont'd)

	CAJALCO RD	2005	(Cont
18282	RIDENOUR, ROBIN		
18286	CABALLERO, FRANCISCA		
18294	MCCASKEY, PAMELA D		
18310	GARCIA, MARIO		
18318	RYE, JAMES C		
	SAND HAVEN PINES		
18591	LEE, SANG W		
19203	BARRIOS, RODOLFO		
	PIZZA HUT		
19207	OCCUPANT UNKNOWN,		
19401	PAYAN, JOSE		
00050	SANTILLAN, FREDY		
20050	OCCUPANT UNKNOWN,		
20195	OCCUPANT UNKNOWN,		
20211	ALVAREZ, GUADALUPE V		
00004	CAMPOS HOME MAKINGS		
20221	CERVANTES, ROBERT R		
20231	RUIZ, ARNULFO		
20253	MARTINEZ, GREGORIO F		
20281	OCHOA, MOISES		
20295	MARTINEZ, JOSE G		
20337	BERNAL, GERARDO		
20385	DEMPSEY, ROGER D		
20433	ROMO, T		
20443	OCCUPANT UNKNOWN,		
20475	BARFOOT, BRYANT		
20495	SERRANO, CARLOS		
20505	FORD, JASON		
20572 20581	COAXUM, ROBIN BROWN, PAT		
20601	SIMONS, STEPHANIE		
20645	WALTER, JOHN C		
20655	MORRIS, JACK R		
	OCCUPANT UNKNOWN,		
20659 20673	ARTEAGA, BLANCA		
20680	MARTINEZ, REYES D		
20701	RIVERA, ENOS C		
20721	RAMIREZ, JESUS M		
20761	RODRIGEZ, JOSE G		
20780	SIMS, THOMAS L		
20795	ROUNDPOINT, HOLLY		
20810	RAUDALEZ, JOSE		
20815	OCCUPANT UNKNOWN,		
20835	ROSALES, CRISPIN S		
20845	BARAJAS, ALFREDO		
20858	OCCUPANT UNKNOWN,		
20895	WILKERSON, WELDON		
20900	ESPARZA, FRANCISCO N		
20914	BRAVO, EVA		
20931	SANCHEZ, JOSE A		
	, • • • - · ·		

CAJALCO RD 2005

	CAJALCO RD	2005	(Cont'd)	
20024	ALDRIDGE JAMES			
20934	ALDRIDGE, JAMES			
20950 21110	MARTIN, GONZALEZ J MEAD VALLEY MARKET			
21166	JOHNSON, BEVERLY L			
21321	RODRIGUEZ, ANTONIO			
21381	BREEDS MARKET & LIQUOR			
04000	EXPRESSWAY COMPUTERS			
21386	EXPRESS DEPOT BUILDERS SUPPLY			
04.000	TOSCANO, RONALD			
21623	MEAD VALLEY FEED			
21705	BARBER, ARTHUR			
21805	BRIBIESCA, RUBEN			
21830	OCCUPANT UNKNOWN,			
21871	FERENENDEZ, FRANK G			
21885	OCCUPANT UNKNOWN,			
21909	POWELL, IDA B			
21962	SMITH, ELIZABETH B			
22024	GALVAN, MANUEL G			
22050	OCCUPANT UNKNOWN,			
22080	BURCH, JANET			
22095	AVELAR, HILDA M			
22099 22115	BROWN, ROBERT RANSON, WILLIAM			
22113	OCCUPANT UNKNOWN,			
22160	RIVERA, OSMIN			
22180	OCCUPANT UNKNOWN,			
22185	ELLIS, ALBERT W			
22191	MORALES, ANTONIO C			
22260	TREJO, ROBERT T			
22290	ARMENDARIZ, JOHNNY			
22370	VILLA, UMBERTO			
22460	MARTINEZ, FABIAN			
22490	OCCUPANT UNKNOWN,			
22530	RAMSEY, EDGAR K			
22685	EVANS, LARRY			
22691	WORTHLEY, DON			
22700	CORAN, DEBRA			
	MCCULLOUGH, LORENA			
	NEW MILLENIUM AUTO			
	WILSON, E			
22761	MENDOZA, SALVADOR			
22765	STEPHENS, HENRIETTA L			
22810	RODRIGUEZ, RODNEY G			
22820	MCANLIS, JOHN A			
22840	BROWN, KYLE C			
22920	MARTINEZ, TOMAS			
	TROPICAL GARDENS UNIQUE ORCHIDS			
23031	DIAZ, LOURDES			
	EDITH CONCRETE PUMPING			
	GONZALEZ, LUZ			

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CAJALCO RD 2005 (Cont'd)

23050	S K CONCRETE
23051	VALDASO, BLANCA
23052	OCCUPANT UNKNOWN,
23113	GONZALES, BENJAMIN
23320	COOKSEY, ELMER L
23330	OCCUPANT UNKNOWN,
23332	ARLINGTON SHEET METAL CORP
23447	CALIFORNIA TRUSS CO
23451	OCCUPANT UNKNOWN,
23453	PACHECO, MANUEL
23455	FANN, DAVID M
23459	NELSON, GREGORY L
23471	HERNANDEZ, JUAN
23473	VADASZ, ESTHER A
23665	CALIFORNIA TRUSS CO

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SEATON AVE 2005

18131	RUSSELL, CAMIELLE
18221	JONES, ROBERT E
18391	MARTINEZ, PETE G
18399	HUFF, HARRY
18431	RAYMOND, KEN A
18463	TODOROVITCH, JIM A
18605	OCCUPANT UNKNOWN,
18775	SANDOVAL, AGUSTIN U
18795	PADILLA, MARIA
18890	DESIGNER SASH & DOOR
18901	OCCUPANT UNKNOWN,
18910	INCE, GINNY
18916	WHITE HO ANITATION
	WHITE HO EPTIC TANK PUMPING & SPEED
19053	SMITH, JIMMIE L
19081	HARTMAN, JAY L
19091	HURTADO, DEBBIE A
19101	BORNT, JAMES F
19111	CORTEZ, JOE M
19121	PEDREGON, ROBERT
19165	OCCUPANT UNKNOWN,
19195	ELIAS, DANIEL
19201	SILVA, MANUEL L
19249	OCCUPANT UNKNOWN,
	WARNER WATER WORKS INC
19351	MINARCIN, PHYLLIS J
19355	FUERSTENBERG, CARLOTTA
19580	OCCUPANT UNKNOWN,
19641	OCCUPANT UNKNOWN,
19654	OCCUPANT UNKNOWN,
19691	OCCUPANT UNKNOWN,
19701	OCCUPANT UNKNOWN,
19783	PLUMMER, GILBERT
19865	PLUMMER, GILBERT
19991	ALPHA CORP OF TENNSS
	AOC LLC

CAJALCO RD 2000

	RIVERSIDE COUNTY OF FIRE DEPARTMENT
17679	
40040	LAKE MATHEWS FRUIT STAND
18318	
	ALVAREZ, C
20221	CERVANTES, ROBERT R
20231	•
20253	•
20295	MARTINEZ, RENE
20401	ADKINS, BRUCE
20445	ADUSA LOCK & AUTOMOTIVE
20415	RUBASH, STEVE
20433	STEWART, C E
20443	GONZALEZ, ROBERTO M
20505	FORD, WANDA J NUTTBROCK, JOHN H
20555	NELSON, ROBERT
20572 20581	BROWN, PAT
20601	OCCUPANT UNKNOWN,
	WALTER, ROBERT
20673	
20701	OCCUPANT UNKNOWN,
20721	RAMIREZ, JESUS O
20121	TURTLETAUB, BERTHA H
20761	RODRIGEZ, JOSE
20780	SIMS, THOMAS L
20794	OCCUPANT UNKNOWN,
20795	BRYSON, J P
_0.00	ROUNDPOINT, LOUISE
20858	MESA, E
20900	OCCUPANT UNKNOWN,
20905	·
20934	ALDRIDGE, HELEN M
20950	BRYANT, LILLIE M
21166	JOHNSON, SARAH E
21274	RODRIGUEZ, SARA
21314	OCCUPANT UNKNOWN,
21381	BREEDS MARKET & LIQUOR
21386	OCCUPANT UNKNOWN,
21415	PALM LANE COGIC
21419	TURNER, DON
	TURNERS BOOKS & GIFTS
21425	CAJALCO FUNERAL HOME
	WILEYS GIFT SHOP
21705	BARBER, ARTHUR
21830	MENDOZA, T
21871	FERENENDEZ, FRANK G
21885	OCCUPANT UNKNOWN,
21909	POWELL, IDA B
22695	KIRKUS, AL

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CAJALCO RD 2000 (Cont'd)

22697	OCCUPANT UNKNOWN,
22700	MCCULLOUGH, SEABRON
22761	ORTIZ, ANGIE
22765	STEPHENS, H L
22775	STEPHENS, H L
22779	NASH, N
22810	OCCUPANT UNKNOWN,
22820	MCANLIS, JOANN S
22840	OCCUPANT UNKNOWN,
22920	OCCUPANT UNKNOWN,
23050	JUAREZ, JOSE R
23051	CARDWELL, SHANNON
23052	OCCUPANT UNKNOWN,
23113	OCCUPANT UNKNOWN,
23447	SELECT STEEL INCORPORATED
23451	ARNOLD, PAUL
23453	OCCUPANT UNKNOWN,
23455	FANN, DAVID M
23459	OCCUPANT UNKNOWN,
23471	MAGANA, LOIS
23665	CALIFORNIA TRUSS COMPANY

Target Street Cross Street Source

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SEATON AVE 2000

18221	JONES, EARL
18240	WILSON, SANDRA
18391	MARTINEZ, PETE G
18399	HUFF, HARRY
18431	OCCUPANT UNKNOWN,
18445	OCCUPANT UNKNOWN,
18463	BUSTAMANTE, EMILIO
19053	SMITH, JIMMY
	TYLER, WILLIE
19081	MALINOSKY, JOSEPH R
19091	OCCUPANT UNKNOWN,
19101	BORNT, ALICIA
19111	CORTEZ, JOE
19121	PEDREGON, ROBERT
19165	OCCUPANT UNKNOWN,
19201	SILVA, MANUEL
19351	PECK, PHYLLIS J
19355	FUERSTENBERG, C
19580	VILLEGAS, MARIA
19600	GEORGE, T
19641	OCCUPANT UNKNOWN,
19654	KRETZSCHMAR, HANS
19991	ALPHA OWENS CORNING LLC

CAJALCO RD 1995

	0/10/1200 11D
40005	CANDIVI ALDEDTO
13385	CANDIVI, ALBERTO
13395	TOM, BEVERLY
13440	VILLANUEVA, R A
13515	GOUDEAU, GARY
13521	CLARKSON, TROY D
13535	MURDOCK, JUDITH
13539	BELLEPERCHE, BRAD
13570	,
13580	•
13586	,
13681	- ,
13833	EAKIN, J A
13859	GARCIA, OSWALDO E
16035	LAVERNE, OSCAR
16111	FURMAN, PAUL C
16265	NOTERMAN, RICHARD A
16577	RUGA, JOE
17650	COUNTY FIRE STATION
17679	LAKE MATHEWS FEED & PET SUPPLY
	LAKE MATHEWS VIDEO
	OCCUPANT UNKNOWNN
	PAUL DANIELSON
17770	OCCUPANT UNKNOWNN
17779	WARTER, RICHARD A
17805	STAKE, LOWELL F
17831	OCCUPANT UNKNOWNN
17853	ROIG, AMI
17885	ARMSTRONG, KARIN A
17895	STEFFEN, GEORGE E
17911	GETZ, DANIEL F
17940	GUNSING, WALTER
17941	BONNETT, BARI Y
17981	GAM ELECTRICAL & GENERAL CONTR
18100	SNOW, MARION
18160	OCCUPANT UNKNOWNN
18164	SAUCEDO, R
18168	OCCUPANT UNKNOWNN
18174	HICKS, R L JR
18178	SPINNATO, COREY D
18180	NORRIS, PHILLIP A
18184	OCCUPANT UNKNOWNN
18186	OCCUPANT UNKNOWNN
18194	OCCUPANT UNKNOWNN
18200	MCCLAIN, CHARLES G
18210	FERNANDEZ, RAFAEL
18220	•
18260	
18270	•
18276	SMITH, SUSAN
10000	OCCUPANT UNIONANI

18282 OCCUPANT UNKNOWNN

CAJALCO RD 1995 (Cont'd)

	OASALGO ND	1333	(Cont a)	
18286	OCCUPANT UNKNOWNN			
18300				
18310	·			
18318	RYE, JAMES C			
18550	SERRATO, ROBERTO			
18800	CAJALCO NURSERY			
19207	MARTIN, FANNIE L			
19401	DUPUIS, STEVEN			
	KLIMPEL, WILMER			
19455	OCCUPANT UNKNOWNN			
20050	BONILLA, S B			
20211	ALVAREZ, C			
20231	OCCUPANT UNKNOWNN			
20253	MARTINEZ, F			
20295	MARTINEZ, RENE			
20337	GARCIA, EDGAR			
20385	MYLAR, JEANNE			
20401	ADKINS, BRUCE			
	ADUSA LOCK & AUTOMOTIVE			
	GONZALEZ, F N			
20415	GONZALES, REGINO			
20433	STEWART, C E			
20443	GONZALEZ, ROBERTO M			
20475	BARFOOT, JENNIE R			
20495	SERRANO, CARLOS			
20551	OCCUPANT UNKNOWNN			
20555	OCCUPANT UNKNOWNN			
20601	OCCUPANT UNKNOWNN			
20645	WALTER, ROBERT			
20673	MANRIQUEZ, JAIME A			
20680	CARMONA, CHRIS P			
20701	PARRA, MIGUEL			
20721	RAMIREZ, JESUS O			
	TURTLETAUB, BERTHA H			
20761	BIRDSONG, J			
20780	HEMPHILL, C A			
	JONES, DAVID			
20794	MCCLOUD, JOHNNIE			
	PATTERSON, MARY			
20795	ROUNDPOINT, LOUISE			
20810	OCCUPANT UNKNOWNN			
20815	GUSTAFSON, JANE			
20835	OCCUPANT UNKNOWNN			
20845	GERMAN, ELMER W			
20858	GEIGGAR, MELVIN			
20900	WEBSTER, A			
20931	TAYLOR, N			
20934	ALDRIDGE, HELEN M			
20950	OCCUPANT UNKNOWNN			
21166	JOHNSON, SARAH			

CAJALCO RD 1995 (Cont'd)

04074	
21274	•
21314	IVERSON, CHRIS
21381	BREEDS MARKET & LIQUOR
	WESTERN UNION
21419	WHITE, HATTIE M
21425	CALJALCO FUNERAL HOME
	WILEYS GIFT SHOP
21805	BRIVESCA, CARMEN
21830	OCCUPANT UNKNOWNN
21858	TORRES, ADOLFO
21860	OCCUPANT UNKNOWNN
21871	JOHNSON, WILLIAM
21885	CUMMINS, RICHARD
21909	POWELL, WILLIAM S
21962	OCCUPANT UNKNOWNN
22024	GALVAN, MANUEL
22050	OCCUPANT UNKNOWNN
22080	OCCUPANT UNKNOWNN
22095	SWEAT, CURTIS E
22113	OCCUPANT UNKNOWNN
22115	RANSON, WILLIAM
22120	OCCUPANT UNKNOWNN
22175	OUGZIN, MOHAMED
22180	OCCUPANT UNKNOWNN
22185	ELLIS, ALBERT W
22200	BISHOP, DONALD W
22290	CHAVEZ, RAYMOND L
22460	RODERICK, INGRID
22530	RAMSEY, EDGAR K
22675	KEELING, ROY A
22685	OCCUPANT UNKNOWNN
22695	KIRKUS, AL
22697	ORTIZ, ANGIE
22700	MCCULLOUGH, SEABRON
22761	HAMPTON, T
22765	STEPHENS, H L
22775	STEPHENS, H L
22779	OCCUPANT UNKNOWNN
22820	OCCUPANT UNKNOWNN
22840	HENSLEY, HAZEL
22920	GUARACHA, RUTH G
23031	OCCUPANT UNKNOWNN
23050	KEY, ESTRAL P
23051	OLIVAREZ, LEONOR
23451	SCHNEIDER, C
23453	
23455	·
23459	OCCUPANT UNKNOWNN
	044500444 TD400 CC

23665 CALIFORNIA TRUSS CO

Target Street Cross Street Source

→ EDR Digital Archive

SEATON AVE 1995

18131	PORTER, ODESSA
18240	PASILLAS, MIKE
18391	MARTINEZ, ABELINA S
18399	HUFF, HARRY
18445	CORY, DEAN R
18463	BOYD, WILLIE
18890	DESIGNER SASH & DOOR SYSTEMS
18901	STEINER CONSTRUCTION
19019	VANOEL, JERRIE
19053	SMITH, JIMMY
19081	OCCUPANT UNKNOWNN
19091	OCCUPANT UNKNOWNN
19101	OCCUPANT UNKNOWNN
19121	MOYA, M H
19165	KYLES, JOHN
19201	OCCUPANT UNKNOWNN
19249	ROSALES, ROBERTO
19351	OCCUPANT UNKNOWNN
19355	FUERSTENBERG, C
19580	GUEVARA, ROSA
19600	OCCUPANT UNKNOWNN
19641	OCCUPANT UNKNOWNN
19654	KRETZSCHMAR, HANS
19671	BARCENA, DAN J
19691	BARCENA, DAN
19701	,
19783	PLUMMER, GILBERT
19991	ALPHA RESIN CORP

7020834.5 Page: A27

13395	TOM, B
13521	CLARKSON, TROY D
13570	SATHER, EDWARD T
13586	RILEY, WILLIAM
13681	HEDRICK, DIANA
16035	LAVERNE, OSCAR
16111	FURMANS BULLDOZERS
16577	RUGA, JOE
17650	RIVRSD CO FIRE BUS
17679	JOHNSONS DISC NRSRY
	LAKE MATHEWS FEED
	REAL EST MERCHANTS
17779	•
17831	EDDINGS, RUTH
17885	SMITH, KAREN
17940	BEYER, V M
17981	G A M ELECTRICAL
18100	SNOW, MARION
18168	GRIFFITH, LYNFORD
18174	HICKS, R L JR
18276	CREGGER, WESLEY L
18300	AU, CHUC M
18550	PINE HILL FARMS
	RYE, NEAL SERRATO, ROBERTO
18800	
19401	H B RANCH
13401	KLIMPEL, WILMER
20211	ALVAREZ, C
20253	MARTINEZ, F
20200	ZAINOS, RODRIGO
20295	ROBERTS, GAIL
20401	ADKINS, BRUCE
_0.0.	ADUSA LOCK
20433	STEWART, C E
20572	PURIFOY, HORRIES
20581	MODERN OFFICE TECH
20645	WALTER, ROBERT
20680	CARMONA, CHRIS P
20701	PARRA, MIGUEL
20721	CARILLO, TITO
	HAMMONS, NORVELL
	RAMIREZ, JESUS O
20761	BIRDSONG, J
	LACEY, LEROY
20780	HEMPHILL, C A
	JONES, DAVID
20795	BURNETT, MICHAEL
	ROUNDPOINT, LOUISE
20810	KIDD, L

Target Street Cross Street Source
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CAJALCO RD 1992 (Cont'd)

20835	IRON MASTER
20845	GERMAN, ELMER
21110	MEAD VLY MKT
21166	JOHNSON, SARAH
21381	WESTRN UNION PCK UP
21425	WILEYS GIFT SHOP
21805	BRIVESCA, CARMEN
21830	MENDOZA, T
21909	POWELL, WILLIAM S
22024	GALVAN, MANUEL
22095	SWEAT, CURTIS
22120	WILLIAMS, LEE
22180	TRILLO, SANDRA
22185	WILSON, JOHNNA
22200	BISHOP, DONALD W
22460	RODERICK, INGRID
22695	KIRKUS, AL
22700	LOYD, VERNA
	MCCULLOUGH, SEABRON
	PAYNE, MONIQUE
	TILLMAN, LEE
22761	HAMPTON, T
22765	STEPHENS, H L
22840	HENSLEY, H
23031	ARNOLD, CARRIE
23113	MORONES WELDG&IRON
23451	SCHNEIDER, C
23453	SMITH, ROBERT S
23455	FANN, DAVID
23510	PERRIS LUMBER CO
23665	CA TRUSS CO

Target Street Cross Street Source

→ EDR Digital Archive

18131	PORTER, ODESSA
18399	HUFF, HARRY
18445	CORY, DEAN R
18463	BOYD, WILLIE
18890	DESIGNER SSH&DR SYS
	OAK DOOR THE
18901	STEINER CONSTR
18916	PRICE ROOF&BLDG CO
19053	SMITH, JIMMY
19165	DOVENPORT, SHIRLEY
19201	HODDICK, AMY
19249	ROSALES, ROBERTO
19355	FUERSTENBERG, C
19580	MARTONI, JOSEPH A
19654	KRETZSCHMAR, HANS
19691	BARCENA, DAN
19701	MARAMBA, DANIEL
19783	PLUMMER, GILBERT
19991	ALPHA RESIN CORP

<u>Target Street</u> <u>Cross Street</u>

<u>Source</u>

Haines Criss-Cross Directory

	CAJALCO RD 199	3 0
20004	CALVANIL	00 0505
22024	GALVAN Lorraine	657-9525
	GALVAN Manuel	657-9525
	ROMERO Frank L	00 4
22050	HERNANDEZ Connie A	00 7
	ROMERO Abel B	00 2
22072	XXXX	00
22080	XXXX	00
22113	HARPER Marrianne	00 +0
	MORRIS Rosalind R	00 +0
22160	SERRATT Sylvia J	00 +0
22175	OUGZIN Mohamed	00 4
22180	AYALA Miguel	00 4
22185	ELLIS Robin Y	00 1
22200	BISHOP Irene M	00 3
22460	RODERICK Ingrid	653-5225
22530	RAMSEY Edgar K	00 +0
22675	KEELING Roy A	00 7
	TUCKER Bonnie L	00 7
22685	EVANS Leon	657-2370 9
22691	XXXX	00
22695	KIRKUS AI	943-7738 9
22697	JOHNSTON John W	00 4
22700	FOLEY Christopher	943-6503 +0
	MCCULLOUGH Seabron	
	THOMPSON Geo	943-5380 +0
	WILSON John	657-0349 +0
22765	XXXX	00
22775	XXXX	00
22820		00 +0
22920	TO BE A LONG TO	00 4
	ARNOLD Carrie	657-6259
23050	DICK Clifton	667-6605

and a			200	-
1	CAJAL	.CO RD	92370 CONT	
0	23051	JACKSON Milton R	657-1943	9
6	23052	XXXX	00	
5	23113	REYES Marjorie	00	7
	23245	XXXX	00	
	23264	HERNANDEZ Alfred R	00	4
5	23280	*HIGH CHAPARELL	657-8455	9
0	23320	COOKSEY Elmer	00	7
	23330	XXXX	00	
	23417	XXXX	00	
	23451	SCHNEIDER Edw	943-1184	3
	23453	SMITH Robt S	943-2680	4
	23455	FANN David	943-3906	9
2	23459	LARSON Donald C	657-6665	
		LARSON Mary R	657-6665	
1	23471	JORGENSON Karen	00	+0
4	23473	VADASZ Wm	657-4785	5
6	23510	HERNANDEZ Andrew L	657-5563	5
6	23665	*CA TRUSS CO	657-7491	5
5		*UPTON&ODONNELL	657-3828	
	1	20 BUS 191 RES	27 NEW	
-				

5 6		TON AV 92370 RRIS		
5		PORTER Odeasa	657-4563	4
5		JONES Earl *ATCHLEY TRUCKING	657-3551 653-4493	1
0	10240	RENFRO Debra	000	+0
C		VICKERY Shelley	657-5302	6
C	18391	MARTINEZ Pete G	00	5
7	18399	HUFF Harry	00	4
C	18431	WILLIAMS Jay D	00	7
		CORY Dean R	657-5557	
	1 550	PECK J D	657-1670	
		URENA Agustin S	00	4
		OROSCO Alfredo A	00	5
	18890	*DESIGNER SSHADR SYS	943-4011	75
		*OAK DOOR THE	657-5579	9
		RAMSEY Michael S	00	
3	18901		00	
3	18966		00	6
9	19081	MALINOSKY Joseph	00	+0
3		WILLIAMS Lloyd	943-3638	5
C	19091	JOHNSON H	657-8522	
Ol		JOHNSON N	657-8522	

	SEATO	ON AV	92370 CONT
	19101	BORNT James F	00 4
	19121	KENDALL Rosalie A	00 4
)	19201	HODDICK Catherine	657-9602
		HODDICK Kenneth	657-9602
)	19249	JOHNSON James H	00
	19351	XXXX	00
)	19355	FUERSTENBERG C	657-1004 9
	19399	*HOWARD ENTRPRS	657-1666
	19429	XXXX	00
	19641	SANCHEZ Robert A	00 4
	19654	KRETZSCHMAR Hans	657-3891
	19691	BARCENA Dan	657-2668
	19701	MARAMBA Dani	657-4253
	19750	XXXX	00
	19783	PLUMMER Gilbert	657-8390
		PLUMMER Maxine	657-8390
	19991	*ALPHA RESIN CORP	657-5161
	1	5 BUS 33 RES	3 NEW

<u>Target Street</u> <u>Cross Street</u>

<u>Source</u>

Haines Criss-Cross Directory

	CAJALCO RD 1963	Total Total	
22024	GALVAN MANUEL	657-9525	1
22050	XXXX	00	
22072	XXXX	00	
22080	SPEAR CHAS L	657-1540	9
22160	XXXX	00	
22175	XXXX	00	
22180	MENDEZ REYDESEL JR	943-3737	+5
22460	RODERICK INGRID	653-5225	8
22530	NICOSIA FRANK JR	657-8858	4
22675	XXXX	00	
22691	XXXX	00	
22697	JOHNSTON WOODROW	657-8124	3
22700	MCCULLOUGH SEABRON	657-6592	6
22765	BROWN C	943-3822	+5
22775	WATSON MOLLIE	943-1079	4
22820	XXXX	00	
22840	XXXX	00	
23031	ARNOLD CARRIE	657-6259	
23050	DICK CLIFTON	657-5505	
23051	XXXX	00	
23052	ADAMS G L	943-1229	3
23113	XXXX	00	
23264	XXXX	00	
23280	MAPES LEON	943-3653	+5
23330	XXXX	00	
23451	SCHNEIDER EDW	943-1184	3
23453	SMITH ROBT S	943-2680	4
23459	LARSON DONALD C	657-8665	
23471	RITCHIE DARRELL	657-1516	5
23473	VADASZ WM	657-4785	+5
23510	HERNANDEZ ANDREW L	857-5563	+5
23665	CA TRUSS CO	657-7491	+5
	UPTONGODONNELL	857-3828	
*	18 BUS 129 RES	24 NEW	

SEAT	ON AV 92370	PERRIS
18131	PORTER ODESSA	657-4563
18221	JONES EARL	657-3551 1
18240	ATCHLEY TRUCKING	653-4493 0
18399	XXXX	00
18431	LIVEZEY PAULINE A	657-2807 9
18445	CORY DEAN R	657-5557 7
18463	PECK J D	657-1670 0
18901	XXXX	00
19081	COWIE WM A	943-3638 +5
	WILLIAMS LLOYD V	943-3638 +5
19201	HODDICK KENNETH	657-9602 +5
19249	XXXX	00
19351	CRARY DENNIS	657-8211 +5
19399	HOWARD ENTRPRS	657-1666 9
19641	XXXX	00
19654	KRETZSCHMAR HANS	657-3891
19691	BARCENA DAN	657-2668
19701	MARAMBA DANL	657-4253
19750	HARPER MONROE H	657-0424 2
19783	PLUMMER GILBERT	657-8390 7
19991	ALPHA RESIN CORP	657-5161
*	3 BUS 18 RES	4 NEW

Target Street Cross Street Source
- Source Haines Criss-Cross Directory

22050	VASQUEZ RAY G	657-8576 8	1
22080	SPEAR CHARLES L	657-1540 9	
22160	PEARSON RUTH M	657-2622	
22175	COMPHER ROY E	781-3912+0	
22180	WILLIAMS M C	657-1381 9	
22460	RODERICK INGRID	653-5225 8	
22530	XXXX	00	
22675	EVANS BARBARA P	657-2242	
22700	MCCULLOUGH SEABRON	657-6592 6	
22775	XXXX	00	
22820	MCANLIS JOHN A	657-5745+0	
22840	XXXX	00	
23031	ARNOLD CARRIE	657-6259	
*	CARRIES HSE BUTY 1	657-8034 8	
23050	DICK CLIFTON	657-5505	
23051	OLIVAREZ GUADALUPE	657-5416+0	
23451		657-2062 9	
23453		657-5003+0	
23459		657-6665	
	VADASZ WM	653-8825 7	
	UPTONAODONNELL		
NO ##	*********		
*	11 BUS 105 RES	32 NEW	

SEAT	ON AV 92370	PERRIS
18131	PORTER ODESSA	657-4563
18221	XXXX	00
18240★	ATCHLEY TRUCKING	653-4493+0
	MCKNIGHT MAUDE	653-9190+0
18399	ADAMS L MAY	657-4924
18431	LIVEZEY PAULINE A	657-2807 9
18445	CORY DEAN R	657-5557
18463	PECK J D	657-1670+0
19201	XXXX	00
19249	HERNANDEZ JOHN	657-8515+0
19399*	HOWARD ENTERPRISES	657-1666
19641	TOY ROBERT C	657-8769
19654	KRETZSCHMAR HANS	657-3891
19691	BARCENA DAN	657-2668
19701	MARAMBA DANL	657-4253
19783	PLUMMER GILBERT	657-8390
19991*	ALPHA RESIN CORP	657-5161
*	3 BUS 14 RES	4 NEW

<u>Target Street</u> <u>Cross Street</u> <u>Source</u>
- Haines Criss-Cross Directory

21962	XXXX	CO
22160	PEARSON RLTH M	657-2622
22180	VENABLE GEO H	657-5944
22460	XXXX	CO
22530	UMIPEG ERLINDA	657-2700 4
22675	EVANS BARBARA P	657-2242
22700	MCCULLOUGH SEABRON	657-6592+6
22775	COLLINS GABRIEL	657-4052
22840	HENSLEY PAUL	657-6438 5
23031	ARNOLD CARRIE	657-6259
*	*CARRIES HS CF BTY	2657-8034
23050	DICK CLIFTON	657-5505
23052	ADAMS G L	657-7226 4
23113	MCFADDEN R H	657-3852
23264	XXXX	CO
23280	XXXX	CO
23453	WALKER CLIFFORD	657-3717 5
23459	LARSON DONALD C	657-6665
23665*	*UPTON&ODONNELL	657-3828
*	* 10 BUS 77 RES	14 NEW

SEATON AV 92370 PERRI	S
19641 BERIDON JAS M 19654 KRETZSCHMAR HANS 19691 BARCENA DAN 19701 MARAMBA DANL 19783 PLUMMER GILBERT 19991*ALPHA RESIN CORP	

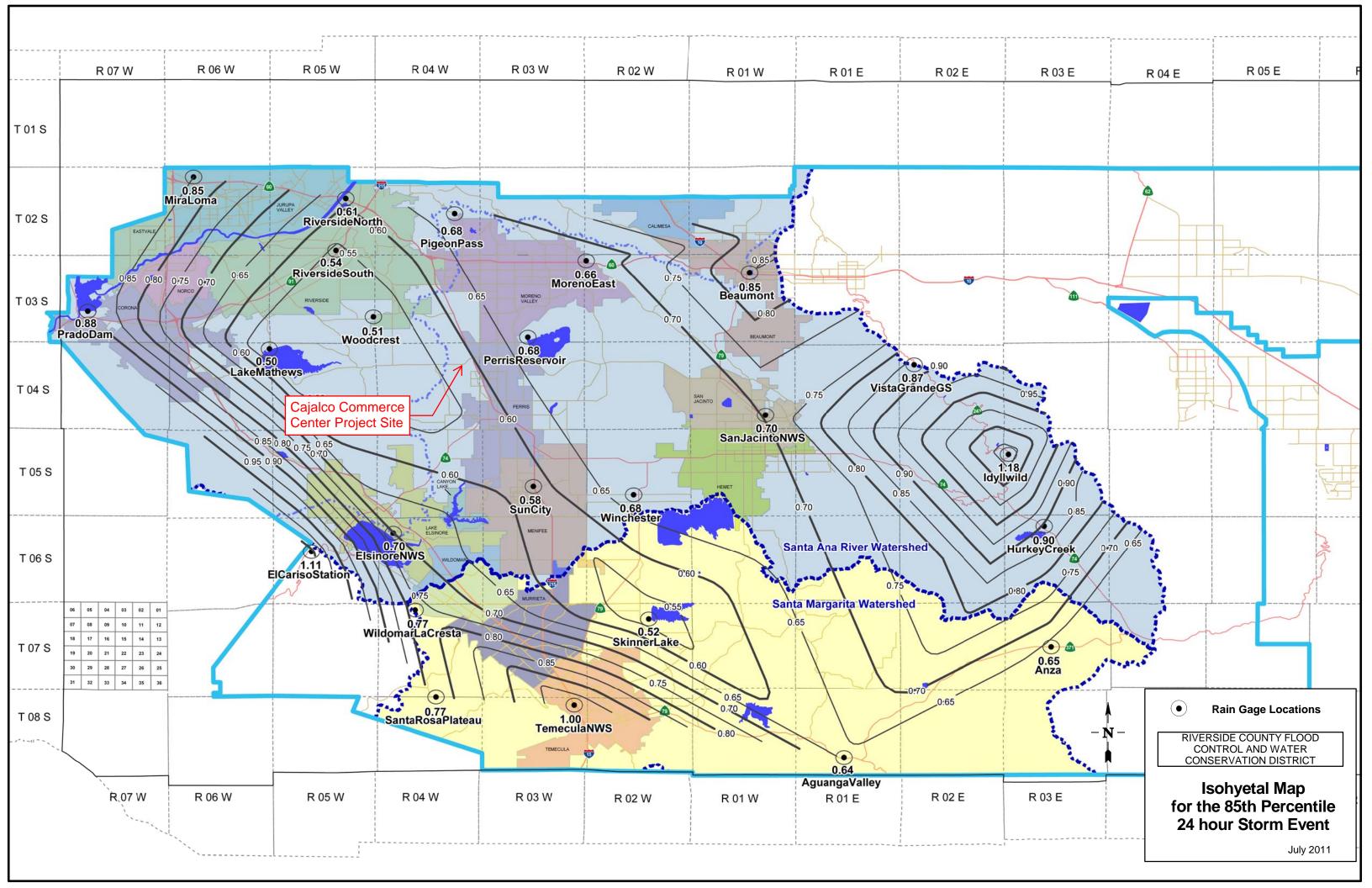
Appendix 5: LID Infeasibility

LID Technical Infeasibility Analysis

N/A

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation



Sa	anta .	Ana Wat	ershed - BMP I	Design Vo	olume, \mathbf{V}_1	ВМР	Legend		Required Ent Calculated Co
		Note this worksh	eet shall <u>only</u> be used	in conjunction	n with BMP	designs from the	LID BMP		<u>k</u>)
ompany N			ebb Associates						3/12/2024
esigned by		RSB			2022 040			Case No	
ompany Pi	roject [Number/Nam	e		2022-019	2			
				BMP I	dentificati	on			
MP NAM	E / ID	BMP-A							
			Must	match Nam	ne/ID used o	on BMP Design	Calculation	Sheet	
				Design I	Rainfall De	epth			
		-hour Rainfal Map in Hand	ll Depth, lbook Appendix E				D ₈₅ =	0.57	inches
			Drain	age Manag	ement Are	a Tabulation			
		Ins	sert additional rows i	f needed to d	accommodo	ate all DMAs dr	aining to th	ne BMP	
	OMA pe/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I _f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V _{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
-	L-A	238328	Ornamental Landscaping	0.1	0.11	26325.2			
	R-A	993511	Roofs	1	0.89	886211.8			
_	H-A	672460	Concrete or Asphalt	1	0.89	599834.3			
	H-C DG-C	465,260 25,400	Concrete or Asphalt Decomposed Granite	0.4	0.89	415011.9 7104.7			
-	L-C	121610	Ornamental Landscaping	0.1	0.11	13432.8			
			γγ						
		254555	_	atal		4047022	0.55	00505	000.451
		2516569	l 7	otal		1947920.7	0.57	92526.2	900,431

Notes:

Proposed (4) MWS-L-8-20 Treatment Capacity (with 48-hr drawdown) = 4 x 25,120 = 100,480 CF

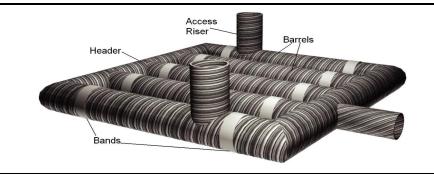
DYODS TM Design Your Own Detention System

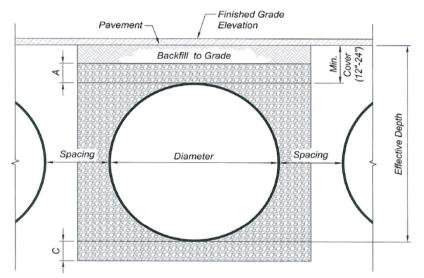




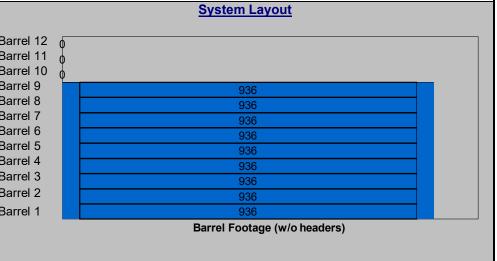
For design assistance, drawings, and pricing send completed worksheet to: dyods@contech-cpi.com

Project Summary			
Date:	11/2/2023		
Project Name:	Hillwood Seaton		
City / County:	Riverside County		
State:	CA		
Designed By:	RSB		
Company:	Albert A. Webb Associates		Enter Information in
Telephone:		Blue Cells	
Corrugated Metal P	ipe Calculator		
Storage Volume Required (cf): 900,4		900,431	
Limiting Width (ft):		120.00	
Invert Depth Below A	Asphalt (ft):	12.00	
Solid or Perforated F	Pipe:	Perforated	
Shape Or Diameter	(in):	120	78.54 ft ² Pipe Area
Number Of Headers	:	2	
Spacing between Ba	rrels (ft):	3.00	
Stone Width Around	Perimeter of System (ft):	1.5	
Depth A: Porous Stone Above Pipe (in): 12		12	
Depth C: Porous Sto	ne Below Pipe (in):	0	
Stone Porosity (0 to	40%):	40	
System Sizing			

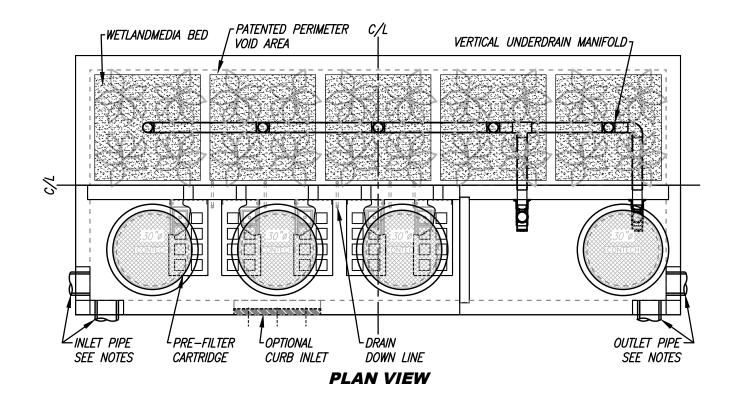


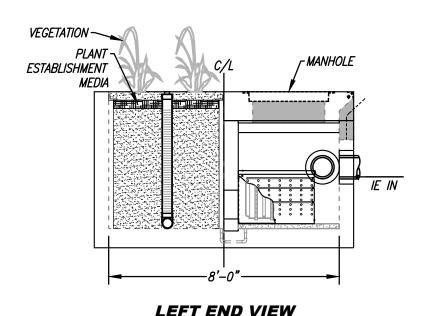


Depth A: Porous Stone Above Pipe	(in):	12			
Depth C: Porous Stone Below Pipe	(in):	0			
Stone Porosity (0 to 40%):		40			
System Sizing					
Pipe Storage:	679,526	cf			
Porous Stone Storage:	221,883	cf			
Total Storage Provided:	901,409	cf	100.1%	Of Required Storage	В
Number of Barrels:	9	barrels			В
Length per Barrel:	936.0	ft			В
Length Per Header:	114.0	ft			В
Rectangular Footprint (W x L):	117. ft x 959. ft				В
CONTECH Materials					В
Total CMP Footage:	8,652	ft			В
Approximate Total Pieces:	435	pcs			В
Approximate Coupling Bands:	442	bands			В
Approximate Truckloads:	218	trucks			В
Construction Quantities**					В
Total Excavation:	49868	су			В
Porous Stone Backfill For Storage:	20545	cy stone			
Backfill to Grade Excluding Stone:	4156	cy fill			
**Construction quantities are approx	imate and shoul	d be verified	upon fina	l design	



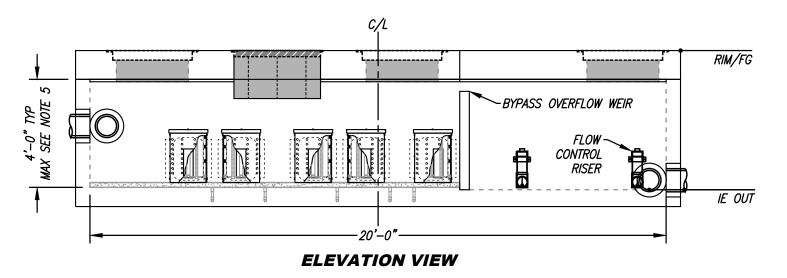
	SITE SPEC	IFIC DATA	
PROJECT NUMBE	:R		
PROJECT NAME			
PROJECT LOCATI	'ON		
STRUCTURE ID			
	TREATMENT	REQUIRED	
TREATMENT FLO	V (CFS)		
PRETREATMENT I	LOADING RATE (GF	PM/SF)	
WETLAND MEDIA	LOADING RATE (G	PM/SF)	
PEAK BYPASS R	PEQUIRED (CFS) —	IF APPLICABLE	
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD			
NOTES:			

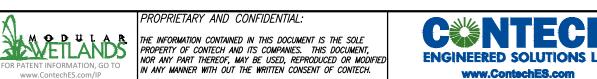




INSTALLATION NOTES

- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
- 2. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
- CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATERTIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
- CONTRACTOR RESPONSIBLE FOR CONTACTING CONTECH FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A CONTECH REPRESENTATIVE.
- VERTICAL HEIGHT VARIES BASED ON SITE SPECIFIC REQUIREMENTS.







MWS-L-8-20-V STORMWATER BIOFILTRATION SYSTEM STANDARD DETAIL

RIGHT END VIEW

6" MIN. BASE

Pump Rate Calculation

$$Q_{chamber\ out} = Q_{pump}$$

$$Q_{pump} = \frac{ft^3}{sec} * \frac{449 \ gpm}{1 \ \frac{ft^3}{sec}}$$

$$Q_{pump} = \frac{2.3 ft^3}{sec} * \frac{449}{1} \frac{gpm}{\frac{ft^3}{sec}} = 1036 gpm$$

$$Q_{pump} = 1036 gpm$$



Volume Based Sizing

Many states require treatment of a water quality volume and do not offer the option of flow based design. The MWS Linear and its unique horizontal flow makes it the only biofilter that can be used in volume based design installed downstream of ponds, detention basins, and underground storage systems.

Model#	Treatment Capacity (cu. ft.) @ 24-Hour Drain Down	Treatment Capacity (cu. ft.) @ 48-Hour Drain Down
MWS-L-4-4	1140	2280
MWS-L-4-6	1600	3200
MWS-L-4-8	2518	5036
MWS-L-4-13	3131	6261
MWS-L-4-15	3811	7623
MWS-L-4-17	4492	8984
MWS-L-4-19	5172	10345
MWS-L-4-21	5853	11706
MWS-L-6-8	3191	6382
MWS-L-8-8	5036	10072
MWS-L-8-12	7554	15109
MWS-L-8-16	10073	20145
MWS-L-8-20	12560	25120
MWS-L-8-24	15108	30216

	Santa	Ana Wat	ershed - BMP I	Design Vo	lume, V_{B}	вмР	Legend:		Required Entr	
		07	(Rev. 10-2011)		: I DI (D	1	TTD DITE		Calculated Ce	ells
Common			heet shall <u>only</u> be used ebb Associates	in conjunction	n with BMP	designs from the	<u>LID BMP L</u>		4/30/2024	
Designe	•	RSB/ABE	Associates						22-0050	
	2	Number/Name	a .		2022-019	2 Mead Valley	Commerc		22-0030	
Compan	ly 1 loject i	Number/Tvam	C		2022-0172	2 Wiedd Valley	Commerc	e Center		
				BMP I	dentificati	on				
BMP N	AME / ID	BMP-W1	A.A.,	at wastab Alaw	20/ID used	on DAAD Dooises	Calaulatian	Chaot		
			IVIUS			on BMP Design	Calculation	Sneet		
85th Pet	centile 24	-hour Rainfal	1 Denth	Design I	Rainfall De	epth	D ₈₅ =	0.57	l. ,	
			book Appendix E				D ₈₅ -	0.37	inches	
			Drair	nage Manag	ement Are	a Tabulation				
•		Ir	nsert additional rows	if needed to	accommodo	ate all DMAs dr	aining to the	e BMP		
	DMA	DMA Area	Post-Project Surface	Effective Imperivous	DMA Runoff	DMA Areas x	Design Storm	Design Capture Volume, V _{BMP}	Proposed Volume on Plans (cubic	
	Type/ID	(square feet)	Туре	Fraction, I _f	Factor	Runoff Factor	Depth (in)	(cubic feet)	feet)	
	L-W1	109487	Ornamental Landscaping	0.1	0.11	12093.7				
	H-W1	105338	Concrete or Asphalt	1	0.89	93961.5				
	B-W1	9137	Ornamental Landscaping	0.1	0.11	1009.3				
	R-W1	3,010	Roofs	1	0.89	2684.9				
		226972	7	otal		109749.4	0.57	5213.1	10,208	
		-	-						- <u> </u>	
Notes:										

	Santa	Ana Wat	<mark>ershed</mark> - BMP I	Design Vo	lume, V _E	3MP	Legend:		Required Enti	ries
			(Rev. 10-2011)						Calculated Ce	ells
Compan			heet shall <u>only</u> be used ebb Associates	in conjunction	n with BMP	designs from the	<u>LID BMP L</u>) 4/30/2024	
Designe	•	RSB/ABE	ASSOCIATES						22-0050	
		Number/Name			2022-0192	2 Mead Valley	Commerc			
				BMP I	dentificati	on				
BMP N	AME / ID	BMP-E2								
			Mus	t match Nan	ne/ID used (on BMP Design	Calculation	Sheet		
				Design I	Rainfall De	epth				
85th Per	centile, 24	l-hour Rainfal	l Depth,				$D_{85} =$	0.57	inches	
			book Appendix E							
			Drair	nage Manag	ement Are	a Tabulation				
		Ir	nsert additional rows				aining to the	е ВМР		
							3		Proposed	
	DN44	DMAA Aroo	Doct Drainet Curfore	Effective	DMA Runoff	DMAA Aroos v	Design	Design Capture Volume, V _{BMP}	Volume on Plans (cubic	
	DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Imperivous Fraction, I _f	Factor	DMA Areas x Runoff Factor	Storm Depth (in)	(cubic feet)	feet)	
	L-E2	32991	Ornamental	0.1	0.11	3644.1				
	H-E2	42989	Landscaping Concrete or Asphalt	1	0.89	38346.2				
	B-E2	4234	Ornamental	0.1	0.11	467.7				
			Landscaping							
		80214	7	otal		42458	0.57	2016.8	4,580	
			•							
Notes:										

Bioretention F	acility Design	m Procedure	BMP ID	Legend:	Require	d Entries	
Dioretennon r	actiffy - Desig	gii Procedure	BMP-W1	Legelia.	Calcula	ted Cells	
Company Name:	A	lbert A. Webb	Associates		Date:	4/30/2024	
Designed by:		RSB/Al		County/City (Case No.:	22-0050	
			Design Volume				
Enter the	area tributary	to this feature			$A_T =$	5	acres
Enter V _B	MP determined	from Section 2	.1 of this Handbook		$V_{BMP} =$	5,213	ft ³
		Type of E	Bioretention Facility	Design			
Side slop	es required (paralle	to parking spaces o	or adjacent to walkways)				
_			g space or Planter Boxes)				
		Rioreter	ntion Facility Surface	Area			
D 1 1	0. 11 F11 - 3.5		mon racinty Surface	Alla	1	2.5	0
Depth of	Soil Filter Med	dia Layer			$d_S =$	2.5	ft
Top Widt	h of Bioretent	on Facility, ex	cluding curb		$\mathbf{w}_{\mathrm{T}} =$	16.0	ft
Total Eff	ective Depth, d	L					
	•	$(0.7/w_T)$) + 0.5		$d_E = $	1.61	ft
Minimun	n Surface Area	Α					
$A_{\rm M}$ (ft ²	V	***			$A_{M} =$	3,246	ft
	Surface Area	$\mathbf{d}_{\mathrm{E}}\left(\mathbf{\Pi}\right)$			A=	3,273	ft^2
Troposed	Surface Area				A	3,213	II.
		Biorete	ention Facility Prope	rties			
Side Slop	es in Bioretent	tion Facility			z =	4	:1
Diameter	of Underdrain					6	inche
Longitud	nal Slope of S	ite (3% maxim	um)			0	%
6" Check	Dam Spacing					0	feet
Describe	Vegetation:	Natu	ral Grasses				
lotes:							

Bioretention Faci	lity - Design Procedure	BMP ID	Legend:	Required		
	<u>,</u>	BMP-E2	Legena.	Calculat		
Company Name:	Albert A. Webb		G /G'		4/30/2024	
Designed by:	RSB/AI	Design Volume	County/City (Case No.:	22-0050	
		Design volume				
Enter the are	a tributary to this feature			$A_T = $	1.7	acres
Enter V_{BMP}	determined from Section 2	.1 of this Handbook		$V_{BMP} = $	2,017	ft ³
	Type of E	Bioretention Facility	Design			
Side slopes re	equired (parallel to parking spaces o	or adjacent to walkways)				
O No side slope	s required (perpendicular to parking	g space or Planter Boxes)				
	Bioreten	ntion Facility Surface	Area			
Depth of Soi	l Filter Media Layer	-		$d_S =$	2.5	ft
1	Ž			5		_
Top Width o	f Bioretention Facility, ex-	cluding curb		$\mathbf{w}_{\mathrm{T}} = \underline{\hspace{1cm}}$	16.0	ft
Total Effecti	ve Denth. d _E					
	$(x d_S + (0.4) x 1 - (0.7/w_T))$) + 0.5		$d_E = $	1.61	ft
	urface Area, A _m					
$A_{\rm M}$ (ft ²) =	$\frac{V_{BMP}(ft^3)}{d_E(ft)}$	_		$A_{M} = $	1,256	ft²
				Δ —	1 561	ft^2
Proposed Su	rrace Area			A=	1,561	Ιί
	Biorete	ention Facility Prope	rties			
Side Slopes	in Bioretention Facility			$\mathbf{z} =$	4	:1
Diamatan af	TT., d.,				(1
Diameter of	Underdrain				6	inche
Longitudinal	Slope of Site (3% maxim	um)			0	%
6" Check Da	m Spacing				0	feet
Describe Ve	getation: Natu	ral Grasses				
lotes:						

MVCC PARK P-WQMP CALCULATIONS

	SELF RETAINING AREA				TYPE 'C' DMAS THAT ARE DRAINING TO THE SELF-			DMA					RECEIVING SELF-RETAINING		
DMA AME/ID	POST-PROJECT SURFACE TYPE	AREA (SF)	STORM DEPTH (IN)	DMA AME/ID	[C] FROM TABLE 3-3	REQUIRED RETENTION DEPTH (IN)		DMA AME/ID	AREA (SF)	POST-PROJECT SURFACE-TYPE	RUNOFF FACTOR	PRODUCT	DMA AME/ID	AREA (SF)	RATIO
Ž		[A]	[B]	Ž	[C]	[D]=[B]+([B]*[C]/[A])		Ž	[A]		[B]	[C]=[A]*[B]	Ž	[D]	[C]/[D]
SR-E-1	ORNAMENTAL LANDSCAPING (SELF RETAINING DEPRESSED AREA)	59,219	0.57	DMA-E1	48,754	1.04		L-E-1	57,522	ORNAMENTAL LANDSCAPING	0.10	5,752			
								N-E-1	54,548	NATURAL (B SOIL)	0.15	8,182			
								H-E-1	34,820	CONCRETE OR ASPHALT	1.00	34,820			
								DMA-E1	146,890	MIXED USE	0.33	48,754	SR-E-1	59,219	0.8

RATIO SHOULD BE 2:1 MAXIMUM

	SELF RETAINING AREA				TYPE 'C' DMAS THAT ARE DRAINING TO THE SELF-			DMA					RECEIVING SELF-RETAINING		
DMA AME/ID	POST-PROJECT SURFACE TYPE	AREA (SF)	STORM DEPTH (IN)	DMA AME/ID	[C] FROM TABLE 3-3	REQUIRED RETENTION DEPTH (IN)	EPTH (IN) ARE	AREA (SF)	POST-PROJECT SURFACE-TYPE	RUNOFF FACTOR	PRODUCT	DMA AME/ID	AREA (SF)		
ž		[A]	[B]	ž	[C]	[D]=[B]+([B]*[C]/[A])		Z	[A]		[B]	[C]=[A]*[B]	Z	[D]	[C]/[D]
SR-E-3	ORNAMENTAL LANDSCAPING (SELF RETAINING DEPRESSED AREA)	15,001	0.57	DMA-E3	30,225	1.72		L-E-3	81,453	ORNAMENTAL LANDSCAPING	0.10	8,145			
								N-E-3	24,572	NATURAL (B SOIL)	0.15	3,686			
								H-E-3	18,394	CONCRETE OR ASPHALT	1.00	18,394			
								DMA-E2	124,419	MIXED USE	0.24	30,225	SR-E-3	15,001	2.0

RATIO SHOULD BE 2:1 MAXIMUM

	SELF RETAINING AREA				TYPE 'C' DMAS THAT ARE DRAINING TO THE SELF-			DMA					RECEIVING SELF-RETAINING		
DMA AME/ID	POST-PROJECT SURFACE TYPE	AREA (SF)	STORM DEPTH (IN)	DMA AME/ID	[C] FROM TABLE 3-3	REQUIRED RETENTION DEPTH (IN)	D D MA		AREA (SF)	POST-PROJECT SURFACE-TYPE	RUNOFF FACTOR	PRODUCT	DMA AME/ID	AREA (SF)) RATIO
Ž		[A]	[B]	Ž	[C]	[D]=[B]+([B]*[C]/[A])		Ž	[A]		[B]	[C]=[A]*[B]	Ž	[D]	[C]/[D]
SR-E-4	ORNAMENTAL LANDSCAPING (SELF RETAINING DEPRESSED AREA)	3,037	0.57	DMA-W1	6,626	1.81		L-E-4	7,987	ORNAMENTAL LANDSCAPING	0.10	799			
								D-E-4	14,568	DECOMPOSED GRANITE	0.40	5,827			
	_							DMA-E3	22,555	MIXED USE	0.29	6,626	SR-E-4	3,037	2.2

RATIO SHOULD BE 2:1 MAXIMUM

WO 2022-0077 1 of 2

Appendix 7: Hydromodification

Supporting Detail Relating to Hydrologic Conditions of Concern



Cut/Fill Report

Generated: 2024-04-30 16:11:04

By user: rebeccab

Drawing:

0192 PARK BASIN VOLUMES.dwg

Volume S	Volume Summary										
Name	Туре	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)				
B-E2 VOL	full	1.000	1.000	4234.20	25.81	169.60	143.78 <fill></fill>				
B-W1 VOL	full	1.000	1.000	12184.72	153.87	378.09	224.23 <fill></fill>				

Totals				
	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	16418.92	179.68	547.69	368.01 <fill></fill>

^{*} Value adjusted by cut or fill factor other than 1.0

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018, Version 9.0 Study date 03/04/24 File: ONSITEPREE1242.out

```
Riverside County Synthetic Unit Hydrology Method
      RCFC & WCD Manual date - April 1978
      Program License Serial Number 6586
       English (in-lb) Input Units Used
       English Rainfall Data (Inches) Input Values Used
       English Units used in output format
       22-0192 - MVCC PARK
      ONSITE UNIT HYDROGRAPH ANALYSIS - DMA E-1
      EXISITNG CONDITION, 2-YEAR 24-HOUR
      FN: ONSITEPREE1.OUT- RSB
      ______
      Drainage Area = 4.70(Ac.) = 0.007 Sq. Mi.
      Drainage Area for Depth-Area Areal Adjustment = 4.70(Ac.) =
0.007 Sq. Mi.
      Length along longest watercourse =
                                     577.00(Ft.)
      Length along longest watercourse measured to centroid = 276.00(Ft.)
      Length along longest watercourse = 0.109 Mi.
      Length along longest watercourse measured to centroid = 0.052 Mi.
      Difference in elevation = 16.00(Ft.)
Slope along watercourse = 146.4125 Ft./Mi.
      Average Manning's 'N' = 0.030
      Lag time = 0.039 \text{ Hr}.
      Lag time = 2.35 Min.
      25% of lag time = 0.59 Min.
40% of lag time = 0.94 Min.
      Unit time = 5.00 Min.
      Duration of storm = 24 Hour(s)
      User Entered Base Flow = 0.00(CFS)
      2 YEAR Area rainfall data:
```

```
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
       4.70
                      2.00
                                            9.40
100 YEAR Area rainfall data:
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
                  5.40
                                     25.38
       4.70
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 5.400(In)
Point rain (area averaged) =
                             2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
Area(Ac.) Runoff Index Impervious 4.700 91.00 0.000
                              Impervious %
 Total Area Entered = 4.70(Ac.)
RI
          Infil. Rate Impervious Adj. Infil. Rate Area%
     RI
                                                           F
AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.) (In/Hr)
              0.246
                       0.000
                                   0.246
                                              1.000 0.246
91.0 79.8
                                              Sum(F) = 0.246
Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900
   Unit Hydrograph
                     VALLEY S-Curve
______
              Unit Hydrograph Data
______
Unit time period Time % of lag Distribution Unit Hydrograph (hrs) Graph % (CFS)

      1
      0.083
      212.498
      45.480

      2
      0.167
      424.997
      42.505

      3
      0.250
      637.495
      8.308

      4
      0.333
      849.994
      3.707

                                                    2.154
                                                   2.013
                                                   0.394
                                                   0.176
                     Sum = 100.000 Sum= 4.737
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time	Pattern	Storm Rain	Loss	rate(In./Hr)	Effective
	(Hr.)	Percent	(In/Hr)	Max		Low	(In/Hr)
1	0.08	0.07	0.016	(0.4	437)	0.014	0.002
2	0.17	0.07	0.016	(0.4	435)	0.014	0.002
3	0.25	0.07	0.016	(0.4	433)	0.014	0.002
4	0.33	0.10	0.024	(0.4	432)	0.022	0.002
5	0.42	0.10	0.024	•	430)	0.022	0.002
6	0.50	0.10	0.024	•	428)	0.022	0.002
7	0.58	0.10	0.024	•	427)	0.022	0.002
8	0.67	0.10	0.024		425)	0.022	0.002
9	0.75	0.10	0.024	•	423)	0.022	0.002
10	0.83	0.13	0.032	•	422)	0.029	0.003
11	0.92	0.13	0.032	•	420)	0.029	0.003
12	1.00	0.13	0.032	•	418)	0.029	0.003
13	1.08	0.10	0.024	•	417)	0.022	0.002
14	1.17	0.10	0.024	•	415)	0.022	0.002
15	1.25	0.10	0.024	•	413)	0.022	0.002
16	1.33	0.10	0.024	•	412)	0.022	0.002
17	1.42	0.10	0.024	•	410)	0.022	0.002
18	1.50	0.10	0.024	•	408)	0.022	0.002
19	1.58	0.10	0.024	:	407)	0.022	0.002
20	1.67	0.10	0.024	•	405)	0.022	0.002
21	1.75	0.10	0.024	•	404)	0.022	0.002
22	1.83	0.13	0.032	•	402)	0.029	0.003
23	1.92	0.13	0.032	•	400)	0.029	0.003
24	2.00	0.13	0.032	•	399)	0.029	0.003
25	2.08	0.13	0.032	•	397)	0.029	0.003
26	2.17	0.13	0.032	•	395)	0.029	0.003
27	2.25	0.13	0.032	•	394)	0.029	0.003
28	2.33	0.13	0.032	•	392)	0.029	0.003
29	2.42	0.13	0.032	•	391)	0.029	0.003
30 21	2.50	0.13	0.032	•	389)	0.029	0.003
31	2.58	0.17	0.040	•	387)	0.036	0.004
32	2.67	0.17	0.040		386)	0.036	0.004
33	2.75	0.17	0.040	:	384)	0.036	0.004
34	2.83	0.17	0.040		383)	0.036	0.004
35 36	2.92	0.17	0.040		381)	0.036	0.004
37	3.00	0.17 0.17	0.040		380) 270)	0.036	0.004
38	3.08	0.17	0.040	:	378) 376)	0.036	0.004
39	3.17 3.25	0.17	0.040 0.040	1		0.036 0.036	0.004 0.004
40	3.33	0.17	0.040		375) 272)	0.036	0.004
40 41	3.42	0.17	0.040		373) 372)	0.036	0.004
42	3.50	0.17	0.040		372) 370)	0.036	0.004
43	3.58	0.17	0.040		369)	0.036	0.004
43 44	3.67	0.17	0.040		367)	0.036	0.004
45	3.75	0.17	0.040	•	366)	0.036	0.004
40	٠,/ ٥	0.1/	0.040	(0	,,,,,	0.000	0.004

46	3.83	0.20	0.048	(0.364)	0.043	0.005
47	3.92	0.20	0.048	(0.362)	0.043	0.005
48	4.00	0.20	0.048	(0.361)	0.043	0.005
49	4.08	0.20	0.048	(0.359)	0.043	0.005
50	4.17	0.20	0.048	(0.358)	0.043	0.005
51	4.25	0.20	0.048	(0.356)	0.043	0.005
52	4.33	0.23	0.056	(0.355)	0.050	0.006
53	4.42	0.23	0.056	(0.353)	0.050	0.006
54	4.50	0.23	0.056	(0.352)	0.050	0.006
55	4.58	0.23	0.056	(0.350)	0.050	0.006
56	4.67	0.23	0.056	(0.349)	0.050	0.006
57	4.75	0.23	0.056	(0.347)	0.050	0.006
58	4.83	0.27	0.064	(0.346)	0.058	0.006
59	4.92	0.27	0.064	(0.344)	0.058	0.006
60	5.00	0.27	0.064	(0.343)	0.058	0.006
61	5.08	0.20	0.048	(0.341)	0.043	0.005
62	5.17	0.20	0.048	(0.340)	0.043	0.005
63	5.25	0.20	0.048	(0.338)	0.043	0.005
64	5.33	0.23	0.056	(0.337)	0.050	0.005
65	5.42	0.23	0.056	(0.335)	0.050	0.006
66	5.50	0.23	0.056	(0.334)	0.050	0.006
67	5.58	0.27	0.064	(0.332)	0.058	0.006
68	5.67	0.27	0.064	(0.331)	0.058	0.006
69	5.75	0.27	0.064	(0.331)	0.058	0.006
70	5.83	0.27	0.064	(0.328)	0.058	0.006
76 71	5.92	0.27	0.064	·	0.058	0.006
71 72	6.00	0.27	0.064	(0.327) (0.325)	0.058	0.006
72 73	6.08	0.30	0.072	(0.324)	0.065	0.007
73 74	6.17	0.30	0.072	(0.322)	0.065	0.007
74 75	6.25	0.30	0.072	(0.321)		0.007
75 76	6.33	0.30	0.072	(0.319)	0.065 0.065	0.007
76 77	6.42	0.30		(0.318)	0.065	0.007
			0.072	·	0.065	
78 79	6.50 6.58	0.30	0.072 0.080	(0.317)		0.007
		0.33		(0.315)	0.072	0.008
80 01	6.67	0.33	0.080	(0.314)	0.072	0.008 0.008
81	6.75	0.33	0.080	(0.312) (0.311)	0.072	
82	6.83	0.33	0.080	•	0.072	0.008
83	6.92	0.33	0.080	(0.310)	0.072	0.008
84 or	7.00	0.33	0.080	(0.308)	0.072	0.008
85 86	7.08	0.33	0.080	(0.307)	0.072	0.008
86 87	7.17	0.33	0.080	(0.305)	0.072	0.008
87	7.25	0.33	0.080	(0.304)	0.072	0.008
88	7.33	0.37	0.088	(0.303)	0.079	0.009
89	7.42	0.37	0.088	(0.301)	0.079	0.009
90	7.50	0.37	0.088	(0.300)	0.079	0.009
91	7.58	0.40	0.096	(0.298)	0.086	0.010
92	7.67	0.40	0.096	(0.297)	0.086	0.010
93	7.75	0.40	0.096	(0.296)	0.086	0.010
94	7.83	0.43	0.104	(0.294)	0.094	0.010
95	7.92	0.43	0.104	(0.293)	0.094	0.010

96	8.00	0.43	0.104	(0	.292)	0.094	0.010
97	8.08	0.50	0.120	-).290)	0.108	0.012
98	8.17	0.50	0.120	•	.289)	0.108	0.012
99	8.25	0.50	0.120	•	288)	0.108	0.012
100	8.33	0.50	0.120	•	.286)	0.108	0.012
101	8.42	0.50	0.120	•).285)	0.108	0.012
				•	•		
102	8.50	0.50	0.120		283)	0.108	0.012
103	8.58	0.53	0.128		282)	0.115	0.013
104	8.67	0.53	0.128	•).281)	0.115	0.013
105	8.75	0.53	0.128	•	.280)	0.115	0.013
106	8.83	0.57	0.136	•).278)	0.122	0.014
107	8.92	0.57	0.136	•).277)	0.122	0.014
108	9.00	0.57	0.136	•	.276)	0.122	0.014
109	9.08	0.63	0.152	(0).274)	0.137	0.015
110	9.17	0.63	0.152	(0).273)	0.137	0.015
111	9.25	0.63	0.152	(6	.272)	0.137	0.015
112	9.33	0.67	0.160	(0	.270)	0.144	0.016
113	9.42	0.67	0.160	(0	.269)	0.144	0.016
114	9.50	0.67	0.160	(0	.268)	0.144	0.016
115	9.58	0.70	0.168	(0	.267)	0.151	0.017
116	9.67	0.70	0.168		.265)	0.151	0.017
117	9.75	0.70	0.168).264)	0.151	0.017
118	9.83	0.73	0.176).263)	0.158	0.018
119	9.92	0.73	0.176	•	.261)	0.158	0.018
120	10.00	0.73	0.176	•	260)	0.158	0.018
121	10.08	0.50	0.120	•	259)	0.108	0.012
122	10.17	0.50	0.120	•).258)	0.108	0.012
123	10.25	0.50	0.120	•).256)	0.108	0.012
124	10.23	0.50	0.120).255)	0.108	0.012
125	10.33	0.50	0.120	•).254)	0.108	0.012
126	10.42	0.50	0.120	•).253)	0.108	0.012
127	10.58	0.67	0.160		251)	0.144	0.016
128	10.67	0.67	0.160		250)	0.144	0.016
129	10.75	0.67	0.160	•	249)	0.144	0.016
	10.83		0.160		248)	0.144	0.016
131	10.92	0.67	0.160).247)	0.144	0.016
132	11.00	0.67	0.160	•	.245)		0.016
133	11.08	0.63	0.152		.244)	0.137	0.015
134	11.17	0.63	0.152	•	.243)		0.015
135	11.25	0.63	0.152	•	.242)		0.015
136	11.33	0.63	0.152	•).241)	0.137	0.015
137	11.42	0.63	0.152	(0).239)	0.137	0.015
138	11.50	0.63	0.152	(0).238)	0.137	0.015
139	11.58	0.57	0.136	(0).237)	0.122	0.014
140	11.67	0.57	0.136	(0	.236)	0.122	0.014
141	11.75	0.57	0.136	(0	.235)	0.122	0.014
142	11.83	0.60	0.144	-	.233)	0.130	0.014
143	11.92	0.60	0.144		.232)	0.130	0.014
144		0.60	0.144	-).231)		0.014
145	12.08	0.83	0.200	-).230)		0.020
				•	•		

146	12.17	0.83	0.200	(0.229)		0.180	0.020
147	12.25	0.83	0.200	į (0.228)		0.180	0.020
148	12.33	0.87	0.208	ì	0.227)		0.187	0.021
149	12.42	0.87	0.208	ì	0.225)		0.187	0.021
150	12.50	0.87	0.208	ì	0.224)		0.187	0.021
151	12.58	0.93	0.224	ì	0.223)		0.202	0.022
152	12.67	0.93	0.224	ì	0.222)		0.202	0.022
153	12.75	0.93	0.224	ì	0.221)		0.202	0.022
154	12.83	0.97	0.232	ì	0.220)		0.209	0.023
155	12.92	0.97	0.232	ì	0.219)		0.209	0.023
156	13.00	0.97	0.232	ì	0.218)		0.209	0.023
157	13.08	1.13	0.272	`	0.216		0.245)	0.056
158	13.17	1.13	0.272		0.215	•	0.245)	0.057
159	13.25	1.13	0.272		0.214	•	0.245)	0.058
160	13.33	1.13	0.272		0.213	•	0.245)	0.059
161	13.42	1.13	0.272		0.212	•	0.245)	0.060
162	13.50	1.13	0.272		0.211	•	0.245)	0.061
163	13.58	0.77	0.184	(0.210)	`	0.166	0.018
164	13.67	0.77	0.184	ì	0.209)		0.166	0.018
165	13.75	0.77	0.184	ì	0.208)		0.166	0.018
166	13.83	0.77	0.184	ì	0.207)		0.166	0.018
167	13.92	0.77	0.184	ì	0.206)		0.166	0.018
168	14.00	0.77	0.184	ì	0.205)		0.166	0.018
169	14.08	0.90	0.216	ì	0.204)		0.194	0.022
170	14.17	0.90	0.216	ì	0.203)		0.194	0.022
171	14.25	0.90	0.216	ì	0.202)		0.194	0.022
172	14.33	0.87	0.208	ì	0.200)		0.187	0.021
173	14.42	0.87	0.208	ì	0.199)		0.187	0.021
174	14.50	0.87	0.208	ì	0.198)		0.187	0.021
175	14.58	0.87	0.208	Ì	0.197)		0.187	0.021
176	14.67	0.87	0.208	Ì	0.196)		0.187	0.021
177	14.75	0.87	0.208	ì	0.195)		0.187	0.021
178	14.83	0.83	0.200	ì	0.194)		0.180	0.020
179	14.92	0.83	0.200	ì	0.193)		0.180	0.020
	15.00		0.200)			0.180	
181	15.08	0.80	0.192)	0.191)		0.173	0.019
182	15.17	0.80	0.192	į	0.190)		0.173	0.019
183	15.25	0.80	0.192	į	0.189)		0.173	0.019
184	15.33	0.77	0.184	į	0.188)		0.166	0.018
185	15.42	0.77	0.184	į (0.188)		0.166	0.018
186	15.50	0.77	0.184	(0.187)		0.166	0.018
187	15.58	0.63	0.152	(0.186)		0.137	0.015
188	15.67	0.63	0.152	(0.185)		0.137	0.015
189	15.75	0.63	0.152	(0.184)		0.137	0.015
190	15.83	0.63	0.152	(0.183)		0.137	0.015
191	15.92	0.63	0.152	(0.182)		0.137	0.015
192	16.00	0.63	0.152	(0.181)		0.137	0.015
193	16.08	0.13	0.032	(0.180)		0.029	0.003
194	16.17	0.13	0.032	(0.179)		0.029	0.003
195	16.25	0.13	0.032	(0.178)		0.029	0.003

196	16.33	0.13	0.032	(0.177)	0.029	0.003
197	16.42	0.13	0.032	(0.176)	0.029	0.003
198	16.50	0.13	0.032	(0.175)	0.029	0.003
199	16.58	0.10	0.024	(0.175)	0.022	0.002
200	16.67	0.10	0.024	(0.174)	0.022	0.002
201	16.75	0.10	0.024	(0.173)	0.022	0.002
202	16.83	0.10	0.024	(0.172)	0.022	0.002
203	16.92	0.10	0.024	(0.171)	0.022	0.002
204	17.00	0.10	0.024	(0.170)	0.022	0.002
205	17.08	0.17	0.040	(0.169)	0.036	0.004
206	17.17	0.17	0.040	(0.168)	0.036	0.004
207	17.25	0.17	0.040	(0.168)	0.036	0.004
208	17.33	0.17	0.040	(0.167)	0.036	0.004
209	17.42	0.17	0.040	(0.166)	0.036	0.004
210	17.50	0.17	0.040	(0.165)	0.036	0.004
211	17.58	0.17	0.040	(0.164)	0.036	0.004
212	17.67	0.17	0.040	(0.163)	0.036	0.004
213	17.75	0.17	0.040	(0.163)	0.036	0.004
214	17.83	0.13	0.032	(0.162)	0.029	0.003
215	17.92	0.13	0.032	(0.161)	0.029	0.003
216	18.00	0.13	0.032	(0.160)	0.029	0.003
217	18.08	0.13	0.032	(0.159)	0.029	0.003
218	18.17	0.13	0.032	(0.159)	0.029	0.003
219	18.25	0.13	0.032	(0.158)	0.029	0.003
220	18.33	0.13	0.032	(0.157)	0.029	0.003
221	18.42	0.13	0.032	(0.156)	0.029	0.003
222	18.50	0.13	0.032	(0.156)	0.029	0.003
223	18.58	0.10	0.024	(0.155)	0.022	0.002
224	18.67	0.10	0.024	(0.154)	0.022	0.002
225	18.75	0.10	0.024	(0.153)	0.022	0.002
226	18.83	0.07	0.016	(0.153)	0.014	0.002
227	18.92	0.07	0.016	(0.152)	0.014	0.002
228	19.00	0.07	0.016	(0.151)	0.014	0.002
229	19.08	0.10	0.024	(0.150)	0.022	0.002
230	19.17	0.10	0.024	(0.150)	0.022	0.002
231	19.25	0.10	0.024	(0.149)	0.022	0.002
232 233	19.33 19.42	0.13	0.032	(0.148)	0.029	0.003
234	19.42	0.13	0.032 0.032	(0.148)	0.029	0.003
235	19.58	0.13 0.10	0.032	(0.147) 0.146)	0.029 0.022	0.003 0.002
236	19.67	0.10	0.024	(0.146)	0.022	0.002
237	19.75	0.10	0.024		0.145)	0.022	0.002
238	19.83	0.10	0.016	(0.143)	0.014	0.002
239	19.83	0.07	0.016	(0.144)	0.014	0.002
240	20.00	0.07	0.016	(0.143)	0.014	0.002
241	20.08	0.10	0.010	(0.143)	0.022	0.002
241	20.08	0.10	0.024	(0.142)	0.022	0.002
243	20.17	0.10	0.024	(0.142)	0.022	0.002
244	20.23	0.10	0.024	(0.141)	0.022	0.002
245	20.33	0.10	0.024	(0.141)	0.022	0.002
_ , _	20.72	0.10	0.027	`	3.170)	0.022	0.002

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282
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283
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284
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285
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                0.07
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286
     23.83
                0.07
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287
     23.92
                0.07
                          0.016
                                           0.123)
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                                                                       0.002
288
     24.00
                0.07
                          0.016
                                           0.123)
                                                         0.014
                                                                       0.002
                 (Loss Rate Not Used)
                                                                    2.6
    Sum =
               100.0
                                                          Sum =
       Flood volume = Effective rainfall
                                                 0.22(In)
                          4.7(Ac.)/[(In)/(Ft.)] =
                                                           0.1(Ac.Ft)
        times area
       Total soil loss =
                                1.78(In)
                               0.699(Ac.Ft)
       Total soil loss =
       Total rainfall =
                               2.00(In)
```

	ood volume = tal soil loss =					
 Pe	eak flow rate o	f this hydrogr	aph =	0.285(CFS)		
+++	+++++++++++++				 +++++++	+++++
	Rı	24 - H O U u n o f f	R STO			
	Hydrog	graph in 5	Minute int	ervals ((CF	-S))	
Time(h+m)) Volume Ac.Ft	Q(CFS) 0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00 Q				
0+10	0.0001	0.01 Q	ĺ		İ	ĺ
0+15	0.0001	0.01 Q	Ì	ĺ	İ	ĺ
0+20	0.0002		ĺ		İ	ĺ
0+25	0.0003	0.01 Q				
0+30	0.0003	0.01 Q	1			
0+35	0.0004	0.01 Q	1			
0+40	0.0005	0.01 Q				
0+45	0.0006	0.01 Q	1			
0+50	0.0007	0.01 Q	1			
0+55	0.0008	0.01 Q				
1+ 0	0.0009	0.02 Q	1			
1+ 5	0.0010	0.01 Q	1			
1+10	0.0010	0.01 Q				
1+15	0.0011	0.01 Q				
1+20	0.0012	0.01 Q				
1+25	0.0013	0.01 Q				
1+30	0.0014	0.01 Q				
1+35	0.0014	0.01 Q				
1+40	0.0015	0.01 Q				
1+45	0.0016	0.01 Q				
1+50	0.0017	0.01 Q	1			
1+55	0.0018	0.01 Q	ļ			
2+ 0	0.0019	0.02 Q	ļ			
2+ 5	0.0020	0.02 Q	ļ			
2+10	0.0021	0.02 Q	ļ		ļ	ļ
2+15	0.0022	0.02 QV	ļ	ļ		
2+20	0.0023	0.02 QV	ļ		ļ	
2+25	0.0024	0.02 QV	ļ	ļ	ļ	ļ
2+30	0.0025	0.02 QV	ļ	!	ļ	ļ
2+35	0.0026	0.02 QV	ļ	ļ	ļ	ļ
2+40	0.0028	0.02 QV	ļ	ļ	ļ	ļ
2+45	0.0029	0.02 QV	ļ	ļ	ļ	ļ
2+50	0.0030	0.02 QV	ļ	ļ	ļ	ļ
2+55	0.0031	0.02 QV	ļ	ļ	ļ	ļ
3+ 0	0.0033	0.02 QV		1		I

3+ 5	0.0034	0.02	QV				
3+10	0.0035	0.02	QV	1			
3+15	0.0037	0.02	QV	1			
3+20	0.0038	0.02	QV]			
3+25	0.0039	0.02	Qν	į i		ĺ	
3+30	0.0041	0.02	Qν	į i		İ	
3+35	0.0042	0.02	Qν	į i		İ	
3+40	0.0043	0.02	Qν	į i		İ	
3+45	0.0045	0.02	Qν	į i		İ	İ
3+50	0.0046	0.02	Qν	į i		İ	j
3+55	0.0047	0.02	Qν	į i		İ	İ
4+ 0	0.0049	0.02	Qν	į i		İ	İ
4+ 5	0.0051	0.02	Q V	i		İ	j
4+10	0.0052	0.02	Q V	i		İ	j
4+15	0.0054	0.02	Qν	i		İ	j
4+20	0.0055	0.02	Q V	i		İ	j
4+25	0.0057	0.03	Q V	i		İ	İ
4+30	0.0059	0.03	Q V	į i		İ	
4+35	0.0061	0.03	Q V	į i		İ	<u> </u>
4+40	0.0063	0.03	Qν	i		İ	j
4+45	0.0065	0.03	Q V	i		İ	j
4+50	0.0066	0.03	Q V	i		İ	!
4+55	0.0069	0.03	Q V	i		İ	!
5+ 0	0.0071	0.03	Q V			İ	!
5+ 5	0.0072	0.03	Q V			İ	!
5+10	0.0074	0.02	Q V			İ	!
5+15	0.0076	0.02	Q V			İ	i
5+20	0.0077	0.02	Q V	<u> </u>		İ	!
5+25	0.0079	0.03	Q V			İ	!
5+30	0.0081	0.03	Q V	<u> </u>		İ	!
5+35	0.0083	0.03	Q V			İ	!
5+40	0.0085	0.03	Q V			İ	!
5+45	0.0087	0.03	Q V	<u> </u>		İ	!
5+50	0.0089	0.03	0 V			İ	i
5+55	0.0091	0.03	Q V			İ	!
6+ 0	0.0093	0.03	Q V			İ	!
6+ 5	0.0096	0.03	Q V	<u> </u>		İ	!
6+10	0.0098	0.03	Q V			i I	1
6+15	0.0100	0.03	Q V			i I	!
6+20	0.0103	0.03	Q V			! 	!
6+25	0.0105	0.03	Q V			! 	!
6+30	0.0107	0.03	Q V			! 	!
6+35	0.0110	0.03	Q V			! 	!
6+40	0.0112	0.04	Q V			! 	!
6+45	0.0115	0.04	Q V			! 	!
6+50	0.0117	0.04	Q V			I 	!
6+56	0.0117	0.04	Q V			I 	I I
0+33 7+ 0	0.0120	0.04	Q V			I 	I
7+ 0 7+ 5	0.0125	0.04	Q V			I 	I
7+ 3 7+10	0.0128	0.04	•			I 	I I
/ TT0	0.0120	0.04	Q V	1	l	I	I

7+15	0.0131	0.04 Q	V		
7+20	0.0133	0.04 Q	V		
7+25	0.0136	0.04 Q	V	i i	Ì
7+30	0.0139	0.04 Q	v İ	i i	j
7+35	0.0142	0.04 Q	v İ	i i	
7+40	0.0145	0.05 Q	v	i i	i
7+45	0.0148	0.05 Q	v	i i	
7+50	0.0151	0.05 Q	V	i i	i i
7+55	0.0151	0.05 Q	V	1 1	
8+ 0	0.0158	0.05 Q	V	1	
8+ 5	0.0162	0.05 Q	V	1	
	0.0166	=	V		l I
8+10		_	!		l I
8+15	0.0170	0.06 Q	V		
8+20	0.0173	0.06 Q	V		
8+25	0.0177	0.06 Q	V		
8+30	0.0181	0.06 Q	V	!!!	
8+35	0.0185	0.06 Q	V	!!!	
8+40	0.0190	0.06 Q	V	!!!	
8+45	0.0194	0.06 Q	V	!!!	
8+50	0.0198	0.06 Q	V	!!!	
8+55	0.0202	0.06 Q	V		
9+ 0	0.0207	0.06 Q	V		
9+ 5	0.0211	0.07 Q	V	!!!	
9+10	0.0216	0.07 Q	V	!!!	
9+15	0.0221	0.07 Q	V	!!!	
9+20	0.0226	0.07 Q	V	!!!	
9+25	0.0232	0.08 Q	V	!!!	
9+30	0.0237	0.08 Q	ļv	!!!	
9+35	0.0242	0.08 Q	ļν	!!!	
9+40	0.0248	0.08 Q	ļV	ļ ļ	ļ
9+45	0.0253	0.08 Q	ļV		
9+50	0.0259	0.08 Q	V		
9+55	0.0264	0.08 Q	V		
10+ 0	0.0270	0.08 Q	V		
10+ 5	0.0275	0.07 Q	V		
10+10	0.0279	0.06 Q	V		
10+15	0.0283	0.06 Q	V		
10+20	0.0287	0.06 Q	V		
10+25	0.0291	0.06 Q	V		
10+30	0.0295	0.06 Q	V		
10+35	0.0299	0.07 Q	V		
10+40	0.0304	0.07 Q	V		
10+45	0.0310	0.08 Q	V		
10+50	0.0315	0.08 Q	V		
10+55	0.0320	0.08 Q	V		
11+ 0	0.0325	0.08 Q	V		
11+ 5	0.0330	0.07 Q	j v	l İ	
11+10	0.0335	0.07 Q	j v		
11+15	0.0340	0.07 Q	j v		
11+20	0.0345	0.07 Q	V		

11+25	0.0350	0.07	Q	V	
11+30	0.0355	0.07	Q	i v i i	j
11+35	0.0360	0.07	Q	i vi i	İ
11+40	0.0365	0.07	Q	i vi i	İ
11+45	0.0369	0.06	Q	i vi i	i
11+50	0.0374	0.07	Q	i vi i	i
11+55	0.0378	0.07	Q	i vi i	i
12+ 0	0.0383	0.07	Q	i vi i	
12+ 5	0.0388	0.08	Q	i vi i	i
12+10	0.0395	0.09	Q	i vi i	i
12+15	0.0401	0.09	Q	i vi i	j
12+20	0.0408	0.10	Q	i vi i	İ
12+25	0.0415	0.10	Q	i vi i	i
12+30	0.0421	0.10	Q	i vi i	i
12+35	0.0428	0.10	Q	i v i	i
12+40	0.0436	0.11	Q	i v i	i
12+45	0.0443	0.11	Q	i v i	i
12+50	0.0450	0.11	Q	i iv i	i
12+55	0.0458	0.11	Q	i iv i	i
13+ 0	0.0465	0.11	Q	i iv i	i
13+ 5	0.0478	0.18	Q	i iv i	i
13+10	0.0495	0.25	Q	i ivi	i
13+15	0.0513	0.26	ĮÕ	i i v i	i
13+20	0.0532	0.28	ĮQ	i i v i	i
13+25	0.0551	0.28	ĮQ	i i v i	i
13+30	0.0571	0.29	ĮQ	i i vi	i
13+35	0.0585	0.20	Q	i i vi	i
13+40	0.0592	0.11	Q	i i vi	i
13+45	0.0599	0.09	Q	i i vi	i
13+50	0.0605	0.09	Q	i i vi	j
13+55	0.0611	0.09	Q	i i vi	İ
14+ 0	0.0617	0.09	Q	i i vi	İ
14+ 5	0.0623	0.09	Q	i i vi	İ
14+10	0.0630	0.10	Õ	i i vi	İ
14+15	0.0637	0.10	Q	i i v	İ
14+20	0.0644	0.10	Q	i i v	j
14+25	0.0651	0.10	Q	i i v	İ
14+30	0.0658	0.10	Q	i i i	v İ
14+35	0.0664	0.10	Q	i i i	v İ
14+40	0.0671	0.10	Q	i i i	v İ
14+45	0.0678	0.10	Q	i i i	v j
14+50	0.0685	0.10	Q	i i i	v İ
14+55	0.0691	0.10	Q	į į į	v į
15+ 0	0.0698	0.09	Q	į į į	v į
15+ 5	0.0704	0.09	Q	į į į	v į
15+10	0.0711	0.09	Q	į į į	v j
15+15	0.0717	0.09	Q	j j j	v į
15+20	0.0723	0.09	Q	į į į	v į
15+25	0.0729	0.09	Q		v į
15+30	0.0735	0.09	Q	i i	v į
				•	·

15+35	0.0741	0.08	Q			V	
15+40	0.0746	0.07	Q	j	j	j v j	
15+45	0.0751	0.07	Q	İ	j	j v j	
15+50	0.0756	0.07	Q	i	i	i v i	
15+55	0.0761	0.07	Q	i	į	i v i	
16+ 0	0.0765	0.07	Q	i	į	i v i	
16+ 5	0.0769	0.05	Q	i	i	i v i	
16+10	0.0770	0.02	Q	i	i	i v i	
16+15	0.0771	0.02	Q	i	i	i v i	
16+20	0.0772	0.02	Q	i	i	i v i	
16+25	0.0773	0.02	Q	i	i	i v i	
16+30	0.0775	0.02	Q	i	i	i v i	
16+35	0.0775	0.01	Q	i	i	i v i	
16+40	0.0776	0.01	Q	i	i	i v i	
16+45	0.0777	0.01	Q	i	i	i v i	
16+50	0.0778	0.01	Q		i	i v i	
16+55	0.0779	0.01	Q	i i	i i	i v i	
17+ 0	0.0779	0.01	Q			v	
17+ 5	0.0780	0.01	Q			i v i	
17+10	0.0782	0.01	Q			v	
17+15	0.0783	0.02	Q			l v l	
17+13 17+20	0.0784	0.02				V V	
17+25	0.0786	0.02	Q			V V	
17+23 17+30	0.0787	0.02	Q			V V	
			Q	ļ I	l	V V	
17+35	0.0788	0.02	Q	ļ	ļ	V	
17+40	0.0789	0.02	Q	ļ	ļ	V	
17+45	0.0791	0.02	Q	ļ	ļ	! !	
17+50	0.0792	0.02	Q	ļ	ļ	V	
17+55	0.0793	0.02	Q			V	
18+ 0	0.0794	0.02	Q			V	
18+ 5	0.0795	0.02	Q			V	
18+10	0.0796	0.02	Q	l I		V	
18+15	0.0797	0.02	Q	ļ		V	
18+20	0.0798	0.02	Q	ļ		V	
18+25	0.0799	0.02	Q	ļ		V	
18+30	0.0800	0.02	Q	l I		V	
18+35	0.0801	0.01	Q	ļ		V	
18+40	0.0802	0.01	Q	ļ		V	
18+45	0.0803	0.01	Q			V	
18+50	0.0804	0.01	Q			V	
18+55	0.0804	0.01	Q	l I		V	
19+ 0	0.0805	0.01	Q			V	
19+ 5	0.0805	0.01	Q		ļ	V	
19+10	0.0806	0.01	Q	ļ	ļ	V	
19+15	0.0807	0.01	Q		ļ	V	
19+20	0.0808	0.01	Q		ļ	V	
19+25	0.0809	0.01	Q		ļ	V	
19+30	0.0810	0.02	Q		ļ	V	
19+35	0.0811	0.01	Q		ļ	V	
19+40	0.0812	0.01	Q		I	V	

19+45	0.0812	0.01	Q			1	V	
19+50	0.0813	0.01	Q	ĺ	ĺ	ĺ	V I	
19+55	0.0814	0.01	Q	Ì	Ì	ĺ	V	
20+ 0	0.0814	0.01	Q	ĺ	Ì	ĺ	V	
20+ 5	0.0815	0.01	Q	į	j	į	νj	
20+10	0.0815	0.01	Q	į	j	į	νj	
20+15	0.0816	0.01	Q	į	j	į	νj	
20+20	0.0817	0.01	Q	į	j	į	νİ	
20+25	0.0818	0.01	Q	i	j	į	νį	
20+30	0.0819	0.01	Q	į	j	j	νį	
20+35	0.0819	0.01	Q	i	j	į	νį	
20+40	0.0820	0.01	Q	i	j	į	νİ	
20+45	0.0821	0.01	Q	i	į	i	v İ	
20+50	0.0822	0.01	Q	i	j	į	νį	
20+55	0.0822	0.01	Q	i	j	į	νį	
21+ 0	0.0823	0.01	Q	i	j	į	νį	
21+ 5	0.0823	0.01	Q	i	j	i	vİ	
21+10	0.0824	0.01	Q	i	į	i	vi	
21+15	0.0825	0.01	Q	i	į	i	vi	
21+20	0.0825	0.01	Q	i	j	į	vİ	
21+25	0.0826	0.01	Q	i	i	i	vi	
21+30	0.0827	0.01	Q	i	į	i	vi	
21+35	0.0827	0.01	Q	i	į	i	vi	
21+40	0.0828	0.01	Q	i	į	i	vi	
21+45	0.0829	0.01	Q	i	i	i	vi	
21+50	0.0829	0.01	Q	i	į	i	vi	
21+55	0.0830	0.01	Q	i	į	i	vi	
22+ 0	0.0830	0.01	Q	į	į	i	vi	
22+ 5	0.0831	0.01	Q	i	j	i	vİ	
22+10	0.0832	0.01	Q	i	j	į	vİ	
22+15	0.0833	0.01	Q	i	j	į	vİ	
22+20	0.0833	0.01	Q	i	j	į	vİ	
22+25	0.0834	0.01	Q	i	j	į	vj	
22+30	0.0834	0.01	Q	i	j	į	vİ	
22+35	0.0835	0.01	Q	į	j	į	vİ	
22+40	0.0835	0.01	Q	į	İ	į	νİ	
22+45	0.0836	0.01	Q	ĺ	Ì	ĺ	٧l	
22+50	0.0837	0.01	Q	į	İ	j	νİ	
22+55	0.0837	0.01	Q	Ì	ĺ	ĺ	V	
23+ 0	0.0838	0.01	Q	Ì	ĺ	ĺ	V	
23+ 5	0.0838	0.01	Q	ĺ	Ì	ĺ	V	
23+10	0.0839	0.01	Q	1		- 1	V	
23+15	0.0839	0.01	Q	- 1	1		V	
23+20	0.0840	0.01	Q	ĺ	1	ĺ	V	
23+25	0.0840	0.01	Q	ĺ	1	ĺ	V	
23+30	0.0841	0.01	Q	ĺ	1	ĺ	v	
23+35	0.0841	0.01	Q	ĺ	1	ĺ	V	
23+40	0.0842	0.01	Q	ĺ	1	ĺ	V	
23+45	0.0842	0.01	Q	ĺ	1	ĺ	V	
23+50	0.0843	0.01	Q		1		V	

23+55	0.0843	0.01	Q	1	٧
24+ 0	0.0844	0.01	Q		٧
24+ 5	0.0844	0.00	Q		٧
24+10	0.0844	0.00	Q		٧
24+15	0.0844	0.00	Q		٧

Unit Hydrograph Analysis

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```
Riverside County Synthetic Unit Hydrology Method
       RCFC & WCD Manual date - April 1978
       Program License Serial Number 6586
       English (in-lb) Input Units Used
       English Rainfall Data (Inches) Input Values Used
       English Units used in output format
       22-0192 - MVCC PARK
      ONSITE UNIT HYDROGRAPH ANALYSIS - DMA E-2
       EXISITNG CONDITION, 2-YEAR 24-HOUR
      FN: ONSITEPREE2.OUT- RSB
       ______
      Drainage Area = 2.00(Ac.) = 0.003 Sq. Mi.
      Drainage Area for Depth-Area Areal Adjustment = 2.00(Ac.) =
0.003 Sq. Mi.
      Length along longest watercourse =
                                     321.00(Ft.)
       Length along longest watercourse measured to centroid = 182.00(Ft.)
       Length along longest watercourse = 0.061 Mi.
       Length along longest watercourse measured to centroid = 0.034 Mi.
      Difference in elevation = 29.00(Ft.)
      Slope along watercourse = 477.0093 Ft./Mi.
      Average Manning's 'N' = 0.030
      Lag time = 0.021 Hr.
       Lag time = 1.28 Min.
      25% of lag time = 0.32 Min.
40% of lag time = 0.51 Min.
      Unit time = 5.00 Min.
      Duration of storm = 24 Hour(s)
      User Entered Base Flow = 0.00(CFS)
      2 YEAR Area rainfall data:
```

```
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
      2.00
                    2.00
                                        4.00
100 YEAR Area rainfall data:
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
                5.40
                                  10.80
      2.00
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 5.400(In)
Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
Area(Ac.) Runoff Index Impervious 2.000 91.00 0.000
                           Impervious %
Total Area Entered = 2.00(Ac.)
RI
     RI Infil. Rate Impervious Adj. Infil. Rate Area%
                                                      F
AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.) (In/Hr) 91.0 79.8 0.246 0.000 0.246 1.000 0.246
                                          Sum(F) = 0.246
Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900
   Unit Hydrograph
                   VALLEY S-Curve
______
            Unit Hydrograph Data
______

      1
      0.083
      389.322
      64.334

      2
      0.167
      778.644
      32.659

      3
      0.250
      1167.966
      3.007

                                               1.297
                                               0.658
                                               0.061
                  Sum = 100.000 Sum= 2.016
```

The following loss rate calculations reflect use of the minimum calculated loss

rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time	Pattern	Storm Rain	Loss rate(In /Hr)	Effective
OHIL	(Hr.)	Percent	(In/Hr)	Max	Low	(In/Hr)
1	0.08	0.07	0.016	(0.437)	0.014	0.002
2	0.17	0.07	0.016	(0.435)	0.014	0.002
3	0.25	0.07	0.016	(0.433)	0.014	0.002
4	0.33	0.10	0.010	· · · · · · · · · · · · · · · · · · ·	0.014	0.002
	0.33			•		
5		0.10	0.024	(0.430)	0.022	0.002
6	0.50	0.10	0.024	(0.428)	0.022	0.002
7	0.58	0.10	0.024	(0.427)	0.022	0.002
8	0.67	0.10	0.024	(0.425)	0.022	0.002
9	0.75	0.10	0.024	(0.423)	0.022	0.002
10	0.83	0.13	0.032	(0.422)	0.029	0.003
11	0.92	0.13	0.032	(0.420)	0.029	0.003
12	1.00	0.13	0.032	(0.418)	0.029	0.003
13	1.08	0.10	0.024	(0.417)	0.022	0.002
14	1.17	0.10	0.024	(0.415)	0.022	0.002
15	1.25	0.10	0.024	(0.413)	0.022	0.002
16	1.33	0.10	0.024	(0.412)	0.022	0.002
17	1.42	0.10	0.024	(0.410)	0.022	0.002
18	1.50	0.10	0.024	(0.408)	0.022	0.002
19	1.58	0.10	0.024	(0.407)	0.022	0.002
20	1.67	0.10	0.024	(0.405)	0.022	0.002
21	1.75	0.10	0.024	(0.404)	0.022	0.002
22	1.83	0.13	0.032	(0.402)	0.029	0.003
23	1.92	0.13	0.032	(0.400)	0.029	0.003
24	2.00	0.13	0.032	(0.399)	0.029	0.003
25	2.08	0.13	0.032	(0.397)	0.029	0.003
26	2.17	0.13	0.032	(0.395)	0.029	0.003
27	2.25	0.13	0.032	(0.394)	0.029	0.003
28	2.33	0.13	0.032	(0.392)	0.029	0.003
29	2.42	0.13	0.032	(0.391)	0.029	0.003
30	2.50	0.13	0.032	(0.389)	0.029	0.003
31	2.58	0.17	0.040	(0.387)	0.036	0.004
32	2.67	0.17	0.040	(0.386)	0.036	0.004
33	2.75	0.17	0.040	(0.384)	0.036	0.004
34	2.83	0.17	0.040	(0.383)	0.036	0.004
35	2.92	0.17	0.040	(0.381)	0.036	0.004
36	3.00	0.17	0.040	(0.380)	0.036	0.004
37	3.08	0.17	0.040	(0.378)	0.036	0.004
38	3.17	0.17	0.040	(0.376)	0.036	0.004
39	3.25	0.17	0.040	(0.375)	0.036	0.004
40	3.33	0.17	0.040	(0.373)	0.036	0.004
41	3.42	0.17	0.040	(0.372)	0.036	0.004
42	3.50	0.17	0.040	(0.372)	0.036	0.004
43	3.58	0.17	0.040	(0.369)	0.036	0.004
43 44	3.67	0.17	0.040	;	0.036	0.004
44 45	3.75	0.17	0.040		0.036	0.004
				(0.366)		
46	3.83	0.20	0.048	(0.364)	0.043	0.005

47	3.92	0.20	0.048	(0.362)	0.043	0.005
48	4.00	0.20	0.048	(0.361)	0.043	0.005
49	4.08	0.20	0.048		0.359)	0.043	0.005
				(•		
50	4.17	0.20	0.048	(0.358)	0.043	0.005
51	4.25	0.20	0.048	(0.356)	0.043	0.005
52	4.33	0.23	0.056	(0.355)	0.050	0.006
53	4.42	0.23	0.056	(0.353)	0.050	0.006
54	4.50	0.23	0.056	(0.352)	0.050	0.006
55	4.58	0.23	0.056	ì	0.350)	0.050	0.006
56	4.67	0.23	0.056	7	0.349)	0.050	0.006
				(•		
57	4.75	0.23	0.056	(0.347)	0.050	0.006
58	4.83	0.27	0.064	(0.346)	0.058	0.006
59	4.92	0.27	0.064	(0.344)	0.058	0.006
60	5.00	0.27	0.064	(0.343)	0.058	0.006
61	5.08	0.20	0.048	(0.341)	0.043	0.005
62	5.17	0.20	0.048	Ċ	0.340)	0.043	0.005
63	5.25	0.20	0.048	ì	0.338)	0.043	0.005
64	5.33	0.23	0.056		0.337)	0.050	0.006
				(•		
65	5.42	0.23	0.056	(0.335)	0.050	0.006
66	5.50	0.23	0.056	(0.334)	0.050	0.006
67	5.58	0.27	0.064	(0.332)	0.058	0.006
68	5.67	0.27	0.064	(0.331)	0.058	0.006
69	5.75	0.27	0.064	(0.330)	0.058	0.006
70	5.83	0.27	0.064	Ċ	0.328)	0.058	0.006
71	5.92	0.27	0.064	ì	0.327)	0.058	0.006
72	6.00	0.27	0.064		0.325)	0.058	0.006
				(•		
73	6.08	0.30	0.072	(0.324)	0.065	0.007
74	6.17	0.30	0.072	(0.322)	0.065	0.007
75	6.25	0.30	0.072	(0.321)	0.065	0.007
76	6.33	0.30	0.072	(0.319)	0.065	0.007
77	6.42	0.30	0.072	(0.318)	0.065	0.007
78	6.50	0.30	0.072	(0.317)	0.065	0.007
79	6.58	0.33	0.080	ì	0.315)	0.072	0.008
80	6.67	0.33	0.080	ì	0.314)	0.072	0.008
81	6.75	0.33	0.080	7	0.312)	0.072	0.008
				(-		
82	6.83	0.33	0.080	(0.311)	0.072	0.008
83	6.92	0.33	0.080	(0.310)	0.072	0.008
84	7.00	0.33	0.080	(0.308)	0.072	0.008
85	7.08	0.33	0.080	(0.307)	0.072	0.008
86	7.17	0.33	0.080	(0.305)	0.072	0.008
87	7.25	0.33	0.080	(0.304)	0.072	0.008
88	7.33	0.37	0.088	į	0.303)	0.079	0.009
89	7.42	0.37	0.088	(0.301)	0.079	0.009
90	7.50	0.37	0.088		0.300)	0.079	0.009
				(-		
91	7.58	0.40	0.096	(0.298)	0.086	0.010
92	7.67	0.40	0.096	(0.297)	0.086	0.010
93	7.75	0.40	0.096	(0.296)	0.086	0.010
94	7.83	0.43	0.104	(0.294)	0.094	0.010
95	7.92	0.43	0.104	(0.293)	0.094	0.010
96	8.00	0.43	0.104	(0.292)	0.094	0.010
				-	·		

97	8.08	0.50	0.120	(0.290)	0.108	0.012
98	8.17	0.50	0.120	(0.289)	0.108	0.012
99	8.25	0.50	0.120	(0.288)	0.108	0.012
100	8.33	0.50	0.120	(0.286)	0.108	0.012
101	8.42	0.50	0.120	į (0.285)	0.108	0.012
102	8.50	0.50	0.120	ì	0.283)	0.108	0.012
103	8.58	0.53	0.128	ì	0.282)	0.115	0.013
104	8.67	0.53	0.128	ì	0.281)	0.115	0.013
105	8.75	0.53	0.128	ì	0.280)	0.115	0.013
106		0.57	0.136	ì	0.278)		0.014
107		0.57	0.136	ì	0.277)		0.014
108		0.57	0.136	ì	0.276)		0.014
109	9.08	0.63	0.152	ì	0.274)	0.137	0.015
110	9.17	0.63	0.152	ì	0.273)		0.015
111	9.25	0.63	0.152	ì	0.272)	0.137	0.015
112	9.33	0.67	0.160	(0.270)	0.144	0.016
113	9.42	0.67	0.160	(0.269)		0.016
114		0.67	0.160	(0.268)		0.016
115		0.70	0.168	(0.267)		0.017
116		0.70	0.168	(0.265)	0.151	0.017
117		0.70	0.168	(0.264)	0.151	0.017
118	9.83	0.73	0.176	(0.263)	0.158	0.018
119	9.92	0.73	0.176	(0.261)	0.158	0.018
120	10.00	0.73	0.176	(0.260)	0.158	0.018
121	10.08	0.73	0.170	(0.259)		0.013
122	10.03		0.120	(0.258)		0.012
123	10.17	0.50	0.120	(0.256)	0.108	0.012
124	10.23	0.50	0.120	(0.255)	0.108	0.012
125	10.33	0.50	0.120	(0.254)		0.012
126	10.42	0.50	0.120	(0.253)	0.108 0.108	0.012
127	10.58	0.67	0.120	(0.251)	0.144	0.012
128	10.58			(•		
129		0.67	0.160	(0.250)		0.016
	10.75	0.67	0.160	(0.249)		0.016
130	10.83	0.67	0.160	(0.248)	0.144	0.016
	10.92		0.160	(0.144	0.016
	11.00	0.67	0.160	(0.245)		0.016
133		0.63	0.152	(0.244)		0.015
134		0.63	0.152	(0.243)		0.015
135	11.25	0.63	0.152	(0.242)		0.015
136		0.63	0.152	(0.241)		0.015
137		0.63	0.152	(0.239)		0.015
138	11.50	0.63	0.152	(0.238)	0.137	0.015
139	11.58	0.57	0.136	(0.237)	0.122	0.014
140	11.67	0.57	0.136	(0.236)	0.122	0.014
141	11.75	0.57	0.136	(0.235)	0.122	0.014
142	11.83	0.60	0.144	Ç	0.233)		0.014
143	11.92	0.60		(0.232)		0.014
144		0.60		(0.231)		0.014
145			0.200	(0.230)		0.020
146	12.17	0.83	0.200	(0.229)	0.180	0.020

147	12.25	0.83	0.200	(0.228)		0.180	0.020
148	12.33	0.87	0.208	(0.227)		0.187	0.021
149	12.42	0.87	0.208	į	0.225)		0.187	0.021
150	12.50	0.87	0.208	Ċ	0.224)		0.187	0.021
151	12.58	0.93	0.224	į (0.223)		0.202	0.022
152	12.67	0.93	0.224	ì	0.222)		0.202	0.022
153	12.75	0.93	0.224	(0.221)		0.202	0.022
154	12.83	0.97	0.232)	0.220)		0.209	0.023
155	12.92	0.97	0.232	ì	0.219)		0.209	0.023
156	13.00	0.97	0.232	ì	0.218)		0.209	0.023
157	13.08	1.13	0.272	`	0.216	(0.056
158	13.17	1.13	0.272		0.215	(0.057
159	13.25	1.13	0.272		0.214	(0.245)	0.058
160	13.33	1.13	0.272		0.213	(0.245)	0.059
161	13.42	1.13	0.272		0.212	(0.245)	0.060
162	13.50	1.13	0.272		0.211	(0.245)	0.061
163	13.58	0.77	0.184	(0.210)	`	0.166	0.018
164	13.67	0.77	0.184	ì	0.209)		0.166	0.018
165	13.75	0.77	0.184	ì	0.208)		0.166	0.018
166	13.83	0.77	0.184	ì	0.207)		0.166	0.018
167	13.92	0.77	0.184	(0.206)		0.166	0.018
168	14.00	0.77	0.184	(0.205)		0.166	0.018
169	14.08	0.90	0.216	(0.204)		0.194	0.022
170	14.17	0.90	0.216	(0.204)		0.194	0.022
171	14.25	0.90	0.216	(0.202)		0.194	0.022
172	14.23	0.87	0.210	(0.202)		0.134	0.022
173	14.42	0.87	0.208	(0.199)		0.187	0.021
174	14.50	0.87	0.208	(0.198)		0.187	0.021
175	14.58	0.87	0.208	(0.197)		0.187	0.021
176	14.67	0.87	0.208	(0.196)		0.187	0.021
177	14.75	0.87	0.208	(0.195)		0.187	0.021
178	14.83	0.83	0.200	(0.194)		0.180	0.020
179	14.83	0.83	0.200	(0.194)		0.180	0.020
180	15.00	0.83	0.200	(0.193)		0.180	0.020
	15.08	0.80	0.192	(•		0.173	0.019
182		0.80	0.192	(0.191)		0.173	0.019
183	15.25	0.80	0.192	(0.189)		0.173	0.019
184	15.33	0.77	0.192	(0.188)		0.166	0.018
185	15.42	0.77 0.77	0.184	(0.188)		0.166	0.018
186	15.50	0.77 0.77	0.184	(0.187)		0.166	0.018
187		0.63		(0.187)		0.137	0.015
188	15.58		0.152	(0.185)		0.137	
	15.67 15.75	0.63	0.152 0.152	(0.183)			0.015
189		0.63		(•		0.137	0.015
190	15.83	0.63	0.152 0.152	(0.183)		0.137	0.015
191	15.92	0.63	0.152	(0.182)		0.137	0.015
192	16.00	0.63	0.152	(0.181) 0.180)		0.137	0.015
193	16.08	0.13	0.032	(•		0.029	0.003
194 195	16.17	0.13	0.032 0.032	(0.179) 0.178)		0.029	
195	16.25 16.33	0.13	0.032	(0.178) 0.177)		0.029 0.029	0.003 0.003
130	10.33	0.13	0.032	(0.1//)		0.023	0.003

197	16.42	0.13	0.032	(0.176)	0.029	0.003
198	16.50	0.13	0.032	(0.175)	0.029	0.003
199	16.58	0.10	0.024	(0.175)	0.022	0.002
200	16.67	0.10	0.024	(0.174)	0.022	0.002
201	16.75	0.10	0.024	(0.173)	0.022	0.002
202	16.83	0.10	0.024	(0.172)	0.022	0.002
203	16.92	0.10	0.024	(0.171)	0.022	0.002
204	17.00	0.10	0.024	(0.170)	0.022	0.002
205	17.08	0.17	0.040	(0.169)	0.036	0.004
206	17.17	0.17	0.040	(0.168)	0.036	0.004
207	17.25	0.17	0.040	(0.168)	0.036	0.004
208	17.33	0.17	0.040	(0.167)	0.036	0.004
209	17.42	0.17	0.040	(0.166)	0.036	0.004
210	17.50	0.17	0.040	(0.165)	0.036	0.004
211	17.58	0.17	0.040	(0.164)	0.036	0.004
212	17.67	0.17	0.040	(0.163)	0.036	0.004
213	17.75	0.17	0.040	(0.163)	0.036	0.004
214	17.83	0.13	0.032	(0.162)	0.029	0.003
215	17.92	0.13	0.032	(0.161)	0.029	0.003
216	18.00	0.13	0.032	(0.160)	0.029	0.003
217	18.08	0.13	0.032	(0.159)	0.029	0.003
218	18.17	0.13	0.032	(0.159)	0.029	0.003
219	18.25	0.13	0.032	(0.158)	0.029	0.003
220	18.33	0.13	0.032	(0.157)	0.029	0.003
221	18.42	0.13	0.032	(0.156)	0.029	0.003
222	18.50	0.13	0.032	(0.156)	0.029	0.003
223	18.58	0.10	0.024	(0.155)	0.022	0.002
224	18.67	0.10	0.024	(0.154)	0.022	0.002
225	18.75	0.10	0.024	(0.153)	0.022	0.002
226	18.83	0.07	0.016	(0.153)	0.014	0.002
227	18.92	0.07	0.016	(0.152)	0.014	0.002
228	19.00	0.07	0.016	(0.151)	0.014	0.002
229	19.08	0.10	0.024	(0.150)	0.022	0.002
230	19.17	0.10	0.024	(0.150)	0.022	0.002
231	19.25	0.10	0.024	(0.149)	0.022	0.002
232	19.33	0.13	0.032	(0.148)	0.029	0.003
233	19.42	0.13	0.032	(0.148)	0.029	0.003
234	19.50	0.13	0.032	(0.147)	0.029	0.003
235	19.58	0.10	0.024	(0.146)	0.022	0.002
236 237	19.67	0.10	0.024	(0.146)	0.022	0.002
238	19.75	0.10	0.024	(0.145) 0.144)	0.022	0.002
239	19.83 19.92	0.07 0.07	0.016 0.016	(0.144)	0.014 0.014	0.002 0.002
240	20.00	0.07	0.016	(0.144)	0.014	0.002
240	20.08	0.10	0.024	(0.143)	0.022	0.002
241				(0.142)		
242	20.17 20.25	0.10 0.10	0.024 0.024	(0.142)	0.022 0.022	0.002 0.002
243	20.23	0.10	0.024	(0.141)	0.022	0.002
244	20.33	0.10	0.024	(0.141)	0.022	0.002
245	20.50	0.10	0.024	(0.140)	0.022	0.002
0	20.50	0.10	0.027	(0.100)	0.022	3.002

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                                           0.123)
287
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                                                                       0.002
288
     24.00
                0.07
                           0.016
                                           0.123)
                                                         0.014
                                                                       0.002
                 (Loss Rate Not Used)
    Sum =
               100.0
                                                          Sum =
                                                                     2.6
                                                 0.22(In)
       Flood volume = Effective rainfall
        times area
                           2.0(Ac.)/[(In)/(Ft.)] =
                                                           0.0(Ac.Ft)
       Total soil loss =
                                1.78(In)
       Total soil loss =
                               0.297(Ac.Ft)
       Total rainfall =
                               2.00(In)
       Flood volume =
                               1564.8 Cubic Feet
```

Pea	ak flow rate o	f this	hydrogra	ph = 6	0.122(CFS)		
++++		 ++++++	+++++++	++++++++	 ++++++++	 +++++++	+++++
				STOF			
	R	unof	f	Hydroį	graph		
	Hvdro	oranh i	 n 5	 Minute inte	ervals ((C	 FS))	
	,	5. up	5			. 3//	
ime(h+m)	Volume Ac.Ft	Q(CFS) 0	2.5	5.0	7.5	10.6
0+ 5	0.0000	0.00	Q				
0+10	0.0000		Q				
0+15	0.0001	0.00	Q	ļ			
0+20	0.0001		Q				
0+25	0.0001	0.00	Q				
0+30	0.0002	0.00	Q				
0+35	0.0002		Q			ļ	
0+40			Q	ļ	ļ	ļ	ļ
0+45			Q	ļ	ļ	ļ	ļ
0+50	0.0003		Q	ļ		ļ	ļ
0+55	0.0003		Q	ļ	ļ	ļ	ļ
1+ 0			Q	ļ	ļ	ļ	ļ
1+ 5			Q	ļ		ļ	ļ
1+10			Q	ļ	ļ	ļ	ļ
1+15			Q	ļ	ļ	ļ	ļ
1+20	0.0005		Q	ļ	ļ	ļ	ļ
1+25		0.00	Q	ļ	ļ	ļ	ļ
1+30		0.00	Q	ļ	ļ	ļ	ļ
1+35	0.0006		Q	ļ	ļ	ļ	ļ
	0.0007		Q	ļ	ļ	ļ	ļ
_		0.00	Q	ļ	ļ	ļ	ļ
1+50	0.0007	0.01	Q	ļ		ļ	ļ
1+55	0.0008	0.01	Q	ļ		ļ	ļ
2+ 0	0.0008	0.01	Q	ļ		ļ	ļ
2+ 5	0.0009	0.01	Q	ļ		ļ	ļ
2+10	0.0009	0.01	QV	ļ			
2+15	0.0009	0.01	QV	ļ			
2+20	0.0010	0.01	QV	ļ		ļ	ļ
2+25	0.0010	0.01	QV	ļ			
2+30	0.0011	0.01	QV	ļ		ļ	
2+35	0.0011	0.01	QV	ļ		ļ	
2+40	0.0012	0.01	QV	ļ		ļ	
2+45	0.0012	0.01	QV	ļ		ļ	
2+50	0.0013	0.01	QV	ļ		ļ	
2+55	0.0014	0.01	QV	ļ		ļ	
3+ 0	0.0014 0.0015	0.01	QV		I	1	

3+10	0.0015	0.01	QV
3+15	0.0016	0.01	ϙν i i i
3+20	0.0016	0.01	ov i i i
3+25	0.0017	0.01	Qv i i i
3+30	0.0017	0.01	Qv
3+35	0.0018	0.01	QV
3+40	0.0019	0.01	Q V
3+45	0.0019	0.01	Q V
3+50	0.0020	0.01	Q V
3+55	0.0020	0.01	Q V
4+ 0	0.0021	0.01	Q V
4+ 5	0.0021	0.01	ğν
4+10	0.0022	0.01	ov
4+15	0.0022	0.01	ov
4+20	0.0023	0.01	ov
4+26 4+25	0.0024	0.01	Q V
4+25 4+30	0.0025	0.01	Q V
4+36 4+35	0.0025	0.01	Q V
4+35 4+40	0.0025	0.01	- : : : : : : : : : : : : : : : : : : :
4+46 4+45	0.0027	0.01	Q V
4+45 4+50			Q V
4+50 4+55	0.0029	0.01	Q V
	0.0029	0.01	Q V
5+ 0	0.0030	0.01	Q V
5+ 5	0.0031	0.01	Q V
5+10	0.0032	0.01	Q V
5+15	0.0032	0.01	Q V
5+20	0.0033	0.01	Q V
5+25	0.0034	0.01	QV
5+30	0.0035	0.01	Q V
5+35	0.0036	0.01	Q V
5+40	0.0036	0.01	Q V
5+45	0.0037	0.01	Q V
5+50	0.0038	0.01	Q V
5+55	0.0039	0.01	Q V
6+ 0	0.0040		Q V
6+ 5	0.0041	0.01	Q V
6+10	0.0042	0.01	Q V
6+15	0.0043	0.01	Q V
6+20	0.0044	0.01	Q V
6+25	0.0045	0.01	Q V
6+30	0.0046	0.01	Q V
6+35	0.0047	0.02	Q V
6+40	0.0048	0.02	Q V
6+45	0.0049	0.02	Q V
6+50	0.0050	0.02	Q V
6+55	0.0051	0.02	Q V
7+ 0	0.0053	0.02	Q V
7+ 5	0.0054	0.02	Q V
7+10	0.0055	0.02	Q V j j j
7+15	0.0056	0.02	o v i i i

7+20	0.0057	0.02	Q	V		
7+25	0.0058	0.02	Q	V		
7+30	0.0060	0.02	Q	V	i i	İ
7+35	0.0061	0.02	Q	V	i i	İ
7+40	0.0062	0.02	Q	v j	i i	j
7+45	0.0063	0.02	Q	v j	i i	j
7+50	0.0065	0.02	Q	v İ	i i	j
7+55	0.0066	0.02	Q	v İ	i i	i
8+ 0	0.0068	0.02	Q	V	i i	i
8+ 5	0.0069	0.02	Q	v	i i	i
8+10	0.0071	0.02	Q	v	i i	i
8+15	0.0073	0.02	Q	v İ	iii	i
8+20	0.0074	0.02	Q	νİ	iii	i
8+25	0.0076	0.02	Q	νİ	iii	i
8+30	0.0078	0.02	Q	νİ	i i	i
8+35	0.0079	0.03	Q	νİ	;	¦
8+40	0.0075	0.03	Q	v	1 1	¦
8+45	0.0083	0.03	Q	V I		ł
8+50	0.0085	0.03		V V	-	<u> </u>
8+55	0.0087	0.03	Q	V V	-	<u> </u>
			Q	· ·		l I
9+ 0	0.0089	0.03	Q	V		l I
9+ 5	0.0091	0.03	Q	V		l I
9+10	0.0093	0.03	Q	V		ļ
9+15	0.0095	0.03	Q	V		ļ
9+20	0.0097	0.03	Q	V	!!!	ļ
9+25	0.0099	0.03	Q	V	!!!	ļ
9+30	0.0101	0.03	Q	V	!!!	ļ
9+35	0.0104	0.03	Q	Į V	!!!	ļ
9+40	0.0106	0.03	Q	Į V		ļ
9+45	0.0108	0.03	Q	V	!!!	ļ
9+50	0.0111	0.03	Q	į v	!!!	ļ
9+55	0.0113	0.04	Q	į v	!!!	ļ
10+ 0	0.0116	0.04	Q	į v	!!!	ļ
10+ 5	0.0118	0.03	Q	l V	. [ļ
10+10	0.0119	0.02	Q	į V	!!!	ļ
10+15	0.0121	0.02	Q	V	ļļļ	ļ
10+20	0.0123	0.02	Q	V	ļ	ļ
10+25	0.0124	0.02	Q	V		
10+30	0.0126	0.02	Q	V		
10+35	0.0128	0.03	Q	V		
10+40	0.0130	0.03	Q	V		
10+45	0.0132	0.03	Q	V		
10+50	0.0135	0.03	Q	V		
10+55	0.0137	0.03	Q	į v	i i	
11+ 0	0.0139	0.03	Q	į v	İ	
11+ 5	0.0141	0.03	Q	į V	İ	
11+10	0.0143	0.03	Q	į v	j	
11+15	0.0146	0.03	Q	į v	j	j
11+20	0.0148	0.03	Q	į v	j	j
11+25	0.0150	0.03	Q	į V	j	j
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11+30	0.0152	0.03	Q	V
11+35	0.0154	0.03	Q	i v i i i
11+40	0.0156	0.03	Q	i v i i i
11+45	0.0158	0.03	Q	i v i i i
11+50	0.0160	0.03	Q	i vi i i
11+55	0.0162	0.03	Q	i v i i i
12+ 0	0.0164	0.03	Q	i vi i i
12+ 5	0.0166	0.04	Q	i vi i i
12+10	0.0169	0.04	Q	i vi i i
12+15	0.0172	0.04	Q	i vi i i
12+20	0.0174	0.04	Q	i vi i i
12+25	0.0177	0.04	Q	j vj j j
12+30	0.0180	0.04	Q	i v i i
12+35	0.0183	0.04	Q	i v i i
12+40	0.0186	0.05	Q	i v i i
12+45	0.0189	0.05	Q	j lv j j
12+50	0.0193	0.05	Q	j įv į į
12+55	0.0196	0.05	Q	i iv i i
13+ 0	0.0199	0.05	Q	i iv i i
13+ 5	0.0205	0.09	Q	i iv i i
13+10	0.0213	0.11	Q	i v i i
13+15	0.0221	0.12	Q	i v i i
13+20	0.0229	0.12	Q	i v i i
13+25	0.0237	0.12	Q	i vi i
13+30	0.0246	0.12	Q	i vi i
13+35	0.0250	0.07	Q	i vi
13+40	0.0253	0.04	Q	i vi
13+45	0.0256	0.04	Q	i vi
13+50	0.0258	0.04	Q	i vi
13+55	0.0261	0.04	Q	i vi i
14+ 0	0.0263	0.04	Q	i vi i
14+ 5	0.0266	0.04	Q	i vi i
14+10	0.0269	0.04	Q	i vi i
14+15	0.0272	0.04	Q	i v
14+20	0.0275	0.04	Q	i v i
14+25	0.0278	0.04	Q	i v i
14+30	0.0281	0.04	Q	i iv i
14+35	0.0284	0.04	Q	i iv i
14+40	0.0287	0.04	Q	i iv i
14+45	0.0289	0.04	Q	i iv i
14+50	0.0292	0.04	Q	i ivi
14+55	0.0295	0.04	Q	i ivi
15+ 0	0.0298	0.04	Q	i ivi
15+ 5	0.0301	0.04	Q	i ivi
15+10	0.0303	0.04	Q	i i v i
15+15	0.0306	0.04	Q	i i v i
15+20	0.0308	0.04	Q	i i v i
15+25	0.0311	0.04	Q	i i v i
15+30	0.0314	0.04	Q	i i v i
15+35	0.0316	0.03	Q	i i v i
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15+40						
15+45	15+40	0.0318	0.03	Q		V
15+50	15+45	0.0320	0.03		İ	V
15+55	15+50	0.0322	0.03		j j	j v j
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	19+45	0.0346	0.00	Q		V

19+50	0.0346	0.00	Q	1	1 1	v I	
19+55	0.0346	0.00	Q	İ	i i	v İ	
20+ 0	0.0346	0.00	Q	Ì	i i	v İ	
20+ 5	0.0347	0.00	Q	i	i i	νİ	
20+10	0.0347	0.00	Q	ì	i i	νİ	
20+15	0.0347	0.00	Q	i	i i	νİ	
20+20	0.0348	0.00	Q	ì	i i	νİ	
20+25	0.0348	0.00	Q	i	i i	νİ	
20+30	0.0348	0.00	Q	i	;	ν̈́Ι	
20+35	0.0349	0.00	Q	i i	;	ν̈́Ι	
20+40	0.0349	0.00	Q	1	;	ν̈́Ι	
20+45	0.0349	0.00	Q	i i	; ;	ν̈́Ι	
20+50	0.0350	0.00	Q	1	;	ν̈́Ι	
20+55	0.0350	0.00	Q	1	;	ν̈́Ι	
21+ 0	0.0350	0.00	Q	1	;	ν̈́Ι	
21+ 5	0.0350	0.00	Q	1	;	vl	
21+10	0.0351	0.00	Q	}	;	۷I	
21+15	0.0351	0.00	Q	}	;	۷I	
21+20	0.0351	0.00	Q	}	;	۷I	
21+25	0.0352	0.00		}	;	۷I	
21+30	0.0352	0.00	Q	}	;	۷I	
21+35	0.0352	0.00	Q	}		۷I	
21+40	0.0352	0.00	Q	}		۷I	
21+45	0.0353	0.00	Q	}		۷I	
21+50		0.00	Q	}	;	۷I	
	0.0353		Q	}	;	۷I	
21+55 22+ 0	0.0353 0.0353	0.00 0.00	Q	}	;	۷I	
22+ 5	0.0354	0.00	Q	}		V I	
22+10	0.0354	0.00	Q	}	;	۷I	
22+16	0.0354		Q	}	;	:	
22+13	0.0355	0.00 0.00	Q	}	;	V V	
22+25			Q	}	;	۷I	
22+30	0.0355	0.00	Q	1			
	0.0355	0.00	Q			V	
22+35	0.0355	0.00	Q			V	
22+40 22+45	0.0356	0.00	Q			V V	
22+50	0.0356	0.00 0.00	Q	1		V V	
22+55	0.0356 0.0356	0.00	Q	}	;	۷I	
23+ 0		0.00	Q	}	;	۷I	
23+ 5	0.0356 0.0357	0.00	Q	}	;	۷I	
23+10	0.0357	0.00	Q	}	;	۷I	
23+16			Q	1			
	0.0357	0.00	Q			V V	
23+20	0.0357	0.00	Q				
23+25 23+30	0.0358	0.00	Q	1		V V	
	0.0358	0.00	Q	1			
23+35	0.0358	0.00	Q	1		V	
23+40	0.0358	0.00	Q	1		V	
23+45	0.0358	0.00	Q	1		V	
23+50	0.0359	0.00	Q	1	1	V	
23+55	0.0359	0.00	Q	I	1 1	V	

24+ 0	0.0359	0.00	Q	1	V
24+ 5	0.0359	0.00	Q		V
24+10	0.0359	0.00	Q		V

Unit Hydrograph Analysis

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```
Riverside County Synthetic Unit Hydrology Method
       RCFC & WCD Manual date - April 1978
       Program License Serial Number 6586
        English (in-lb) Input Units Used
        English Rainfall Data (Inches) Input Values Used
        English Units used in output format
       22-0192 - MVCC PARK
       ONSITE UNIT HYDROGRAPH ANALYSIS - DMA E-3
       EXISITNG CONDITION, 2-YEAR 24-HOUR
       FN: ONSITEPREE3.OUT- RSB
       ______
       Drainage Area = 2.50(Ac.) = 0.004 Sq. Mi.
       Drainage Area for Depth-Area Areal Adjustment = 2.50(Ac.) =
0.004 Sq. Mi.
       Length along longest watercourse =
                                       495.00(Ft.)
       Length along longest watercourse measured to centroid = 179.00(Ft.)
       Length along longest watercourse = 0.094 Mi.
       Length along longest watercourse measured to centroid = 0.034 Mi.
       Difference in elevation = 14.00(Ft.)
Slope along watercourse = 149.3333 Ft./Mi.
       Average Manning's 'N' = 0.030
       Lag time = 0.031 \text{ Hr}.
       Lag time = 1.88 Min.
       25% of lag time = 0.47 Min.
40% of lag time = 0.75 Min.
       Unit time = 5.00 Min.
       Duration of storm = 24 Hour(s)
       User Entered Base Flow = 0.00(CFS)
       2 YEAR Area rainfall data:
```

```
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
       2.50
                     2.00
                                           5.00
100 YEAR Area rainfall data:
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
       2.50
                  5.40
                                    13.50
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 5.400(In)
Point rain (area averaged) =
                            2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
Area(Ac.) Runoff Index Impervious 2.500 91.00 0.000
                             Impervious %
 Total Area Entered = 2.50(Ac.)
RI
         Infil. Rate Impervious Adj. Infil. Rate Area%
     RI
                                                         F
AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.) (In/Hr)
              0.246
                       0.000 0.246
                                             1.000 0.246
91.0 79.8
                                             Sum(F) = 0.246
Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900
   Unit Hydrograph
                    VALLEY S-Curve
______
             Unit Hydrograph Data
______
Unit time period Time % of lag Distribution Unit Hydrograph (hrs) Graph % (CFS)
   1 0.083
                           52.963
39.051
6.511
1.475

      1
      0.083
      266.529

      2
      0.167
      533.057

      3
      0.250
      799.586

      4
      0.333
      1066.114

                  266.529
                                                  1.334
                                                 0.984
                                                 0.164
                                                 0.037
                    Sum = 100.000 Sum= 2.520
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time	Pattern	Storm Rain	Loss rate	(In./Hr)	Effective
	(Hr.)	Percent	(In/Hr)	Max	Low	(In/Hr)
1	0.08	0.07	0.016	(0.437)	0.014	0.002
2	0.17	0.07	0.016	(0.435)	0.014	0.002
3	0.25	0.07	0.016	(0.433)	0.014	0.002
4	0.33	0.10	0.024	(0.432)	0.022	0.002
5	0.42	0.10	0.024	(0.430)	0.022	0.002
6	0.50	0.10	0.024	(0.428)	0.022	0.002
7	0.58	0.10	0.024	(0.427)	0.022	0.002
8	0.67	0.10	0.024	(0.425)	0.022	0.002
9	0.75	0.10	0.024	(0.423)	0.022	0.002
10	0.83	0.13	0.032	(0.422)	0.029	0.003
11	0.92	0.13	0.032	(0.420)	0.029	0.003
12	1.00	0.13	0.032	(0.418)	0.029	0.003
13	1.08	0.10	0.024	(0.417)	0.022	0.002
14	1.17	0.10	0.024	(0.415)	0.022	0.002
15	1.25	0.10	0.024	(0.413)	0.022	0.002
16	1.33	0.10	0.024	(0.412)	0.022	0.002
17	1.42	0.10	0.024	(0.410)	0.022	0.002
18	1.50	0.10	0.024	(0.408)	0.022	0.002
19	1.58	0.10	0.024	(0.407) (0.405)	0.022	0.002
20 21	1.67 1.75	0.10 0.10	0.024 0.024	: :	0.022 0.022	0.002 0.002
22	1.83	0.10	0.032	(0.404) (0.402)	0.029	0.003
23	1.92	0.13	0.032	(0.400)	0.029	0.003
24	2.00	0.13	0.032	(0.399)	0.029	0.003
25	2.08	0.13	0.032	(0.397)	0.029	0.003
26	2.17	0.13	0.032	(0.395)	0.029	0.003
27	2.25	0.13	0.032	(0.394)	0.029	0.003
28	2.33	0.13	0.032	(0.392)	0.029	0.003
29	2.42	0.13	0.032	(0.391)	0.029	0.003
30	2.50	0.13	0.032	(0.389)	0.029	0.003
31	2.58	0.17	0.040	(0.387)	0.036	0.004
32	2.67	0.17	0.040	(0.386)	0.036	0.004
33	2.75	0.17	0.040	(0.384)	0.036	0.004
34	2.83	0.17	0.040	(0.383)	0.036	0.004
35	2.92	0.17	0.040	(0.381)	0.036	0.004
36	3.00	0.17	0.040	(0.380)	0.036	0.004
37	3.08	0.17	0.040	(0.378)	0.036	0.004
38	3.17	0.17	0.040	(0.376)	0.036	0.004
39	3.25	0.17	0.040	(0.375)	0.036	0.004
40	3.33	0.17	0.040	(0.373)	0.036	0.004
41	3.42	0.17	0.040	(0.372)	0.036	0.004
42	3.50	0.17	0.040	(0.370)	0.036	0.004
43	3.58	0.17	0.040	(0.369)	0.036	0.004
44	3.67	0.17	0.040	(0.367)	0.036	0.004
45	3.75	0.17	0.040	(0.366)	0.036	0.004

46	3.83	0.20	0.048	(0.364)	0.043	0.005
47	3.92	0.20	0.048	(0.362)	0.043	0.005
48	4.00	0.20	0.048	(0.361)	0.043	0.005
49	4.08	0.20	0.048	(0.359)	0.043	0.005
50	4.17	0.20	0.048	(0.358)	0.043	0.005
51	4.25	0.20	0.048	(0.356)	0.043	0.005
52	4.33	0.23	0.056	(0.355)	0.050	0.006
53	4.42	0.23	0.056	(0.353)	0.050	0.006
54	4.50	0.23	0.056	(0.352)	0.050	0.006
55	4.58	0.23	0.056	(0.350)	0.050	0.006
56	4.67	0.23	0.056	(0.349)	0.050	0.006
57	4.75	0.23	0.056	(0.347)	0.050	0.006
58	4.83	0.27	0.064	(0.346)	0.058	0.006
59	4.92	0.27	0.064	(0.344)	0.058	0.006
60	5.00	0.27	0.064	(0.343)	0.058	0.006
61	5.08	0.20	0.048	(0.341)	0.043	0.005
62	5.17	0.20	0.048	(0.340)	0.043	0.005
63	5.25	0.20	0.048	(0.338)	0.043	0.005
64	5.33	0.23	0.056	(0.337)	0.050	0.005
65	5.42	0.23	0.056	(0.335)	0.050	0.006
66	5.50	0.23	0.056	(0.334)	0.050	0.006
67	5.58	0.27	0.064	(0.332)	0.058	0.006
68	5.67	0.27	0.064	(0.331)	0.058	0.006
69	5.75	0.27	0.064	(0.331)	0.058	0.006
70	5.83	0.27	0.064	•	0.058	0.006
76 71	5.92	0.27	0.064 0.064	(0.328)	0.058	0.006
71 72	6.00	0.27	0.064 0.064	(0.327) (0.325)	0.058	0.006
72 73	6.08	0.30	0.072	(0.324)	0.065	0.007
73 74	6.17	0.30	0.072	(0.324)	0.065	0.007
74 75	6.25	0.30	0.072	(0.321)		0.007
75 76	6.33	0.30	0.072	(0.319)	0.065 0.065	0.007
76 77	6.42	0.30		(0.318)	0.065	0.007
			0.072	•	0.065	
78 79	6.50 6.58	0.30	0.072 0.080	(0.317)		0.007
		0.33		(0.315)	0.072	0.008
80 01	6.67	0.33	0.080	(0.314)	0.072	0.008 0.008
81 82	6.75	0.33	0.080	(0.312) (0.311)	0.072	
	6.83	0.33	0.080	,	0.072	0.008
83	6.92	0.33	0.080	(0.310)	0.072	0.008
84 or	7.00	0.33	0.080	(0.308)	0.072	0.008
85 86	7.08	0.33	0.080	(0.307)	0.072	0.008
86 87	7.17	0.33	0.080	(0.305)	0.072	0.008
87	7.25	0.33	0.080	(0.304)	0.072	0.008
88	7.33	0.37	0.088	(0.303)	0.079	0.009
89	7.42	0.37	0.088	(0.301)	0.079	0.009
90	7.50	0.37	0.088	(0.300)	0.079	0.009
91	7.58	0.40	0.096	(0.298)	0.086	0.010
92	7.67	0.40	0.096	(0.297)	0.086	0.010
93	7.75	0.40	0.096	(0.296)	0.086	0.010
94	7.83	0.43	0.104	(0.294)	0.094	0.010
95	7.92	0.43	0.104	(0.293)	0.094	0.010

96	8.00	0.43	0.104	(0.292)	0.094	0.010
97	8.08	0.50	0.120	į	0.290)	0.108	0.012
98	8.17	0.50	0.120	ì	0.289)	0.108	0.012
99	8.25	0.50	0.120	ì	0.288)	0.108	0.012
100	8.33	0.50	0.120	(0.286)	0.108	0.012
101	8.42	0.50	0.120	(0.285)	0.108	0.012
				(•		
102	8.50	0.50	0.120	(0.283)	0.108	0.012
103	8.58	0.53	0.128	(0.282)	0.115	0.013
104	8.67	0.53	0.128	(0.281)	0.115	0.013
105	8.75	0.53	0.128	(0.280)	0.115	0.013
106	8.83	0.57	0.136	(0.278)	0.122	0.014
107	8.92	0.57	0.136	(0.277)	0.122	0.014
108	9.00	0.57	0.136	(0.276)	0.122	0.014
109	9.08	0.63	0.152	(0.274)	0.137	0.015
110	9.17	0.63	0.152	(0.273)	0.137	0.015
111	9.25	0.63	0.152	(0.272)	0.137	0.015
112	9.33	0.67	0.160	(0.270)	0.144	0.016
113	9.42	0.67	0.160	(0.269)	0.144	0.016
114	9.50	0.67	0.160	(0.268)	0.144	0.016
115	9.58	0.70	0.168	(0.267)	0.151	0.017
116	9.67	0.70	0.168	į	0.265)	0.151	0.017
117	9.75	0.70	0.168)	0.264)	0.151	0.017
118	9.83	0.73	0.176)	0.263)	0.158	0.018
119	9.92	0.73	0.176	ì	0.261)	0.158	0.018
120	10.00	0.73	0.176	ì	0.260)	0.158	0.018
121	10.08	0.50	0.120	ì	0.259)	0.108	0.012
122	10.17	0.50	0.120	(0.258)	0.108	0.012
123	10.25	0.50	0.120	(0.256)	0.108	0.012
124	10.23	0.50	0.120	(0.255)	0.108	0.012
125	10.33	0.50	0.120		0.254)	0.108	0.012
126	10.42	0.50	0.120	(0.254)	0.108	0.012
				(
127	10.58	0.67	0.160	(0.251)	0.144	0.016
128	10.67	0.67	0.160	(0.250)	0.144	0.016
129	10.75	0.67	0.160	(0.249)	0.144	0.016
	10.83		0.160	(0.144	0.016
131	10.92	0.67	0.160	(0.247)	0.144	0.016
132	11.00	0.67	0.160	(0.245)		0.016
133	11.08	0.63	0.152	(0.244)	0.137	0.015
134	11.17	0.63	0.152	(0.243)		0.015
135	11.25	0.63	0.152	(0.242)		0.015
136	11.33	0.63	0.152	(0.241)	0.137	0.015
137	11.42	0.63	0.152	(0.239)	0.137	0.015
138	11.50	0.63	0.152	(0.238)	0.137	0.015
139	11.58	0.57	0.136	(0.237)	0.122	0.014
140	11.67	0.57	0.136	(0.236)	0.122	0.014
141	11.75	0.57	0.136	(0.235)	0.122	0.014
142	11.83	0.60	0.144	(0.233)	0.130	0.014
143	11.92	0.60	0.144	(0.130	0.014
144		0.60	0.144	į	0.231)		0.014
145	12.08	0.83	0.200	(0.230)		0.020
				•	•		

146	12.17	0.83	0.200	(0.229)		0.180	0.020
147	12.25	0.83	0.200	į (0.228)		0.180	0.020
148	12.33	0.87	0.208	ì	0.227)		0.187	0.021
149	12.42	0.87	0.208	ì	0.225)		0.187	0.021
150	12.50	0.87	0.208	ì	0.224)		0.187	0.021
151	12.58	0.93	0.224	ì	0.223)		0.202	0.022
152	12.67	0.93	0.224	ì	0.222)		0.202	0.022
153	12.75	0.93	0.224	ì	0.221)		0.202	0.022
154	12.83	0.97	0.232	ì	0.220)		0.209	0.023
155	12.92	0.97	0.232	ì	0.219)		0.209	0.023
156	13.00	0.97	0.232	ì	0.218)		0.209	0.023
157	13.08	1.13	0.272	`	0.216		0.245)	0.056
158	13.17	1.13	0.272		0.215	•	0.245)	0.057
159	13.25	1.13	0.272		0.214	•	0.245)	0.058
160	13.33	1.13	0.272		0.213	•	0.245)	0.059
161	13.42	1.13	0.272		0.212	•	0.245)	0.060
162	13.50	1.13	0.272		0.211	•	0.245)	0.061
163	13.58	0.77	0.184	(0.210)	`	0.166	0.018
164	13.67	0.77	0.184	ì	0.209)		0.166	0.018
165	13.75	0.77	0.184	ì	0.208)		0.166	0.018
166	13.83	0.77	0.184	ì	0.207)		0.166	0.018
167	13.92	0.77	0.184	ì	0.206)		0.166	0.018
168	14.00	0.77	0.184	ì	0.205)		0.166	0.018
169	14.08	0.90	0.216	ì	0.204)		0.194	0.022
170	14.17	0.90	0.216	ì	0.203)		0.194	0.022
171	14.25	0.90	0.216	ì	0.202)		0.194	0.022
172	14.33	0.87	0.208	ì	0.200)		0.187	0.021
173	14.42	0.87	0.208	ì	0.199)		0.187	0.021
174	14.50	0.87	0.208	ì	0.198)		0.187	0.021
175	14.58	0.87	0.208	Ì	0.197)		0.187	0.021
176	14.67	0.87	0.208	Ì	0.196)		0.187	0.021
177	14.75	0.87	0.208	ì	0.195)		0.187	0.021
178	14.83	0.83	0.200	ì	0.194)		0.180	0.020
179	14.92	0.83	0.200	ì	0.193)		0.180	0.020
	15.00		0.200)			0.180	
181	15.08	0.80	0.192)	0.191)		0.173	0.019
182	15.17	0.80	0.192	į	0.190)		0.173	0.019
183	15.25	0.80	0.192	į	0.189)		0.173	0.019
184	15.33	0.77	0.184	į	0.188)		0.166	0.018
185	15.42	0.77	0.184	į (0.188)		0.166	0.018
186	15.50	0.77	0.184	(0.187)		0.166	0.018
187	15.58	0.63	0.152	(0.186)		0.137	0.015
188	15.67	0.63	0.152	(0.185)		0.137	0.015
189	15.75	0.63	0.152	(0.184)		0.137	0.015
190	15.83	0.63	0.152	(0.183)		0.137	0.015
191	15.92	0.63	0.152	(0.182)		0.137	0.015
192	16.00	0.63	0.152	(0.181)		0.137	0.015
193	16.08	0.13	0.032	(0.180)		0.029	0.003
194	16.17	0.13	0.032	(0.179)		0.029	0.003
195	16.25	0.13	0.032	(0.178)		0.029	0.003

196	16.33	0.13	0.032	(0.177)	0.029	0.003
197	16.42	0.13	0.032	(0.176)	0.029	0.003
198	16.50	0.13	0.032	(0.175)	0.029	0.003
199	16.58	0.10	0.024	(0.175)	0.022	0.002
200	16.67	0.10	0.024	(0.174)	0.022	0.002
201	16.75	0.10	0.024	(0.173)	0.022	0.002
202	16.83	0.10	0.024	(0.172)	0.022	0.002
203	16.92	0.10	0.024	(0.171)	0.022	0.002
204	17.00	0.10	0.024	(0.170)	0.022	0.002
205	17.08	0.17	0.040	(0.169)	0.036	0.004
206	17.17	0.17	0.040	(0.168)	0.036	0.004
207	17.25	0.17	0.040	(0.168)	0.036	0.004
208	17.33	0.17	0.040	(0.167)	0.036	0.004
209	17.42	0.17	0.040	(0.166)	0.036	0.004
210	17.50	0.17	0.040	(0.165)	0.036	0.004
211	17.58	0.17	0.040	(0.164)	0.036	0.004
212	17.67	0.17	0.040	(0.163)	0.036	0.004
213	17.75	0.17	0.040	(0.163)	0.036	0.004
214	17.83	0.13	0.032	(0.162)	0.029	0.003
215	17.92	0.13	0.032	(0.161)	0.029	0.003
216	18.00	0.13	0.032	(0.160)	0.029	0.003
217	18.08	0.13	0.032	(0.159)	0.029	0.003
218	18.17	0.13	0.032	(0.159)	0.029	0.003
219	18.25	0.13	0.032	(0.158)	0.029	0.003
220	18.33	0.13	0.032	(0.157)	0.029	0.003
221	18.42	0.13	0.032	(0.156)	0.029	0.003
222	18.50	0.13	0.032	(0.156)	0.029	0.003
223	18.58	0.10	0.024	(0.155)	0.022	0.002
224	18.67	0.10	0.024	(0.154)	0.022	0.002
225	18.75	0.10	0.024	(0.153)	0.022	0.002
226	18.83	0.07	0.016	(0.153)	0.014	0.002
227	18.92	0.07	0.016	(0.152)	0.014	0.002
228	19.00	0.07	0.016	(0.151)	0.014	0.002
229	19.08	0.10	0.024	(0.150)	0.022	0.002
230	19.17	0.10	0.024	(0.150)	0.022	0.002
231	19.25	0.10	0.024	(0.149)	0.022	0.002
232	19.33	0.13	0.032	(0.148)	0.029	0.003
233	19.42	0.13	0.032	(0.148)	0.029	0.003
234	19.50	0.13	0.032	(0.147)	0.029	0.003
235	19.58	0.10	0.024	(0.146)	0.022	0.002
236	19.67	0.10	0.024	(0.146)	0.022	0.002
237	19.75	0.10	0.024	(0.145)	0.022	0.002
238 239	19.83	0.07	0.016	(0.144)	0.014	0.002
240	19.92	0.07 0.07	0.016	(0.144)	0.014	0.002
	20.00		0.016	(0.143)	0.014	0.002
241 242	20.08	0.10	0.024	(0.142) 0.142)	0.022	0.002
242	20.17 20.25	0.10 0.10	0.024 0.024	(0.142)	0.022 0.022	0.002 0.002
243 244	20.23	0.10	0.024	(0.141)	0.022 0.022	0.002
244	20.33	0.10	0.024	(0.141)	0.022	0.002
243	20.42	0.10	0.024	(0.140)	0.022	0.002

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286
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287
     23.92
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                                           0.123)
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                                                                       0.002
288
     24.00
                0.07
                          0.016
                                           0.123)
                                                         0.014
                                                                       0.002
                 (Loss Rate Not Used)
                                                                    2.6
    Sum =
               100.0
                                                          Sum =
       Flood volume = Effective rainfall
                                                 0.22(In)
                           2.5(Ac.)/[(In)/(Ft.)] =
                                                           0.0(Ac.Ft)
        times area
       Total soil loss =
                                1.78(In)
       Total soil loss =
                               0.372(Ac.Ft)
       Total rainfall =
                               2.00(In)
```

	od volume = al soil loss =					
Pe	ak flow rate of	f this hydro	ograph =	0.152(CFS)		
+++-			·	 +++++++++	 ++++++++	+++++
		24 - H O	UR STO	R M		
	Rι	ınoff	Hydro	graph		
	Hydrog	graph in :	5 Minute int	ervais ((C	F3))	
Time(h+m)	Volume Ac.Ft	Q(CFS) 0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00 Q				
	0.0000		j	İ	i	j
	0.0001		İ	İ	i	ĺ
0+20	0.0001	0.01 Q	j	İ	į	j
0+25	0.0001	0.01 Q	İ	ĺ	İ	ĺ
0+30	0.0002	0.01 Q		I		
0+35		0.01 Q		I		
0+40	0.0003	0.01 Q		I		
0+45	0.0003	0.01 Q		I		
0+50	0.0004	0.01 Q				
0+55	0.0004	0.01 Q		I		
1+ 0	0.0005	0.01 Q				
1+ 5	0.0005	0.01 Q		ļ		
1+10	0.0006	0.01 Q		ļ		
		0.01 Q	ļ	ļ	ļ	
1+20	0.0006	-	ļ	ļ	ļ	ļ
1+25		•	ļ	ļ	ļ	ļ
	0.0007	•	ļ	ļ	ļ	ļ
1+35		0.01 Q	ļ	ļ	ļ	ļ
1+40		0.01 Q	ļ	ļ	ļ	ļ
1+45	0.0009	0.01 Q	ļ	ļ	ļ	ļ
1+50	0.0009	0.01 Q		ļ		ļ
1+55	0.0010	0.01 Q	ļ	ļ		ļ
2+ 0	0.0010	0.01 Q	ļ	ļ		
2+ 5	0.0011	0.01 Q	ļ	ļ		ļ
2+10	0.0011	0.01 Q	ļ	ļ		ļ
2+15	0.0012	0.01 QV	ļ	ļ		ļ
2+20	0.0012	0.01 QV	ļ	ļ		ļ
2+25	0.0013	0.01 QV	l I		l I	l I
2+30	0.0013	0.01 QV	l I		l I	l I
2+35	0.0014	0.01 QV	l I	ļ	l I	l I
2+40 2+45	0.0015	0.01 QV	l I	!	I I	l I
2+45 2+50	0.0015 0.0016	0.01 QV 0.01 QV		-	l I	l I
2+56 2+55	0.0017	0.01 QV 0.01 QV		-		l I
2+55 3+ 0	0.0017	0.01 QV 0.01 QV	l I	<u> </u>	l I	l I
J+ 0	0.0010	O.OI QV	I	ı	ı	I

3+ 5	0.0018	0.01	QV		
3+10	0.0019	0.01	QV		
3+15	0.0020	0.01	QV		
3+20	0.0020	0.01	QV		
3+25	0.0021	0.01	QV		
3+30	0.0022	0.01	QV		
3+35	0.0022	0.01	QV		
3+40	0.0023	0.01	Q V		
3+45	0.0024	0.01	Q V		
3+50	0.0025	0.01	Q V	į į	
3+55	0.0025	0.01	Q V j	į į	
4+ 0	0.0026	0.01	o v j j	į į	
4+ 5	0.0027	0.01	ov j j	į į	
4+10	0.0028	0.01	ov j j	į į	
4+15	0.0029	0.01	o v j j	į į	
4+20	0.0030	0.01	o v j j	į į	
4+25	0.0031	0.01	ov i i	į į	
4+30	0.0032	0.01	ovi i	j j	
4+35	0.0033	0.01	ov j j	į į	
4+40	0.0033	0.01	Q v	j j	
4+45	0.0034	0.01	Q V	i i	
4+50	0.0035	0.02	Q V	i	
4+55	0.0037	0.02	Q V	i	
5+ 0	0.0038	0.02	Q V	i	
5+ 5	0.0039	0.01	Q V	i	
5+10	0.0040	0.01	Q V		
5+15	0.0040	0.01	Q V	; ;	
5+20	0.0041	0.01	Q V		
5+25	0.0042	0.01	Q V	i	
5+30	0.0043	0.01	Q V		
5+35	0.0044	0.02	Q V		
5+40	0.0045	0.02	Q V		
5+45	0.0046	0.02	Q V		
5+50	0.0048	0.02	Q V		
5+55	0.0049	0.02			
6+ 0	0.0050	0.02	Q V		
6+ 5	0.0051	0.02	Q V		
6+10	0.0052	0.02	Q V		
6+15	0.0053	0.02	Q V		
6+20	0.0055	0.02	Q V		
6+25	0.0056	0.02	Q V		
6+30	0.0057	0.02	· :		
6+35	0.0059	0.02	• !		
			• !		
6+40 6+45	0.0060	0.02	Q V O V		
6+45	0.0061	0.02	• !		
6+50	0.0063	0.02	Q V		
6+55	0.0064	0.02	Q V		
7+ 0	0.0065	0.02	Q V		
7+ 5	0.0067	0.02	Q V		
7+10	0.0068	0.02	Q V	l l	

7+15	0.0070	0.02	Q	V		
7+20	0.0071	0.02	Q	V		
7+25	0.0073	0.02	Q	V	i i	İ
7+30	0.0074	0.02	Q	V	i i	j
7+35	0.0076	0.02	Q	V	i i	İ
7+40	0.0077	0.02	Q	V	i i	İ
7+45	0.0079	0.02	Q	v j	i i	İ
7+50	0.0081	0.03	Q	v j	i i	İ
7+55	0.0083	0.03	Q	v İ	i i	i
8+ 0	0.0084	0.03	Q	v İ	i i	i
8+ 5	0.0086	0.03	Q	v İ	i i	i
8+10	0.0088	0.03	Q	v İ	i i	i
8+15	0.0090	0.03	Q	v İ	i i	i
8+20	0.0093	0.03	Q	v İ	i i	i
8+25	0.0095	0.03	Q	v İ	i i	i
8+30	0.0097	0.03	Q	v İ	i i	i
8+35	0.0099	0.03	Q	v	i i	i
8+40	0.0101	0.03	Q	v	i i	i
8+45	0.0103	0.03	Q	νİ	i i	i
8+50	0.0106	0.03	Q	νİ	i i	i
8+55	0.0108	0.03	Q	v	i i	i
9+ 0	0.0110	0.03	Q	v	i i	i
9+ 5	0.0113	0.04	Q	V	i i	i
9+10	0.0115	0.04	Q	V	i i	i
9+15	0.0118	0.04	Q	V	i i	i
9+20	0.0121	0.04	Q	V	i i	i
9+25	0.0124	0.04	Q	Į V	i i	i
9+30	0.0126	0.04	Q	V V	i i	i
9+35	0.0129	0.04	Q	V V	i i	i
9+40	0.0132	0.04	Q	V	1 1	ł
9+45	0.0135	0.04	Q	V	1 1	ł
9+50	0.0138	0.04	Q	V	1 1	ł
9+55	0.0141	0.04	Q	i v	i i	i
10+ 0	0.0144	0.04	Q	V	1	
10+ 5	0.0147	0.04	Q	v	1	
10+10	0.0149	0.03	Q	l v		
10+15	0.0151	0.03	Q	l v	1 1	i i
10+20	0.0153	0.03	Q	l v		
10+25	0.0155	0.03	Q	l v	1	
10+30	0.0157	0.03	Q	l v	1	
10+35	0.0160	0.03	Q	l v	1	
10+40	0.0162	0.04	Q	V	1 1	i i
10+45	0.0165	0.04	Q	l V		
10+50	0.0168	0.04	Q	l V	1	
10+55	0.0171	0.04	Q	l V		
10+33	0.0171	0.04	Q	V		
11+ 6 11+ 5	0.0175	0.04		V		l I
11+10	0.0179	0.04	Q Q	l V		l I
11+16	0.0181	0.04		V		
11+15	0.0184	0.04	Q	l V		
11+70	0.0184	0.04	Q	Į V	1 1	I

11+25	0.0187	0.04	Q	\	/	
11+30	0.0189	0.04	Q	\	/	
11+35	0.0192	0.04	Q		V	
11+40	0.0194	0.03	Q		V	
11+45	0.0197	0.03	Q		V	
11+50	0.0199	0.04	Q		V	
11+55	0.0202	0.04	Q	Ì	V	j j
12+ 0	0.0204	0.04	Q	Ì	V	j j
12+ 5	0.0207	0.04	Q	Ì	V	j j
12+10	0.0210	0.05	Q	Ì	V	j j
12+15	0.0214	0.05	Q	Ì	٧İ	j j
12+20	0.0217	0.05	Q	İ	٧ĺ	j j
12+25	0.0221	0.05	Q	j	νİ	j j
12+30	0.0225	0.05	Q	Ì	V	j j
12+35	0.0228	0.05	Q	j	V	j j
12+40	0.0232	0.06	Q	j	V	j j
12+45	0.0236	0.06	Q	İ	l V	j j
12+50	0.0240	0.06	Q	j	įν	i i
12+55	0.0244	0.06	Q	j	ĺV	j j
13+ 0	0.0248	0.06	Q	j	į v	i i
13+ 5	0.0255	0.10	Q	İ	į v	i i
13+10	0.0264	0.13	Q	i	į v	i i
13+15	0.0274	0.14	Q	i	j v	i i
13+20	0.0284	0.15	Q	i	j v	i i
13+25	0.0295	0.15	Q	i	j v	i i
13+30	0.0305	0.15	Q	i	j v	i i
13+35	0.0312	0.10	Q	i	j v	i i
13+40	0.0316	0.05	Q	i	j v	i i
13+45	0.0319	0.05	Q	İ	j v	i i
13+50	0.0322	0.05	Q	j	j v	i i
13+55	0.0325	0.05	Q	j	j v	i i
14+ 0	0.0328	0.05	Q	j	j v	'İ İ
14+ 5	0.0332	0.05	Q	İ	į v	'İ İ
14+10	0.0336	0.05	Q	j	j v	'İ İ
14+15	0.0339	0.05	Q	Ì	ĺ	v i
14+20	0.0343	0.05	Q	Ì	İ	V
14+25	0.0347	0.05	Q			V
14+30	0.0350	0.05	Q			V
14+35	0.0354	0.05	Q			V
14+40	0.0358	0.05	Q			V
14+45	0.0361	0.05	Q			V
14+50	0.0365	0.05	Q			V
14+55	0.0368	0.05	Q			į v į
15+ 0	0.0372	0.05	Q			j v j
15+ 5	0.0375	0.05	Q			V
15+10	0.0378	0.05	Q			V
15+15	0.0382	0.05	Q			V
15+20	0.0385	0.05	Q			j v j
15+25	0.0388	0.05	Q			j v j
15+30	0.0391	0.05	Q			j v j

15+35	0.0394	0.04	Q		V
15+40	0.0397	0.04	Q	į į	i v i
15+45	0.0400	0.04	Q	į į	i v i
15+50	0.0402	0.04	Q	i i	i v i
15+55	0.0405	0.04	Q	i i	i v i
16+ 0	0.0408	0.04	Q	i i	i v i
16+ 5	0.0409	0.02	Q	i i	i v i
16+10	0.0410	0.01	Q	i i	i v i
16+15	0.0410	0.01	Q	i i	i v i
16+20	0.0411	0.01	Q	i i	i v i
16+25	0.0411	0.01	Q	i i	i v i
16+30	0.0412	0.01	Q	i i	i v i
16+35	0.0413	0.01	Q	i i	i v i
16+40	0.0413	0.01	Q	i i	i v i
16+45	0.0413	0.01	Q	i i	i v i
16+50	0.0414	0.01	Q	i i	i v i
16+55	0.0414	0.01	Q	i i	i v i
17+ 0	0.0415	0.01	Q	i i	i v i
17+ 5	0.0415	0.01	Q	i i	i v i
17+10	0.0416	0.01	Q	i i	i v i
17+15	0.0417	0.01	Q	i i	i v i
17+20	0.0417	0.01	Q	i i	i v i
17+25	0.0418	0.01	Q	i i	i v i
17+30	0.0419	0.01	Q	i i	i v i
17+35	0.0419	0.01	Q	i i	i v i
17+40	0.0420	0.01	Q	i i	i v i
17+45	0.0421	0.01	Q	i i	i v i
17+50	0.0421	0.01	Q	į į	j v j
17+55	0.0422	0.01	Q	j j	j v j
18+ 0	0.0422	0.01	Q	į į	j v j
18+ 5	0.0423	0.01	Q	İ	V
18+10	0.0424	0.01	Q		V
18+15	0.0424	0.01	Q		V
18+20	0.0425	0.01	Q		V
18+25	0.0425	0.01	Q		V
18+30	0.0426	0.01	Q		V
18+35	0.0426	0.01	Q		V
18+40	0.0427	0.01	Q		V
18+45	0.0427	0.01	Q		V
18+50	0.0427	0.00	Q		V
18+55	0.0428	0.00	Q		V
19+ 0	0.0428	0.00	Q		V
19+ 5	0.0428	0.01	Q		V
19+10	0.0429	0.01	Q		V
19+15	0.0429	0.01	Q		V
19+20	0.0430	0.01	Q		V
19+25	0.0430	0.01	Q		V
19+30	0.0431	0.01	Q	ļ l	V
19+35	0.0431	0.01	Q		V
19+40	0.0432	0.01	Q		V

19+45	0.0432	0.01	Q		V
19+50	0.0432	0.00	Q	j j	i vi
19+55	0.0433	0.00	Q	i i	i vi
20+ 0	0.0433	0.00	Q	i i	i vi
20+ 5	0.0433	0.01	Q	i i	i vi
20+10	0.0434	0.01	Q	i i	i vi
20+15	0.0434	0.01	Q	i i	i vi
20+20	0.0435	0.01	Q	i i	i vi
20+25	0.0435	0.01	Q	i i	i vi
20+30	0.0435	0.01	Q	i i	i vi
20+35	0.0436	0.01	Q	i i	i vi
20+40	0.0436	0.01	Q	i i	i vi
20+45	0.0437	0.01	Q	i i	i vi
20+50	0.0437	0.00	Q	i i	i vi
20+55	0.0437	0.00	Q	i i	i vi
21+ 0	0.0438	0.00	Q	i i	i vi
21+ 5	0.0438	0.01	Q	i i	i vi
21+10	0.0438	0.01	Q	i i	i vi
21+15	0.0439	0.01	Q	i i	i vi
21+20	0.0439	0.00	Q	i i	i vi
21+25	0.0439	0.00	Q	i i	i vi
21+30	0.0440	0.00	Q	i i	i vi
21+35	0.0440	0.01	Q	i i	i vi
21+40	0.0440	0.01	Q	i i	i vi
21+45	0.0441	0.01	Q	i i	i vi
21+50	0.0441	0.00	Q	j j	i vi
21+55	0.0442	0.00	Q	j j	j vj
22+ 0	0.0442	0.00	Q	j j	j vj
22+ 5	0.0442	0.01	Q	į į	j vj
22+10	0.0443	0.01	Q	j j	j vj
22+15	0.0443	0.01	Q	į į	j vj
22+20	0.0443	0.00	Q	į į	j vj
22+25	0.0444	0.00	Q		V
22+30	0.0444	0.00	Q		V
22+35	0.0444	0.00	Q		V
22+40	0.0444	0.00	Q		V
22+45	0.0445	0.00	Q		V
22+50	0.0445	0.00	Q		V
22+55	0.0445	0.00	Q		V
23+ 0	0.0446	0.00	Q		V
23+ 5	0.0446	0.00	Q		V
23+10	0.0446	0.00	Q		V
23+15	0.0446	0.00	Q		V
23+20	0.0447	0.00	Q	ļ ļ	ļ Vļ
23+25	0.0447	0.00	Q	ļ	j vj
23+30	0.0447	0.00	Q	ļ	į vį
23+35	0.0447	0.00	Q]	ļ vļ
23+40	0.0448	0.00	Q	į į	ļ Vļ
23+45	0.0448	0.00	Q	į į	ļ vļ
23+50	0.0448	0.00	Q		V

23+55	0.0449	0.00	Q		1	٧
24+ 0	0.0449	0.00	Q		1	٧
24+ 5	0.0449	0.00	Q		1	٧
24+10	0.0449	0.00	Q		1	٧
24+15	0.0449	0.00	Q		1	٧

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018, Version 9.0 Study date 03/12/24 File: ONSITEPREE4242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978
Program License Serial Number 6586
 English (in-lb) Input Units Used English Rainfall Data (Inches) Input Values Used
 English Units used in output format
22-0192 - MVCC PARK
ONSITE UNIT HYDROGRAPH ANALYSIS - DMA E-4
EXISITNG CONDITION, 2-YEAR 24-HOUR
FN: ONSITEPREE4.OUT- RSB
Drainage Area = 0.60(Ac.) = 0.001 Sq. Mi.
Drainage Area = 0.60(AC.) = 0.001 Sq. M1.

Drainage Area for Depth-Area Areal Adjustment = 0.60

Length along longest watercourse = 181.00(Ft.)

Length along longest watercourse measured to centroid =

Length along longest watercourse = 0.034 Mi.

Length along longest watercourse measured to centroid =

Difference in elevation = 19.00(Ft.)

Slope along watercourse = 554.2541 Ft./Mi.
                                                                     0.60(Ac.) = 0.001 \text{ Sq. Mi.}
                                                                               25.00(Ft.)
                                                                               0.005 Mi.
Average Manning's 'N' = 0.030
Lag time = 0.008 Hr.
Lag time = 0.47 Min.
25% of lag time = 0.12 Min.
40% of lag time = 0.19 Min.
Unit time = 5.00 Min.
Duration of storm = 24 \text{ Hour(s)}
User Entered Base Flow =
                                      0.00(CFS)
2 YEAR Area rainfall data:
                         Rainfall(In)[2]
Area(Ac.)[1]
                                                   Weighting[1*2]
                              2.00
                                                           1.20
100 YEAR Area rainfall data:
Area(Ac.)[1]
                        Rainfall(In)[2] Weighting[1*2]
                                                          3.24
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall =
                                              5.400(In)
Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
                       Runoff Index Impervious %
Area(Ac.)
      0.600
                          91.00
                                              0.000
                                 0.60(Ac.)
 Total Area Entered =
RI RI Infil. Rate Impervious Adj. Infil. Rate Area% AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.)
                                                                                (In/Hr)
```

91.0 79.8 0.246 0.000 0.246 1.000 0.246 Sum (F) = 0.246

Area averaged mean soil loss (F) (In/Hr) = 0.246 Minimum soil loss rate ((In/Hr)) = 0.123 (for 24 hour storm duration) soil low loss rate (decimal) = 0.900

Unit Hydrograph VALLEY S-Curve

Unit Hydrograph Data								
Unit time period	Time % of lag	Distribution	Unit Hydrograph					
(hrs)		Graph %	(CFS)					
1 0.083	1058.907	100.000	0.605					
	Sum	= 100.000 Sur	n= 0.605					

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value $\frac{1}{2}$

(Hr.) Percent (In/Hr) (Max Low (In/Hr) 0.002 2	Unit	Time	Pattern	Storm Rain	L	oss rate	(In./Hr)	Effective
2 0.17 0.07 0.016 (0.435) 0.014 0.002 3 0.25 0.07 0.016 (0.433) 0.014 0.002 4 0.33 0.10 0.024 (0.432) 0.022 0.002 5 0.42 0.10 0.024 (0.430) 0.022 0.002 6 0.50 0.10 0.024 (0.428) 0.022 0.002 7 0.58 0.10 0.024 (0.427) 0.022 0.002 8 0.67 0.10 0.024 (0.425) 0.022 0.002	1				(
3 0.25 0.07 0.016 (0.433) 0.014 0.002 4 0.33 0.10 0.024 (0.432) 0.022 0.002 5 0.42 0.10 0.024 (0.430) 0.022 0.002 6 0.50 0.10 0.024 (0.428) 0.022 0.002 7 0.58 0.10 0.024 (0.427) 0.022 0.002 8 0.67 0.10 0.024 (0.425) 0.022 0.002	2				(
5 0.42 0.10 0.024 (0.430) 0.022 0.002 6 0.50 0.10 0.024 (0.428) 0.022 0.002 7 0.58 0.10 0.024 (0.427) 0.022 0.002 8 0.67 0.10 0.024 (0.425) 0.022 0.002	3				(
6 0.50 0.10 0.024 (0.428) 0.022 0.002 7 0.58 0.10 0.024 (0.427) 0.022 0.002 8 0.67 0.10 0.024 (0.425) 0.022 0.002	4				(
7 0.58 0.10 0.024 (0.427) 0.022 0.002 8 0.67 0.10 0.024 (0.425) 0.022 0.002	6				(
8 0.67 0.10 0.024 (0.425) 0.022 0.002 10 0.83 0.13 0.032 (0.422) 0.029 0.003 11 0.92 0.13 0.032 (0.420) 0.029 0.003 12 1.00 0.13 0.032 (0.418) 0.029 0.003 13 1.08 0.10 0.024 (0.415) 0.022 0.002 14 1.17 0.10 0.024 (0.415) 0.022 0.002 15 1.25 0.10 0.024 (0.412) 0.022 0.002 16 1.33 0.10 0.024 (0.413) 0.022 0.002 17 1.42 0.10 0.024 (0.412) 0.022 0.002 18 1.50 0.10 0.024 (0.410) 0.022 0.002 19 1.58 0.10 0.024 (0.408) 0.022 0.002 19 1.58 0.10 0.024 (0.408) 0.022 0.002 20 1.67 0.10 0.024 (0.407) 0.022 0.002 21 1.75 0.10 0.024 (0.405) 0.022 0.002 22 1.83 0.13 0.032 (0.400) 0.022 0.002 23 1.92 0.13 0.032 (0.402) 0.029 0.003 24 2.00 0.13 0.032 (0.402) 0.029 0.003 25 2.08 0.13 0.032 (0.395) 0.029 0.003 26 2.17 0.13 0.032 (0.399) 0.029 0.003 27 2.25 0.13 0.032 (0.399) 0.029 0.003 28 2.33 0.13 0.032 (0.399) 0.029 0.003 28 2.33 0.13 0.032 (0.399) 0.029 0.003 29 2.42 0.13 0.032 (0.399) 0.029 0.003 28 2.33 0.13 0.032 (0.399) 0.029 0.003 29 2.42 0.13 0.032 (0.399) 0.029 0.003 29 2.42 0.13 0.032 (0.399) 0.029 0.003 29 2.42 0.13 0.032 (0.399) 0.029 0.003 29 2.42 0.13 0.032 (0.399) 0.029 0.003 29 2.42 0.13 0.032 (0.399) 0.029 0.003 20 2.50 0.13 0.032 (0.399) 0.029 0.003 21 2.58 0.17 0.040 (0.387) 0.029 0.003 22 2.67 0.17 0.040 (0.388) 0.036 0.004 31 2.58 0.17 0.040 (0.388) 0.036 0.004 32 2.67 0.17 0.040 (0.388) 0.036 0.004 33 2.75 0.17 0.040 (0.388) 0.036 0.004 34 2.83 0.17 0.040 (0.388) 0.036 0.004 35 2.92 0.17 0.040 (0.375) 0.036 0.004 37 3.08 0.17 0.040 (0.375) 0.036 0.004 40 3.33 7.7 0.17 0.040 (0.375) 0.036 0.004 41 3.42 0.17 0.040 (0.375) 0.036 0.004 42 3.50 0.17 0.040 (0.375) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004 42 3.50 0.17 0.040 (0.370)	7	0.58		0.024	Ç			
10 0.83 0.13 0.032 (0.422) 0.029 0.003 11 0.92 0.13 0.032 (0.420) 0.029 0.003 12 1.00 0.13 0.032 (0.418) 0.029 0.003 13 1.08 0.10 0.024 (0.417) 0.022 0.002 14 1.17 0.10 0.024 (0.415) 0.022 0.002 15 1.25 0.10 0.024 (0.412) 0.022 0.002 16 1.33 0.10 0.024 (0.412) 0.022 0.002 17 1.42 0.10 0.024 (0.410) 0.022 0.002 18 1.50 0.10 0.024 (0.408) 0.022 0.002 19 1.58 0.10 0.024 (0.407) 0.022 0.002 20 1.67 0.10 0.024 (0.407) 0.022 0.002 21 1.75 0.10 0.024					(
11 0.92 0.13 0.032 (0.420) 0.029 0.003 12 1.00 0.13 0.032 (0.418) 0.029 0.003 13 1.08 0.10 0.024 (0.417) 0.022 0.002 14 1.17 0.10 0.024 (0.415) 0.022 0.002 15 1.25 0.10 0.024 (0.413) 0.022 0.002 16 1.33 0.10 0.024 (0.410) 0.022 0.002 17 1.42 0.10 0.024 (0.410) 0.022 0.002 18 1.50 0.10 0.024 (0.408) 0.022 0.002 19 1.58 0.10 0.024 (0.407) 0.022 0.002 20 1.67 0.10 0.024 (0.407) 0.022 0.002 21 1.75 0.10 0.024 (0.404) 0.022 0.002 21 1.75 0.10 0.024 (0.404) 0.022 0.003 23 1.92 0.13 0		0.83		0.032	(0.422)		
12 1.00 0.13 0.032 (0.417) 0.022 0.002 14 1.17 0.10 0.024 (0.415) 0.022 0.002 15 1.25 0.10 0.024 (0.413) 0.022 0.002 16 1.33 0.10 0.024 (0.412) 0.022 0.002 17 1.42 0.10 0.024 (0.410) 0.022 0.002 18 1.50 0.10 0.024 (0.408) 0.022 0.002 19 1.58 0.10 0.024 (0.408) 0.022 0.002 20 1.67 0.10 0.024 (0.407) 0.022 0.002 21 1.75 0.10 0.024 (0.407) 0.022 0.002 22 1.83 0.13 0.032 (0.405) 0.022 0.002 22 1.83 0.13 0.032 (0.404) 0.022 0.002 23 1.92 0.13 0.032 (0.402) 0.029 0.003 24 2.00 0.13 0.032 (0.399) 0.029 0.003 25 2.08 0.13 0.032 (0.399) 0.029 0.003 26 2.17 0.13 0.032 (0.397) 0.029 0.003 27 2.25 0.13 0.032 (0.395) 0.029 0.003 28 2.33 0.13 0.032 (0.394) 0.029 0.003 29 2.42 0.13 0.032 (0.399) 0.029 0.003 29 2.42 0.13 0.032 (0.399) 0.029 0.003 30 2.50 0.13 0.032 (0.399) 0.029 0.003 31 2.58 0.17 0.040 (0.387) 0.029 0.003 31 2.58 0.17 0.040 (0.388) 0.029 0.003 31 2.58 0.17 0.040 (0.386) 0.036 0.004 33 2.75 0.17 0.040 (0.386) 0.036 0.004 34 2.83 0.17 0.040 (0.388) 0.036 0.004 35 2.92 0.17 0.040 (0.388) 0.036 0.004 37 3.08 0.17 0.040 (0.388) 0.036 0.004 38 3.17 0.17 0.040 (0.388) 0.036 0.004 40 3.33 0.17 0.040 (0.375) 0.036 0.004 41 3.42 0.17 0.040 (0.375) 0.036 0.004 41 3.42 0.17 0.040 (0.375) 0.036 0.004 42 3.50 0.17 0.040 (0.375) 0.036 0.004 43 3.58 0.17 0.040 (0.372) 0.036 0.004 44 3.35 0.17 0.040 (0.373) 0.036 0.004					(
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26 2.17 0.13 0.032 (0.395) 0.029 0.003 27 2.25 0.13 0.032 (0.394) 0.029 0.003 28 2.33 0.13 0.032 (0.392) 0.029 0.003 29 2.42 0.13 0.032 (0.391) 0.029 0.003 30 2.50 0.13 0.032 (0.389) 0.029 0.003 31 2.58 0.17 0.040 (0.387) 0.036 0.004 32 2.67 0.17 0.040 (0.386) 0.036 0.004 32 2.67 0.17 0.040 (0.384) 0.036 0.004 34 2.83 0.17 0.040 (0.383) 0.036 0.004 35 2.92 0.17 0.040 (0.381) 0.036 0.004 36 3.00 0.17 0.040 (0.380) 0.036 0.004 37 3.08 0.17 0.040 (0.378) 0.036 0.004 38 3.17 0.17 0	25	2.08	0.13)	0.397)		
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32 2.67 0.17 0.040 (0.386) 0.036 0.004 33 2.75 0.17 0.040 (0.384) 0.036 0.004 34 2.83 0.17 0.040 (0.383) 0.036 0.004 35 2.92 0.17 0.040 (0.381) 0.036 0.004 36 3.00 0.17 0.040 (0.380) 0.036 0.004 37 3.08 0.17 0.040 (0.378) 0.036 0.004 38 3.17 0.17 0.040 (0.378) 0.036 0.004 39 3.25 0.17 0.040 (0.375) 0.036 0.004 40 3.33 0.17 0.040 (0.375) 0.036 0.004 41 3.42 0.17 0.040 (0.372) 0.036 0.004 42 3.50 0.17 0.040 (0.372) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004					(
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39 3.25 0.17 0.040 (0.375) 0.036 0.004 40 3.33 0.17 0.040 (0.375) 0.036 0.004 41 3.42 0.17 0.040 (0.372) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004 43 3.58 0.17 0.040 (0.370) 0.036 0.004					(
40 3.33 0.17 0.040 (0.373) 0.036 0.004 41 3.42 0.17 0.040 (0.372) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004 43 3.58 0.17 0.040 (0.369) 0.036 0.004					(
41 3.42 0.17 0.040 (0.372) 0.036 0.004 42 3.50 0.17 0.040 (0.370) 0.036 0.004 43 3.58 0.17 0.040 (0.360) 0.036 0.004	40	3.33		0.040	Ì	0.373)	0.036	0.004
43 3 58 0 17 0 040 (0.360) 0 036 0 004					(
75 5.50 0.17 0.040 (0.505) 0.050 0.004	43	3.58	0.17	0.040)	0.369)	0.036	0.004
44 3.67 0.17 0.040 (0.367) 0.036 0.004 45 3.75 0.17 0.040 (0.366) 0.036 0.004					(
45 3.75 0.17 0.040 (0.366) 0.036 0.004 46 3.83 0.20 0.048 (0.364) 0.043 0.005					(
47 3.92 0.20 0.048 (0.362) 0.043 0.005	47	3.92	0.20		Ç	0.362)		0.005
48 4.00 0.20 0.048 (0.361) 0.043 0.005 49 4.08 0.20 0.048 (0.359) 0.043 0.005								

501 512 513 513 513 513 513 513 513 513 513 513	4.17 4.25 4.42 4.50 4.58 4.67 5.00 4.58 4.75 5.50 5.50 5.50 5.50 5.50 6.00 6.12 5.50 6.00 6.12 5.50 6.00 6.12 5.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00	0.20 0.23 0.23 0.23 0.23 0.23 0.23 0.27 0.27 0.27 0.20 0.20 0.20 0.23 0.23 0.27 0.27 0.27 0.27 0.27 0.27 0.27 0.27	0.048 0.048 0.048 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.064 0.064 0.064 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.058 0.064 0.064 0.064 0.064 0.072 0.072 0.072 0.072 0.072 0.072 0.072 0.072 0.072 0.072 0.072 0.072 0.072 0.072 0.080	(0.358) (0.356) (0.355) (0.353) (0.352) (0.350) (0.349) (0.347) (0.346) (0.341) (0.341) (0.340) (0.338) (0.337) (0.335) (0.332) (0.331) (0.328) (0.327) (0.328) (0.327) (0.324) (0.322) (0.321) (0.319) (0.319) (0.319) (0.319) (0.317) (0.315) (0.317) (0.317) (0.317) (0.317) (0.317) (0.318) (0.317) (0.317) (0.317) (0.318) (0.317) (0.310) (0.303) (0.301) (0.303) (0.301) (0.303) (0.301) (0.303) (0.301) (0.303) (0.298) (0.299) (0.298) (0.299) (0.298) (0.292) (0.292) (0.292) (0.293) (0.293) (0.292) (0.293) (0.292) (0.293) (0.293) (0.292) (0.293) (0.293) (0.294) (0.293) (0.294) (0.293) (0.292) (0.293) (0.292) (0.293) (0.293) (0.294) (0.293) (0.296)	0.043 0.043 0.050 0.050 0.050 0.050 0.050 0.050 0.058 0.058 0.043 0.043 0.043 0.050 0.050 0.050 0.055 0.065 0.065 0.065 0.065 0.065 0.065 0.065 0.065 0.065 0.065 0.072 0.073 0.094 0.094 0.108 0.108 0.108 0.108 0.108 0.108 0.115	0.005 0.006
107 108 109 110 111 112 113	8.92 9.00 9.08 9.17 9.25 9.33 9.42	0.57 0.57 0.63 0.63 0.63 0.67	0.136 0.136 0.152 0.152 0.152 0.160 0.160	(0.277) (0.276) (0.274) (0.273) (0.272) (0.270) (0.269)	0.122 0.122 0.137 0.137 0.137 0.144 0.144	0.014 0.014 0.011 0.011 0.010 0.010

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200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220	16.67 16.75 16.83 16.92 17.00 17.08 17.17 17.25 17.33 17.42 17.50 17.58 17.67 17.75 17.83 17.92 18.00 18.08 18.17 18.25 18.33	0.10 0.10 0.10 0.10 0.17 0.17 0.17 0.17	0.024 0.024 0.024 0.024 0.024 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.032 0.032 0.032 0.032 0.032	(0.174) (0.173) (0.172) (0.171) (0.170) (0.169) (0.168) (0.167) (0.166) (0.165) (0.163) (0.163) (0.163) (0.163) (0.162) (0.161) (0.160) (0.159) (0.159) (0.158) (0.157) (0.156)	0.022 0.022 0.022 0.022 0.036 0.036 0.036 0.036 0.036 0.036 0.036 0.036 0.039 0.029 0.029 0.029 0.029	0.002 0.002 0.002 0.002 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.003 0.003 0.003 0.003
221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240	18.42 18.50 18.58 18.67 18.75 18.83 18.92 19.00 19.08 19.17 19.25 19.33 19.42 19.50 19.58 19.67 19.75 19.83 19.92 20.00	0.13 0.13 0.10 0.10 0.10 0.07 0.07 0.10 0.10 0.13 0.13 0.13 0.10 0.10 0.10	0.032 0.032 0.024 0.024 0.016 0.016 0.016 0.024 0.024 0.032 0.032 0.032 0.032 0.024 0.024 0.024 0.024 0.024	(0.156) (0.156) (0.155) (0.154) (0.153) (0.153) (0.152) (0.150) (0.150) (0.150) (0.149) (0.148) (0.148) (0.147) (0.146) (0.146) (0.146) (0.144) (0.144) (0.144) (0.143) (0.142)	0.029 0.029 0.022 0.022 0.014 0.014 0.014 0.022 0.022 0.022 0.029 0.029 0.029 0.029 0.022 0.022 0.022	0.003 0.003 0.002 0.002 0.002 0.002 0.002 0.002 0.003 0.003 0.003 0.002 0.002 0.002
241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259	20.08 20.17 20.25 20.33 20.42 20.50 20.58 20.67 20.75 20.83 20.92 21.00 21.08 21.17 21.25 21.33 21.42 21.50 21.58	0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.07 0.07 0.07 0.10 0.10 0.10 0.10	0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.016 0.016 0.016 0.024 0.024 0.024 0.024 0.024 0.024	(0.142) (0.141) (0.140) (0.139) (0.138) (0.138) (0.137)	0.022 0.022 0.022 0.022 0.022 0.022 0.022 0.022 0.014 0.014 0.014 0.022 0.022 0.022 0.022 0.022	0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002
260 261 262 263 264 265 266 267 268 269 270 271 272 273 274	21.67 21.75 21.83 21.92 22.00 22.08 22.17 22.25 22.33 22.42 22.50 22.58 22.67 22.75 22.83	0.10 0.10 0.07 0.07 0.07 0.10 0.10 0.10 0.07 0.07 0.07 0.07 0.07	0.024 0.024 0.016 0.016 0.016 0.024 0.024 0.024 0.016 0.016 0.016 0.016 0.016	(0.137) (0.136) (0.135) (0.135) (0.134) (0.134) (0.133) (0.132) (0.132) (0.131) (0.131) (0.131) (0.130) (0.129) (0.129) (0.129) (0.128) (0.128) (0.128) (0.127) (0.127) (0.127) (0.126)	0.022 0.022 0.014 0.014 0.014 0.022 0.022 0.022 0.014 0.014 0.014 0.014 0.014	0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002

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275 22.92 0.07
276 23.00 0.07
277 23.08 0.07
278 23.17 0.07
279 23.25 0.07
                                                         0.014
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280 23.33
                 0.07
                                                              0.014
281 23.42
282 23.50
                 0.07
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282
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0.014
283
     23.58
                 0.07
                                                                              0.002
284
     23.67
                 0.07
                                                                              0.002
                         0.016
0.016
0.016
0.016
285 23.75
                 0.07
                                                                              0.002
                                                                       0.002
0.002
0.002
286 23.83
              0.07
                                           ( 0.123)
( 0.123)
287
      23.92
                 0.07
288 24.00
                 0.07
                                                             0.014
                                                                            0.002
                  (Loss Rate Not Used)
               100.0
     Sum =
                                                                Sum = 2.6
        Flood volume = Effective rainfall 0.22(In)
       times area 0.6(Ac.)/[(In)/(Ft.)] =
Total soil loss = 1.78(In)
Total soil loss = 0.089(Ac.Ft)
Total rainfall = 2.00(In)
Flood volume = 469.4 Cubic Feet
Total soil loss = 3886.6 Cubic Feet
                                                                0.0(Ac.Ft)
        Peak flow rate of this hydrograph = 0.037(CFS)
        ______
        24 - HOUR STORM
Runoff Hydrograph
        ______
                     Hydrograph in 5 Minute intervals ((CFS))
 Time(h+m) Volume Ac.Ft Q(CFS) 0 2.5 5.0 7.5 10.0
                0.0000 0.00 Q
0.0000 0.00 Q
0.0000 0.00 Q
0.0000 0.00 Q
   0+10 0.0000
0+15 0.0000
0+20 0.0000
              0.0000
                          0.00 q
0.00 Q
   0+25
   0 + 30
               0.0001
                            0.00 Q
0.00 Q
   0 + 35
   0+40
               0.0001
               0.0001
                             0.00
   0 + 45
               0.0001
                             0.00
   0 + 50
   0 + 55
               0.0001
                              0.00
               0.0001
   1+ 0
                             0.00
              0.0001
0.0001
                             0.00
   1+ 5
   1+10
    1+15
               0.0001
                              0.00
   1+20
                0.0002
                              0.00
               0.0002
                              0.00
   1+25
               0.0002
                             0.00
   1+30
                0.0002
                              0.00
    1+35
               0.0002
   1+40
                              0.00
               0.0002
                              0.00
   1+45
   1+50
               0.0002
                              0.00
               0.0002
                             0.00
    1+55
               0.0002
                              0.00
    2+ 0
    2+ 5
                              0.00
    2+10
               0.0003
                             0.00 QV
                0.0003
                              0.00 QV
    2+15
               0.0003
                              0.00 QV
    2+20
               0.0003
    2+25
                             0.00 QV
    2+30
                0.0003
                              0.00
    2+35
                0.0003
                              0.00 QV
                0.0004
                              0.00 QV
    2+40
    2+45
                0.0004
                              0.00 QV
    2+50
               0.0004
                              0.00 QV
               0.0004
    2+55
                              0.00 QV
                              0.00 QV
    3+ 0
              0.0004
0.0005
0.0005
              0.0004 0.00 QV
0.0005 0.00 QV
0.0005 0.00 QV
0.0005 0.00 QV
    3+10
    3+15
    3+20
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3+25	
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22+10	0.0106	0.00	Q	I		l v	1
22+15	0.0106	0.00	Q	I		l v	1
22+20	0.0106	0.00	Q	l		l v	1
22+25	0.0107	0.00	Q	l		l v	1
22+30	0.0107	0.00	Q	l		l v	1
22+35	0.0107	0.00	Q	ļ		ļ v	1
22+40	0.0107	0.00	Q	<u>!</u>	ļ	ļ v	Ţ
22+45	0.0107	0.00	Q	<u>!</u>	ļ	ļ v	Ţ
22+50	0.0107	0.00	Q	ļ.	ļ.	ļ v	:
22+55	0.0107	0.00	Q	ļ.	ļ.	ļ v	:
23+ 0	0.0107	0.00	Q	ļ ļ	!	ļ v	:
23+ 5	0.0107	0.00	Q	!	!	ļ v	:
23+10	0.0107	0.00	Q	ļ		Į V	•
23+15	0.0107	0.00	Q	!		ļ v	:
23+20	0.0107	0.00	Q	!		Į V	.
23+25	0.0107	0.00	Q	!		Į V	. [
23+30	0.0107	0.00	Q	ļ		l v	:
23+35	0.0107	0.00	Q	ļ		l v	:
23+40	0.0108	0.00	Q	<u> </u>		l v	:
23+45 23+50	0.0108 0.0108	0.00	Q	ļ.		l v	:
23+50	0.0108	0.00	Q	-	I I	l V	:
	0.0108	0.00	Q	-	I I	l v	•
24+ 0	0.0108	0.00	Q	I	I	l v	1

24+ 0 0.0100 0.00 Q | | |

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018, Version 9.0 Study date 05/10/24 File: ONSITEPREE5242.out

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Riverside County Synthetic Unit Hydrology Method
      RCFC & WCD Manual date - April 1978
      Program License Serial Number 6586
       English (in-lb) Input Units Used
       English Rainfall Data (Inches) Input Values Used
       English Units used in output format
       22-0192 - MVCC PARK
      ONSITE UNIT HYDROGRAPH ANALYSIS - DMA E-5
      EXISITNG CONDITION, 2-YEAR 24-HOUR
      FN: ONSITEPREE5.OUT- RSB
      ______
      Drainage Area = 2.00(Ac.) = 0.003 Sq. Mi.
      Drainage Area for Depth-Area Areal Adjustment = 2.00(Ac.) =
0.003 Sq. Mi.
      Length along longest watercourse =
                                    627.00(Ft.)
      Length along longest watercourse measured to centroid = 278.00(Ft.)
      Length along longest watercourse = 0.119 Mi.
      Length along longest watercourse measured to centroid = 0.053 Mi.
      Difference in elevation = 24.00(Ft.)
Slope along watercourse = 202.1053 Ft./Mi.
      Average Manning's 'N' = 0.030
      Lag time = 0.038 Hr.
      Lag time = 2.29 Min.
      25% of lag time = 0.57 Min.
40% of lag time = 0.92 Min.
      Unit time = 5.00 Min.
      Duration of storm = 24 Hour(s)
      User Entered Base Flow = 0.00(CFS)
      2 YEAR Area rainfall data:
```

```
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
      2.00
                    2.00
                                         4.00
100 YEAR Area rainfall data:
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
                 5.40
                                   10.80
      2.00
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 5.400(In)
Point rain (area averaged) =
                           2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
Area(Ac.) Runoff Index Impervious 2.000 91.00 0.000
                            Impervious %
Total Area Entered = 2.00(Ac.)
RI
         Infil. Rate Impervious Adj. Infil. Rate Area%
     RI
                                                       F
AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.) (In/Hr)
             0.246
                      0.000
                                            1.000
91.0 79.8
                                 0.246
                                                    0.246
                                           Sum(F) = 0.246
Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900
   Unit Hydrograph
                   VALLEY S-Curve
______
             Unit Hydrograph Data
______
Unit time period Time % of lag Distribution Unit Hydrograph (hrs) Graph % (CFS)
                          46.393
42.111
8.099
3.397
   1 0.083
                 218,298
                                                 0.935

      2
      0.167
      436.595

      3
      0.250
      654.893

      4
      0.333
      873.191

                                                0.849
                                                0.163
                                                0.068
                   Sum = 100.000 Sum= 2.016
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time	Pattern	Storm Rain	Loss rate	(In./Hr)	Effective
	(Hr.)	Percent	(In/Hr)	Max	Low	(In/Hr)
1	0.08	0.07	0.016	(0.437)	0.014	0.002
2	0.17	0.07	0.016	(0.435)	0.014	0.002
3	0.25	0.07	0.016	(0.433)	0.014	0.002
4	0.33	0.10	0.024	(0.432)	0.022	0.002
5	0.42	0.10	0.024	(0.430)	0.022	0.002
6	0.50	0.10	0.024	(0.428)	0.022	0.002
7	0.58	0.10	0.024	(0.427)	0.022	0.002
8	0.67	0.10	0.024	(0.425)	0.022	0.002
9	0.75	0.10	0.024	(0.423)	0.022	0.002
10	0.83	0.13	0.032	(0.422)	0.029	0.003
11	0.92	0.13	0.032	(0.420)	0.029	0.003
12	1.00	0.13	0.032	(0.418)	0.029	0.003
13	1.08	0.10	0.024	(0.417)	0.022	0.002
14	1.17	0.10	0.024	(0.415)	0.022	0.002
15	1.25	0.10	0.024	(0.413)	0.022	0.002
16	1.33	0.10	0.024	(0.412)	0.022	0.002
17	1.42	0.10	0.024	(0.410)	0.022	0.002
18	1.50	0.10	0.024	(0.408)	0.022	0.002
19	1.58	0.10	0.024	(0.407) (0.405)	0.022	0.002
20 21	1.67 1.75	0.10 0.10	0.024 0.024	: :	0.022 0.022	0.002 0.002
22	1.83	0.10	0.032	(0.404) (0.402)	0.029	0.003
23	1.92	0.13	0.032	(0.400)	0.029	0.003
24	2.00	0.13	0.032	(0.399)	0.029	0.003
25	2.08	0.13	0.032	(0.397)	0.029	0.003
26	2.17	0.13	0.032	(0.395)	0.029	0.003
27	2.25	0.13	0.032	(0.394)	0.029	0.003
28	2.33	0.13	0.032	(0.392)	0.029	0.003
29	2.42	0.13	0.032	(0.391)	0.029	0.003
30	2.50	0.13	0.032	(0.389)	0.029	0.003
31	2.58	0.17	0.040	(0.387)	0.036	0.004
32	2.67	0.17	0.040	(0.386)	0.036	0.004
33	2.75	0.17	0.040	(0.384)	0.036	0.004
34	2.83	0.17	0.040	(0.383)	0.036	0.004
35	2.92	0.17	0.040	(0.381)	0.036	0.004
36	3.00	0.17	0.040	(0.380)	0.036	0.004
37	3.08	0.17	0.040	(0.378)	0.036	0.004
38	3.17	0.17	0.040	(0.376)	0.036	0.004
39	3.25	0.17	0.040	(0.375)	0.036	0.004
40	3.33	0.17	0.040	(0.373)	0.036	0.004
41	3.42	0.17	0.040	(0.372)	0.036	0.004
42	3.50	0.17	0.040	(0.370)	0.036	0.004
43	3.58	0.17	0.040	(0.369)	0.036	0.004
44	3.67	0.17	0.040	(0.367)	0.036	0.004
45	3.75	0.17	0.040	(0.366)	0.036	0.004

46	3.83	0.20	0.048	(0.364)	0.043	0.005
47	3.92	0.20	0.048	(0.362)	0.043	0.005
48	4.00	0.20	0.048	(0.361)	0.043	0.005
49	4.08	0.20	0.048	(0.359)	0.043	0.005
50	4.17	0.20	0.048	(0.358)	0.043	0.005
51	4.25	0.20	0.048	(0.356)	0.043	0.005
52	4.33	0.23	0.056	(0.355)	0.050	0.006
53	4.42	0.23	0.056	(0.353)	0.050	0.006
54	4.50	0.23	0.056	(0.352)	0.050	0.006
55	4.58	0.23	0.056	(0.350)	0.050	0.006
56	4.67	0.23	0.056	(0.349)	0.050	0.006
57	4.75	0.23	0.056	(0.347)	0.050	0.006
58	4.83	0.27	0.064	(0.346)	0.058	0.006
59	4.92	0.27	0.064	(0.344)	0.058	0.006
60	5.00	0.27	0.064	(0.343)	0.058	0.006
61	5.08	0.20	0.048	(0.341)	0.043	0.005
62	5.17	0.20	0.048	(0.340)	0.043	0.005
63	5.25	0.20	0.048	(0.338)	0.043	0.005
64	5.33	0.23	0.056	(0.337)	0.050	0.005
65	5.42	0.23	0.056	(0.335)	0.050	0.006
66	5.50	0.23	0.056	(0.334)	0.050	0.006
67	5.58	0.27	0.064	(0.332)	0.058	0.006
68	5.67	0.27	0.064	(0.331)	0.058	0.006
69	5.75	0.27	0.064	(0.331)	0.058	0.006
70	5.83	0.27	0.064	•	0.058	0.006
76 71	5.92	0.27	0.064 0.064	(0.328)	0.058	0.006
71 72	6.00	0.27	0.064 0.064	(0.327) (0.325)	0.058	0.006
72 73	6.08	0.30	0.072	(0.324)	0.065	0.007
73 74	6.17	0.30	0.072	(0.324)	0.065	0.007
74 75	6.25	0.30	0.072	(0.321)		0.007
75 76	6.33	0.30	0.072	(0.319)	0.065 0.065	0.007
76 77	6.42	0.30		(0.318)	0.065	0.007
			0.072	•	0.065	
78 79	6.50 6.58	0.30	0.072 0.080	(0.317)		0.007
		0.33		(0.315)	0.072	0.008
80 01	6.67	0.33	0.080	(0.314)	0.072	0.008 0.008
81 82	6.75	0.33	0.080	(0.312) (0.311)	0.072	
	6.83	0.33	0.080	,	0.072	0.008
83	6.92	0.33	0.080	(0.310)	0.072	0.008
84 or	7.00	0.33	0.080	(0.308)	0.072	0.008
85 86	7.08	0.33	0.080	(0.307)	0.072	0.008
86 87	7.17	0.33	0.080	(0.305)	0.072	0.008
87	7.25	0.33	0.080	(0.304)	0.072	0.008
88	7.33	0.37	0.088	(0.303)	0.079	0.009
89	7.42	0.37	0.088	(0.301)	0.079	0.009
90	7.50	0.37	0.088	(0.300)	0.079	0.009
91	7.58	0.40	0.096	(0.298)	0.086	0.010
92	7.67	0.40	0.096	(0.297)	0.086	0.010
93	7.75	0.40	0.096	(0.296)	0.086	0.010
94	7.83	0.43	0.104	(0.294)	0.094	0.010
95	7.92	0.43	0.104	(0.293)	0.094	0.010

96	8.00	0.43	0.104	(0.292)	0.094	0.010
97	8.08	0.50	0.120	į	0.290)	0.108	0.012
98	8.17	0.50	0.120	ì	0.289)	0.108	0.012
99	8.25	0.50	0.120	ì	0.288)	0.108	0.012
100	8.33	0.50	0.120	(0.286)	0.108	0.012
101	8.42	0.50	0.120	(0.285)	0.108	0.012
				(•		
102	8.50	0.50	0.120	(0.283)	0.108	0.012
103	8.58	0.53	0.128	(0.282)	0.115	0.013
104	8.67	0.53	0.128	(0.281)	0.115	0.013
105	8.75	0.53	0.128	(0.280)	0.115	0.013
106	8.83	0.57	0.136	(0.278)	0.122	0.014
107	8.92	0.57	0.136	(0.277)	0.122	0.014
108	9.00	0.57	0.136	(0.276)	0.122	0.014
109	9.08	0.63	0.152	(0.274)	0.137	0.015
110	9.17	0.63	0.152	(0.273)	0.137	0.015
111	9.25	0.63	0.152	(0.272)	0.137	0.015
112	9.33	0.67	0.160	(0.270)	0.144	0.016
113	9.42	0.67	0.160	(0.269)	0.144	0.016
114	9.50	0.67	0.160	(0.268)	0.144	0.016
115	9.58	0.70	0.168	(0.267)	0.151	0.017
116	9.67	0.70	0.168	į	0.265)	0.151	0.017
117	9.75	0.70	0.168)	0.264)	0.151	0.017
118	9.83	0.73	0.176)	0.263)	0.158	0.018
119	9.92	0.73	0.176	ì	0.261)	0.158	0.018
120	10.00	0.73	0.176	ì	0.260)	0.158	0.018
121	10.08	0.50	0.120	ì	0.259)	0.108	0.012
122	10.17	0.50	0.120	(0.258)	0.108	0.012
123	10.25	0.50	0.120	(0.256)	0.108	0.012
124	10.23	0.50	0.120	(0.255)	0.108	0.012
125	10.33	0.50	0.120		0.254)	0.108	0.012
126	10.42	0.50	0.120	(0.254)	0.108	0.012
				(
127	10.58	0.67	0.160	(0.251)	0.144	0.016
128	10.67	0.67	0.160	(0.250)	0.144	0.016
129	10.75	0.67	0.160	(0.249)	0.144	0.016
	10.83		0.160	(0.144	0.016
131	10.92	0.67	0.160	(0.247)	0.144	0.016
132	11.00	0.67	0.160	(0.245)		0.016
133	11.08	0.63	0.152	(0.244)	0.137	0.015
134	11.17	0.63	0.152	(0.243)		0.015
135	11.25	0.63	0.152	(0.242)		0.015
136	11.33	0.63	0.152	(0.241)	0.137	0.015
137	11.42	0.63	0.152	(0.239)	0.137	0.015
138	11.50	0.63	0.152	(0.238)	0.137	0.015
139	11.58	0.57	0.136	(0.237)	0.122	0.014
140	11.67	0.57	0.136	(0.236)	0.122	0.014
141	11.75	0.57	0.136	(0.235)	0.122	0.014
142	11.83	0.60	0.144	(0.233)	0.130	0.014
143	11.92	0.60	0.144	(0.130	0.014
144		0.60	0.144	į	0.231)		0.014
145	12.08	0.83	0.200	(0.230)		0.020
				•	•		

146	12.17	0.83	0.200	(0.229)		0.180	0.020
147	12.25	0.83	0.200	<u>;</u>	0.228)		0.180	0.020
148	12.33	0.87	0.208	ì	0.227)		0.187	0.021
149	12.42	0.87	0.208	ì	0.225)		0.187	0.021
150	12.50	0.87	0.208	ì	0.224)		0.187	0.021
151	12.58	0.93	0.224	ì	0.223)		0.202	0.022
152	12.67	0.93	0.224	ì	0.222)		0.202	0.022
153	12.75	0.93	0.224	ì	0.221)		0.202	0.022
154	12.83	0.97	0.232	ì	0.220)		0.209	0.023
155	12.92	0.97	0.232	ì	0.219)		0.209	0.023
156	13.00	0.97	0.232	ì	0.218)		0.209	0.023
157	13.08	1.13	0.272	`	0.216		0.245)	0.056
158	13.17	1.13	0.272		0.215	•	0.245)	0.057
159	13.25	1.13	0.272		0.214	•	0.245)	0.058
160	13.33	1.13	0.272		0.213	•	0.245)	0.059
161	13.42	1.13	0.272		0.212	•	0.245)	0.060
162	13.50	1.13	0.272		0.211	•	0.245)	0.061
163	13.58	0.77	0.184	(0.210)	`	0.166	0.018
164	13.67	0.77	0.184	ì	0.209)		0.166	0.018
165	13.75	0.77	0.184	ì	0.208)		0.166	0.018
166	13.83	0.77	0.184	ì	0.207)		0.166	0.018
167	13.92	0.77	0.184	ì	0.206)		0.166	0.018
168	14.00	0.77	0.184	ì	0.205)		0.166	0.018
169	14.08	0.90	0.216	ì	0.204)		0.194	0.022
170	14.17	0.90	0.216	ì	0.203)		0.194	0.022
171	14.25	0.90	0.216	ì	0.202)		0.194	0.022
172	14.33	0.87	0.208	ì	0.200)		0.187	0.021
173	14.42	0.87	0.208	ì	0.199)		0.187	0.021
174	14.50	0.87	0.208	ì	0.198)		0.187	0.021
175	14.58	0.87	0.208	Ì	0.197)		0.187	0.021
176	14.67	0.87	0.208	Ì	0.196)		0.187	0.021
177	14.75	0.87	0.208	ì	0.195)		0.187	0.021
178	14.83	0.83	0.200	ì	0.194)		0.180	0.020
179	14.92	0.83	0.200	ì	0.193)		0.180	0.020
	15.00		0.200)			0.180	
181	15.08	0.80	0.192)	0.191)		0.173	0.019
182	15.17	0.80	0.192	į	0.190)		0.173	0.019
183	15.25	0.80	0.192	į	0.189)		0.173	0.019
184	15.33	0.77	0.184	į	0.188)		0.166	0.018
185	15.42	0.77	0.184	<u>;</u>	0.188)		0.166	0.018
186	15.50	0.77	0.184	(0.187)		0.166	0.018
187	15.58	0.63	0.152	(0.186)		0.137	0.015
188	15.67	0.63	0.152	(0.185)		0.137	0.015
189	15.75	0.63	0.152	(0.184)		0.137	0.015
190	15.83	0.63	0.152	(0.183)		0.137	0.015
191	15.92	0.63	0.152	(0.182)		0.137	0.015
192	16.00	0.63	0.152	(0.181)		0.137	0.015
193	16.08	0.13	0.032	(0.180)		0.029	0.003
194	16.17	0.13	0.032	(0.179)		0.029	0.003
195	16.25	0.13	0.032	(0.178)		0.029	0.003

196	16.33	0.13	0.032	(0.177)	0.029	0.003
197	16.42	0.13	0.032	(0.176)	0.029	0.003
198	16.50	0.13	0.032	(0.175)	0.029	0.003
199	16.58	0.10	0.024	(0.175)	0.022	0.002
200	16.67	0.10	0.024	(0.174)	0.022	0.002
201	16.75	0.10	0.024	(0.173)	0.022	0.002
202	16.83	0.10	0.024	(0.172)	0.022	0.002
203	16.92	0.10	0.024	(0.171)	0.022	0.002
204	17.00	0.10	0.024	(0.170)	0.022	0.002
205	17.08	0.17	0.040	(0.169)	0.036	0.004
206	17.17	0.17	0.040	(0.168)	0.036	0.004
207	17.25	0.17	0.040	(0.168)	0.036	0.004
208	17.33	0.17	0.040	(0.167)	0.036	0.004
209	17.42	0.17	0.040	(0.166)	0.036	0.004
210	17.50	0.17	0.040	(0.165)	0.036	0.004
211	17.58	0.17	0.040	(0.164)	0.036	0.004
212	17.67	0.17	0.040	(0.163)	0.036	0.004
213	17.75	0.17	0.040	(0.163)	0.036	0.004
214	17.83	0.13	0.032	(0.162)	0.029	0.003
215	17.92	0.13	0.032	(0.161)	0.029	0.003
216	18.00	0.13	0.032	(0.160)	0.029	0.003
217	18.08	0.13	0.032	(0.159)	0.029	0.003
218	18.17	0.13	0.032	(0.159)	0.029	0.003
219	18.25	0.13	0.032	(0.158)	0.029	0.003
220	18.33	0.13	0.032	(0.157)	0.029	0.003
221	18.42	0.13	0.032	(0.156)	0.029	0.003
222	18.50	0.13	0.032	(0.156)	0.029	0.003
223	18.58	0.10	0.024	(0.155)	0.022	0.002
224	18.67	0.10	0.024	(0.154)	0.022	0.002
225	18.75	0.10	0.024	(0.153)	0.022	0.002
226	18.83	0.07	0.016	(0.153)	0.014	0.002
227	18.92	0.07	0.016	(0.152)	0.014	0.002
228	19.00	0.07	0.016	(0.151)	0.014	0.002
229	19.08	0.10	0.024	(0.150)	0.022	0.002
230	19.17	0.10	0.024	(0.150)	0.022	0.002
231	19.25	0.10	0.024	(0.149)	0.022	0.002
232 233	19.33 19.42	0.13	0.032	(0.148)	0.029	0.003
234	19.42	0.13	0.032 0.032	(0.148)	0.029	0.003
235	19.58	0.13 0.10	0.032	(0.147) 0.146)	0.029 0.022	0.003 0.002
236	19.67	0.10	0.024	(0.146)	0.022	0.002
237	19.75	0.10	0.024		0.145)	0.022	0.002
238	19.83	0.10	0.016	(0.143)	0.014	0.002
239	19.83	0.07	0.016	(0.144)	0.014	0.002
240	20.00	0.07	0.016	(0.143)	0.014	0.002
241	20.08	0.10	0.010	(0.143)	0.022	0.002
241	20.08	0.10	0.024	(0.142)	0.022	0.002
243	20.17	0.10	0.024	(0.142)	0.022	0.002
244	20.23	0.10	0.024	(0.141)	0.022	0.002
245	20.33	0.10	0.024	(0.141)	0.022	0.002
_ , _	20.72	0.10	0.027	(3.170)	0.022	0.002

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246
     20.50
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247
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286
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288
     24.00
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                                           0.123)
                                                         0.014
                                                                       0.002
                 (Loss Rate Not Used)
                                                                    2.6
    Sum =
               100.0
                                                          Sum =
       Flood volume = Effective rainfall
                                                 0.22(In)
                           2.0(Ac.)/[(In)/(Ft.)] =
                                                           0.0(Ac.Ft)
        times area
       Total soil loss =
                                1.78(In)
       Total soil loss =
                               0.297(Ac.Ft)
       Total rainfall =
                               2.00(In)
```

	od volume = al soil loss =	12955.1	Cubic Feet			
Pe	ak flow rate of	this hydrogra		0.121(CFS)		
+++	++++++++++++				++++++++	+++++
	D i	24 - H O U R u n o f f				
	Hydrog	graph in 5	Minute inte	ervals ((CI	FS))	
 Time(h+m)	Volume Ac.Ft	Q(CFS) 0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00 Q				
0+10	0.0000	0.00 Q				
0+15	0.0001	0.00 Q				1
0+20	0.0001	_	ļ	ļ	ļ	ļ
0+25	0.0001	•	ļ		ļ	ļ
0+30		0.00 Q			ļ	. !
		0.00 Q	ļ		ļ	ļ
		0.00 Q			!	ļ
		0.00 Q			ļ	- }
0+50	0.0003	_	ļ		ļ	
0+55 1+ 0	0.0003 0.0004	•	ļ	l I	ļ	
1+ 6		0.01 Q 0.01 Q			-	}
1+10		0.01 Q 0.01 Q			-	!
	0.0005	_	i	İ	i	ł
1+20	0.0005		i		i	i
1+25	0.0005	•	i		i	i
1+30	0.0006	•	i	İ	i	i
1+35	0.0006	_	į	İ	İ	İ
1+40	0.0006	0.00 Q	j	İ	İ	j
1+45	0.0007	0.00 Q	ĺ	j	ĺ	Ì
1+50	0.0007	0.01 Q				
1+55	0.0008	0.01 Q	ļ	ļ	ļ	ļ
2+ 0	0.0008	0.01 Q	ļ	ļ	ļ	ļ
2+ 5	0.0008	0.01 Q	ļ		ļ	ļ
2+10	0.0009	0.01 Q	ļ		ļ	ļ
2+15	0.0009	0.01 QV	ļ		ļ	ļ
2+20	0.0010	0.01 QV			- !	-
2+25	0.0010	0.01 QV		l I		l I
2+30 2+35	0.0011 0.0011	0.01 QV 0.01 QV		l		l I
2+35 2+40	0.0011	0.01 QV 0.01 QV		I I		l I
2+46	0.0012	0.01 QV 0.01 QV		I I	1	
2+43	0.0012	0.01 QV 0.01 QV				i
2+55	0.0013	0.01 QV 0.01 QV	i		1	
3+ 0	0.0014	0.01 QV		j	į	j
		=	-	-	-	•

3+ 5	0.0015	0.01	QV				
3+10	0.0015	0.01	QV				
3+15	0.0016	0.01	QV				
3+20	0.0016	0.01	QV				
3+25	0.0017	0.01	Qν	İ		ĺ	
3+30	0.0017	0.01	Qν	j		İ	
3+35	0.0018	0.01	Qν	j	ĺ	İ	
3+40	0.0018	0.01	Qν	j	İ	İ	
3+45	0.0019	0.01	Qν	i		İ	j
3+50	0.0020	0.01	Qν	İ		İ	j
3+55	0.0020	0.01	Qν	İ		İ	İ
4+ 0	0.0021	0.01	Q V	i		İ	İ
4+ 5	0.0022	0.01	Q V	i	İ	İ	
4+10	0.0022	0.01	Q V	i	İ	İ	
4+15	0.0023	0.01	Q V	i		i	
4+20	0.0024	0.01	Q V	i		i	
4+25	0.0024	0.01	Q V	i		İ	!
4+30	0.0025	0.01	Qν	i		İ	!
4+35	0.0026	0.01	Q V	i		İ	!
4+40	0.0027	0.01	Qν	i		İ	!
4+45	0.0027	0.01	Q V	i		İ	!
4+50	0.0028	0.01	Q V	i		İ	ı
4+55	0.0029	0.01	Q V	i		İ	ı
5+ 0	0.0030	0.01	Q V	i		İ	ı
5+ 5	0.0031	0.01	Q V	i	! 	i I	!
5+10	0.0031	0.01	Q V] 	! 	!
5+15	0.0032	0.01	Q V	<u> </u>] 	i I	!
5+20	0.0033	0.01	Q V] 	! 	!
5+25	0.0034	0.01	Q V	i	! 	! 	!
5+30	0.0034	0.01	Q V] 	! 	!
5+35	0.0035	0.01	Q V] 	! 	!
5+40	0.0036	0.01	Q V] 	! 	!
5+45	0.0037	0.01	Q V	i	! 	! 	!
5+50	0.0038	0.01	O V] 	! 	!
5+55	0.0039	0.01	Q V] 	! 	!
6+ 0	0.0040	0.01	Q V] 	! 	!
6+ 5	0.0041	0.01	Q V		! 	! 	!
6+10	0.0041	0.01	Q V] 	! 	!
6+15	0.0043	0.01	Q V] 	! 	!
6+20	0.0044	0.01	Q V] 	! 	!
6+25	0.0045	0.01	Q V] 	! 	!
6+30	0.0046	0.01	Q V] 	! 	!
6+35	0.0047	0.02	Q V] 	! 	!
6+40	0.0048	0.02	Q V] 	1 	!
6+45	0.0049	0.02	Q V] 	1 	!
6+50	0.0049	0.02	Q V] 	I 	I
6+56	0.0051	0.02	Q V] 	I 	l
0+33 7+ 0	0.0051	0.02	Q V] 	I 	l
7+ 0 7+ 5	0.0053	0.02	Q V] 	I 	l
7+ 5 7+10	0.0054	0.02	•] 	 	l
1+10	0.0034	0.02	Q V	I	I	I	I

7+15	0.0056	0.02	Q	V		
7+20	0.0057	0.02	Q	V		
7+25	0.0058	0.02	Q	V		
7+30	0.0059	0.02	Q	V	i i	į
7+35	0.0060	0.02	Q	v j	i i	j
7+40	0.0062	0.02	Q	v į	i i	į
7+45	0.0063	0.02	Q	v İ	i i	į
7+50	0.0064	0.02	Q	v İ	i i	į
7+55	0.0066	0.02	Q	v	i i	i
8+ 0	0.0067	0.02	Q	v	i i	i
8+ 5	0.0069	0.02	Q	v	i i	i
8+10	0.0071	0.02	Q	v	i i	i
8+15	0.0072	0.02	Q	v	i i	i
8+20	0.0074	0.02	Q	ν	i i	i
8+25	0.0074	0.02	Q	ν̈	i i	
8+30	0.0077	0.02	Q	ν̈	i i	İ
8+35	0.0077	0.02	Q	v V	1 1	
8+40	0.0075	0.02	Q	v V		
8+45	0.0081	0.03		v		
8+50	0.0084	0.03	Q	V V		
			Q			
8+55	0.0086	0.03	Q	V		l
9+ 0	0.0088	0.03	Q	V		l
9+ 5	0.0090	0.03	Q	V	!	
9+10	0.0092	0.03	Q	V	! !	
9+15	0.0094	0.03	Q	V	!!!	
9+20	0.0096	0.03	Q	V	!!!	
9+25	0.0099	0.03	Q	V	!!!	
9+30	0.0101	0.03	Q	V	!!!	
9+35	0.0103	0.03	Q	V	!!!	
9+40	0.0105	0.03	Q	V	!!	
9+45	0.0108	0.03	Q	V	!!	
9+50	0.0110	0.03	Q	V	!!!	
9+55	0.0113	0.04	Q	V	!!!	ļ
10+ 0	0.0115	0.04	Q	V		
10+ 5	0.0117	0.03	Q	V		
10+10	0.0119	0.03	Q	V		
10+15	0.0121	0.02	Q	V		
10+20	0.0122	0.02	Q	V		
10+25	0.0124	0.02	Q	V		
10+30	0.0126	0.02	Q	V		
10+35	0.0127	0.03	Q	V		
10+40	0.0130	0.03	Q	V		
10+45	0.0132	0.03	Q	V		
10+50	0.0134	0.03	Q	į v	į į	İ
10+55	0.0136	0.03	Q	į v	į į	İ
11+ 0	0.0138	0.03	Q	į v	j j	j
11+ 5	0.0141	0.03	Q	į v	į į	j
11+10	0.0143	0.03	Q	į v	j i	j
11+15	0.0145	0.03	Q	į v	j i	j
11+20	0.0147	0.03	Q	į v	j i	i
				1		'

11+25						
11+35	11+25	0.0149	0.03	Q	V	1 1
11+40	11+30	0.0151	0.03	Q	V	İ
11+40	11+35	0.0153	0.03	Q	V	İ
11+45	11+40	0.0155	0.03	Q	V	İ
11+50	11+45	0.0157	0.03		į v į	i i
11+55	11+50	0.0159	0.03		į v į	i i
12+ 0	11+55	0.0161	0.03		į v į	i i
12+5	12+ 0	0.0163			i v i	i i
12+10					i v i	i i
12+15	12+10	0.0168			i v i	i i
12+20	12+15				i vi	i i
12+25 0.0176 0.04 Q V <	12+20	0.0174	0.04		i vi	i i
12+30 0.0179 0.04 Q V <		0.0176				i i
12+35 0.0182 0.04 Q V <	12+30					i i
12+40 0.0185 0.04 Q V						i i
12+45 0.0189 0.05 Q V V 12+50 0.0192 0.05 Q V V 12+55 0.0195 0.05 Q V V 13+ 0 0.0198 0.05 Q V V 13+ 5 0.0203 0.08 Q V V 13+10 0.0211 0.11 Q V V 13+20 0.0218 0.11 Q V V 13+20 0.0227 0.12 Q V V 13+30 0.0243 0.12 Q V V 13+35 0.0249 0.08 Q V V 13+40 0.0252 0.05 Q V V 13+45 0.0255 0.04 Q V V 13+50 0.0257 0.04 Q V V 13+55 0.0260 0.04 Q V V 14+ 0 0.0265 0.04 Q V V 14+5 0.0265 0.04 Q V V 14+20 0.0271 0.04 Q V V 14+25						i i
12+50					V	i i
12+55						i i
13+ 0 0.0198 0.05 Q V I3+ 5 0.0203 0.08 Q V I3+10 0.0211 0.11 Q V I3+15 0.0218 0.11 Q V V I3+20 0.0227 0.12 Q V V I3+25 0.0235 0.12 Q V V I3+30 0.0243 0.12 Q V V I3+35 0.0249 0.08 Q V V I3+40 0.0252 0.05 Q V V I3+45 0.0255 0.04 Q V V I3+55 0.0255 0.04 Q V V I3+55 0.0260 0.04 Q V V I4+6 0.0262 0.04 Q V V I4+5 0.0265 0.04 Q V V I4+10 0.0268 0.04 Q V V I4+20 0.0271 0.04 Q V V I4+20 0.0274 0.04 Q V V I4+35 0.0280 0.04 Q V V I4+35 0.0280 0.04 Q V V I4+40 0.0286 0.04 Q V V I4+40 0.0286 0.04 Q V V					: :	i i
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13+10 0.0211 0.11 Q V 13+15 0.0218 0.11 Q V 13+20 0.0227 0.12 Q V 13+25 0.0235 0.12 Q V 13+30 0.0243 0.12 Q V 13+35 0.0249 0.08 Q V 13+35 0.0249 0.08 Q V 13+40 0.0252 0.05 Q V 13+40 0.0252 0.05 Q V 13+45 0.0255 0.04 Q V 13+45 0.0257 0.04 Q V 13+55 0.0260 0.04 Q V V 13+55 0.0260 0.04 Q V V V 14+4 0.0262 0.04 Q V V V 14+5 0.0265 0.04 Q V V V 14+10 0.0268 0.04 Q V V V 14+20 0.0271 0.04 Q V V V 14+25 0.0277 0.04 Q V V V 14+35 0.0283 0.04 <td></td> <td></td> <td></td> <td></td> <td>•</td> <td>i i</td>					•	i i
13+15 0.0218 0.11 Q V 13+20 0.0227 0.12 Q V 13+25 0.0235 0.12 Q V 13+30 0.0243 0.12 Q V 13+35 0.0249 0.08 Q V 13+35 0.0249 0.08 Q V 13+40 0.0252 0.05 Q V 13+45 0.0255 0.04 Q V 13+45 0.0255 0.04 Q V 13+50 0.0257 0.04 Q V 14+40 0.0266 0.04 Q V 14+40 0.0266 0.04 Q V 14+40 0.0265 0.04 Q V 14+10 0.0268 0.04 Q V 14+10 0.0268 0.04 Q V 14+20 0.0271 0.04 Q V 14+20 0.0274 0.04 Q V 14+30 0.0280 0.04 Q V 14+35 0.0283 0.04 Q V 14+450 0.0289 0.04 Q V 14+450 0.0289 0.04 Q					! !	iii
13+20 0.0227 0.12 Q V 13+25 0.0235 0.12 Q V 13+30 0.0243 0.12 Q V 13+35 0.0249 0.08 Q V 13+35 0.0249 0.08 Q V V 13+40 0.0252 0.05 Q V V 13+45 0.0255 0.04 Q V V 13+45 0.0255 0.04 Q V V 13+50 0.0257 0.04 Q V V 13+55 0.0260 0.04 Q V V 14+60 0.0262 0.04 Q V V 14+10 0.0265 0.04 Q V V 14+10 0.0268 0.04 Q V V 14+15 0.0271 0.04 Q V V 14+20 0.0274 0.04 Q V V 14+25 0.0277 0.04 Q V V 14+30 0.0280 0.04 Q V V 14+40 0.0286 0.04 Q V V 14+40 0.0286 <td></td> <td></td> <td></td> <td></td> <td>!</td> <td>iii</td>					!	iii
13+25 0.0235 0.12 Q V 13+30 0.0243 0.12 Q V 13+35 0.0249 0.08 Q V 13+40 0.0252 0.05 Q V 13+45 0.0255 0.04 Q V V 13+45 0.0257 0.04 Q V V 13+50 0.0257 0.04 Q V V 13+55 0.0260 0.04 Q V V 14+60 0.0262 0.04 Q V V 14+10 0.0265 0.04 Q V V 14+11 0.0265 0.04 Q V V 14+11 0.0268 0.04 Q V V 14+11 0.0271 0.04 Q V V 14+20 0.0274 0.04 Q V V 14+25 0.0277 0.04 Q V V 14+30 0.0280 0.04 Q V V 14+40 0.0286 0.04 Q V V 14+40 0.0286 0.04 Q V V 14+50 0.0291 <td></td> <td></td> <td></td> <td></td> <td>;</td> <td>iii</td>					;	iii
13+30 0.0243 0.12 Q V V 13+35 0.0249 0.08 Q V V 13+40 0.0252 0.05 Q V V 13+45 0.0255 0.04 Q V V 13+50 0.0257 0.04 Q V V 13+55 0.0260 0.04 Q V V 14+ 0 0.0262 0.04 Q V V 14+ 5 0.0265 0.04 Q V V 14+10 0.0268 0.04 Q V V 14+15 0.0271 0.04 Q V V 14+20 0.0274 0.04 Q V V 14+30 0.0280 0.04 Q V V 14+35 0.0280 0.04 Q V V 14+40 0.0286 0.04 Q V V 14+45 0.0289 0.04 Q V V 15+0					! ! !	, i i
13+35 0.0249 0.08 Q V 13+40 0.0252 0.05 Q V 13+45 0.0255 0.04 Q V 13+50 0.0257 0.04 Q V 13+55 0.0260 0.04 Q V 14+0 0.0262 0.04 Q V 14+10 0.0265 0.04 Q V 14+10 0.0268 0.04 Q V 14+15 0.0268 0.04 Q V 14+15 0.0271 0.04 Q V 14+20 0.0274 0.04 Q V 14+20 0.0274 0.04 Q V 14+30 0.0280 0.04 Q V 14+30 0.0280 0.04 Q V 14+40 0.0286 0.04 Q V 14+45 0.0286 0.04 Q V 14+50 0.0291 0.04 Q V 15+6 0.0294 0.04 Q V 15+6 0.0300 0.04 Q V 15+10 0.0302 0.04 Q V 15+20 0.0308 0.04 Q <t< td=""><td></td><td></td><td></td><td></td><td></td><td>•</td></t<>						•
13+40 0.0252 0.05 Q V 13+45 0.0255 0.04 Q V 13+50 0.0257 0.04 Q V 13+50 0.0257 0.04 Q V 13+55 0.0260 0.04 Q V 14+0 0.0262 0.04 Q V 14+15 0.0265 0.04 Q V 14+10 0.0268 0.04 Q V 14+15 0.0268 0.04 Q V 14+15 0.0271 0.04 Q V 14+20 0.0274 0.04 Q V 14+20 0.0274 0.04 Q V 14+30 0.0280 0.04 Q V 14+30 0.0280 0.04 Q V 14+35 0.0283 0.04 Q V 14+40 0.0286 0.04 Q V 14+40 0.0286 0.04 Q V 14+55 0.0291 0.04 Q V 15+6 0.0297 0.04 Q V 15+6 0.0300 0.04 Q V 15+10 0.0305 0.04 Q <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>						
13+45 0.0255 0.04 Q V V 13+50 0.0257 0.04 Q V V 13+55 0.0260 0.04 Q V V 14+ 0 0.0262 0.04 Q V V 14+ 5 0.0265 0.04 Q V V 14+10 0.0268 0.04 Q V V 14+15 0.0271 0.04 Q V V 14+20 0.0274 0.04 Q V V 14+30 0.0280 0.04 Q V V 14+30 0.0280 0.04 Q V V 14+40 0.0283 0.04 Q V V 14+45 0.0289 0.04 Q V V 14+50 0.0291 0.04 Q V V 15+ 0 0.0297 0.04 Q V V 15+10 0.0302 0.04 Q V V 15+20 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>: :</td></td<>						: :
13+50 0.0257 0.04 Q V 13+55 0.0260 0.04 Q V 14+0 0.0262 0.04 Q V 14+10 0.0265 0.04 Q V 14+10 0.0268 0.04 Q V 14+10 0.0268 0.04 Q V 14+15 0.0271 0.04 Q V 14+20 0.0274 0.04 Q V 14+25 0.0277 0.04 Q V 14+25 0.0277 0.04 Q V 14+30 0.0280 0.04 Q V 14+35 0.0283 0.04 Q V 14+40 0.0286 0.04 Q V 14+45 0.0289 0.04 Q V 14+50 0.0291 0.04 Q V 14+55 0.0294 0.04 Q V 15+6 0.0300 0.04 Q V 15+10 0.0302 0.04 Q V 15+15 0.0305 0.04 Q V 15+20 0.0308 0.04 Q V V 15+25 0.0310 0.04 <						! !
13+55 0.0260 0.04 Q V 14+ 0 0.0262 0.04 Q V 14+ 5 0.0265 0.04 Q V 14+10 0.0268 0.04 Q V 14+15 0.0271 0.04 Q V 14+20 0.0274 0.04 Q V 14+25 0.0277 0.04 Q V 14+30 0.0280 0.04 Q V 14+35 0.0283 0.04 Q V 14+40 0.0286 0.04 Q V 14+45 0.0289 0.04 Q V 14+50 0.0291 0.04 Q V 15+0 0.0297 0.04 Q V 15+10 0.0302 0.04 Q V 15+20 0.0308 0.04 Q V 15+25 0.0310 0.04 Q V						
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14+ 5 0.0265 0.04 Q V V 14+10 0.0268 0.04 Q V V 14+15 0.0271 0.04 Q V V 14+20 0.0274 0.04 Q V V 14+25 0.0277 0.04 Q V V 14+25 0.0277 0.04 Q V V 14+30 0.0280 0.04 Q V V 14+35 0.0283 0.04 Q V V 14+40 0.0286 0.04 Q V V 14+45 0.0286 0.04 Q V V 14+50 0.0289 0.04 Q V V 14+50 0.0291 0.04 Q V V 15+0 0.0297 0.04 Q V V 15+0 0.0302 0.04 Q V V 15+15 0.0305 0.04 Q V V 15+20 0.0308 0.04 Q V V 15+25 0.0310 0.04 Q V V 15+25 0.0310 0.04 Q V V 15+25 0.0310 0.04 Q V V 15+25 0.0310 0.04 Q V V 15+25 0.0310						!!
14+10 0.0268 0.04 Q V V 14+15 0.0271 0.04 Q V 14+20 0.0274 0.04 Q V 14+20 0.0274 0.04 Q V 14+25 0.0277 0.04 Q V 14+25 0.0277 0.04 Q V 14+30 0.0280 0.04 Q V 14+35 0.0283 0.04 Q V 14+35 0.0283 0.04 Q V 14+40 0.0286 0.04 Q V 14+40 0.0286 0.04 Q V 14+45 0.0289 0.04 Q V 14+50 0.0291 0.04 Q V 14+50 0.0291 0.04 Q V 15+60 0.0297 0.04 Q V 15+10 0.0302 0.04 Q V 15+10 0.0305 0.04 Q V 15+20 0.0308 0.04 Q V 15+20 0.0310 0.04 Q V 15+25 0.0310 0.04 Q V 0 V 15+25 0.0						
14+15 0.0271 0.04 Q V V 14+20 0.0274 0.04 Q V V 14+25 0.0277 0.04 Q V V 14+30 0.0280 0.04 Q V V 14+35 0.0283 0.04 Q V V 14+40 0.0286 0.04 Q V V 14+50 0.0289 0.04 Q V V 14+50 0.0291 0.04 Q V V 15+ 0 0.0297 0.04 Q V V 15+ 10 0.0302 0.04 Q V V 15+15 0.0305 0.04 Q V V 15+20 0.0308 0.04 Q V V 15+25 0.0310 0.04 Q V V						
14+20 0.0274 0.04 Q V 14+25 0.0277 0.04 Q V 14+30 0.0280 0.04 Q V 14+35 0.0283 0.04 Q V 14+40 0.0286 0.04 Q V 14+45 0.0289 0.04 Q V 14+50 0.0291 0.04 Q V 14+55 0.0294 0.04 Q V 15+0 0.0297 0.04 Q V 15+10 0.0302 0.04 Q V 15+15 0.0305 0.04 Q V 15+20 0.0308 0.04 Q V 15+25 0.0310 0.04 Q V				•		• •
14+25 0.0277 0.04 Q V IV 14+30 0.0280 0.04 Q IV IV 14+35 0.0283 0.04 Q IV IV 14+40 0.0286 0.04 Q IV IV 14+45 0.0289 0.04 Q IV IV 14+50 0.0291 0.04 Q IV IV 15+0 0.0294 0.04 Q IV IV 15+0 0.0297 0.04 Q IV IV 15+10 0.0300 0.04 Q IV IV 15+20 0.0308 0.04 Q IV IV 15+25 0.0310 0.04 Q IV IV						•
14+30 0.0280 0.04 Q V 14+35 0.0283 0.04 Q V 14+40 0.0286 0.04 Q V 14+45 0.0289 0.04 Q V 14+50 0.0291 0.04 Q V 15+ 0 0.0294 0.04 Q V 15+ 0 0.0297 0.04 Q V 15+10 0.0302 0.04 Q V 15+15 0.0305 0.04 Q V 15+20 0.0308 0.04 Q V 15+25 0.0310 0.04 Q V					i i	·
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15+25 0.0310 0.04 Q V				-	j j	!!
					j j	
					j j	
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15+35	0.0315	0.03	Q			V	
15+40	0.0317	0.03	Q	j	j	j v j	
15+45	0.0319	0.03	Q	j	j	i v i	
15+50	0.0322	0.03	Q	j	j	i v i	
15+55	0.0324	0.03	Q	į		i v i	
16+ 0	0.0326	0.03	Q	į		i v i	
16+ 5	0.0327	0.02	Q	į		i v i	
16+10	0.0328	0.01	Q	İ		i v i	
16+15	0.0328	0.01	Q	İ		i v i	
16+20	0.0329	0.01	Q	İ		i vi	
16+25	0.0329	0.01	Q	į		i v i	
16+30	0.0330	0.01	Q	İ		i vi	
16+35	0.0330	0.01	Q	İ		i vi	
16+40	0.0330	0.01	Q	İ		i v i	
16+45	0.0331	0.00	Q	İ		i v i	
16+50	0.0331	0.00	Q	İ		i vi	
16+55	0.0331	0.00	Q	i	İ	i vi	
17+ 0	0.0332	0.00	Q	i	İ	i vi	
17+ 5	0.0332	0.01	Q	i	İ	i vi	
17+10	0.0333	0.01	Q	i	İ	i vi	
17+15	0.0333	0.01	Q	i	İ	i vi	
17+20	0.0334	0.01	Q	i		i vi	
17+25	0.0334	0.01	Q	i		i vi	
17+30	0.0335	0.01	Q	i		i vi	
17+35	0.0335	0.01	Q	i	İ	i vi	
17+40	0.0336	0.01	Q	i		i vi	
17+45	0.0337	0.01	Q	i		i vi	
17+50	0.0337	0.01	Q	i		i vi	
17+55	0.0337	0.01	Q	i	İ	i vi	
18+ 0	0.0338	0.01	Q	İ		i vi	
18+ 5	0.0338	0.01	Q	İ		i vi	
18+10	0.0339	0.01	Q	į	İ	i vi	
18+15	0.0339	0.01	Q	į	İ	i vi	
18+20	0.0340	0.01	Õ	į	İ	i vi	
18+25	0.0340	0.01	Q	į	İ	i vi	
18+30	0.0341	0.01	Q	j	j	i vi	
18+35	0.0341	0.01	Q	j	j	j v j	
18+40	0.0341	0.01	Q	j	j	j vj	
18+45	0.0342	0.00	Q	j	j	j vj	
18+50	0.0342	0.00	Q	j	j	j vj	
18+55	0.0342	0.00	Q	j	İ	į v į	
19+ 0	0.0342	0.00	Q	j	j	j vj	
19+ 5	0.0343	0.00	Q	j	j	j vj	
19+10	0.0343	0.00	Q	j	İ	j vj	
19+15	0.0343	0.00	Q	j	İ	j vj	
19+20	0.0344	0.01	Q	į	į	j vj	
19+25	0.0344	0.01	Q	į	į	i vi	
19+30	0.0345	0.01	Q	j	İ	j vj	
19+35	0.0345	0.01	Q	j	İ	j vj	
19+40	0.0345	0.01	Q	j	j	j vj	
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19+45	0.0346	0.00	Q		V
19+50	0.0346	0.00	Q		V
19+55	0.0346	0.00	Q		V
20+ 0	0.0346	0.00	Q	i i	į v į
20+ 5	0.0347	0.00	Q	i i	i vi
20+10	0.0347	0.00	Q	i i	i vi
20+15	0.0347	0.00	Q	i i	i vi
20+20	0.0348	0.00	Q	i i	i vi
20+25	0.0348	0.00	Q	i i	i vi
20+30	0.0348	0.00	Q	i i	i vi
20+35	0.0349	0.00	Q	i i	i vi
20+40	0.0349	0.00	Q	i i	i vi
20+45	0.0349	0.00	Q	i i	i vi
20+50	0.0350	0.00	Q	i i	i vi
20+55	0.0350	0.00	Q	i i	i vi
21+ 0	0.0350	0.00	Q	i i	i vi
21+ 5	0.0350	0.00	Q	i i	i vi
21+10	0.0351	0.00	Q	i i	i vi
21+15	0.0351	0.00	Q	i i	i vi
21+20	0.0351	0.00	Q	i i	j vj
21+25	0.0352	0.00	Q	i i	j vj
21+30	0.0352	0.00	Q	i i	i vi
21+35	0.0352	0.00	Q	i i	i vi
21+40	0.0352	0.00	Q	i i	i vi
21+45	0.0353	0.00	Q	i i	i vi
21+50	0.0353	0.00	Q	iii	i vi
21+55	0.0353	0.00	Q	iii	i vi
22+ 0	0.0353	0.00	Q	iii	i vi
22+ 5	0.0354	0.00	Q	i i	i vi
22+10	0.0354	0.00	Q	iii	i vi
22+15	0.0354	0.00	Q	i i	i vi
22+20	0.0355	0.00	Q	i i	i vi
22+25	0.0355	0.00	Q	i i	i vi
22+30	0.0355	0.00	Q	i i	i vi
22+35	0.0355	0.00	Q	i i	j vj
22+40	0.0356	0.00	Q	i i	j vj
22+45	0.0356	0.00	Q	i i	j vj
22+50	0.0356	0.00	Q	i i	i vi
22+55	0.0356	0.00	Q	i i	j vj
23+ 0	0.0356	0.00	Q	i i	j vj
23+ 5	0.0357	0.00	Q	i i	j vj
23+10	0.0357	0.00	Q	i i	i vi
23+15	0.0357	0.00	Q	i i	j vj
23+20	0.0357	0.00	Q	j i	i vi
23+25	0.0358	0.00	Q	j j	i vi
23+30	0.0358	0.00	Q	į į	i vi
23+35	0.0358	0.00	Q	i i	i vi
23+40	0.0358	0.00	Q	į į	i vi
23+45	0.0358	0.00	Q	j i	i vi
23+50	0.0359	0.00	Q	į į	v
-			·	1	- 1

23+55	0.0359	0.00	Q		٧
24+ 0	0.0359	0.00	Q		V
24+ 5	0.0359	0.00	Q		٧
24+10	0.0359	0.00	Q		V
24+15	0.0359	0.00	Q		٧

Unit Hydrograph Analysis

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```
Riverside County Synthetic Unit Hydrology Method
       RCFC & WCD Manual date - April 1978
       Program License Serial Number 6586
        English (in-lb) Input Units Used
        English Rainfall Data (Inches) Input Values Used
        English Units used in output format
       ______
       22-0192 - MVCC PARK
       ONSITE UNIT HYDROGRAPH ANALYSIS - DMA W-1
       EXISITNG CONDITION, 2-YEAR 24-HOUR
       FN: ONSITEPREW1.OUT- RSB
       ______
      Drainage Area = 4.90(Ac.) = 0.008 Sq. Mi.
      Drainage Area for Depth-Area Areal Adjustment = 4.90(Ac.) =
0.008 Sq. Mi.
       Length along longest watercourse =
                                      206.00(Ft.)
       Length along longest watercourse measured to centroid = 195.00(Ft.)
       Length along longest watercourse = 0.039 Mi.
       Length along longest watercourse measured to centroid = 0.037 Mi.
       Difference in elevation = 30.00(Ft.)
      Slope along watercourse = 768.9320 Ft./Mi.
      Average Manning's 'N' = 0.030
       Lag time = 0.017 Hr.
       Lag time = 1.02 Min.
      25% of lag time = 0.25 Min.
40% of lag time = 0.41 Min.
      Unit time = 5.00 Min.
       Duration of storm = 24 Hour(s)
      User Entered Base Flow = 0.00(CFS)
       2 YEAR Area rainfall data:
```

```
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
      4.90
                  2.00
                                    9.80
100 YEAR Area rainfall data:
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
                               26.46
      4.90
               5.40
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 5.400(In)
Point rain (area averaged) =
                        2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
Area(Ac.) Runoff Index Impervious 4.900 91.00 0.000
                         Impervious %
Total Area Entered = 4.90(Ac.)
RI
        Infil. Rate Impervious Adj. Infil. Rate Area%
                                                 F
    RI
AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.) (In/Hr)
                  0.000 0.246
            0.246
                                       1.000
91.0 79.8
                                             0.246
                                      Sum(F) = 0.246
Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900
   Unit Hydrograph
                 VALLEY S-Curve
______
           Unit Hydrograph Data
______
Unit time period Time % of lag Distribution Unit Hydrograph (hrs) Graph % (CFS)
   1 0.083
              491.501 70.495
983.001 29.505
                                          3.481
   2 0.167
                 Sum = 100.000 Sum= 4.938
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time	Pattern	Storm Rain	Loss rate(In./Hr)	Effective
00	(Hr.)	Percent	(In/Hr)	Max	Low	(In/Hr)
1	ò.08´	0.07	0.016	(0.437)	0.014	0.002
2	0.17	0.07	0.016	(0.435)	0.014	0.002
3	0.25	0.07	0.016	(0.433)	0.014	0.002
4	0.33	0.10	0.024	(0.432)	0.022	0.002
5	0.42	0.10	0.024	(0.430)	0.022	0.002
6	0.50	0.10	0.024	(0.428)	0.022	0.002
7	0.58	0.10	0.024	(0.427)	0.022	0.002
8	0.67	0.10	0.024	(0.425)	0.022	0.002
9	0.75	0.10	0.024	(0.423)	0.022	0.002
10	0.83	0.13	0.032	(0.422)	0.029	0.003
11	0.92	0.13	0.032	(0.420)	0.029	0.003
12	1.00	0.13	0.032	(0.418)	0.029	0.003
13	1.08	0.10	0.024	(0.417)	0.022	0.002
14	1.17	0.10	0.024	(0.415)	0.022	0.002
15	1.25	0.10	0.024	(0.413)	0.022	0.002
16	1.33	0.10	0.024	(0.412)	0.022	0.002
17	1.42	0.10	0.024	(0.410)	0.022	0.002
18	1.50	0.10	0.024	(0.408)	0.022	0.002
19	1.58	0.10	0.024	(0.407)	0.022	0.002
20	1.67	0.10	0.024	(0.405)	0.022	0.002
21	1.75	0.10	0.024	(0.404)	0.022	0.002
22	1.83	0.13	0.032	(0.402)	0.029	0.003
23	1.92	0.13	0.032	(0.400)	0.029	0.003
24	2.00	0.13	0.032	(0.399)	0.029	0.003
25	2.08	0.13	0.032	(0.397)	0.029	0.003
26	2.17	0.13	0.032	(0.395)	0.029	0.003
27	2.25	0.13	0.032	(0.394)	0.029	0.003
28	2.33	0.13	0.032	(0.392)	0.029	0.003
29	2.42	0.13	0.032	(0.391)	0.029	0.003
30	2.50	0.13	0.032	(0.389)	0.029	0.003
31	2.58	0.17	0.040	(0.387)	0.036	0.004
32	2.67	0.17	0.040	(0.386)	0.036	0.004
33	2.75	0.17	0.040	(0.384)	0.036	0.004
34	2.83	0.17	0.040	(0.383)	0.036	0.004
35	2.92	0.17	0.040	(0.381)	0.036	0.004
36	3.00	0.17	0.040	(0.380)	0.036	0.004
37	3.08	0.17	0.040	(0.378)	0.036	0.004
38	3.17	0.17	0.040	(0.376)	0.036	0.004
39	3.25	0.17	0.040	(0.375)	0.036	0.004
40	3.33	0.17	0.040	(0.373)	0.036	0.004
41	3.42	0.17	0.040	(0.372)	0.036	0.004
42	3.50	0.17	0.040	(0.370)	0.036	0.004
43	3.58	0.17	0.040	(0.369)	0.036	0.004
44	3.67	0.17	0.040	(0.367)	0.036	0.004
45	3.75	0.17	0.040	(0.366)	0.036	0.004
46	3.83	0.20	0.048	(0.364)	0.043	0.005
47	3.92	0.20	0.048	(0.362)	0.043	0.005

48	4.00	0.20	0.048	(0.361)	0.043	0.005
49	4.08	0.20	0.048	į	0.359)	0.043	0.005
50	4.17	0.20	0.048	7	0.358)	0.043	0.005
				(•		
51	4.25	0.20	0.048	(0.356)	0.043	0.005
52	4.33	0.23	0.056	(0.355)	0.050	0.006
53	4.42	0.23	0.056	(0.353)	0.050	0.006
54	4.50	0.23	0.056	(0.352)	0.050	0.006
55	4.58	0.23	0.056	(0.350)	0.050	0.006
56	4.67	0.23	0.056	(0.349)	0.050	0.006
57	4.75	0.23	0.056	Ċ	0.347)	0.050	0.006
58	4.83	0.27	0.064	ì	0.346)	0.058	0.006
59	4.92	0.27	0.064	ì	0.344)	0.058	0.006
60	5.00	0.27	0.064	(0.343)	0.058	0.006
				(•		
61	5.08	0.20	0.048	(0.341)	0.043	0.005
62	5.17	0.20	0.048	(0.340)	0.043	0.005
63	5.25	0.20	0.048	(0.338)	0.043	0.005
64	5.33	0.23	0.056	(0.337)	0.050	0.006
65	5.42	0.23	0.056	(0.335)	0.050	0.006
66	5.50	0.23	0.056	(0.334)	0.050	0.006
67	5.58	0.27	0.064	(0.332)	0.058	0.006
68	5.67	0.27	0.064	(0.331)	0.058	0.006
69	5.75	0.27	0.064	į	0.330)	0.058	0.006
70	5.83	0.27	0.064	ì	0.328)	0.058	0.006
71	5.92	0.27	0.064	ì	0.327)	0.058	0.006
72	6.00	0.27	0.064	(0.325)	0.058	0.006
73	6.08	0.30	0.072	(0.324)	0.065	0.007
				(•		
74 75	6.17	0.30	0.072	(0.322)	0.065	0.007
75	6.25	0.30	0.072	(0.321)	0.065	0.007
76	6.33	0.30	0.072	(0.319)	0.065	0.007
77	6.42	0.30	0.072	(0.318)	0.065	0.007
78	6.50	0.30	0.072	(0.317)	0.065	0.007
79	6.58	0.33	0.080	(0.315)	0.072	0.008
80	6.67	0.33	0.080	(0.314)	0.072	0.008
81	6.75	0.33	0.080	(0.312)	0.072	0.008
82	6.83	0.33	0.080	į	0.311)	0.072	0.008
83	6.92	0.33	0.080	į	0.310)	0.072	0.008
84	7.00	0.33	0.080	(0.308)	0.072	0.008
85	7.08	0.33	0.080	(0.307)	0.072	0.008
86	7.17	0.33	0.080	(0.305)	0.072	0.008
87	7.25	0.33	0.080	(0.304)	0.072	0.008
				(•		
88	7.33	0.37	0.088	(0.303)	0.079	0.009
89	7.42	0.37	0.088	(0.301)	0.079	0.009
90	7.50	0.37	0.088	(0.300)	0.079	0.009
91	7.58	0.40	0.096	(0.298)	0.086	0.010
92	7.67	0.40	0.096	(0.297)	0.086	0.010
93	7.75	0.40	0.096	(0.296)	0.086	0.010
94	7.83	0.43	0.104	(0.294)	0.094	0.010
95	7.92	0.43	0.104	(0.293)	0.094	0.010
96	8.00	0.43	0.104	(0.292)	0.094	0.010
97	8.08	0.50	0.120	Ì	0.290)	0.108	0.012
				`	,		

98	8.17	0.50	0.120	((0.289)	0.108	0.012
99	8.25	0.50	0.120	•	3.288)	0.108	0.012
100	8.33	0.50	0.120	•	2.286)	0.108	0.012
101	8.42	0.50	0.120	•	a.285)	0.108	0.012
102	8.50	0.50	0.120	•	3.283)	0.108	0.012
103	8.58	0.53	0.128	•	3.282)	0.115	0.012
				•	•		
104	8.67	0.53	0.128		2.281)	0.115	0.013
105	8.75	0.53	0.128	:	0.280)	0.115	0.013
106	8.83	0.57	0.136	•	2.278)	0.122	0.014
107	8.92	0.57	0.136	•	ð.277)	0.122	0.014
108	9.00	0.57	0.136	•	3. 276)	0.122	0.014
109	9.08	0.63	0.152	•	ð.274)	0.137	0.015
110	9.17	0.63	0.152	((ð.273)	0.137	0.015
111	9.25	0.63	0.152	((3.272)	0.137	0.015
112	9.33	0.67	0.160	((0.270)	0.144	0.016
113	9.42	0.67	0.160		3.269)	0.144	0.016
114	9.50	0.67	0.160	•	2.268)	0.144	0.016
115	9.58	0.70	0.168	•	3.267)	0.151	0.017
116	9.67	0.70	0.168	•	a.265)	0.151	0.017
117	9.75	0.70	0.168	•	2.264)	0.151	0.017
118	9.83	0.73	0.176	•	a.263)	0.158	0.018
119	9.92	0.73	0.176	•	3.261)	0.158	0.018
120	10.00	0.73	0.176	•	3.260)	0.158	0.018
121	10.08	0.50		•	3.259)	0.108	0.013
			0.120	-	-		
122	10.17	0.50	0.120	•	2.258)	0.108	0.012
123	10.25	0.50	0.120	•	0.256)	0.108	0.012
124	10.33	0.50	0.120	•	0.255)	0.108	0.012
125	10.42	0.50	0.120		0.254)	0.108	0.012
126	10.50	0.50	0.120	:	0.253)	0.108	0.012
127	10.58	0.67	0.160	•	ð.251)	0.144	0.016
128	10.67	0.67	0.160	•	0.250)	0.144	0.016
129	10.75	0.67	0.160	((ð.249)	0.144	0.016
130	10.83	0.67	0.160	((3.248)	0.144	0.016
131	10.92	0.67	0.160	((ð.247)	0.144	0.016
132	11.00	0.67	0.160	((0.245)	0.144	0.016
133	11.08	0.63	0.152		a.244)		0.015
134	11.17	0.63	0.152		3.243)	0.137	0.015
135	11.25	0.63	0.152	•	a.242)		0.015
136	11.33	0.63	0.152	•	a.241)		0.015
137	11.42	0.63	0.152	•	a.239)		0.015
138	11.50	0.63	0.152	•	a.238)		0.015
139	11.58	0.57	0.136		3.237)	0.122	0.014
140	11.67	0.57	0.136		(a).236)	0.122	0.014
				-			0.014
141 142	11.75	0.57	0.136	•	(a. 222)	0.122	0.014
	11.83	0.60	0.144	•	0.233)	0.130	
143	11.92	0.60	0.144	•	0.232)		0.014
144	12.00	0.60			0.231)		0.014
145		0.83		•	0.230)		0.020
146			0.200		0.229)		0.020
147	12.25	0.83	0.200	((0.228)	0.180	0.020

148	12.33	0.87	0.208	(0.227)		0.187	0.021
149	12.42	0.87	0.208	(0.225)		0.187	0.021
150	12.50	0.87	0.208	(0.224)		0.187	0.021
151	12.58	0.93	0.224	(0.223)		0.202	0.022
152	12.67	0.93	0.224	(0.222)		0.202	0.022
153	12.75	0.93	0.224	(0.221)		0.202	0.022
154	12.83	0.97	0.232	(0.220)		0.209	0.023
155	12.92	0.97	0.232	(0.219)		0.209	0.023
156	13.00	0.97	0.232	(0.218)		0.209	0.023
157	13.08	1.13	0.272		0.216	(0.245)	0.056
158	13.17	1.13	0.272		0.215	(0.057
159	13.25	1.13	0.272		0.214	(-	0.058
160	13.33	1.13	0.272		0.213	(-	0.059
161	13.42	1.13	0.272		0.212	(•	0.060
162	13.50	1.13	0.272		0.211	(•	0.061
163	13.58	0.77	0.184	(0.210)		0.166	0.018
164	13.67	0.77	0.184	(0.209)		0.166	0.018
165	13.75	0.77	0.184	(0.208)		0.166	0.018
166	13.83	0.77	0.184	(0.207)		0.166	0.018
167	13.92	0.77	0.184	(0.206)		0.166	0.018
168	14.00	0.77	0.184	(0.205)		0.166	0.018
169	14.08	0.90	0.216	(0.204)		0.194	0.022
170	14.17	0.90	0.216	(0.203)		0.194	0.022
171	14.25	0.90	0.216	(0.202)		0.194	0.022
172	14.33	0.87	0.208	(0.200)		0.187	0.021
173	14.42	0.87	0.208	(0.199)		0.187	0.021
174	14.50	0.87	0.208	(0.198)		0.187	0.021
175	14.58	0.87	0.208	(0.197)		0.187	0.021
176	14.67	0.87	0.208	(0.196)		0.187	0.021
177	14.75	0.87	0.208	(0.195)		0.187	0.021
178	14.83	0.83	0.200	(0.194)		0.180	0.020
179	14.92	0.83	0.200	(0.193)		0.180	0.020
180	15.00 15.08	0.83	0.200	(0.192)		0.180	0.020
181		0.80	0.192	(0.191)		0.173	0.019
182 183	15.17	0.80	0.192	(0.190) 0.189)		0.173	0.019
	15.25	0.80	0.192	(•		0.173	0.019
184 185	15.33 15.42	0.77	0.184	(0.188)		0.166	0.018
186	15.42	0.77 0.77	0.184 0.184	(0.188) 0.187)		0.166	0.018 0.018
187	15.58	0.63	0.152	(0.187)		0.166 0.137	0.015
188	15.67	0.63	0.152	(0.185)		0.137	0.015
189	15.75	0.63	0.152	(0.183)		0.137	0.015
190	15.83	0.63	0.152	(0.184)		0.137	0.015
191	15.83	0.63	0.152	(0.183)		0.137	0.015
192	16.00	0.63	0.152	(0.182)		0.137	0.015
193	16.08	0.03	0.032	(0.181)		0.029	0.003
194	16.17	0.13	0.032	(0.179)		0.029	0.003
195	16.25	0.13	0.032	(0.178)		0.029	0.003
196	16.33	0.13	0.032	(0.173)		0.029	0.003
197	16.42	0.13	0.032	(0.176)		0.029	0.003
/	10.72	0.10	0.052	(0.170)		0.025	0.003

198	16.50	0.13	0.032	(0.175)	0.029	0.003
199	16.58	0.10	0.024	(0.175)	0.022	0.002
200	16.67	0.10	0.024	(0.174)	0.022	0.002
201	16.75	0.10	0.024	(0.173)	0.022	0.002
202	16.83	0.10	0.024	(0.172)	0.022	0.002
203	16.92	0.10	0.024	(0.171)	0.022	0.002
204	17.00	0.10	0.024	(0.170)	0.022	0.002
205	17.08	0.17	0.040	(0.169)	0.036	0.004
206	17.17	0.17	0.040	(0.168)	0.036	0.004
207	17.25	0.17	0.040	(0.168)	0.036	0.004
208	17.33	0.17	0.040	(0.167)	0.036	0.004
209	17.42	0.17	0.040	(0.166)	0.036	0.004
210	17.50	0.17	0.040	(0.165)	0.036	0.004
211	17.58	0.17	0.040	(0.164)	0.036	0.004
212	17.67	0.17	0.040	(0.163)	0.036	0.004
213	17.75	0.17	0.040	(0.163)	0.036	0.004
214	17.83	0.13	0.032	(0.162)	0.029	0.003
215	17.92	0.13	0.032	(0.161)	0.029	0.003
216	18.00	0.13	0.032	(0.160)	0.029	0.003
217	18.08	0.13	0.032	(0.159)	0.029	0.003
218	18.17	0.13	0.032	(0.159)	0.029	0.003
219	18.25	0.13	0.032	(0.158)	0.029	0.003
220	18.33	0.13	0.032	(0.157)	0.029	0.003
221	18.42	0.13	0.032	(0.156)	0.029	0.003
222	18.50	0.13	0.032	(0.156)	0.029	0.003
223	18.58	0.10	0.024	(0.155)	0.022	0.002
224	18.67	0.10	0.024	(0.154)	0.022	0.002
225	18.75	0.10	0.024	(0.153)	0.022	0.002
226	18.83	0.07	0.016	(0.153)	0.014	0.002
227	18.92	0.07	0.016	(0.152)	0.014	0.002
228	19.00	0.07	0.016	(0.151)	0.014	0.002
229 230	19.08	0.10 0.10	0.024 0.024	(0.150) 0.150)	0.022	0.002 0.002
231	19.17 19.25	0.10	0.024	(0.130)	0.022 0.022	0.002
232	19.23	0.10	0.024	(0.149)	0.022	0.002
232	19.33	0.13	0.032	(0.148)	0.029	0.003
234	19.50	0.13	0.032	(0.148)	0.029	0.003
235	19.58	0.13	0.032	(0.147)	0.023	0.003
236	19.67	0.10	0.024	(0.146)	0.022	0.002
237	19.75	0.10	0.024	(0.145)	0.022	0.002
238	19.83	0.10	0.016	(0.144)	0.014	0.002
239	19.92	0.07	0.016	(0.144)	0.014	0.002
240	20.00	0.07	0.016	(0.143)	0.014	0.002
241	20.08	0.10	0.024	(0.142)	0.022	0.002
242	20.03	0.10	0.024	(0.142)	0.022	0.002
243	20.25	0.10	0.024	(0.141)	0.022	0.002
244	20.23	0.10	0.024	(0.141)	0.022	0.002
245	20.42	0.10	0.024	(0.140)	0.022	0.002
246	20.50	0.10	0.024	(0.139)	0.022	0.002
247	20.58	0.10	0.024	(0.139)	0.022	0.002
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288
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                                          0.123)
                                                        0.014
                                                                      0.002
                 (Loss Rate Not Used)
    Sum =
               100.0
                                                         Sum =
                                                                    2.6
       Flood volume = Effective rainfall
                                                 0.22(In)
        times area
                          4.9(Ac.)/[(In)/(Ft.)] =
                                                          0.1(Ac.Ft)
       Total soil loss =
                                1.78(In)
       Total soil loss =
                              0.729(Ac.Ft)
       Total rainfall =
                              2.00(In)
       Flood volume =
                              3833.7 Cubic Feet
       Total soil loss =
                                31739.9 Cubic Feet
```

Pea	ak flow rate o	f this hydrog 	raph =	0.300(CFS)		
+++-	++++++++++++++++++++++++++++++++++++++		R STO	R M	++++++++	·+++++
	Hydro	graph in 5	Minute int	ervals ((C	FS))	
Time(h+m)	Volume Ac.Ft	Q(CFS) 0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.01 O	I		 	1

TIME (TITM)	VOIUIILE AC.FC	Q(CF3) 0		2.3	3.0	7.5	10.0
0+ 5	0.0000	0.01	Q					
0+10	0.0001	0.01	Q					
0+15	0.0001	0.01	Q					
0+20	0.0002	0.01	Q					
0+25	0.0003	0.01	Q					
0+30	0.0004	0.01	Q					
0+35	0.0005	0.01	Q					
0+40	0.0005	0.01	Q					
0+45	0.0006	0.01	Q					
0+50	0.0007	0.01	Q					
0+55	0.0008	0.02	Q					
1+ 0	0.0009	0.02	Q					
1+ 5	0.0010	0.01	Q					
1+10	0.0011	0.01	Q					
1+15	0.0012	0.01	Q					ļ
1+20	0.0013	0.01	Q					1
1+25	0.0014	0.01	Q					
1+30	0.0014	0.01	Q					
1+35	0.0015	0.01	Q					ļ
1+40	0.0016	0.01	Q					1
1+45	0.0017	0.01	Q					
1+50	0.0018	0.01	Q					
1+55	0.0019	0.02	Q					ļ
2+ 0	0.0020	0.02	Q					1
2+ 5	0.0021	0.02	Q					ļ
2+10	0.0022	0.02	QV					ļ
2+15	0.0023	0.02	-					ļ
2+20	0.0024	0.02	_					ļ
2+25	0.0026	0.02	-					ļ
2+30	0.0027	0.02	QV					ļ
2+35	0.0028	0.02	QV					ļ
2+40	0.0029	0.02	QV					ļ
2+45	0.0031	0.02	QV					ļ
2+50	0.0032	0.02	QV					ļ
2+55	0.0033	0.02	QV					ļ
3+ 0	0.0035	0.02	QV					!
3+ 5	0.0036	0.02	QV					ļ
3+10	0.0037	0.02	QV					

3+15 0.0039 0.02 QV 3+20 0.0040 0.02 QV 3+30 0.0043 0.02 QV 3+35 0.0044 0.02 QV 3+40 0.0046 0.02 QV 3+45 0.0047 0.02 QV 3+50 0.0049 0.02 QV 4+0 0.0650 0.02 QV 4+5 0.0050 0.02 QV 4+10 0.0055 0.02 QV 4+15 0.0057 0.02 QV 4+20 0.0059 0.03 QV 4+20 0.0059 0.03 QV 4+25 0.0060 0.03 QV 4+30 0.0062 0.03 QV 4+440 0.0066 0.03 QV 4+45 0.0068 0.03 QV 4+50 0.0068 0.03 QV 4+50 0.0070 0.03 QV 5+10 0.0074 0.03 QV 5+20 0.0080								
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6+ 0 0.0098 0.03 Q V	5+55	0.0096	0.03		V	İ	İ	į
6+ 5				-		i	i	i
6+10 0.0103 0.04 Q V				-		i	i	i
6+15				•		i	j	i
6+20				•		i	j	i
6+25				_		i		i
6+30				•		i		¦
6+35						i		l
6+40 0.0118 0.04 Q V						i		l
6+45							i I	l I
6+50 0.0124 0.04 Q V								l
6+55 0.0126 0.04 Q V						1		-
7+ 0 0.0129 0.04 Q V						1		ļ
7+ 5						 	 	l I
7+10 0.0134 0.04 Q V								
7+15 0.0137 0.04 Q V								-
								-
/+20 0.0140 0.04 Q V								ļ
	/+20	0.0140	0.04	Q	V			1

7+25	0.0143	0.04	Q	V		ļ
7+30	0.0146	0.04	Q	V		Į
7+35	0.0149	0.05	Q	V		1
7+40	0.0153	0.05	Q	V		1
7+45	0.0156	0.05	Q	V		
7+50	0.0159	0.05	Q	V		
7+55	0.0163	0.05	Q	V		1
8+ 0	0.0166	0.05	Q	V	1	I
8+ 5	0.0170	0.06	Q	V	1	I
8+10	0.0174	0.06	Q	V	i i	İ
8+15	0.0178	0.06	Q	V İ	i i	İ
8+20	0.0183	0.06	Q	v İ	i i	İ
8+25	0.0187	0.06	Q	νİ	i i	İ
8+30	0.0191	0.06	Q	νİ	i i	į
8+35	0.0195	0.06	Q	νİ	i i	į
8+40	0.0199	0.06	Q	νİ	i i	į
8+45	0.0204	0.06	Q	νİ	i i	i
8+50	0.0208	0.07	Q	νİ	i i	i
8+55	0.0213	0.07	Q	νİ	i i	i
9+ 0	0.0217	0.07	Q	v	i i	i
9+ 5	0.0223	0.07	Q	V	i i	i
9+10	0.0228	0.08	Q	V	i i	i
9+15	0.0233	0.08	Q	V	i i	i
9+20	0.0238	0.08	Q	V	i i	i
9+25	0.0244	0.08	Q	ĮV	i i	i
9+30	0.0249	0.08	Q	V	;	i
9+35	0.0255	0.08	Q	V V	; ;	<u> </u>
9+40	0.0260	0.08	Q	V V	; ;	<u> </u>
9+45	0.0266	0.08	Q	V	; ;	-
9+50	0.0272	0.00	Q	v V	; ;	-
9+55	0.0278	0.09		V V	; ;	-
10+ 0	0.0284	0.09	Q Q	V V	; ;	-
10+ 5				V	; ;	-
10+ 3	0.0289	0.07	Q	V V	! !	-
10+10	0.0293 0.0297	0.06	Q	l V		<u> </u>
		0.06	Q	ļ ·	 	<u> </u>
10+20	0.0301	0.06	Q	V	 	!
10+25	0.0305	0.06	Q	V		
10+30	0.0309	0.06	Q	V		-
10+35	0.0314	0.07	Q	V		-
10+40	0.0320	0.08	Q	V		-
10+45	0.0325	0.08	Q	V		-
10+50	0.0331	0.08	Q	l V	!!	- !
10+55	0.0336	0.08	Q	V		
11+ 0	0.0341	0.08	Q	V		
11+ 5	0.0347	0.08	Q	V	ļ ļ	ļ
11+10	0.0352	0.08	Q	l V	ļ ļ	ļ
11+15	0.0357	0.08	Q	l V		ļ
11+20	0.0362	0.08	Q	l V	ļ ļ	ļ
11+25	0.0367	0.08	Q	l V	ļ ļ	ļ
11+30	0.0373	0.08	Q	V	ı l	l

11+35	0.0377	0.07	Q	l v	,	1 1	
11+40	0.0382	0.07	Q	i v		i i	
11+45	0.0387	0.07	Q	i v	, j	i i	
11+50	0.0391	0.07	Q	i v		i i	
11+55	0.0396	0.07	Q		v İ	i i	
12+ 0	0.0401	0.07	Q		v	i i	
12+ 5	0.0407	0.09	Q		v i	i i	
12+10	0.0414	0.10	Q	:	v İ	i i	
12+15	0.0421	0.10	Q	i	v	i i	
12+20	0.0428	0.10	Q	İ	νİ	i i	
12+25	0.0435	0.10	Q	i	v	i i	
12+30	0.0442	0.10	Q	i	V	i i	
12+35	0.0450	0.11	Q	i	V	i i	
12+40	0.0457	0.11	Q	i	V	1 1	
12+45	0.0465	0.11	Q	i	ľv	1 1	
12+50	0.0473	0.11	Q	i	Ĭv	1 1	
12+55	0.0481	0.11	Q		IV		
13+ 0	0.0488	0.11	Q		ľV		
13+ 5	0.0504	0.23	Q		i v		
13+10	0.0523	0.28	Q Q		ľv		
13+15	0.0543	0.28	_		ľv		
13+15		0.29	Q		ľv		
13+26	0.0563		Q		ľv		
	0.0583	0.29	Q	l	l v		
13+30	0.0604	0.30	Q				
13+35	0.0614	0.15	Q		l v		
13+40	0.0620	0.09	Q		l v	! !	
13+45	0.0627	0.09	Q		l V		
13+50	0.0633	0.09	Q		l V		
13+55	0.0639	0.09	Q		Į v	!	
14+ 0	0.0646	0.09	Q		V	: :	
14+ 5	0.0653	0.10	Q		Į v	: :	
14+10	0.0660	0.11	Q		Į v		
14+15	0.0667	0.11	Q		ļ	V	
14+20	0.0674	0.10	Q			V	
14+25	0.0681	0.10	Q		ļ	V	
14+30	0.0689	0.10	Q		ļ	V	
14+35	0.0696	0.10	Q		ļ	V	
14+40	0.0703	0.10	Q		ļ	V	
14+45	0.0710	0.10	Q		ļ	V	
14+50	0.0717	0.10	Q		ļ	V	
14+55	0.0723	0.10	Q		ļ	V	
15+ 0	0.0730	0.10	Q		ļ	V	
15+ 5	0.0737	0.10	Q			V	
15+10	0.0743	0.09	Q			V	
15+15	0.0750	0.09	Q			V	
15+20	0.0756	0.09	Q			V	
15+25	0.0763	0.09	Q	ļ	ļ	V	
15+30	0.0769	0.09	Q	ļ	ļ	V	
15+35	0.0774	0.08	Q	ļ	ļ	v	
15+40	0.0779	0.08	Q	l		V	

15+45	0.0785	0.08	Q	1		V	
15+50	0.0790	0.08	Q	j	į	i v i	
15+55	0.0795	0.08	Q	j	į	i v i	
16+ 0	0.0800	0.08	Q	į	į	i v i	
16+ 5	0.0802	0.03	Q	j	į	i v i	
16+10	0.0804	0.02	Q	j	į	i v i	
16+15	0.0805	0.02	Q	j	į	i v i	
16+20	0.0806	0.02	Q	į	į	i v i	
16+25	0.0807	0.02	Q	i	į	i v i	
16+30	0.0808	0.02	Q	i	į	i v i	
16+35	0.0809	0.01	Q	j	į	i v i	
16+40	0.0810	0.01	Q	i	i	i v i	
16+45	0.0810	0.01	Q	i	į	i v i	
16+50	0.0811	0.01	Q	i	į	i v i	
16+55	0.0812	0.01	Q	i	į	i v i	
17+ 0	0.0813	0.01	Q	j	į	i v i	
17+ 5	0.0814	0.02	Q	į	į	i vi	
17+10	0.0815	0.02	Q	i	į	i vi	
17+15	0.0817	0.02	Q	j	į	i vi	
17+20	0.0818	0.02	Q	j	į	i vi	
17+25	0.0820	0.02	Q	i	i	i vi	
17+30	0.0821	0.02	Q	i	į	i vi	
17+35	0.0822	0.02	Q	i	į	i vi	
17+40	0.0824	0.02	Q	i	į	i vi	
17+45	0.0825	0.02	Q	i	i	i vi	
17+50	0.0826	0.02	Q	j	į	i vi	
17+55	0.0827	0.02	Q	j	į	i vi	
18+ 0	0.0828	0.02	Q	į	į	j v j	
18+ 5	0.0829	0.02	Q	į	į	j v j	
18+10	0.0831	0.02	Q	j	į	j v j	
18+15	0.0832	0.02	Q	ĺ	İ	j v j	
18+20	0.0833	0.02	Q			V	
18+25	0.0834	0.02	Q			V	
18+30	0.0835	0.02	Q			V	
18+35	0.0836	0.01	Q			V	
18+40	0.0837	0.01	Q			V	
18+45	0.0837	0.01	Q			V	
18+50	0.0838	0.01	Q			V	
18+55	0.0839	0.01	Q			V	
19+ 0	0.0839	0.01	Q			V	
19+ 5	0.0840	0.01	Q			V	
19+10	0.0841	0.01	Q			V	
19+15	0.0841	0.01	Q			V	
19+20	0.0842	0.01	Q			V	
19+25	0.0844	0.02	Q			V	
19+30	0.0845	0.02	Q			V	
19+35	0.0846	0.01	Q			V	
19+40	0.0846	0.01	Q			V	
19+45	0.0847	0.01	Q			V	
19+50	0.0848	0.01	Q			V	

19+55	0.0848	0.01	Q	1	1 1	V	
20+ 0	0.0849	0.01	Q	İ	j i	v i	
20+ 5	0.0850	0.01	Q	i	i i	v İ	
20+10	0.0850	0.01	Q	i	i i	v İ	
20+15	0.0851	0.01	Q	i	i i	v	
20+20	0.0852	0.01	Q	i	i	v	
20+25	0.0853	0.01	Q	i	i	v	
20+30	0.0854	0.01	Q	İ	;	v I	
20+35	0.0855	0.01	Q	İ		v I	
20+40	0.0855	0.01	Q			v I	
20+45	0.0856	0.01	Q			v I	
20+50	0.0857	0.01	Q			V	
20+55	0.0857	0.01	Q	-		V V	
21+ 0	0.0858	0.01	Q	-		V V	
21+ 5	0.0859	0.01	Q	-		V V	
21+10	0.0859	0.01	Q	-		V V	
21+16	0.0860	0.01			;	V	
21+13	0.0861	0.01	Q Q			V	
21+25	0.0861	0.01	Q			V	
21+30	0.0862	0.01				V	
21+35	0.0863	0.01	Q		;	V V	
21+40	0.0864	0.01	Q			V	
21+45	0.0864	0.01	Q			V	
21+50	0.0865	0.01	Q			V	
21+55	0.0866		Q	1	;	:	
22+ 0		0.01	Q			V	
	0.0866	0.01	Q			V	
22+ 5 22+10	0.0867	0.01 0.01	Q			V	
	0.0868		Q	I I	1 1	V	
22+15	0.0868	0.01	Q			V	
22+20 22+25	0.0869	0.01	Q			V	
	0.0870	0.01	Q			V	
22+30	0.0870	0.01	Q			V	
22+35	0.0871	0.01	Q			V	
22+40	0.0871	0.01	Q			V	
22+45	0.0872	0.01	Q			V	
22+50	0.0872	0.01	Q			V	
22+55	0.0873	0.01	Q			V	
23+ 0	0.0873	0.01	Q			V	
23+ 5	0.0874	0.01	Q			V	
23+10	0.0874	0.01	Q			V	
23+15	0.0875	0.01	Q			V	
23+20	0.0876	0.01	Q			V	
23+25	0.0876	0.01	Q			V	
23+30	0.0877	0.01	Q			V	
23+35	0.0877	0.01	Q			V	
23+40	0.0878	0.01	Q			V	
23+45	0.0878	0.01	Q			V	
23+50	0.0879	0.01	Q			V	
23+55	0.0879	0.01	Q			V	
24+ 0	0.0880	0.01	Q	I	1 1	V	

24+ 5 0.0880 0.00 Q | V

Unit Hydrograph Analysis

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```
Riverside County Synthetic Unit Hydrology Method
       RCFC & WCD Manual date - April 1978
       Program License Serial Number 6586
        English (in-lb) Input Units Used
        English Rainfall Data (Inches) Input Values Used
        English Units used in output format
       22-0192 - MVCC PARK
       ONSITE UNIT HYDROGRAPH ANALYSIS - DMA E-1
       DEVELOPED CONDITION, 2-YEAR 24-HOUR
       FN: ONSITEPOSTE1.OUT- RSB
       ______
       Drainage Area = 4.70(Ac.) = 0.007 Sq. Mi.
       Drainage Area for Depth-Area Areal Adjustment = 4.70(Ac.) =
0.007 Sq. Mi.
       Length along longest watercourse =
                                       596.00(Ft.)
       Length along longest watercourse measured to centroid = 301.00(Ft.)
       Length along longest watercourse = 0.113 Mi.
       Length along longest watercourse measured to centroid = 0.057 Mi.
       Difference in elevation = 12.00(Ft.)
Slope along watercourse = 106.3087 Ft./Mi.
       Average Manning's 'N' = 0.025
       Lag time = 0.036 Hr.
       Lag time = 2.18 Min.
       25% of lag time = 0.55 Min.
40% of lag time = 0.87 Min.
       Unit time = 5.00 Min.
       Duration of storm = 24 Hour(s)
       User Entered Base Flow = 0.00(CFS)
       2 YEAR Area rainfall data:
```

```
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
       4.70
                     2.00
                                           9.40
100 YEAR Area rainfall data:
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
                  5.40
                                     25.38
       4.70
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 5.400(In)
Point rain (area averaged) =
                             2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
Area(Ac.) Runoff Index Impervious 4.700 69.00 0.170
                             Impervious %
 Total Area Entered = 4.70(Ac.)
RI
         Infil. Rate Impervious Adj. Infil. Rate Area%
                                                          F
     RI
AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.) (In/Hr)
                       0.170
                                              1.000
69.0 49.8
              0.574
                                   0.486
                                                      0.486
                                             Sum(F) = 0.486
Area averaged mean soil loss (F) (In/Hr) = 0.486
Minimum soil loss rate ((In/Hr)) = 0.243
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.764
   Unit Hydrograph
                    VALLEY S-Curve
______
             Unit Hydrograph Data
______
Unit time period Time % of lag Distribution Unit Hydrograph (hrs) Graph % (CFS)

      1
      0.083
      229.334

      2
      0.167
      458.668

      3
      0.250
      688.002

      4
      0.333
      917.336

                           48.051
41.372
7.714
2.863
                                                   2,276
                                                  1.960
                                                  0.365
                                                  0.136
                     Sum = 100.000 Sum= 4.737
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time	Pattern	Storm Rain	Loss rate(In./Hr)	Effective
	(Hr.)	Percent	(In/Hr)	Max `	Low	(In/Hr)
1	0.08	0.07	0.016	(0.862)	0.012	0.004
2	0.17	0.07	0.016	(0.858)	0.012	0.004
3	0.25	0.07	0.016	(0.855)	0.012	0.004
4	0.33	0.10	0.024	(0.852)	0.018	0.006
5	0.42	0.10	0.024	(0.849)	0.018	0.006
6	0.50	0.10	0.024	(0.845)	0.018	0.006
7	0.58	0.10	0.024	(0.842)	0.018	0.006
8	0.67	0.10	0.024	(0.839)	0.018	0.006
9	0.75	0.10	0.024	(0.835)	0.018	0.006
10	0.83	0.13	0.032	(0.832)	0.024	0.008
11	0.92	0.13	0.032	(0.829)	0.024	0.008
12	1.00	0.13	0.032	(0.825)	0.024	0.008
13	1.08	0.10	0.024	(0.822)	0.018	0.006
14	1.17	0.10	0.024	(0.819)	0.018	0.006
15	1.25	0.10	0.024	(0.816)	0.018	0.006
16	1.33	0.10	0.024	(0.812)	0.018	0.006
17	1.42	0.10	0.024	(0.809)	0.018	0.006
18 19	1.50 1.58	0.10	0.024	(0.806)	0.018	0.006
20		0.10 0.10	0.024	(0.803)	0.018	0.006
20	1.67 1.75	0.10	0.024 0.024	(0.800) (0.796)	0.018 0.018	0.006 0.006
22	1.83	0.10	0.032		0.018	0.008
23	1.92	0.13	0.032	(0.793) (0.790)	0.024	0.008
24	2.00	0.13	0.032	(0.787)	0.024	0.008
25	2.08	0.13	0.032	(0.784)	0.024	0.008
26	2.17	0.13	0.032	(0.780)	0.024	0.008
27	2.25	0.13	0.032	(0.777)	0.024	0.008
28	2.33	0.13	0.032	(0.774)	0.024	0.008
29	2.42	0.13	0.032	(0.771)	0.024	0.008
30	2.50	0.13	0.032	(0.768)	0.024	0.008
31	2.58	0.17	0.040	(0.765)	0.031	0.009
32	2.67	0.17	0.040	(0.762)	0.031	0.009
33	2.75	0.17	0.040	(0.758)	0.031	0.009
34	2.83	0.17	0.040	(0.755)	0.031	0.009
35	2.92	0.17	0.040	(0.752)	0.031	0.009
36	3.00	0.17	0.040	(0.749)	0.031	0.009
37	3.08	0.17	0.040	(0.746)	0.031	0.009
38	3.17	0.17	0.040	(0.743)	0.031	0.009
39	3.25	0.17	0.040	(0.740)	0.031	0.009
40	3.33	0.17	0.040	(0.737)	0.031	0.009
41	3.42	0.17	0.040	(0.734)	0.031	0.009
42	3.50	0.17	0.040	(0.731)	0.031	0.009
43	3.58	0.17	0.040	(0.727)	0.031	0.009
44	3.67	0.17	0.040	(0.724)	0.031	0.009
45	3.75	0.17	0.040	(0.721)	0.031	0.009

46	3.83	0.20	0.048	(0.718)	0.037	0.011
47	3.92	0.20	0.048	į	0.715)	0.037	0.011
48	4.00	0.20	0.048	ì	0.712)	0.037	0.011
49	4.08	0.20	0.048	ì	0.709)	0.037	0.011
50	4.17	0.20	0.048		0.706)	0.037	0.011
51	4.25	0.20		(0.703)	0.037	0.011
			0.048	(•		
52	4.33	0.23	0.056	(0.700)	0.043	0.013
53	4.42	0.23	0.056	(0.697)	0.043	0.013
54	4.50	0.23	0.056	(0.694)	0.043	0.013
55	4.58	0.23	0.056	(0.691)	0.043	0.013
56	4.67	0.23	0.056	(0.688)	0.043	0.013
57	4.75	0.23	0.056	(0.685)	0.043	0.013
58	4.83	0.27	0.064	(0.682)	0.049	0.015
59	4.92	0.27	0.064	(0.679)	0.049	0.015
60	5.00	0.27	0.064	(0.676)	0.049	0.015
61	5.08	0.20	0.048	(0.674)	0.037	0.011
62	5.17	0.20	0.048	į (0.671)	0.037	0.011
63	5.25	0.20	0.048	ì	0.668)	0.037	0.011
64	5.33	0.23	0.056	ì	0.665)	0.043	0.013
65	5.42	0.23	0.056	(0.662)	0.043	0.013
66	5.50	0.23	0.056	(0.659)	0.043	0.013
67	5.58	0.23	0.064		0.656)	0.049	0.015
				(•		
68	5.67	0.27	0.064	(0.653)	0.049	0.015
69	5.75	0.27	0.064	(0.650)	0.049	0.015
70	5.83	0.27	0.064	(0.647)	0.049	0.015
71	5.92	0.27	0.064	(0.645)	0.049	0.015
72	6.00	0.27	0.064	(0.642)	0.049	0.015
73	6.08	0.30	0.072	(0.639)	0.055	0.017
74	6.17	0.30	0.072	(0.636)	0.055	0.017
75	6.25	0.30	0.072	(0.633)	0.055	0.017
76	6.33	0.30	0.072	(0.630)	0.055	0.017
77	6.42	0.30	0.072	(0.628)	0.055	0.017
78	6.50	0.30	0.072	(0.625)	0.055	0.017
79	6.58	0.33	0.080	į (0.622)	0.061	0.019
80	6.67	0.33	0.080	į	0.619)	0.061	0.019
81	6.75	0.33	0.080	į	0.616)	0.061	0.019
82	6.83	0.33	0.080	ì	0.614)	0.061	0.019
83	6.92	0.33	0.080	(0.611)	0.061	0.019
84	7.00	0.33	0.080	ì	0.608)	0.061	0.019
85	7.08	0.33	0.080	(0.605)	0.061	0.019
86	7.00 7.17	0.33	0.080		0.602)	0.061	0.019
				(-		
87	7.25	0.33	0.080	(0.600)	0.061	0.019
88	7.33	0.37	0.088	(0.597)	0.067	0.021
89	7.42	0.37	0.088	(0.594)	0.067	0.021
90	7.50	0.37	0.088	(0.592)	0.067	0.021
91	7.58	0.40	0.096	(0.589)	0.073	0.023
92	7.67	0.40	0.096	(0.586)	0.073	0.023
93	7.75	0.40	0.096	(0.583)	0.073	0.023
94	7.83	0.43	0.104	(0.079	0.025
95	7.92	0.43	0.104	(0.578)	0.079	0.025

96	8.00	0.43	0.104	(0.575)	0.079	0.025
97	8.08	0.50	0.120	(0.573)	0.092	0.028
98	8.17	0.50	0.120	(0.570)	0.092	0.028
99	8.25	0.50	0.120	(0.567)	0.092	0.028
100	8.33	0.50	0.120	į (0.565)	0.092	0.028
101	8.42	0.50	0.120	(0.562)	0.092	0.028
102	8.50	0.50	0.120	(0.559)	0.092	0.028
103	8.58	0.53	0.128	(0.557)	0.098	0.030
104	8.67	0.53	0.128	(0.554)	0.098	0.030
105	8.75	0.53	0.128	ì	0.552)	0.098	0.030
106	8.83	0.57	0.136	ì	0.549)	0.104	0.032
107	8.92	0.57	0.136	ì	0.546)	0.104	0.032
108	9.00	0.57	0.136	(0.544)	0.104	0.032
109	9.08	0.63	0.152	(0.541)	0.116	0.036
110	9.17	0.63	0.152	(0.539)	0.116	0.036
111	9.25	0.63	0.152	(0.536)	0.116	0.036
112	9.33	0.67	0.160	ì	0.534)	0.122	0.038
113	9.42	0.67	0.160	ì	0.531)		0.038
114	9.50	0.67	0.160	ì	0.528)	0.122	0.038
115	9.58	0.70	0.168	(0.526)	0.128	0.040
116	9.67	0.70	0.168	(0.523)	0.128	0.040
117	9.75	0.70	0.168	(0.521)	0.128	0.040
118	9.83	0.73	0.176	(0.518)	0.134	0.042
119	9.92	0.73	0.176	(0.516)	0.134	0.042
120	10.00	0.73	0.176	(0.513)	0.134	0.042
121	10.08	0.73	0.170	(0.513)	0.092	0.028
122	10.03	0.50	0.120	(0.508)	0.092	0.028
123	10.17	0.50	0.120	(0.506)	0.092	0.028
124	10.23	0.50	0.120	(0.503)	0.092	0.028
125	10.33	0.50	0.120	(0.501)	0.092	0.028
126	10.50	0.50	0.120	(0.499)	0.092	0.028
127	10.58	0.67	0.120	(0.496)		0.028
128	10.67	0.67	0.160	(0.494)	0.122	0.038
129	10.75	0.67	0.160	(0.491)	0.122	0.038
130			0.160	(•	0.122	0.038
131	10.92	0.67	0.160	(0.122	0.038
132	11.00	0.67	0.160	(0.122	0.038
133	11.08	0.63	0.152	(0.116	0.036
134	11.17	0.63	0.152	(0.479)		0.036
135	11.25	0.63	0.152	(0.477)		0.036
136	11.33	0.63	0.152	(0.477)	0.116	0.036
137	11.42	0.63	0.152	(0.473)	0.116	0.036
138	11.50	0.63	0.152	(0.472)	0.116 0.116	0.036
139		0.57			•		
140	11.58 11.67	0.57	0.136 0.136	(0.465)	0.104 0.104	0.032 0.032
141	11.75	0.57	0.136 0.136	(0.463)	0.104	0.032
141	11.73	0.60		(•		0.032
143	11.63	0.60					0.034
144	12.00	0.60	0.144 0.144	(0.034
145	12.08	0.83	0.144	(0.454)		0.047
T+7	12.00	0.05	0.200	(U.+J4)	0.100	0.04/

146	12.17	0.83	0.200	(0.452)	0.153	0.047
147	12.25	0.83	0.200	(0.449)	0.153	0.047
148	12.33	0.87	0.208	(0.447)	0.159	0.049
149	12.42	0.87	0.208	(0.445)	0.159	0.049
150	12.50	0.87	0.208	(0.443)	0.159	0.049
151	12.58	0.93	0.224	(0.440)	0.171	0.053
152	12.67	0.93	0.224	(0.438)	0.171	0.053
153	12.75	0.93	0.224	(0.436)	0.171	0.053
154	12.83	0.97	0.232	(0.434)	0.177	0.055
155	12.92	0.97	0.232	(0.431)	0.177	0.055
156	13.00	0.97	0.232	(0.429)	0.177	0.055
157	13.08	1.13	0.272	(0.427)	0.208	0.064
158	13.17	1.13	0.272	(0.425)	0.208	0.064
159	13.25	1.13	0.272	(0.423)	0.208	0.064
160	13.33	1.13	0.272	(0.421)	0.208	0.064
161	13.42	1.13	0.272	(0.419)	0.208	0.064
162	13.50	1.13	0.272	(0.416)	0.208	0.064
163	13.58	0.77	0.184	(0.414)	0.141	0.043
164	13.67	0.77	0.184	(0.412)	0.141	0.043
165	13.75	0.77	0.184	(0.410)	0.141	0.043
166	13.83	0.77	0.184	(0.408)	0.141	0.043
167	13.92	0.77	0.184	(0.406)	0.141	0.043
168	14.00	0.77	0.184	(0.404)	0.141	0.043
169	14.08	0.90	0.216	(0.402)	0.165	0.051
170	14.17	0.90	0.216	(0.400)	0.165	0.051
171	14.25	0.90	0.216	(0.398)	0.165	0.051
172	14.33	0.87	0.208	(0.396)	0.159	0.049
173	14.42	0.87	0.208	(0.394)	0.159	0.049
174	14.50	0.87	0.208	(0.392)	0.159	0.049
175	14.58	0.87	0.208	(0.390)	0.159	0.049
176	14.67	0.87	0.208	(0.388)	0.159	0.049
177	14.75	0.87	0.208	(0.386)	0.159	0.049
178	14.83	0.83	0.200	(0.384)	0.153	0.047
179	14.92	0.83	0.200	(0.382)	0.153	0.047
180		0.83	0.200	(0.380)	0.153	0.047
181	15.08	0.80	0.192	(0.378)	0.147	0.045
182	15.17	0.80	0.192	(0.376)	0.147	0.045
183	15.25	0.80	0.192	(0.374)	0.147	0.045
184	15.33	0.77	0.184	(0.372)	0.141	0.043
185	15.42	0.77	0.184	(0.370)	0.141	0.043
186	15.50	0.77	0.184	(0.368)	0.141	0.043
187	15.58	0.63	0.152	(0.366)	0.116	0.036
188	15.67	0.63	0.152	(0.364)	0.116	0.036
189	15.75	0.63	0.152	(0.363)	0.116	0.036
190	15.83	0.63	0.152	(0.361)	0.116	0.036
191	15.92	0.63	0.152	(0.359)	0.116	0.036
192	16.00	0.63	0.152	(0.357)	0.116	0.036
193	16.08	0.13	0.032	(0.355)	0.024	0.008
194	16.17	0.13	0.032	(0.353)	0.024	0.008
195	16.25	0.13	0.032	(0.352)	0.024	0.008
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196	16.33	0.13	0.032	(0.350)	0.024	0.008
197	16.42	0.13	0.032	(0.348)	0.024	0.008
198	16.50	0.13	0.032	(0.346)	0.024	0.008
199	16.58	0.10	0.024	(0.344)	0.018	0.006
200	16.67	0.10	0.024	(0.343)	0.018	0.006
201	16.75	0.10	0.024	(0.341)	0.018	0.006
202	16.83	0.10	0.024	(0.339)	0.018	0.006
203	16.92	0.10	0.024	(0.338)	0.018	0.006
204	17.00		0.024	(0.336)	0.018	0.006
205	17.08	0.17		(0.334)	0.031	0.009
206	17.17		0.040	(0.332)	0.031	0.009
207	17.25	0.17	0.040	(0.331)	0.031	0.009
208	17.33	0.17	0.040	(0.329)	0.031	0.009
209	17.42	0.17	0.040	(0.327)	0.031	0.009
210	17.50	0.17	0.040	(0.326)	0.031	0.009
211	17.58	0.17		(0.324)	0.031	0.009
212	17.67	0.17	0.040	(0.323)	0.031	0.009
213	17.75	0.17	0.040	(0.321)	0.031	0.009
214	17.83	0.13	0.032	(0.319)	0.024	0.008
215	17.92	0.13	0.032	(0.318)	0.024	0.008
216	18.00	0.13	0.032	(0.316)	0.024	0.008
217	18.08	0.13	0.032	(0.315)	0.024	0.008
218	18.17		0.032	(0.313)	0.024	0.008
219	18.25		0.032	(0.312)	0.024	0.008
220	18.33	0.13	0.032	(0.310)	0.024	0.008
221	18.42	0.13	0.032	(0.309)	0.024	0.008
222	18.50	0.13	0.032	(0.307)	0.024	0.008
223	18.58	0.10	0.024	(0.306)	0.018	0.006
224	18.67	0.10	0.024	(0.304)	0.018	0.006
225	18.75	0.10	0.024	(0.303)	0.018	0.006
226	18.83 18.92	0.07	0.016	(0.301)	0.012	0.004
227		0.07	0.016	(0.300) 0.298)	0.012	0.004
228 229	19.00	0.07 0.10	0.016	(0.298) 0.297)	0.012 0.018	0.004
239	19.08 19.17	0.10	0.024 0.024	(0.297)	0.018	0.006 0.006
231	19.17	0.10	0.024	(0.294)	0.018	0.006
232	19.33	0.10	0.024	(0.294)	0.024	0.008
232	19.42	0.13	0.032	(0.293)	0.024	0.008
234	19.50	0.13	0.032	(0.291)	0.024	0.008
235	19.58	0.10	0.024	(0.289)	0.018	0.006
236	19.67	0.10	0.024	(0.287)	0.018	0.006
237	19.75	0.10	0.024	(0.286)	0.018	0.006
238	19.83	0.10	0.016	(0.285)	0.013	0.004
239	19.92	0.07	0.016	(0.284)	0.012	0.004
240	20.00	0.07	0.016	(0.282)	0.012	0.004
241	20.08	0.10	0.024	(0.281)	0.012	0.004
242	20.17	0.10	0.024	(0.281)	0.018	0.006
243	20.25	0.10	0.024	(0.279)	0.018	0.006
244	20.33	0.10	0.024	(0.277)	0.018	0.006
245	20.42	0.10	0.024	(0.276)	0.018	0.006
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                 (Loss Rate Not Used)
                                                                     5.7
    Sum =
               100.0
                                                          Sum =
       Flood volume = Effective rainfall
                                                 0.47(In)
                           4.7(Ac.)/[(In)/(Ft.)] =
                                                           0.2(Ac.Ft)
        times area
       Total soil loss =
                                1.53(In)
       Total soil loss =
                               0.598(Ac.Ft)
       Total rainfall =
                               2.00(In)
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		8052.7 Cub 26069.0	Cubic Feet			
Pe	ak flow rate of	f this hydrogra		0.304(CFS)		
+++-	++++++++++++	++++++++++++	++++++++	 +++++++++		+++++
	р.	24 - H O U R				
	к (unoff 		 Br. apn		
	Hydrog	graph in 5	Minute into	ervals ((CF	·S))	
Time(h+m)	Volume Ac.Ft	Q(CFS) 0	2.5	5.0	7.5	10.0
0+ 5	0.0001	0.01 Q				
0+10	0.0002	0.02 Q	ĺ	ĺ	ĺ	Ì
0+15	0.0003	0.02 Q		1	1	
0+20	0.0004	0.02 Q	ĺ	ĺ	ĺ	Ì
0+25	0.0006	0.03 Q			I	
0+30	0.0008	0.03 Q		1		
0+35	0.0010	0.03 Q		1		
0+40	0.0012	0.03 Q		1		
0+45	0.0014	0.03 Q		1		
0+50	0.0016	0.03 Q		1		
0+55	0.0018	_		1		
1+ 0	0.0021	0.04 Q		1		
1+ 5	0.0023	0.03 Q		1		
1+10	0.0025	0.03 Q		1	1	
1+15	0.0027	0.03 Q	ļ	Į	ļ	ļ
1+20	0.0028	0.03 Q	ļ	Į	ļ	ļ
1+25	0.0030	-	ļ	ļ	ļ	ļ
1+30	0.0032	-		Į	ļ	ļ
1+35		0.03 Q	ļ	Į	ļ	ļ
1+40		0.03 Q	ļ	Į	ļ	ļ
1+45	0.0038	0.03 Q	Į	Į	ļ	ļ
1+50	0.0040	0.03 Q	ļ	ļ	ļ	ļ
1+55	0.0042	0.03 Q	ļ	ļ	ļ	ļ
2+ 0	0.0045	0.04 Q	ļ	ļ	ļ	ļ
2+ 5	0.0047	0.04 QV	ļ	ļ	ļ	ļ
2+10	0.0050	0.04 QV	ļ	ļ	ļ	ļ
2+15	0.0052	0.04 QV	ļ	ļ	ļ	ļ
2+20	0.0054	0.04 QV	ļ	ļ	ļ	ļ
2+25	0.0057	0.04 QV				
2+30	0.0059	0.04 QV				
2+35	0.0062	0.04 QV	ļ			
2+40	0.0065	0.04 QV				
2+45	0.0068	0.04 QV				
2+50	0.0071	0.04 QV				
2+55	0.0074	0.04 QV				ļ
3+ 0	0.0077	0.04 QV	I	I	l	Į

3+ 5	0.0081	0.04	QV				
3+10	0.0084	0.04	QV				
3+15	0.0087	0.04	QV				
3+20	0.0090	0.04	QV				
3+25	0.0093	0.04	Q V				
3+30	0.0096	0.04	Q V				
3+35	0.0099	0.04	Q V				
3+40	0.0102	0.04	Q V				
3+45	0.0105	0.04	Q V				
3+50	0.0109	0.05	Q V				
3+55	0.0112	0.05	Q V				
4+ 0	0.0116	0.05	QV		1		
4+ 5	0.0120	0.05	Q V	İ	ĺ		İ
4+10	0.0123	0.05	Qν	İ	İ	İ	İ
4+15	0.0127	0.05	Qν	İ	İ	İ	İ
4+20	0.0131	0.06	ųν	İ	j	j	
4+25	0.0135	0.06	Qν	İ	İ	İ	
4+30	0.0140	0.06	ųν		İ		
4+35	0.0144	0.06	ųν	İ	İ	ĺ	İ
4+40	0.0148	0.06	ųν	! 	İ		!
4+45	0.0152	0.06	ųν	! 	! 		
4+50	0.0157	0.07	Q V	! 	İ		!
4+55	0.0162	0.07	Qν	<u> </u>	İ	! 	İ
5+ 0	0.0167	0.07	Q V	! 	İ		!
5+ 5	0.0171	0.06	Q V	! 	i	! 	!
5+10	0.0175	0.06	Q V	İ	i		<u> </u>
5+15	0.0179	0.05	Q V	! 	i	! 	l
5+20	0.0183	0.06	Q V	İ	i		<u> </u>
5+25	0.0187	0.06	Q V	! 	ı İ	! 	l
5+30	0.0191	0.06	Q V	! 	i	! 	l
5+35	0.0196	0.07	Q V	! 	i	! 	!
5+40	0.0201	0.07	Q V	! 	i İ	I 	l
5+45	0.0201	0.07	Q V	! 	! 	! 	l
5+50	0.0211	0.07	Q V	! 	! 	l 	[]
5+55	0.0211	0.07	_	! 	! 	l 	[]
6+ 0	0.0220	0.07	Q V	! 	! 	l 	[]
6+ 5	0.0226	0.08	Q V	! 	! 	[[<u> </u>
6+10	0.0231	0.08	Q V	l 	! 	l I	<u> </u>
6+15	0.0237	0.08	Q V	l 	! 	l I	<u> </u>
6+20	0.0242	0.08	Q V	l 	! 	l I	<u> </u>
6+25	0.0248	0.08	Q V	! 	! 	l 	[]
6+30	0.0253	0.08	Q V	 	! 	I I	<u> </u>
6+35	0.0259	0.08	•	 	! !] 	[[
6+40	0.0265	0.09	-	 	! !] 	[[
6+45	0.0271	0.09	•	 	!] 	l
		0.09	•	I I	I I	I I	l
6+50	0.0278		•] 	[[
6+55	0.0284	0.09	Q V] 	[[
7+ 0	0.0290	0.09	Q V] 	[[
7+ 5	0.0296	0.09	Q V] 	[[
7+10	0.0302	0.09	Q V	I	I	I	I

7+15	0.0308	0.09	Q	V		1
7+20	0.0315	0.09	Q	V		1
7+25	0.0322	0.10	Q	V		1
7+30	0.0328	0.10	Q	V		
7+35	0.0335	0.10	Q	v j	i i	İ
7+40	0.0343	0.11	Q	v j	i i	İ
7+45	0.0350	0.11	Q	v j	i i	j
7+50	0.0358	0.11	Q	v j	i i	j
7+55	0.0366	0.12	Q	v İ	i i	i
8+ 0	0.0374	0.12	Q	v İ	i i	į
8+ 5	0.0382	0.12	Q	v İ	i i	į
8+10	0.0391	0.13	Q	V	i i	i
8+15	0.0401	0.13	Q	V	i i	i
8+20	0.0410	0.13	Q	V	i i	i
8+25	0.0419	0.13	Q	v	i i	i
8+30	0.0428	0.13	Q	ν	i i	i
8+35	0.0438	0.14	Q	ν		i İ
8+40	0.0448	0.14	Q	ν		İ
8+45	0.0458	0.14	Q	ν		i
8+50	0.0468	0.15	Q	V		i
8+55	0.0478	0.15		V		ł
9+ 0	0.0489	0.15	Q	V		-
9+ 5	0.0500	0.15	Q	V		-
9+10	0.0511	0.10	Q	\ V		-
			Q	· ·		ļ i
9+15	0.0523	0.17	Q	V		
9+20	0.0535	0.17	Q	V		
9+25	0.0547	0.18	Q	V		ļ
9+30	0.0559	0.18	Q	V		<u> </u>
9+35	0.0572	0.18	Q	V		ļ
9+40	0.0585	0.19	Q	V		ļ
9+45	0.0598	0.19	Q	V		ļ
9+50	0.0611	0.19	Q	V	!!!	ļ
9+55	0.0625	0.20	Q	V	!!!	ļ
10+ 0	0.0638	0.20	Q	l V		ļ
10+ 5	0.0650	0.17	Q	l V	!!!	ļ
10+10	0.0659	0.14	Q	į v	!!!	ļ
10+15	0.0669	0.14	Q	V	!!!	ļ
10+20	0.0678	0.13	Q	V	ļ ļ	ļ
10+25	0.0687	0.13	Q	l V		ļ
10+30	0.0696	0.13	Q	l V	ļ ļ	ļ
10+35	0.0707	0.16	Q	V		ļ
10+40	0.0719	0.17	Q	Į V	ļ ļ	ļ
10+45	0.0731	0.18	Q	l V	į l	ļ
10+50	0.0744	0.18	Q	Į V	ļ l	ļ
10+55	0.0756	0.18	Q	V		
11+ 0	0.0768	0.18	Q	V		
11+ 5	0.0780	0.17	Q	V		
11+10	0.0792	0.17	Q	V		
11+15	0.0804	0.17	Q	V		
11+20	0.0816	0.17	Q	V		1

11+25					
11+30	11+25	0.0827	0.17 0	l v l	1 1
11+35	11+30		•	· :	i i
11+40			~	·	i i
11+45			=	!	i i
11+50					i i
11+55				!	i i
12+ 0			~	: :	i
12+5			•	• •	i i
12+10				·	1 1
12+15			•		
12+20			~	•	1 1
12+25			=	· •	
12+30				•	}
12+35			~		
12+40			~		
12+45 0.1046 0.25 Q V <			~	· :	!!!
12+50 0.1064 0.25 Q V <					!!!
12+55 0.1082 0.26 Q V <					!!!
13+ 0 0.1099 0.26 Q V <			: -		ļ ļ
13+ 5 0.1119 0.28 Q V V V V <			: -		į į
13+10 0.1139 0.30 Q V V V V <			· -		
13+15 0.1160 0.30 Q V 13+20 0.1181 0.30 Q V 13+25 0.1202 0.30 Q V 13+30 0.1223 0.30 Q V 13+30 0.1223 0.30 Q V 13+30 0.12241 0.26 Q V 13+45 0.12241 0.26 Q V 13+40 0.1256 0.22 Q V 13+45 0.1270 0.21 Q V 13+50 0.1284 0.21 Q V 13+50 0.1284 0.21 Q V 13+55 0.1298 0.21 Q V 14+40 0.1313 0.21 Q V 14+40 0.1313 0.21 Q V 14+10 0.1328 0.22 Q V 14+10 0.1344 0.24 Q V V 14+20 0.1377 0.24 Q V V 14+20 0.1377 0.24 Q V V 14+30 0.1409 0.23 Q V V 14+35 0.1425 0.23 Q V V <td>13+ 5</td> <td>0.1119</td> <td>0.28 Q</td> <td> </td> <td></td>	13+ 5	0.1119	0.28 Q		
13+20 0.1181 0.30 Q	13+10	0.1139	0.30 Q		
13+25 0.1202 0.30 Q V 13+30 0.1223 0.30 Q V 13+35 0.1241 0.26 Q V 13+440 0.1256 0.22 Q V 13+45 0.1270 0.21 Q V 13+45 0.1270 0.21 Q V 13+50 0.1284 0.21 Q V 13+55 0.1298 0.21 Q V 14+6 0.1313 0.21 Q V 14+6 0.1313 0.21 Q V 14+7 0.1328 0.22 Q V 14+10 0.1344 0.24 Q V 14+10 0.1344 0.24 Q V 14+15 0.1361 0.24 Q V V 14+20 0.1377 0.24 Q V V 14+25 0.1393 0.23 Q V V 14+30 0.1409 0.23 Q V V 14+45 0.1440 0.23 Q V V 14+45 0.1457 0.23 Q V V 14+450 0.1473 0.23 Q	13+15	0.1160	0.30 Q		
13+30 0.1223 0.30 Q V 13+35 0.1241 0.26 Q V 13+40 0.1256 0.22 Q V 13+45 0.1270 0.21 Q V 13+55 0.1284 0.21 Q V 13+55 0.1298 0.21 Q V 14+6 0.1313 0.21 Q V 14+6 0.1313 0.21 Q V 14+7 0.1328 0.22 Q V 14+10 0.1344 0.24 Q V 14+10 0.1344 0.24 Q V 14+15 0.1361 0.24 Q V 14+20 0.1377 0.24 Q V 14+25 0.1393 0.23 Q V 14+30 0.1409 0.23 Q V 14+35 0.1425 0.23 Q V 14+40 0.1441 0.23 Q V 14+45 0.1457 0.23 Q V V 14+45 0.1473 0.23 Q V V 14+55 0.1489 0.22 Q V V 15+6 0.1549<	13+20	0.1181	0.30 Q	V	
13+30 0.1223 0.30 Q V 13+35 0.1241 0.26 Q V 13+40 0.1256 0.22 Q V 13+440 0.1256 0.22 Q V 13+45 0.1270 0.21 Q V 13+55 0.1284 0.21 Q V 13+55 0.1298 0.21 Q V 14+40 0.1313 0.21 Q V 14+40 0.1313 0.21 Q V 14+5 0.1328 0.22 Q V 14+10 0.1344 0.24 Q V 14+10 0.1344 0.24 Q V 14+15 0.1361 0.24 Q V 14+20 0.1377 0.24 Q V 14+25 0.1393 0.23 Q V 14+30 0.1409 0.23 Q V 14+35 0.1409 0.23 Q V 14+440 0.1441 0.23 Q V V 14+450 0.1473 0.23 Q V V 14+50 0.1473 0.23 Q V V 15+5 0.	13+25	0.1202	0.30 Q	V	1
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15+30 0.1592 0.21 Q V			•		! !
	15+30	0.1592	0.21 Q		V

15+35	0.1605	0.19	Q	1	1	V	
15+40	0.1617	0.17	Q	j	į	i v i	
15+45	0.1628	0.17	Q	İ	į	i v i	
15+50	0.1640	0.17	Q	İ	i	i v i	
15+55	0.1652	0.17	Q	i	į	i v i	
16+ 0	0.1664	0.17	Q	i	į	i v i	
16+ 5	0.1671	0.11	Q	i	į	i v i	
16+10	0.1674	0.05	Q	i	į	i v i	
16+15	0.1677	0.04	Q	i	i	i v i	
16+20	0.1679	0.04	Q	i	i	i v i	
16+25	0.1682	0.04	Q	i	į	i v i	
16+30	0.1684	0.04	Q	i	į	i v i	
16+35	0.1687	0.03	Q	i	i	i v i	
16+40	0.1688	0.03	Q	i	i	i v i	
16+45	0.1690	0.03	Q	i	i	i v i	
16+50	0.1692	0.03	Q	i	i	i v i	
16+55	0.1694	0.03	Q	i	i	i v i	
17+ 0	0.1696	0.03	Q	i	i	i v i	
17+ 5	0.1698	0.04	Q	i	i	i v i	
17+10	0.1701	0.04	Q	i	i	i v i	
17+15	0.1704	0.04	Q	i	i	i v i	
17+20	0.1707	0.04	Q	i		i v i	
17+25	0.1710	0.04	Q	i		i vi	
17+30	0.1714	0.04	Q	i		i vi	
17+35	0.1717	0.04	Q	i	i	i vi	
17+40	0.1720	0.04	Q	i	i	i vi	
17+45	0.1723	0.04	Q	i	i	i vi	
17+50	0.1726	0.04	Q	i	i	i vi	
17+55	0.1728	0.04	Q	i	i	i vi	
18+ 0	0.1731	0.04	Q	i	i	i vi	
18+ 5	0.1733	0.04	Q	i	i	i vi	
18+10	0.1736	0.04	Q	i	į	i vi	
18+15	0.1738	0.04	Q	i	į	i vi	
18+20	0.1740	0.04	Õ	i	į	i vi	
18+25	0.1743	0.04	Q	i	į	i vi	
18+30	0.1745	0.04	Q	i	i	i vi	
18+35	0.1748	0.03	Q	İ	i	i vi	
18+40	0.1749	0.03	Q	İ	į	j v j	
18+45	0.1751	0.03	Q	İ	į	j v j	
18+50	0.1753	0.02	Q	İ	į	j v j	
18+55	0.1754	0.02	Q	İ	į	j v j	
19+ 0	0.1755	0.02	Q	j	į	j v j	
19+ 5	0.1757	0.02	Q	İ	į	j vj	
19+10	0.1759	0.03	Q	j	j	j vj	
19+15	0.1761	0.03	Q	j	İ	j vj	
19+20	0.1763	0.03	Q	j	j	j vj	
19+25	0.1765	0.03	Q	j	j	j vj	
19+30	0.1768	0.04	Q	j	İ	j vj	
19+35	0.1770	0.03	Q	j		j vj	
19+40	0.1772	0.03	Q			j v j	
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19+45	0.1773	0.03	Q	1 1	V
19+50	0.1775	0.02	Q		V
19+55	0.1776	0.02	Q		V
20+ 0	0.1778	0.02	Q	i i	j vj
20+ 5	0.1779	0.02	Q	i i	j vj
20+10	0.1781	0.03	Q	i i	i vi
20+15	0.1783	0.03	Q	i i	i vi
20+20	0.1785	0.03	Q	i i	i vi
20+25	0.1786	0.03	Q	i i	i vi
20+30	0.1788	0.03	Q	i i	i vi
20+35	0.1790	0.03	Q	i i	i vi
20+40	0.1792	0.03	Q	iii	i vi
20+45	0.1794	0.03	Q	iii	i vi
20+50	0.1795	0.02	Q	iii	i vi
20+55	0.1797	0.02	Q	iiii	i vi
21+ 0	0.1798	0.02	Q	iiii	i vi
21+ 5	0.1799	0.02	Q	i	i vi
21+10	0.1801	0.02	Q	i i	i vi
21+15	0.1801	0.03	Q	i i	i vi
21+13	0.1805	0.02	Q	1 1	V
21+25	0.1805	0.02		1 1	V
21+23	0.1807	0.02	Q	1 1	: :
21+36	0.1807	0.02	Q	1 1	l VI
21+33	0.1810	0.02	Q	1 1	l VI
			Q	1 1	V
21+45	0.1812	0.03	Q	}	V
21+50	0.1814	0.02	Q	}	l VI
21+55	0.1815	0.02	Q	}	l VI
22+ 0	0.1816	0.02	Q		l VI
22+ 5	0.1818	0.02	Q		l VI
22+10	0.1820	0.03	Q		l VI
22+15	0.1822	0.03	Q		l VI
22+20	0.1823	0.02	Q	ļ ļ	V
22+25	0.1824	0.02	Q	! !	l VI
22+30	0.1826	0.02	Q	! !	l VI
22+35	0.1827	0.02	Q	! !	V
22+40	0.1828	0.02	Q	! !	V
22+45	0.1829	0.02	Q	! !	V
22+50	0.1831	0.02	Q	!!!	V
22+55	0.1832	0.02	Q	!!!	V
23+ 0	0.1833	0.02	Q	!!!	V
23+ 5	0.1834	0.02	Q	!!!	V
23+10	0.1836	0.02	Q	į į	V
23+15	0.1837	0.02	Q		V
23+20	0.1838	0.02	Q		V
23+25	0.1839	0.02	Q	ļ	V
23+30	0.1840	0.02	Q	ļ	ļ Vļ
23+35	0.1842	0.02	Q	ļ	V
23+40	0.1843	0.02	Q	ļ	V
23+45	0.1844	0.02	Q	ļ	ļ Vļ
23+50	0.1845	0.02	Q		V

23+55	0.1847	0.02	Q		\	/
24+ 0	0.1848	0.02	Q		\	/
24+ 5	0.1848	0.01	Q		\	/
24+10	0.1849	0.00	Q		\	/
24+15	0.1849	0.00	Q			٧

Unit Hydrograph Analysis

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```
Riverside County Synthetic Unit Hydrology Method
       RCFC & WCD Manual date - April 1978
       Program License Serial Number 6586
        English (in-lb) Input Units Used
        English Rainfall Data (Inches) Input Values Used
        English Units used in output format
       22-0192 - MVCC PARK
       ONSITE UNIT HYDROGRAPH ANALYSIS - DMA E-2
       DEVELOPED CONDITION, 2-YEAR 24-HOUR
       FN: ONSITEPOSTE2.OUT- RSB
       ______
       Drainage Area = 2.00(Ac.) = 0.003 Sq. Mi.
       Drainage Area for Depth-Area Areal Adjustment = 2.00(Ac.) =
0.003 Sq. Mi.
       Length along longest watercourse =
                                       380.00(Ft.)
       Length along longest watercourse measured to centroid = 90.00(Ft.)
       Length along longest watercourse = 0.072 Mi.
       Length along longest watercourse measured to centroid = 0.017 Mi.
       Difference in elevation = 9.00(Ft.)
Slope along watercourse = 125.0526 Ft./Mi.
       Average Manning's 'N' = 0.025
       Lag time = 0.019 Hr.
       Lag time = 1.13 Min.
       25% of lag time = 0.28 Min.
40% of lag time = 0.45 Min.
       Unit time = 5.00 Min.
       Duration of storm = 24 Hour(s)
       User Entered Base Flow = 0.00(CFS)
       2 YEAR Area rainfall data:
```

```
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
      2.00
                   2.00
                                      4.00
100 YEAR Area rainfall data:
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
                                10.80
               5.40
      2.00
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 5.400(In)
Point rain (area averaged) =
                         2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
Area(Ac.) Runoff Index Impervious 2.000 69.00 0.400
                          Impervious %
 Total Area Entered = 2.00(Ac.)
RI
        Infil. Rate Impervious Adj. Infil. Rate Area%
    RI
                                                   F
AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.) (In/Hr) 69.0 49.8 0.574 0.400 0.367 1.000 0.367
                                        Sum(F) = 0.367
Area averaged mean soil loss (F) (In/Hr) = 0.367
Minimum soil loss rate ((In/Hr)) = 0.184
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.580
    Unit Hydrograph
                  VALLEY S-Curve
______
            Unit Hydrograph Data
______
Unit time period Time % of lag Distribution Unit Hydrograph (hrs) Graph % (CFS)
   1 0.083
              444.004 67.892
888.008 32.108
                                            1.368
   2 0.167
                                            0.647
                 Sum = 100.000 Sum= 2.016
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time	Pattern	Storm Rain		Loss ra	te(In./Hr)	Effective
01120	(Hr.)	Percent	(In/Hr)		Max	Low	(In/Hr)
1	0.08	0.07	0.016	(0.651	•	0.007
2	0.17	0.07	0.016	(•	0.007
3	0.25	0.07	0.016)		•	0.007
4	0.33	0.10	0.024	į		•	0.010
5	0.42	0.10	0.024	(•	0.010
6	0.50	0.10	0.024	į (•	0.010
7	0.58	0.10	0.024	į	0.636	•	0.010
8	0.67	0.10	0.024	(0.634	0.014	0.010
9	0.75	0.10	0.024	(0.631	0.014	0.010
10	0.83	0.13	0.032	(0.629	0.019	0.013
11	0.92	0.13	0.032	(0.019	0.013
12	1.00	0.13	0.032	(0.624	0.019	0.013
13	1.08	0.10	0.024	(0.621	0.014	0.010
14	1.17	0.10	0.024	(0.619	0.014	0.010
15	1.25	0.10	0.024	(0.616	0.014	0.010
16	1.33	0.10	0.024	(0.614	0.014	0.010
17	1.42	0.10	0.024	(0.611	0.014	0.010
18	1.50	0.10	0.024	(0.609	0.014	0.010
19	1.58	0.10	0.024	(0.607	0.014	0.010
20	1.67	0.10	0.024	(0.604	0.014	0.010
21	1.75	0.10	0.024	(0.602	0.014	0.010
22	1.83	0.13	0.032	(0.599	0.019	0.013
23	1.92	0.13	0.032	(0.597	0.019	0.013
24	2.00	0.13	0.032	(0.595	0.019	0.013
25	2.08	0.13	0.032	(0.592	0.019	0.013
26	2.17	0.13	0.032	(0.590	0.019	0.013
27	2.25	0.13	0.032	(0.587	0.019	0.013
28	2.33	0.13	0.032	(0.585	0.019	0.013
29	2.42	0.13	0.032	(0.583	0.019	0.013
30	2.50	0.13	0.032	(0.580) 0.019	0.013
31	2.58	0.17	0.040	(0.578	0.023	0.017
32	2.67	0.17	0.040	(0.575	0.023	0.017
33	2.75	0.17	0.040	(0.573	0.023	0.017
34	2.83	0.17	0.040	(0.017
35	2.92	0.17	0.040	(0.568	0.023	0.017
36	3.00	0.17	0.040	(0.566) 0.023	0.017
37	3.08	0.17	0.040	(0.564	-	0.017
38	3.17	0.17	0.040	(0.561) 0.023	0.017
39	3.25	0.17	0.040	(-	0.017
40	3.33	0.17	0.040	(-	0.017
41	3.42	0.17	0.040	(•	0.017
42	3.50	0.17	0.040	(•	0.017
43	3.58	0.17	0.040	(•	0.017
44	3.67	0.17	0.040	(•	0.017
45	3.75	0.17	0.040	(•	
46	3.83	0.20	0.048	(•	
47	3.92	0.20	0.048	(0.540) 0.028	0.020

48	4.00	0.20	0.048	(0.538)	0.028	0.020
49	4.08	0.20	0.048	(0.536)	0.028	0.020
50	4.17	0.20	0.048	(0.534)	0.028	0.020
51	4.25	0.20	0.048	(0.531)	0.028	0.020
52	4.33	0.23	0.056	(0.529)	0.032	0.024
53	4.42	0.23	0.056	(0.527)	0.032	0.024
54	4.50	0.23	0.056	(0.525)	0.032	0.024
55	4.58	0.23	0.056	(0.522)	0.032	0.024
56	4.67	0.23	0.056	(0.520)	0.032	0.024
57	4.75	0.23	0.056	(0.518)	0.032	0.024
58	4.73	0.23	0.064	(0.516)	0.037	0.027
59	4.92	0.27	0.064	(0.513)	0.037	0.027
60	5.00	0.27	0.064	(0.511)	0.037	0.027
61	5.08	0.27	0.048	(0.511)	0.028	0.027
				•		
62	5.17	0.20	0.048	(0.507)	0.028	0.020
63	5.25	0.20	0.048	(0.505)	0.028	0.020
64	5.33	0.23	0.056	(0.502)	0.032	0.024
65	5.42	0.23	0.056	(0.500)	0.032	0.024
66	5.50	0.23	0.056	(0.498)	0.032	0.024
67	5.58	0.27	0.064	(0.496)	0.037	0.027
68	5.67	0.27	0.064	(0.494)	0.037	0.027
69	5.75	0.27	0.064	(0.491)	0.037	0.027
70	5.83	0.27	0.064	(0.489)	0.037	0.027
71	5.92	0.27	0.064	(0.487)	0.037	0.027
72	6.00	0.27	0.064	(0.485)	0.037	0.027
73	6.08	0.30	0.072	(0.483)	0.042	0.030
74	6.17	0.30	0.072	(0.481)	0.042	0.030
75	6.25	0.30	0.072	(0.478)	0.042	0.030
76	6.33	0.30	0.072	(0.476)	0.042	0.030
77	6.42	0.30	0.072	(0.474)	0.042	0.030
78	6.50	0.30	0.072	(0.472)	0.042	0.030
79	6.58	0.33	0.080	(0.470)	0.046	0.034
80	6.67	0.33	0.080	(0.468)	0.046	0.034
81	6.75	0.33	0.080	(0.466)	0.046	0.034
82	6.83	0.33	0.080	(0.464)	0.046	0.034
83	6.92	0.33	0.080	(0.461)	0.046	0.034
84	7.00	0.33	0.080	(0.459)	0.046	0.034
85	7.08	0.33	0.080	(0.457)	0.046	0.034
86	7.17	0.33	0.080	(0.455)	0.046	0.034
87	7.25	0.33	0.080	(0.453)	0.046	0.034
88	7.33	0.37	0.088	(0.451)	0.051	0.037
89	7.42	0.37	0.088	(0.449)	0.051	0.037
90	7.50	0.37	0.088	(0.447)	0.051	0.037
91	7.58	0.40	0.096	(0.445)	0.056	0.040
92	7.67	0.40	0.096	(0.443)	0.056	0.040
93	7.75	0.40	0.096	(0.441)	0.056	0.040
94	7.83	0.43	0.104	(0.439)	0.060	0.044
95	7.92	0.43	0.104	(0.437)	0.060	0.044
96	8.00	0.43	0.104	(0.435)	0.060	0.044
97	8.08	0.50	0.120	(0.433)	0.070	0.050
				· · · · · · · · · · · · · · · · · · ·		

98	8.17	0.50	0.120	(0.431)	0.070	0.050
99	8.25	0.50	0.120	(0.429)	0.070	0.050
100	8.33	0.50	0.120	ì	0.427)	0.070	0.050
101	8.42	0.50	0.120	ì	0.425)	0.070	0.050
102	8.50	0.50	0.120	(0.423)	0.070	0.050
103	8.58	0.53	0.128	(0.421)	0.074	0.054
				(•		
104	8.67	0.53	0.128	(0.419)	0.074	0.054
105	8.75	0.53	0.128	(0.417)	0.074	0.054
106	8.83	0.57	0.136	(0.415)	0.079	0.057
107	8.92	0.57	0.136	(0.413)	0.079	0.057
108	9.00	0.57	0.136	(0.411)	0.079	0.057
109	9.08	0.63	0.152	(0.409)	0.088	0.064
110	9.17	0.63	0.152	(0.407)	0.088	0.064
111	9.25	0.63	0.152	(0.405)	0.088	0.064
112	9.33	0.67	0.160	(0.403)	0.093	0.067
113	9.42	0.67	0.160	(0.401)	0.093	0.067
114	9.50	0.67	0.160	(0.399)	0.093	0.067
115	9.58	0.70	0.168	(0.397)	0.097	0.071
116	9.67	0.70	0.168	(0.395)	0.097	0.071
117	9.75	0.70	0.168	Ċ	0.394)	0.097	0.071
118	9.83	0.73	0.176	(0.392)	0.102	0.074
119	9.92	0.73	0.176)	0.390)	0.102	0.074
120	10.00	0.73	0.176)	0.388)	0.102	0.074
121	10.08	0.50	0.120	ì	0.386)	0.070	0.050
122	10.17	0.50	0.120	ì	0.384)	0.070	0.050
123	10.25	0.50	0.120	ì	0.382)	0.070	0.050
124	10.33	0.50	0.120	ì	0.380)	0.070	0.050
125	10.42	0.50	0.120	(0.379)	0.070	0.050
126	10.50	0.50	0.120	(0.377)	0.070	0.050
127	10.58	0.67	0.120		0.377)	0.093	0.067
128	10.58	0.67	0.160	(•	0.093	0.067
				(0.373)		
129	10.75	0.67	0.160	(0.371)	0.093	0.067
130	10.83	0.67	0.160	(0.369)	0.093	0.067
131	10.92	0.67	0.160	(0.368)	0.093	0.067
	11.00		0.160	(0.093	0.067
133	11.08	0.63	0.152	(0.364)	0.088	0.064
134	11.17	0.63	0.152	(0.362)	0.088	0.064
135	11.25	0.63	0.152	(0.360)	0.088	0.064
136	11.33	0.63	0.152	(0.359)	0.088	0.064
137	11.42	0.63	0.152	(0.357)	0.088	0.064
138	11.50	0.63	0.152	(0.355)	0.088	0.064
139	11.58	0.57	0.136	(0.353)	0.079	0.057
140	11.67	0.57	0.136	(0.352)	0.079	0.057
141	11.75	0.57	0.136	(0.350)	0.079	0.057
142	11.83	0.60	0.144	(0.348)	0.084	0.060
143	11.92	0.60	0.144	(0.346)	0.084	0.060
144	12.00	0.60	0.144	(0.345)	0.084	0.060
145	12.08	0.83	0.200	(0.343)		0.084
146	12.17	0.83	0.200	(0.084
147	12.25	0.83	0.200	(0.339)		0.084
				•	•		

148	12.33	0.87	0.208	(0.338)	0.121	0.087
149	12.42	0.87	0.208	(0.336)	0.121	0.087
150	12.50	0.87	0.208	(0.334)	0.121	0.087
151	12.58	0.93	0.224	(0.333)	0.130	0.094
152	12.67	0.93	0.224	(0.331)	0.130	0.094
153	12.75	0.93	0.224	(0.329)	0.130	0.094
154	12.83	0.97	0.232	(0.328)	0.135	0.097
155	12.92	0.97	0.232	(0.326)	0.135	0.097
156	13.00	0.97	0.232	(0.324)	0.135	0.097
157	13.08	1.13	0.232	(0.323)	0.158	0.114
158	13.17	1.13	0.272	(0.321)	0.158	0.114
159	13.25	1.13	0.272	(0.319)	0.158	0.114
160	13.33	1.13	0.272	(0.318)	0.158	0.114
161	13.42	1.13	0.272	(0.316)	0.158	0.114
162	13.50	1.13	0.272	· ·	0.158	0.114
163	13.58	0.77	0.184	· · · · · · · · · · · · · · · · · · ·	0.107	0.114
164	13.67	0.77	0.184	(0.313) (0.311)	0.107	0.077
165	13.75	0.77 0.77		•		
			0.184	(0.310)	0.107	0.077
166	13.83	0.77	0.184	(0.308)	0.107	0.077
167	13.92	0.77	0.184	(0.307)	0.107	0.077
168	14.00	0.77	0.184	(0.305)	0.107	0.077
169	14.08	0.90	0.216	(0.304)	0.125	0.091
170	14.17	0.90	0.216	(0.302)	0.125	0.091
171	14.25	0.90	0.216	(0.300)	0.125	0.091
172	14.33	0.87	0.208	(0.299)	0.121	0.087
173	14.42	0.87	0.208	(0.297)	0.121	0.087
174	14.50	0.87	0.208	(0.296)	0.121	0.087
175	14.58	0.87	0.208	(0.294)	0.121	0.087
176	14.67	0.87	0.208	(0.293)	0.121	0.087
177	14.75	0.87	0.208	(0.291)	0.121	0.087
178	14.83	0.83	0.200	(0.290)	0.116	0.084
179	14.92	0.83	0.200	(0.288)	0.116	0.084
180	15.00	0.83	0.200	(0.287)	0.116	0.084
181	15.08	0.80	0.192	(0.285)	0.111	0.081
182	15.17	0.80	0.192	(0.284)	0.111	0.081
183	15.25	0.80	0.192	(0.283)	0.111	0.081
184	15.33	0.77	0.184	(0.281)	0.107	0.077
185	15.42	0.77	0.184	(0.280)	0.107	0.077
186	15.50	0.77	0.184	(0.278)	0.107	0.077
187	15.58	0.63	0.152	(0.277)	0.088	0.064
188	15.67	0.63	0.152	(0.275)	0.088	0.064
189	15.75	0.63	0.152	(0.274)	0.088	0.064
190	15.83	0.63	0.152	(0.273)	0.088	0.064
191	15.92	0.63	0.152	(0.271)	0.088	0.064
192	16.00	0.63	0.152	(0.270)	0.088	0.064
193	16.08	0.13	0.032	(0.268)	0.019	0.013
194	16.17	0.13	0.032	(0.267)	0.019	0.013
195	16.25	0.13	0.032	(0.266)	0.019	0.013
196	16.33	0.13	0.032	(0.264)	0.019	0.013
197	16.42	0.13	0.032	(0.263)	0.019	0.013
				•		

198	16.50	0.13	0.032	(0.262)	0.019	0.013
199	16.58	0.10	0.024	(0.260)	0.014	0.010
200	16.67	0.10	0.024	ì	0.259)	0.014	0.010
201	16.75	0.10	0.024	ì	0.258)	0.014	0.010
202	16.83	0.10	0.024		0.256)	0.014	0.010
203	16.92	0.10	0.024	(0.255)	0.014	0.010
				(•		
204	17.00	0.10	0.024	(0.254)	0.014	0.010
205	17.08	0.17	0.040	(0.252)	0.023	0.017
206	17.17	0.17	0.040	(0.251)	0.023	0.017
207	17.25	0.17	0.040	(0.250)	0.023	0.017
208	17.33	0.17	0.040	(0.249)	0.023	0.017
209	17.42	0.17	0.040	(0.247)	0.023	0.017
210	17.50	0.17	0.040	(0.246)	0.023	0.017
211	17.58	0.17	0.040	(0.245)	0.023	0.017
212	17.67	0.17	0.040	(0.244)	0.023	0.017
213	17.75	0.17	0.040	(0.243)	0.023	0.017
214	17.83	0.13	0.032	(0.241)	0.019	0.013
215	17.92	0.13	0.032	(0.240)	0.019	0.013
216	18.00	0.13	0.032	(0.239)	0.019	0.013
217	18.08	0.13	0.032	(0.238)	0.019	0.013
218	18.17	0.13	0.032	(0.237)	0.019	0.013
219	18.25	0.13	0.032)	0.235)	0.019	0.013
220	18.33	0.13	0.032)	0.234)	0.019	0.013
221	18.42	0.13	0.032	(0.233)	0.019	0.013
222	18.50	0.13	0.032	ì	0.232)	0.019	0.013
223	18.58	0.10	0.024	ì	0.231)	0.014	0.010
224	18.67	0.10	0.024	(0.230)	0.014	0.010
225	18.75	0.10	0.024	(0.229)	0.014	0.010
226	18.83	0.10	0.016	(0.228)	0.009	0.010
227	18.92	0.07	0.016		0.226)	0.009	0.007
228	19.00	0.07	0.016	(0.225)	0.009	0.007
229				(•		
	19.08	0.10	0.024	(0.224)		0.010
230	19.17	0.10	0.024	(0.223)	0.014	0.010
231	19.25	0.10	0.024	(0.222)	0.014	0.010
	19.33	0.13	0.032	(0.019	0.013
233	19.42	0.13	0.032	(0.019	0.013
234		0.13	0.032	(0.219)	0.019	0.013
235	19.58	0.10	0.024	(0.218)	0.014	0.010
236	19.67	0.10	0.024	(0.217)	0.014	0.010
237	19.75	0.10	0.024	(0.216)	0.014	0.010
238	19.83	0.07	0.016	(0.215)	0.009	0.007
239	19.92	0.07	0.016	(0.214)	0.009	0.007
240	20.00	0.07	0.016	(0.213)	0.009	0.007
241	20.08	0.10	0.024	(0.212)	0.014	0.010
242	20.17	0.10	0.024	(0.211)	0.014	0.010
243	20.25	0.10	0.024	(0.211)	0.014	0.010
244	20.33	0.10	0.024	(0.210)	0.014	0.010
245	20.42	0.10	0.024	(0.209)	0.014	0.010
246	20.50	0.10	0.024	(0.208)	0.014	0.010
247	20.58	0.10	0.024	(0.207)		0.010
				-	•		

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248
     20.67
                0.10
                           0.024
                                           0.206)
                                                         0.014
                                                                       0.010
249
                0.10
                                                         0.014
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     20.75
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                                           0.205)
250
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                           0.016
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     20.83
                                           0.204)
251
    20.92
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                                                         0.009
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                                           0.204)
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252
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253
     21.08
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254
    21.17
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                                           0.201)
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255
     21.25
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                           0.024
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256
    21.33
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257
     21.42
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258
     21.50
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                           0.016
259
     21.58
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260
     21.67
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261
    21.75
                0.10
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262
     21.83
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                           0.016
                                           0.195)
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                                                                       0.007
263
    21.92
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                                           0.195)
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264
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265
     22.08
                0.10
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266
    22.17
                0.10
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                                           0.193)
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267
     22.25
                0.10
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                                           0.192)
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268
    22.33
                0.07
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                                           0.191)
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                                                                       0.007
269
     22.42
                0.07
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                                           0.191)
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270
    22.50
                0.07
                           0.016
                                           0.190)
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271
    22.58
                0.07
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                                           0.190)
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272
    22.67
                0.07
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273
    22.75
                0.07
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                                                                       0.007
274
    22.83
                0.07
                           0.016
                                           0.188)
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275
    22.92
                0.07
                           0.016
                                           0.188)
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276
     23.00
                0.07
                           0.016
                                           0.187)
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                0.07
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277
     23.08
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                                           0.187)
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278
                0.07
     23.17
                           0.016
                                           0.186)
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                                                                       0.007
279
    23.25
                0.07
                           0.016
                                           0.186)
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280
     23.33
                0.07
                           0.016
                                           0.186)
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                                                                       0.007
281
     23.42
                0.07
                           0.016
                                           0.185)
                                                         0.009
                                                                       0.007
282
    23.50
                0.07
                                                         0.009
                           0.016
                                           0.185)
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283
     23.58
                0.07
                           0.016
                                           0.185)
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                                                                       0.007
284
    23.67
                0.07
                           0.016
                                           0.184)
                                                         0.009
                                                                       0.007
285
     23.75
                0.07
                           0.016
                                           0.184)
                                                         0.009
                                                                       0.007
286
     23.83
                0.07
                           0.016
                                           0.184)
                                                         0.009
                                                                       0.007
287
     23.92
                0.07
                                                         0.009
                                                                       0.007
                           0.016
                                           0.184)
288
     24.00
                0.07
                           0.016
                                           0.184)
                                                         0.009
                                                                       0.007
                 (Loss Rate Not Used)
    Sum =
               100.0
                                                          Sum =
                                                                    10.1
       Flood volume = Effective rainfall
                                                 0.84(In)
        times area
                           2.0(Ac.)/[(In)/(Ft.)] =
                                                           0.1(Ac.Ft)
       Total soil loss =
                                1.16(In)
       Total soil loss =
                               0.193(Ac.Ft)
       Total rainfall =
                               2.00(In)
       Flood volume =
                               6098.4 Cubic Feet
       Total soil loss =
                                  8421.6 Cubic Feet
```

Peak flow rate of this hydrograph =	0.230(CFS)
24 - H O U R S T R u n o f f H y d r	O R M
Hydrograph in 5 Minute i	Intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS) 0	2.5	5.0	7.5	10.0
0+ 5	0.0001	0.01	Q				
0+10	0.0002	0.01	Q	1			
0+15	0.0003	0.01	Q	I			
0+20	0.0004	0.02	Q	I			
0+25	0.0005	0.02	Q	I			
0+30	0.0007	0.02	Q	I			
0+35	0.0008	0.02	Q	Ì	ĺ	İ	ĺ
0+40	0.0009	0.02	Q	Ì	ĺ	İ	ĺ
0+45	0.0011	0.02	Q	Ì	ĺ	İ	ĺ
0+50	0.0012	0.02	Q	İ	ĺ	į	j
0+55	0.0014	0.03	Q	İ	ĺ	į	j
1+ 0	0.0016	0.03	Q	İ	ĺ	į	j
1+ 5	0.0018	0.02	Q	Ì	ĺ	İ	Ì
1+10	0.0019	0.02	Q	İ	ĺ	į	j
1+15	0.0021	0.02	Q	İ	ĺ	į	j
1+20	0.0022	0.02	Q	İ	İ	į	į
1+25	0.0023	0.02	Q	İ	İ	i	ĺ
1+30	0.0025	0.02	Q	İ	İ	į	j
1+35	0.0026	0.02	Q	İ	İ	i	İ
1+40	0.0028	0.02	Q	İ	İ	į	j
1+45	0.0029	0.02	Q	İ	ĺ	į	ĺ
1+50	0.0031	0.02	Q	İ	İ	į	ĺ
1+55	0.0033	0.03	Q	İ	j	i	j
2+ 0	0.0034	0.03	Q	İ	İ	i	j
2+ 5	0.0036	0.03	Q۷	İ	İ	i	İ
2+10	0.0038	0.03	Q۷	İ	j	i	j
2+15	0.0040	0.03	Q۷	İ	j	i	j
2+20	0.0042	0.03	Q۷	İ	j	i	j
2+25	0.0044	0.03	Q۷	İ	İ	į	ĺ
2+30	0.0046	0.03	QV	İ	İ	i	ĺ
2+35	0.0048	0.03	Q۷	İ	j	i	j
2+40	0.0050	0.03	Qν	į	İ	į	į
2+45	0.0052	0.03	Qν	į	İ	į	į
2+50	0.0055	0.03	Qν	i	İ	į	j
2+55	0.0057	0.03	Q۷	j	İ	i	j
3+ 0	0.0059	0.03	Qν	i	i	i	j
3+ 5	0.0062	0.03	Qν	i	i	i	j
3+10	0.0064	0.03	Q۷	i	i	i	i

3+15	0.0066	0.03	QV	
3+20	0.0069	0.03	Q۷	
3+25	0.0071	0.03	Qν	
3+30	0.0071	0.03	QV	
			_	
3+35	0.0076	0.03	Q V	
3+40	0.0078	0.03	Q V	
3+45	0.0080	0.03	QV	
3+50	0.0083	0.04	QV	
3+55	0.0086	0.04	QV	
4+ 0	0.0089	0.04	QV	
4+ 5	0.0092	0.04	QV	
4+10	0.0094	0.04	QV	
4+15	0.0097	0.04	QV	
4+20	0.0100	0.05	QV	
4+25	0.0103	0.05	Qν	
4+30	0.0107	0.05	Q۷	/
4+35	0.0110	0.05	Qν	
4+40	0.0113	0.05	Qν	
4+45	0.0113	0.05	Q V	
4+45 4+50			-	
	0.0120	0.05	_	
4+55	0.0124	0.05	Q V	
5+ 0	0.0128	0.05	Q V	
5+ 5	0.0131	0.05	Q V	
5+10	0.0134	0.04	Q V	
5+15	0.0136	0.04	Q V	
5+20	0.0139	0.05	Q V	/
5+25	0.0143	0.05	Q	V
5+30	0.0146	0.05	Q	V
5+35	0.0150	0.05		V
5+40	0.0153	0.05	-	V
5+45	0.0157	0.05	-	V
5+50	0.0161	0.05	-	V
5+55	0.0164	0.05	Q	V
6+ 0	0.0168	0.05	Q	V
6+ 5	0.0172	0.06		V
			Q O	
6+10	0.0176	0.06	Q	V
6+15	0.0181	0.06	Q	V
6+20	0.0185	0.06	Q	V
6+25	0.0189	0.06	Q	V
6+30	0.0193	0.06	Q	V
6+35	0.0198	0.07	Q	V
6+40	0.0202	0.07	Q	V
6+45	0.0207	0.07	Q	V
6+50	0.0212	0.07	Q	V
6+55	0.0216	0.07	Q	V
7+ 0	0.0210	0.07	Q	V
7+ 6 7+ 5	0.0221	0.07	-	V V
			Q	
7+10	0.0230	0.07	Q	V
7+15	0.0235	0.07	Q	V
7+20	0.0240	0.07	Q	V

7+25	0.0245	0.07 Q	V		
7+30	0.0250	0.07 Q	V		
7+35	0.0256	0.08 Q	V	<u> </u>	
7+40	0.0261	0.08 Q	V	.	
7+45	0.0267	0.08 Q	v j j	i	İ
7+50	0.0273	0.09 Q	v j j	i	İ
7+55	0.0279	0.09 Q	v j j	i	j
8+ 0	0.0285	0.09 Q	v j j	i	İ
8+ 5	0.0292	0.10 Q	v j j	i	j
8+10	0.0299	0.10 Q	v i i	i	j
8+15	0.0306	0.10 Q	v i i	i	j
8+20	0.0313	0.10 Q	v i i	i	į
8+25	0.0320	0.10 Q	vi i	i	i
8+30	0.0327	0.10 Q	vi i	i	i
8+35	0.0334	0.11 Q	vi i	i	İ
8+40	0.0342	0.11 Q	vi i	i	i
8+45	0.0349	0.11 Q	v	i	i
8+50	0.0357	0.11 Q	V	i	i
8+55	0.0365	0.12 Q	V	i	i
9+ 0	0.0373	0.12 Q	V	i	i
9+ 5	0.0381	0.12 Q	V	i	i
9+10	0.0390	0.13 Q	īv i	i	i
9+15	0.0399	0.13 Q	iv i	i	i
9+20	0.0408	0.13 Q	iv i	i	i
9+25	0.0417	0.14 Q	iv i	i	i
9+30	0.0427	0.14 Q	ľv	i	i
9+35	0.0436	0.14 Q	i v	i	i
9+40	0.0446	0.14 Q	i v i	i	i
9+45	0.0456	0.14 Q	i v i	i	i
9+50	0.0466	0.15 Q	i v i	i	i
9+55	0.0476	0.15 Q	i v i	i	i
10+ 0	0.0487	0.15 Q	i v		i
10+ 5	0.0495	0.12 Q	i v	ı İ	i
10+10	0.0502	0.12 Q 0.10 Q	i v		i
10+15	0.0502	0.10 Q	i v		i
10+20	0.0516	0.10 Q	i v		i
10+25	0.0523	0.10 Q	i v	ı İ	i
10+30	0.0530	0.10 Q	i v	 	i
10+35	0.0538	0.10 Q 0.12 Q	i v i	 	
10+40	0.0548	0.12 Q 0.14 Q	i v i	 	
10+45	0.0557	0.14 Q	i v i	 	
10+50	0.0566	0.14 Q	i v i		i
10+55	0.0576	0.14 Q 0.14 Q	i v i		-
10+33	0.0585	0.14 Q 0.14 Q	V		
11+ 5	0.0594	0.14 Q 0.13 Q	V	 	-
11+ 3	0.0603	0.13 Q 0.13 Q	V		
11+16	0.0612	0.13 Q 0.13 Q	V	 	-
11+15	0.0612	0.13 Q 0.13 Q	V		
11+26 11+25	0.0621	_	V V	 	
		=	V V		l I
11+30	0.0638	0.13 Q	l A l	I	I

11+35	0.0647	0.12	Q	1	V		
11+40	0.0655	0.12	Q	Ì	v İ	i i	
11+45	0.0662	0.12	Q	j	v İ	i i	
11+50	0.0671	0.12	Q	Ì	vİ	i i	
11+55	0.0679	0.12	Q	İ	vİ	i i	
12+ 0	0.0688	0.12	Q	i	vİ	i i	
12+ 5	0.0698	0.15	Q	i	v	i i	
12+10	0.0710	0.17	Q	i	V	i i	
12+15	0.0721	0.17	Q	i	V	i i	
12+20	0.0733	0.17	Q	ì	V	i	
12+25	0.0746	0.18	Q	ì	Ĭv	i	
12+30	0.0758	0.18	Q	i	ľv	i i	
12+35	0.0770	0.19	Q	ł	ľv	i i	
12+40	0.0784	0.19	Q	ł	ľv		
12+45	0.0797	0.19	Q	ł	ľv		
12+50	0.0810	0.19	Q	-	V		
12+55	0.0810	0.19		ł	l V		
13+ 0	0.0824	0.20	Q	ł	l V		
13+ 6			Q	ł	l V		
	0.0852	0.22	Q	ļ	l V		
13+10	0.0868	0.23	Q				
13+15	0.0884	0.23	Q	-	l V		
13+20	0.0900	0.23	Q	-	l V		
13+25	0.0916	0.23	Q	-	l V	!!!	
13+30	0.0932	0.23	Q	ļ	l V	!!!	
13+35	0.0944	0.18	Q	ļ	l V	!!!	
13+40	0.0955	0.16	Q	ļ	l v	ļ ļ	
13+45	0.0965	0.16	Q	ļ	l v	ļ ļ	
13+50	0.0976	0.16	Q	ļ ļ	l v	ļ ļ	
13+55	0.0987	0.16	Q	ļ	l v	!!!	
14+ 0	0.0998	0.16	Q	ļ	Į V	ļ ļ	
14+ 5	0.1010	0.17	Q	ļ	į v	ļ ļ	
14+10	0.1022	0.18	Q	ļ	:	/	
14+15	0.1035	0.18	Q	ļ		/	
14+20	0.1047	0.18	Q	ļ	\	/	
14+25	0.1059	0.18	Q	ļ		V	
14+30	0.1071	0.18	Q			v	
14+35	0.1083	0.18	Q			V	
14+40	0.1096	0.18	Q			V	
14+45	0.1108	0.18	Q			[V]	
14+50	0.1120	0.17	Q			V	
14+55	0.1131	0.17	Q			V	
15+ 0	0.1143	0.17	Q			V	
15+ 5	0.1154	0.16	Q			V	
15+10	0.1165	0.16	Q	1	1	j v j	
15+15	0.1177	0.16	Q	1	1	j v j	
15+20	0.1187	0.16	Q	İ	İ	į v į	
15+25	0.1198	0.16	Q	İ	j	j v j	
15+30	0.1209	0.16	Q	İ	j	j v j	
15+35	0.1218	0.14	Q	İ	j	j v j	
15+40	0.1227	0.13	Q	j	j	j v j	
			-	•	•	. ,	

15+45	0.1236	0.13	Q			V	
15+50	0.1245	0.13	Q			V	
15+55	0.1254	0.13	Q			V	
16+ 0	0.1263	0.13	Q			V	
16+ 5	0.1267	0.06	Q			V	
16+10	0.1269		Q			V	
16+15	0.1271	0.03	Q			V	
16+20	0.1272	0.03	Q			V	
16+25	0.1274	0.03	Q			V	
16+30	0.1276	0.03	Q			V	
16+35	0.1278	0.02	Q			V	
16+40	0.1279	0.02	Q			V	
16+45	0.1281	0.02	Q			V	
16+50	0.1282	0.02	Q			V	
16+55	0.1283	0.02	Q			V	
17+ 0	0.1285	0.02	Q			V	
17+ 5	0.1287		Q			V	
17+10	0.1289		Q	i i	ĺ	V	
17+15	0.1291	0.03	Q			V	
17+20	0.1294		Q			V	
17+25	0.1296		Q			V	
17+30	0.1298		Q	i i	į	V j	
17+35	0.1301		Q	i i	ĺ	V	
17+40	0.1303		Q	i i	į	V j	
17+45	0.1305		Q	i i	ĺ	V	
17+50	0.1307		Q	i i	į	νİ	
17+55	0.1309		Q	i i	ĺ	V	
18+ 0	0.1311		Q	i i	ĺ	V	
18 + 5	0.1313		Q	i i	ĺ	V	
18+10	0.1315		Q	i i	ĺ	V	
18+15	0.1317	0.03	Q			V	
18+20	0.1319	0.03	Q			V	
18+25	0.1321	0.03	Q			V	
18+30	0.1322	0.03	Q			V	
18+35	0.1324	0.02	Q			V	
18+40	0.1325	0.02	Q			V	
18+45	0.1327	0.02	Q			V	
18+50	0.1328	0.02	Q			V	
18+55	0.1329	0.01	Q			V	
19+ 0	0.1330	0.01	Q			V	
19+ 5	0.1331	0.02	Q			V	
19+10	0.1332	0.02	Q			V	
19+15	0.1334	0.02	Q			V	
19+20	0.1335		Q			V	
19+25	0.1337		Q			V	
19+30	0.1339		Q			V	
19+35	0.1341		Q			V	
19+40	0.1342		Q			V	
19+45	0.1344		Q			V	
19+50	0.1345	0.02	Q			V	

19+55	0.1346	0.01	Q	I		V
20+ 0	0.1346	0.01	Q	İ	j i	νİ
20+ 5	0.1348	0.02	Q	İ	j i	νİ
20+10	0.1349	0.02	Q	İ	j i	νİ
20+15	0.1351	0.02	Q	İ		νİ
20+20	0.1352	0.02	Q	İ		νİ
20+25	0.1353	0.02	Q	i	i	νİ
20+30	0.1355	0.02	Q	i	i	νİ
20+35	0.1356	0.02	Q	i	i	v i
20+40	0.1358	0.02	Q	i	i	v i
20+45	0.1359	0.02	Q	i	i	v i
20+50	0.1360	0.02	Q	i	i	v i
20+55	0.1361	0.01	Q	i	i	v i
21+ 0	0.1362	0.01	Q	i	i	v i
21+ 5	0.1363	0.02	Q	i	i	v i
21+10	0.1365	0.02	Q	i	i	v i
21+15	0.1366	0.02	Q	i	i	vi
21+20	0.1367	0.02	Q	i	i	νİ
21+25	0.1368	0.01	Q	i	i	νİ
21+30	0.1369	0.01	Q	i	i	νİ
21+35	0.1370	0.02	Q	i	i	v
21+40	0.1370	0.02	Q	 		v V
21+45	0.1373	0.02	Q	i I		v V
21+50	0.1374	0.02	Q	 		v V
21+55	0.1375	0.01	Q	! 		V V
22+ 0	0.1376	0.01	Q	 		v I V I
22+ 5	0.1377	0.02	Q	i I		v I V I
22+10	0.1379	0.02	Q	i		v V
22+15	0.1380	0.02	Q	i	i	v
22+20	0.1381	0.02	Q	i		νİ
22+25	0.1382	0.01	Q	i	i	νİ
22+30	0.1383	0.01	Q	i	i	νİ
22+35	0.1384	0.01	Q	i	i	νİ
22+40	0.1385	0.01	0	i	i	νİ
22+45	0.1386	0.01	Q	i	i	νİ
22+50	0.1387	0.01	Q	i	i	v
22+55	0.1388	0.01	Q	i	i	νİ
23+ 0	0.1388	0.01	Q	i	i	νİ
23+ 5	0.1389	0.01	Q	i	i	νİ
23+10	0.1390	0.01	Q	İ		vi
23+15	0.1391	0.01	Q	İ		vi
23+20	0.1392	0.01	Q	i	İ	vi
23+25	0.1393	0.01	Q	i	i	νİ
23+30	0.1394	0.01	Q	i	i	v
23+35	0.1395	0.01	Q	i	j	v
23+40	0.1396	0.01	Q	i	j	νİ
23+45	0.1397	0.01	Q	i	j	νİ
23+50	0.1398	0.01	Q	i	j	νİ
23+55	0.1399	0.01	Q	i	j	νİ
24+ 0	0.1400	0.01	Q	i	i	v
=	· · ·		-	•	•	- I

24+ 5 0.1400 0.00 Q | V

Unit Hydrograph Analysis

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```
Riverside County Synthetic Unit Hydrology Method
      RCFC & WCD Manual date - April 1978
      Program License Serial Number 6586
       English (in-lb) Input Units Used
       English Rainfall Data (Inches) Input Values Used
       English Units used in output format
       22-0192 - MVCC PARK
      ONSITE UNIT HYDROGRAPH ANALYSIS - DMA E-3
      DEVELOPED CONDITION, 2-YEAR 24-HOUR
      FN: ONSITEPOSTE3.OUT- RSB
      ______
      Drainage Area = 2.50(Ac.) = 0.004 Sq. Mi.
      Drainage Area for Depth-Area Areal Adjustment = 2.50(Ac.) =
0.004 Sq. Mi.
      Length along longest watercourse =
                                     492.00(Ft.)
      Length along longest watercourse measured to centroid = 165.00(Ft.)
      Length along longest watercourse = 0.093 Mi.
      Length along longest watercourse measured to centroid = 0.031 Mi.
      Difference in elevation = 12.00(Ft.)
Slope along watercourse = 128.7805 Ft./Mi.
      Average Manning's 'N' = 0.025
      Lag time = 0.026 Hr.
      Lag time = 1.56 Min.
      25% of lag time = 0.39 Min.
40% of lag time = 0.62 Min.
      Unit time = 5.00 Min.
      Duration of storm = 24 Hour(s)
      User Entered Base Flow = 0.00(CFS)
      2 YEAR Area rainfall data:
```

```
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
       2.50
                    2.00
                                           5.00
100 YEAR Area rainfall data:
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
       2.50
                5.40
                                    13.50
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 5.400(In)
Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
Area(Ac.) Runoff Index Impervious 2.500 69.00 0.090
                             Impervious %
 Total Area Entered = 2.50(Ac.)
RI
     RI Infil. Rate Impervious Adj. Infil. Rate Area%
                                                          F
AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.) (In/Hr) 69.0 49.8 0.574 0.090 0.527 1.000 0.527
                                             Sum (F) = 0.527
Area averaged mean soil loss (F) (In/Hr) = 0.527
Minimum soil loss rate ((In/Hr)) = 0.264
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.828
   Unit Hydrograph
                    VALLEY S-Curve
______
             Unit Hydrograph Data
______
Unit time period Time % of lag Distribution Unit Hydrograph (hrs) Graph % (CFS)
   1 0.083

      1
      0.083
      321.477
      58.782

      2
      0.167
      642.954
      35.978

      3
      0.250
      964.432
      5.240

                                                   1.481
                                                  0.906
                                                  0.132
                    Sum = 100.000 Sum= 2.520
```

The following loss rate calculations reflect use of the minimum calculated loss

rate subtracted from the Storm Rain to produce the maximum Effective Rain value

llni+	Time	Pattern	Storm Rain	Loss rate(In /Hn)	Effective
OHIL	(Hr.)	Percent	(In/Hr)	Max	Low	(In/Hr)
1	0.08	0.07	0.016	(0.935)	0.013	0.003
2	0.17	0.07	0.016	•	0.013	0.003
3	0.25	0.07	0.016 0.016	•	0.013	0.003
4				•		
	0.33	0.10	0.024	(0.924)	0.020	0.004
5	0.42	0.10	0.024	(0.921)	0.020	0.004
6	0.50	0.10	0.024	(0.917)	0.020	0.004
7	0.58	0.10	0.024	(0.913)	0.020	0.004
8	0.67	0.10	0.024	(0.910)	0.020	0.004
9	0.75	0.10	0.024	(0.906)	0.020	0.004
10	0.83	0.13	0.032	(0.903)	0.026	0.006
11	0.92	0.13	0.032	(0.899)	0.026	0.006
12	1.00	0.13	0.032	(0.896)	0.026	0.006
13	1.08	0.10	0.024	(0.892)	0.020	0.004
14	1.17	0.10	0.024	(0.889)	0.020	0.004
15	1.25	0.10	0.024	(0.885)	0.020	0.004
16	1.33	0.10	0.024	(0.882)	0.020	0.004
17	1.42	0.10	0.024	(0.878)	0.020	0.004
18	1.50	0.10	0.024	(0.875)	0.020	0.004
19	1.58	0.10	0.024	(0.871)	0.020	0.004
20	1.67	0.10	0.024	(0.868)	0.020	0.004
21	1.75	0.10	0.024	(0.864)	0.020	0.004
22	1.83	0.13	0.032	(0.861)	0.026	0.006
23	1.92	0.13	0.032	(0.857)	0.026	0.006
24	2.00	0.13	0.032	(0.854)	0.026	0.006
25	2.08	0.13	0.032	(0.850)	0.026	0.006
26	2.17	0.13	0.032	(0.847)	0.026	0.006
27	2.25	0.13	0.032	(0.843)	0.026	0.006
28	2.33	0.13	0.032	(0.840)	0.026	0.006
29	2.42	0.13	0.032	(0.836)	0.026	0.006
30	2.50	0.13	0.032	(0.833)	0.026	0.006
31	2.58	0.17	0.040	(0.830)	0.033	0.007
32	2.67	0.17	0.040	(0.826)	0.033	0.007
33	2.75	0.17	0.040	(0.823)	0.033	0.007
34	2.83	0.17	0.040	(0.819)	0.033	0.007
35	2.92	0.17	0.040	(0.816)	0.033	0.007
36	3.00	0.17	0.040	(0.813)	0.033	0.007
37	3.08	0.17	0.040	(0.809)	0.033	0.007
38	3.17	0.17	0.040	(0.806)	0.033	0.007
39	3.25	0.17	0.040	(0.803)	0.033	0.007
40	3.33	0.17	0.040	(0.799)	0.033	0.007
41	3.42	0.17	0.040	(0.796)	0.033	0.007
42	3.50	0.17	0.040	(0.793)	0.033	0.007
42 43	3.58	0.17	0.040	(0.789)	0.033	0.007
43 44	3.67	0.17	0.040	::	0.033	0.007
44 45			0.040	•		
	3.75	0.17		(0.783)	0.033	0.007
46	3.83	0.20	0.048	(0.779)	0.040	0.008

47	3.92	0.20	0.048	(0.776)	0.040	0.008
48	4.00	0.20	0.048	(0.773)	0.040	0.008
49	4.08	0.20	0.048	(0.770)	0.040	0.008
50	4.17	0.20	0.048	(0.766)	0.040	0.008
51	4.25	0.20	0.048	(0.763)	0.040	0.008
52	4.33	0.23	0.056	(0.760)	0.046	0.010
53	4.42	0.23	0.056	•	0.046	0.010
				(0.756)		
54	4.50	0.23	0.056	(0.753)	0.046	0.010
55	4.58	0.23	0.056	(0.750)	0.046	0.010
56	4.67	0.23	0.056	(0.747)	0.046	0.010
57	4.75	0.23	0.056	(0.744)	0.046	0.010
58	4.83	0.27	0.064	(0.740)	0.053	0.011
59	4.92	0.27	0.064	(0.737)	0.053	0.011
60	5.00	0.27	0.064	(0.734)	0.053	0.011
61	5.08	0.20	0.048	(0.731)	0.040	0.008
62	5.17	0.20	0.048	(0.728)	0.040	0.008
63	5.25	0.20	0.048	(0.724)	0.040	0.008
64	5.33	0.23	0.056	(0.721)	0.046	0.010
65	5.42	0.23	0.056	(0.718)	0.046	0.010
66	5.50	0.23	0.056	(0.715)	0.046	0.010
67	5.58	0.27	0.064	(0.712)	0.053	0.011
68	5.67	0.27	0.064	(0.709)	0.053	0.011
69	5.75	0.27	0.064	(0.706)	0.053	0.011
70	5.83	0.27	0.064	(0.702)	0.053	0.011
71	5.92	0.27	0.064	(0.699)	0.053	0.011
72	6.00	0.27	0.064	(0.696)	0.053	0.011
73	6.08	0.27	0.072	(0.693)	0.060	0.011
74	6.17	0.30	0.072	(0.690)	0.060	0.012
7 5	6.25	0.30	0.072	(0.687)	0.060	0.012
				,		
76	6.33	0.30	0.072	(0.684)	0.060	0.012
77	6.42	0.30	0.072	(0.681)	0.060	0.012
78	6.50	0.30	0.072	(0.678)	0.060	0.012
79	6.58	0.33	0.080	(0.675)	0.066	0.014
80	6.67	0.33	0.080	(0.672)	0.066	0.014
81	6.75	0.33	0.080	(0.669)	0.066	0.014
82	6.83	0.33	0.080	(0.666)	0.066	0.014
83	6.92	0.33	0.080	(0.663)	0.066	0.014
84	7.00	0.33	0.080	(0.660)	0.066	0.014
85	7.08	0.33	0.080	(0.657)	0.066	0.014
86	7.17	0.33	0.080	(0.654)	0.066	0.014
87	7.25	0.33	0.080	(0.651)	0.066	0.014
88	7.33	0.37	0.088	(0.648)	0.073	0.015
89	7.42	0.37	0.088	(0.645)	0.073	0.015
90	7.50	0.37	0.088	(0.642)	0.073	0.015
91	7.58	0.40	0.096	(0.639)	0.079	0.017
92	7.67	0.40	0.096	(0.636)	0.079	0.017
93	7.75	0.40	0.096	(0.633)	0.079	0.017
94	7.83	0.43	0.104	(0.630)	0.086	0.018
95	7.92	0.43	0.104	(0.627)	0.086	0.018
96	8.00	0.43	0.104	(0.624)	0.086	0.018
-		-		(/		

97	8.08	0.50	0.120	(0	.621)	0.099	0.021
98	8.17	0.50	0.120	•	.618)	0.099	0.021
99	8.25	0.50	0.120	•	.616)		0.021
100	8.33	0.50	0.120	•	.613)		0.021
101	8.42	0.50	0.120	•	.610)	0.099	0.021
102	8.50	0.50	0.120	•	.607)	0.099	0.021
103	8.58	0.53	0.128	•	.604)	0.106	0.022
104	8.67	0.53	0.128	•	.601)	0.106	0.022
105	8.75	0.53	0.128	•	.598)	0.106	0.022
106		0.57	0.136	•	.596)	0.113	0.023
107		0.57	0.136	•	.593)		0.023
108		0.57	0.136	•	.590)		0.023
109	9.08	0.63	0.152	•	.587)	0.126	0.026
110	9.17	0.63	0.152	•	.584)	0.126	0.026
111	9.25	0.63	0.152	•	.582)	0.126	0.026
112	9.33	0.67	0.160	•	.579)	0.132	0.028
113	9.42	0.67	0.160	•	.576)		0.028
114		0.67	0.160	•	.573)		0.028
115		0.70	0.168	•	.571)		0.029
116		0.70	0.168	•	.568)	0.139	0.029
117		0.70	0.168	•	.565)	0.139	0.029
118	9.83	0.73	0.176	•	.562)	0.146	0.030
119	9.92	0.73	0.176	•	.560)	0.146	0.030
120	10.00	0.73	0.176	•	.557)	0.146	0.030
121	10.08	0.50	0.170	•	.554)		0.030
122	10.03	0.50	0.120	•	.552)		0.021
123	10.17	0.50	0.120	•	.549)	0.099	0.021
124	10.23	0.50	0.120	•	.546)	0.099	0.021
125	10.33	0.50	0.120	•	.544)	0.099	0.021
126	10.42	0.50	0.120	•	.541)	0.099	0.021
127	10.58	0.67	0.160	•	.538)		0.021
128	10.58	0.67	0.160	•	.536)		0.028
129	10.75	0.67	0.160		.533)		0.028
130	10.73	0.67	0.160		.530)	0.132	0.028
	10.83		0.160	•	.528)	0.132	0.028
	11.00	0.67	0.160	•	.525)		0.028
133		0.63	0.152	•	.523)	0.126	0.026
134		0.63	0.152	•	.520)	0.126	0.026
135	11.25	0.63	0.152	•	.518)		0.026
136		0.63	0.152	•	.515)		0.026
137	11.42	0.63	0.152		.512)	0.126	0.026
138	11.50	0.63	0.152	•	.510)	0.126	0.026
139	11.58	0.57	0.136	:	.507)	0.113	0.023
140	11.67	0.57	0.136		.505)	0.113	0.023
141	11.75	0.57	0.136 0.136	•	.502)	0.113	0.023
141	11.73	0.60	0.136	•	.502)		0.025
143	11.63	0.60	0.144 0.144	•	. 497)		0.025
144		0.60			·497)		0.025
144		0.83	0.144	•	.493) .492)		0.034
146	12.08	0.83	0.200	•	.492) .490)		0.034
1 +0	14,1/	0.05	0.200	(0	• 700)	0.100	0.034

147	12.25	0.83	0.200	(0.487)	0.166	0.034
148	12.33	0.87	0.208	(0.485)	0.172	0.036
149	12.42	0.87	0.208	(0.483)	0.172	0.036
150	12.50	0.87	0.208	(0.480)	0.172	0.036
151	12.58	0.93	0.224	(0.478)	0.185	0.039
152	12.67	0.93	0.224	(0.475)	0.185	0.039
153	12.75	0.93	0.224	(0.473)	0.185	0.039
154	12.83	0.97	0.232	(0.471)	0.192	0.040
155	12.92	0.97	0.232	(0.468)	0.192	0.040
156	13.00	0.97	0.232	(0.466)	0.192	0.040
157	13.08	1.13	0.272	(0.463)	0.225	0.047
158	13.17	1.13	0.272	(0.461)	0.225	0.047
159	13.25	1.13	0.272	(0.459)	0.225	0.047
160	13.33	1.13	0.272	(0.456)	0.225	0.047
161	13.42	1.13	0.272	(0.454)	0.225	0.047
162	13.50	1.13	0.272	(0.452)	0.225	0.047
163	13.58	0.77	0.184	(0.449)	0.152	0.032
164	13.67	0.77	0.184	(0.447)	0.152	0.032
165	13.75	0.77	0.184	(0.445)	0.152	0.032
166	13.83	0.77	0.184	(0.443)	0.152	0.032
167	13.92	0.77	0.184	(0.440)	0.152	0.032
168	14.00	0.77	0.184	(0.438)	0.152	0.032
169	14.08	0.90	0.216	(0.436)	0.179	0.037
170	14.17	0.90	0.216	(0.434)	0.179	0.037
171	14.25	0.90	0.216	(0.431)	0.179	0.037
172	14.33	0.87	0.208	(0.429)	0.172	0.036
173	14.42	0.87	0.208	(0.427)	0.172	0.036
174	14.50	0.87	0.208	(0.425)	0.172	0.036
175	14.58	0.87	0.208	(0.423)	0.172	0.036
176	14.67	0.87	0.208	(0.421)	0.172	0.036
177	14.75	0.87	0.208	(0.418)	0.172	0.036
178	14.83	0.83	0.200	(0.416)	0.166	0.034
179	14.92	0.83	0.200	(0.414)	0.166	0.034
180	15.00	0.83	0.200	(0.412)	0.166	0.034
181	15.08	0.80	0.192	į	0.410)	0.159	0.033
182	15.17	0.80	0.192	(0.408)	0.159	0.033
183	15.25	0.80	0.192	į	0.406)	0.159	0.033
184	15.33	0.77	0.184	į	0.404)	0.152	0.032
185	15.42	0.77	0.184	į	0.402)	0.152	0.032
186	15.50	0.77	0.184	Ì	0.399)	0.152	0.032
187	15.58	0.63	0.152	(0.397)	0.126	0.026
188	15.67	0.63	0.152	(0.395)	0.126	0.026
189	15.75	0.63	0.152	<i>(</i>	0.393)	0.126	0.026
190	15.83	0.63	0.152	į	0.391)	0.126	0.026
191	15.92	0.63	0.152	Ì	0.389)	0.126	0.026
192	16.00	0.63	0.152	Ì	0.387)	0.126	0.026
193	16.08	0.13	0.032	(0.385)	0.026	0.006
194	16.17	0.13	0.032	(0.383)	0.026	0.006
195	16.25	0.13	0.032	Ì	0.381)	0.026	0.006
196	16.33	0.13	0.032	Ì	0.379)	0.026	0.006
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197	16.42	0.13	0.032	(0.378)	0.026	0.006
198	16.50	0.13	0.032	(0.376)	0.026	0.006
199	16.58	0.10	0.024	(0.374)	0.020	0.004
200	16.67	0.10	0.024	(0.372)	0.020	0.004
201	16.75	0.10	0.024	(0.370)	0.020	0.004
202	16.83	0.10	0.024	(0.368)	0.020	0.004
203	16.92	0.10	0.024	(0.366)	0.020	0.004
204	17.00	0.10	0.024	(0.364)	0.020	0.004
205	17.08	0.17	0.040	(0.363)	0.033	0.007
206	17.17	0.17	0.040	(0.361)	0.033	0.007
207	17.25	0.17	0.040	(0.359)	0.033	0.007
208	17.33	0.17	0.040	(0.357)	0.033	0.007
209	17.42	0.17	0.040	(0.355)	0.033	0.007
210	17.50	0.17	0.040	(0.353)	0.033	0.007
211	17.58	0.17	0.040	(0.352)	0.033	0.007
212	17.67	0.17	0.040	(0.350)	0.033	0.007
213	17.75	0.17	0.040	(0.348)	0.033	0.007
214	17.83	0.13	0.032	(0.347)	0.026	0.006
215	17.92	0.13	0.032	(0.345)	0.026	0.006
216	18.00	0.13	0.032	(0.343)	0.026	0.006
217	18.08	0.13	0.032	(0.341)	0.026	0.006
218	18.17	0.13	0.032	(0.340)	0.026	0.006
219	18.25	0.13	0.032	(0.338)	0.026	0.006
220	18.33	0.13	0.032	(0.336)	0.026	0.006
221	18.42	0.13	0.032	(0.335)	0.026	0.006
222	18.50	0.13	0.032	(0.333)	0.026	0.006
223	18.58	0.10	0.024	(0.332)	0.020	0.004
224	18.67	0.10	0.024	(0.330)	0.020	0.004
225	18.75	0.10	0.024	(0.328)	0.020	0.004
226	18.83	0.07	0.016	(0.327)	0.013	0.003
227	18.92	0.07	0.016	(0.325)	0.013	0.003
228	19.00	0.07	0.016	(0.324)	0.013	0.003
229	19.08	0.10	0.024	(0.322)	0.020	0.004
230	19.17	0.10	0.024	(0.321)	0.020	0.004
231	19.25	0.10	0.024	(0.319)	0.020	0.004
232	19.33	0.13	0.032	(0.318)	0.026	0.006
233	19.42	0.13	0.032	(0.316)	0.026	0.006
234	19.50 19.58	0.13	0.032	(0.315)	0.026	0.006
235 236	19.56	0.10 0.10	0.024 0.024	(0.313) 0.312)	0.020 0.020	0.004 0.004
237	19.75	0.10	0.024	(0.312)	0.020	0.004
238	19.73	0.10	0.016	(0.310)	0.013	0.004
239	19.83	0.07	0.016	(0.308)	0.013	0.003
240	20.00	0.07	0.016	(0.306)	0.013	0.003
240	20.08	0.10	0.024	(0.305)	0.020	0.003
242	20.17	0.10	0.024	(0.304)	0.020	0.004
242	20.17	0.10	0.024	(0.304)	0.020	0.004
244	20.23	0.10	0.024	(0.302)	0.020	0.004
245	20.33	0.10	0.024	(0.301)	0.020	0.004
246	20.50	0.10	0.024	(0.298)	0.020	0.004
0	20.30	0.10	0.027	(0.250)	0.020	J.00 -

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247
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248
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251
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263
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277
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279
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281
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283
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284
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                0.07
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285
     23.75
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286
     23.83
                0.07
                           0.016
                                                         0.013
                                                                       0.003
                                           0.264)
287
     23.92
                0.07
                           0.016
                                           0.264)
                                                         0.013
                                                                       0.003
288
     24.00
                0.07
                           0.016
                                           0.264)
                                                         0.013
                                                                       0.003
                 (Loss Rate Not Used)
    Sum =
               100.0
                                                          Sum =
                                                                     4.1
                                                 0.34(In)
       Flood volume = Effective rainfall
        times area
                           2.5(Ac.)/[(In)/(Ft.)] =
                                                           0.1(Ac.Ft)
       Total soil loss =
                                1.66(In)
       Total soil loss =
                               0.345(Ac.Ft)
       Total rainfall =
                               2.00(In)
       Flood volume =
                               3121.8 Cubic Feet
```

Pea	ak flow rate o	f this	hydrogra	ph = 6	0.118(CFS)		
+++-		 ++++++	 ++++++	++++++++	 ++++++++	 +++++++	+++++
				S T 0 F			
	Rı	unof	f	Hydrog	graph		
	Hydro	graph i	n 5	Minute inte	ervals ((C	FS))	
 ima(h_m)	Volume Ac.Ft	0/CES		2 5	 5 0	 7	10 0
<i>(11+111)</i>		ورددs 		2.5	J.U	/.J	10.6
	0.0000						1
0+10	0.0001		Q				
0+15	0.0001		Q	ļ	ļ	ļ	ļ
0+20	0.0002		Q	ļ	ļ		ļ
	0.0003		Q	ļ	ļ	ļ	ļ
	0.0003		Q	ļ		ļ	ļ
	0.0004		Q	ļ	ļ	ļ	ļ
	0.0005		Q	ļ	ļ	ļ	ļ
	0.0005		Q	ļ	ļ	ļ	ļ
0+50	0.0006		Q	ļ	ļ	ļ	ļ
0+55	0.0007			ļ	ļ	ļ	ļ
1+ 0			Q	ļ	ļ	ļ	ļ
1+ 5			Q	ļ	ļ	ļ	ļ
1+10			Q	ļ	ļ	ļ	ļ
1+15			Q	ļ	ļ	ļ	ļ
1+20	0.0011		Q	ļ	ļ	ļ	ļ
1+25		0.01	Q	ļ		ļ	ļ
1+30			Q	ļ		ļ	ļ
1+35	0.0013		Q	ļ	ļ	ļ	ļ
	0.0014		•	ļ		ļ	ļ
_		0.01	Q	ļ		ļ	
1+50	0.0016	0.01	Q	ļ		ļ	
1+55	0.0017	0.01	Q	ļ		ļ	
2+ 0	0.0017	0.01	Q O) (ļ			
2+ 5	0.0018	0.01	QV	ļ		-	
2+10	0.0019	0.01	QV	ļ		-	
2+15	0.0020	0.01	QV	ļ	ļ	ļ	
2+20	0.0021	0.01	QV	ļ		ļ	
2+25	0.0022	0.01	QV	ļ	ļ	ļ	
2+30	0.0023	0.01	QV		ļ		ļ
2+35	0.0024	0.02	QV		ļ		
2+40	0.0025	0.02	QV	ļ	l I		l I
2+45	0.0027	0.02	QV		ļ	ļ	
2+50	0.0028	0.02	QV		l I		
2+55	0.0029	0.02	QV		l I	l I	
3+ 0 3+ 5	0.0030 0.0031	0.02 0.02	QV QV	ļ		ļ	

3+10	0.0033	0.02	QV				
3+15	0.0034	0.02	QV	1	[
3+20	0.0035	0.02	QV		[
3+25	0.0036	0.02	Qν	1	1		
3+30	0.0037	0.02	ųν	ĺ	ĺ	İ	İ
3+35	0.0039	0.02	ųν	İ	ĺ	ĺ	İ
3+40	0.0040	0.02	ųν	İ	İ	İ	İ
3+45	0.0041	0.02	ųν	İ	İ	İ	İ
3+50	0.0042	0.02	Qν	İ	İ	İ	İ
3+55	0.0044	0.02	Qν	i	İ	İ	İ
4+ 0	0.0045	0.02	ųν	İ	İ	İ	İ
4+ 5	0.0047	0.02	ųν	i	İ	İ	İ
4+10	0.0048	0.02	ųν	İ	İ	İ	İ
4+15	0.0050	0.02	Qν	i	i	i	İ
4+20	0.0051	0.02	Qν	i	i	i	İ
4+25	0.0053	0.02	Qν	i	i	i	İ
4+30	0.0054	0.02	Q V	i	i	i	İ
4+35	0.0056	0.02	Q V	i	i	i	İ
4+40	0.0058	0.02	Q V	i	i	i	İ
4+45	0.0059	0.02	Q V	i	i	i	İ
4+50	0.0061	0.03	Q V	i	i	i	İ
4+55	0.0063	0.03	Q V	i	i	i	!
5+ 0	0.0065	0.03	Q V	i	i	i	!
5+ 5	0.0067	0.02	Q V	i	i	i	<u> </u>
5+10	0.0068	0.02	Q V	i	i	İ	
5+15	0.0070	0.02	Q V	i	i	İ	İ
5+20	0.0071	0.02	Q V	i	i	İ	!
5+25	0.0073	0.02	Q V	i	i	İ	<u> </u>
5+30	0.0074	0.02	Q V	i	i	i	
5+35	0.0076	0.03	Q V	i	i	İ	<u> </u>
5+40	0.0078	0.03	Q V	i	i	i	<u> </u>
5+45	0.0080	0.03	Q V	i	i	i	<u> </u>
5+50	0.0082	0.03	Q V	i	i	İ	<u> </u>
5+55	0.0084	0.03	O V	i	i	İ	<u> </u>
6+ 0	0.0086	0.03	Q V	i	i	i	<u> </u>
6+ 5	0.0088	0.03	Q V	i	i	i	!
6+10	0.0090	0.03	Q V	i	i	i	İ
6+15	0.0092	0.03	Q V	i	i	i	İ
6+20	0.0094	0.03	Q V	i	i	i	!
6+25	0.0096	0.03	Q V	i	i	i	İ
6+30	0.0099	0.03	Q V	i	i	i	İ
6+35	0.0101	0.03	Q V	i	i	İ	
6+40	0.0103	0.03	Q V	i	i	İ	<u> </u>
6+45	0.0106	0.03	Q V	i	i	i	<u> </u>
6+50	0.0108	0.03	Q V	i	i	i	<u> </u>
6+55	0.0110	0.03	Q V	i	i	İ	!
7+ 0	0.0113	0.03	Q V	i	<u> </u>	 	!
7+ 5	0.0115	0.03	Q V	İ	1	! 	!
7+10	0.0118	0.03	Q V	1	i I	! 	!
7+10 7+15	0.0120	0.03	Q V	1		! 	!
/ TIJ	0.0120	0.05	ν v	I	I	I	I

7+20	0.0123	0.04	Q	V				
7+25	0.0125	0.04	Q	V		1	1	
7+30	0.0128	0.04	Q	V		ĺ	Ì	Ì
7+35	0.0131	0.04	Q	νİ		İ	İ	İ
7+40	0.0133	0.04	Q	v j		İ	İ	İ
7+45	0.0136	0.04	Q	v j		İ	i	İ
7+50	0.0139	0.04	Q	v i		İ	İ	i
7+55	0.0142	0.04	Q	v İ		İ	i	i
8+ 0	0.0145	0.05	Q	vi		İ	i	i
8+ 5	0.0149	0.05	Q	νİ		i	i	i
8+10	0.0152	0.05	Q	νİ		i	i	i
8+15	0.0156	0.05	Q	v		i	i	i
8+20	0.0160	0.05	Q	νİ		i	i	¦
8+25	0.0163	0.05	Q	vi		i	i	
8+30	0.0167	0.05	Q	νİ		1	İ	
8+35	0.0170	0.05	Q	νİ		1	İ	
8+40	0.0176	0.06	Q	v		! 	1	
8+45	0.0174	0.06	Q	ν		! !	†	l I
8+50	0.0178	0.06	Q	V		¦	}	
8+55	0.0182	0.06		V		¦	}	
			Q	V		! !	-	l I
9+ 0 9+ 5	0.0190	0.06	Q	V		1	1	
	0.0195	0.06	Q			1	1	
9+10	0.0199	0.07	Q	V] 	1	
9+15	0.0204	0.07	Q	V		1	!	
9+20	0.0208	0.07	Q	V		ļ	!	
9+25	0.0213	0.07	Q	V V		ļ	!	
9+30	0.0218	0.07	Q	V		ļ	!	ļ
9+35	0.0223	0.07	Q	l V			ļ	
9+40	0.0228	0.07	Q	l V			ļ	
9+45	0.0233	0.07	Q	Į V		!	!	ļ
9+50	0.0238	0.07	Q	į v		!	!	ļ
9+55	0.0243	0.08	Q	į v		ļ	ļ	!
10+ 0	0.0248	0.08	Q	į v		ļ	ļ	ļ
10+ 5	0.0253	0.06	Q	•	V	ļ	ļ	
10+10	0.0256	0.05	Q		V	ļ	ļ	ļ
10+15	0.0260	0.05	Q	•	V	ļ	ļ	
10+20	0.0264	0.05	Q	•	V		Į	
10+25	0.0267	0.05	Q	Į ,	V		Į	
10+30	0.0271	0.05	Q		V			
10+35	0.0275	0.06	Q		V			
10+40	0.0280	0.07	Q		V			
10+45	0.0284	0.07	Q		V			
10+50	0.0289	0.07	Q		V			
10+55	0.0294	0.07	Q	ĺ	V			
11+ 0	0.0299	0.07	Q	ĺ	V			
11+ 5	0.0303	0.07	Q	j	V		1	
11+10	0.0308	0.07	Q	j	V		1	İ
11+15	0.0313	0.07	Q	j	V		İ	İ
11+20	0.0317	0.07	Q	j	V		İ	j
11+25	0.0322	0.07	Q	j	V		İ	i
			٠.	•		•	•	•

11+36					
11+35	11+30	0.0326	0.07	Q	V
11+40	11+35	0.0330	0.06		j vj j j
11+45	11+40	0.0334			i vi i i
11+50					i vi i i
11+55					i vi i i
12+ 0		0.0347	0.06		i vi i i
12+ 5					i vi i i
12+10					•
12+15					
12+20					· · · · · · · · · · · · · · · · · · ·
12+25					•
12+30					•
12+35					
12+40					
12+45					: : : : : : : : : : : : : : : : : : : :
12+50 0.0414 0.10 Q V <					
12+55 0.0421 0.10 Q V 13+ 0 0.0427 0.10 Q V 13+ 5 0.0435 0.11 Q V 13+10 0.0443 0.12 Q V 13+15 0.0451 0.12 Q V 13+20 0.0459 0.12 Q V 13+25 0.0468 0.12 Q V 13+30 0.0476 0.12 Q V 13+35 0.0482 0.10 Q V 13+40 0.0488 0.08 Q V 13+45 0.0493 0.08 Q V 13+50 0.0499 0.08 Q V 13+55 0.0504 0.08 Q V 14+ 0 0.0510 0.08 Q V 14+ 5 0.0516 0.09 Q V 14+15 0.0529 0.09 Q V 14+20 0.0535 0.09 Q V 14+20 0.0548					
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13+10 0.0443 0.12 Q V <					
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13+50 0.0499 0.08 Q V 13+55 0.0504 0.08 Q V 14+ 0 0.0510 0.08 Q V 14+ 5 0.0516 0.09 Q V 14+10 0.0522 0.09 Q V 14+15 0.0529 0.09 Q V 14+20 0.0535 0.09 Q V 14+25 0.0541 0.09 Q V 14+30 0.0548 0.09 Q V 14+35 0.0554 0.09 Q V 14+40 0.0560 0.09 Q V 14+45 0.0566 0.09 Q V 14+50 0.0572 0.09 Q V 15+5 0.0590 0.08 Q V 15+10 0.0596 0.08 Q V 15+20 0.0607 0.08 Q V 15+25 0.0613 0.08 Q V 15+30 0.0618					
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14+ 0 0.0510 0.08 Q V 14+ 5 0.0516 0.09 Q V 14+10 0.0522 0.09 Q V 14+15 0.0529 0.09 Q V 14+20 0.0535 0.09 Q V 14+25 0.0541 0.09 Q V 14+30 0.0548 0.09 Q V 14+35 0.0554 0.09 Q V 14+40 0.0560 0.09 Q V 14+45 0.0566 0.09 Q V 14+50 0.0572 0.09 Q V 15+ 0 0.0584 0.09 Q V 15+ 0 0.0584 0.09 Q V 15+10 0.0596 0.08 Q V 15+20 0.0607 0.08 Q V 15+25 0.0613 0.08 Q V 15+30 0.0618 0.08 Q V					: : : : : : :
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14+15 0.0529 0.09 Q V V 14+20 0.0535 0.09 Q V V 14+25 0.0541 0.09 Q V V 14+30 0.0548 0.09 Q V V 14+35 0.0554 0.09 Q V V 14+40 0.0560 0.09 Q V V 14+45 0.0566 0.09 Q V V 14+50 0.0572 0.09 Q V V 15+ 0 0.0578 0.09 Q V V 15+ 0 0.0584 0.09 Q V V 15+ 10 0.0596 0.08 Q V V 15+15 0.0601 0.08 Q V V 15+20 0.0607 0.08 Q V V 15+30 0.0613 0.08 Q V V					: : : : : :
14+20 0.0535 0.09 Q V V 14+25 0.0541 0.09 Q V V 14+30 0.0548 0.09 Q V V 14+35 0.0554 0.09 Q V V 14+40 0.0560 0.09 Q V V 14+45 0.0566 0.09 Q V V 14+50 0.0572 0.09 Q V V 15+ 0 0.0578 0.09 Q V V 15+ 0 0.0584 0.09 Q V V 15+ 10 0.0596 0.08 Q V V 15+15 0.0601 0.08 Q V V 15+20 0.0607 0.08 Q V V 15+30 0.0618 0.08 Q V V					: : : : : : :
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14+30 0.0548 0.09 Q V Id+35 0.0554 0.09 Q V Id+40 0.0560 0.09 Q IV Id+45 0.0566 0.09 Q IV Id+50 0.0572 0.09 Q IV IV Id+55 0.0578 0.09 Q IV IV ID+50 IV ID+50 IV ID+50 IV ID+50					
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14+40 0.0560 0.09 Q V 14+45 0.0566 0.09 Q V 14+50 0.0572 0.09 Q V 14+55 0.0578 0.09 Q V 15+ 0 0.0584 0.09 Q V 15+ 5 0.0590 0.08 Q V 15+10 0.0596 0.08 Q V 15+20 0.0601 0.08 Q V 15+20 0.0613 0.08 Q V 15+30 0.0618 0.08 Q V					!
14+45 0.0566 0.09 Q V 14+50 0.0572 0.09 Q V 14+55 0.0578 0.09 Q V 15+ 0 0.0584 0.09 Q V 15+ 5 0.0590 0.08 Q V 15+10 0.0596 0.08 Q V 15+15 0.0601 0.08 Q V 15+20 0.0607 0.08 Q V 15+25 0.0613 0.08 Q V 15+30 0.0618 0.08 Q V					
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14+55 0.0578 0.09 Q V 15+ 0 0.0584 0.09 Q V 15+ 5 0.0590 0.08 Q V 15+10 0.0596 0.08 Q V 15+15 0.0601 0.08 Q V 15+20 0.0607 0.08 Q V 15+25 0.0613 0.08 Q V 15+30 0.0618 0.08 Q V					
15+ 0 0.0584 0.09 Q					
15+ 5 0.0590 0.08 Q					
15+10 0.0596 0.08 Q V 15+15 0.0601 0.08 Q V 15+20 0.0607 0.08 Q V 15+25 0.0613 0.08 Q V 15+30 0.0618 0.08 Q V					
15+15					!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
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15+25 0.0613 0.08 Q V V 15+30 0.0618 0.08 Q V					
15+30 0.0618 0.08 Q V					!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
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15+40	0.0628	0.07	Q		V
15+45	0.0632	0.07	Q		V
15+50	0.0637	0.07	Q		V
15+55	0.0641	0.07	Q	j j	j v j
16+ 0	0.0646	0.07	Q	į į	i v i
16+ 5	0.0648	0.04	Q	į į	i v i
16+10	0.0649	0.02	Q	į į	i v i
16+15	0.0650	0.01	Q	į į	i v i
16+20	0.0651	0.01	Q	i i	i v i
16+25	0.0652	0.01	Q	i i	i v i
16+30	0.0653	0.01	Q	i i	i v i
16+35	0.0654	0.01	Q	į į	i v i
16+40	0.0655	0.01	Q	j j	i v i
16+45	0.0655	0.01	Q	j j	i v i
16+50	0.0656	0.01	Q	j j	i v i
16+55	0.0657	0.01	Q	j j	i v i
17+ 0	0.0658	0.01	Q	į į	i v i
17+ 5	0.0659	0.01	Q		i v i
17+10	0.0660	0.02	Q		i v i
17+15	0.0661	0.02	Q		i v i
17+20	0.0662	0.02	Q		i v i
17+25	0.0663	0.02	Q		i vi
17+30	0.0665	0.02	Q		i vi
17+35	0.0666	0.02	Q		i vi
17+40	0.0667	0.02	Q		i vi
17+45	0.0668	0.02	Q		i vi
17+50	0.0669	0.02	Q		i vi
17+55	0.0670	0.01	Q		i vi
18+ 0	0.0671	0.01	Q		i vi
18+ 5	0.0672	0.01	Q		i vi
18+10	0.0673	0.01	Q		i vi
18+15	0.0674	0.01	Q		i vi
18+20	0.0675	0.01	Q		i vi
18+25	0.0676	0.01	Q		i vi
18+30	0.0677	0.01	Q		i vi
18+35	0.0678	0.01	Q		i vi
18+40	0.0678	0.01	Q		i vi
18+45	0.0679	0.01	Q		i vi
18+50	0.0680	0.01	Q		i vi
18+55	0.0680	0.01	Q		i vi
19+ 0	0.0681	0.01	Q		i vi
19+ 5	0.0681	0.01	Q		i vi
19+10	0.0682	0.01	Q		i vi
19+15	0.0683	0.01	Q		i vi
19+20	0.0684	0.01	Q	j	i vi
19+25	0.0684	0.01	Q		i vi
19+30	0.0685	0.01	Q		i vi
19+35	0.0686	0.01	Q		i vi
19+40	0.0687	0.01	Q		i vi
19+45	0.0688	0.01	Q		V
· · ·	3.2 300		·	1	i - 1

19+50	0.0688	0.01	Q		1	V	
19+55	0.0689	0.01	Q	İ	į	j v j	
20+ 0	0.0689	0.01	Q	İ	İ	j vj	
20+ 5	0.0690	0.01	Q	İ	İ	i vi	
20+10	0.0691	0.01	Q	i	į	j vj	
20+15	0.0691	0.01	Q	i	İ	j vj	
20+20	0.0692	0.01	Q	i	İ	j vj	
20+25	0.0693	0.01	Q	i	i	i vi	
20+30	0.0693	0.01	Q	i	İ	i vi	
20+35	0.0694	0.01	Q	i	İ	i vi	
20+40	0.0695	0.01	Q	i	i	i vi	
20+45	0.0696	0.01	Q	i	į	i vi	
20+50	0.0696	0.01	Q	i	į	j vj	
20+55	0.0697	0.01	Q	i	i	j vj	
21+ 0	0.0697	0.01	Q	į	İ	j vj	
21+ 5	0.0698	0.01	Q	į	İ	j vj	
21+10	0.0698	0.01	Q	i	İ	i vi	
21+15	0.0699	0.01	Q	i	i	i vi	
21+20	0.0700	0.01	Q	į	İ	i vi	
21+25	0.0700	0.01	Q	İ	İ	j vj	
21+30	0.0701	0.01	Q	İ	İ	j vj	
21+35	0.0701	0.01	Q	į	İ	j vj	
21+40	0.0702	0.01	Q	į	İ	j vj	
21+45	0.0703	0.01	Q	į	İ	j vj	
21+50	0.0703	0.01	Q	İ	İ	j vj	
21+55	0.0704	0.01	Q	İ	İ	j vj	
22+ 0	0.0704	0.01	Q	İ	İ	j vj	
22+ 5	0.0705	0.01	Q	İ	İ	j vj	
22+10	0.0706	0.01	Q	İ	į	į vį	
22+15	0.0706	0.01	Q	İ	į	j vj	
22+20	0.0707	0.01	Q	ĺ	İ	j vj	
22+25	0.0707	0.01	Q	ĺ	İ	j vj	
22+30	0.0708	0.01	Q			V	
22+35	0.0708	0.01	Q	ĺ	İ	j vj	
22+40	0.0709	0.01	Q			V	
22+45	0.0709	0.01	Q			V	
22+50	0.0710	0.01	Q			V	
22+55	0.0710	0.01	Q			V	
23+ 0	0.0711	0.01	Q			V	
23+ 5	0.0711	0.01	Q			V	
23+10	0.0712	0.01	Q			V	
23+15	0.0712	0.01	Q			V	
23+20	0.0713	0.01	Q			V	
23+25	0.0713	0.01	Q			V	
23+30	0.0714	0.01	Q			V	
23+35	0.0714	0.01	Q			V	
23+40	0.0715	0.01	Q			V	
23+45	0.0715	0.01	Q	ļ	ļ	V	
23+50	0.0715	0.01	Q		ļ	V	
23+55	0.0716	0.01	Q			V	

24+ 0	0.0716	0.01	Q		1	٧
24+ 5	0.0717	0.00	Q		1	V
24+10	0.0717	0.00	Q		1	V

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018, Version 9.0 Study date 03/12/24 File: ONSITEPOSTE4242.out

```
Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978
Program License Serial Number 6586
 English (in-lb) Input Units Used English Rainfall Data (Inches) Input Values Used
 English Units used in output format
22-0192 - MVCC PARK
ONSITE UNIT HYDROGRAPH ANALYSIS - DMA E-4
DEVELOPED CONDITION, 2-YEAR 24-HOUR
FN: ONSITEPOSTE4.OUT- RSB
Drainage Area = 0.60(Ac.) = 0.001 Sq. Mi.
Drainage Area = 0.60(AC.) = 0.001 Sq. M1.

Drainage Area for Depth-Area Areal Adjustment = 0.60

Length along longest watercourse = 600.00(Ft.)

Length along longest watercourse measured to centroid =

Length along longest watercourse measured to centroid =

Difference in elevation = 25.00(Ft.)

Slope along watercourse = 220.0000 Ft./Mi.
                                                                   0.60(Ac.) = 0.001 \text{ Sq. Mi.}
                                                                           321.00(Ft.)
                                                                            0.061 Mi.
Average Manning's 'N' = 0.025
Lag time = 0.033 Hr.
Lag time = 1.95 Min.
25% of lag time = 0.49 Min.
40% of lag time = 0.78 Min.
Unit time = 5.00 Min.
Duration of storm = 24 \text{ Hour(s)}
User Entered Base Flow =
                                     0.00(CFS)
2 YEAR Area rainfall data:
                        Rainfall(In)[2]
Area(Ac.)[1]
                                                  Weighting[1*2]
                             2.00
                                                          1.20
100 YEAR Area rainfall data:
Area(Ac.)[1]
                       Rainfall(In)[2] Weighting[1*2]
                                                         3.24
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall =
                                             5.400(In)
Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
                       Runoff Index Impervious %
Area(Ac.)
 0.600 69.00 0
Total Area Entered = 0.60(Ac.)
                                          0.090
RI RI Infil. Rate Impervious Adj. Infil. Rate Area% AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.)
                                                                               (In/Hr)
```

69.0 49.8 0.574 0.090 0.527 1.000 0.527 Sum (F) = 0.527

Area averaged mean soil loss (F) (In/Hr) = 0.527 Minimum soil loss rate ((In/Hr)) = 0.264 (for 24 hour storm duration) Soil low loss rate (decimal) = 0.828

Unit Hydrograph

VALLEY S-Curve Unit Hydrograph Data

			
Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1 0.083 2 0.167 3 0.250 4 0.333	256.307 512.614 768.921 1025.227	51.705 39.667 6.818 1.810	0.313 0.240 0.041 0.011 um= 0.605

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

1 0 2 0 3 0 4 0 5 0 6 0 7 0 8 0 9 0	Hr.) Pe .08 .17 .25 .33 .42 .50 .58 .67	rcent (0.07 0.07 0.07 0.10 0.10 0.10 0.10 0.10	torm Rain In/Hr) 0.016 0.016 0.016 0.024 0.024 0.024 0.024 0.024 0.024 0.024		oss rate(1 Max 0.935) 0.931) 0.928) 0.924) 0.921) 0.917) 0.913) 0.910)	Low 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.013 .013 .013 .020 .020 .020 .020 .020	Effect (In/Hr	0.003 0.003 0.003 0.004 0.004 0.004 0.004 0.004
10 0 11 0 12 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 20 1 21 1 22 1 23 2 25 2 26 2 27 2 28 2 29 2 30 2 31 2 32 2 33 2 35 36 3 37 3 38 3 39 3 40 3 41 3	.83 .92 .00 .08 .17 .25 .33 .42 .50 .58 .67 .75 .83 .92 .00 .08 .17 .25 .33 .42 .50 .58 .67 .75 .83 .92 .00 .58 .67 .75 .33 .42 .50 .50 .50 .50 .50 .50 .50 .50 .50 .50	0.10 0.13 0.13 0.13 0.10 0.10 0.10 0.10	0.024 0.032 0.032 0.032 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.040		0.906) 0.903) 0.899) 0.899) 0.889) 0.882) 0.885) 0.875) 0.871) 0.868) 0.864) 0.864) 0.861) 0.857) 0.854) 0.854) 0.854) 0.854) 0.854) 0.854) 0.854) 0.854) 0.854) 0.859) 0.819) 0.823) 0.819) 0.813) 0.809) 0.806) 0.803) 0.799) 0.796) 0.793)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.020 .026 .026 .020 .020 .020 .020 .020		0.004 0.006 0.006 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007
44 3 45 3	.67 .75	0.17 0.17 0.17 0.20	0.040 0.040 0.040 0.048	(((0.789) 0.786) 0.783) 0.779)	0	.033 .033 .033 .040		0.007 0.007 0.007 0.008

47 3.92 0.20 48 4.00 0.20 49 4.08 0.20 50 4.17 0.20 51 4.25 0.20 52 4.33 0.23 53 4.42 0.23 54 4.50 0.23 56 4.67 0.23 57 4.75 0.23 58 4.83 0.27 59 4.92 0.27 60 5.00 0.27 61 5.08 0.20 62 5.17 0.20 63 5.25 0.20 64 5.33 0.23 65 5.42 0.23 66 5.50 0.23 67 5.58 0.27 69 5.75 0.27 70 5.83 0.27 71 5.92 0.27 72 6.00 0.27 73 6.08 0.30 74 6.17 0.30 75	0.048 0.048 0.048 0.048 0.048 0.056 0.056 0.056 0.056 0.056 0.056 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.072 0.072 0.072 0.072 0.072 0.072 0.072 0.072 0.080 0.080 0.080 0.080 0.088 0.088 0.088 0.088 0.088 0.088 0.088 0.088 0.088 0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.104 0.120 0.120 0.120 0.120 0.128 0.136 0.152 0.152 0.152 0.152 0.152 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.176 0.160 0.160 0.160 0.168 0.168 0.168 0.168 0.168 0.176 0.120	(0.776) (0.773) (0.773) (0.766) (0.763) (0.760) (0.756) (0.753) (0.750) (0.744) (0.744) (0.744) (0.731) (0.721) (0.721) (0.712) (0.702) (0.699) (0.699) (0.693) (0.693) (0.687) (0.6881) (0.675) (0.666) (0.666) (0.666) (0.666) (0.666) (0.666) (0.6651) (0.6651) (0.645) (0.630) (0.633) (0.633) (0.633) (0.633) (0.633) (0.633) (0.633) (0.636) (0.633) (0.633) (0.633) (0.633) (0.633) (0.633) (0.633) (0.633) (0.633) (0.633) (0.633) (0.633) (0.636) (0.633) (0.637) (0.639) (0.598) (0.598) (0.598) (0.598) (0.598) (0.598) (0.598) (0.597) (0.577) (0.577) (0.578) (0.577) (0.578) (0.577) (0.577) (0.577) (0.577) (0.578) (0.577) (0.577) (0.578) (40 0.040 0.040 0.040 0.046 0.046 0.046 0.046 0.046 0.046 0.046 0.053 0.060 0.060 0.060 0.060 0.066 0.099 0.0126 0	0.008 0.008 0.008 0.008 0.008 0.010 0.010 0.010 0.011 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.014 0.014 0.014 0.014 0.014 0.014 0.015 0.015 0.017 0.017 0.018 0.018 0.018 0.019	
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122 123 124 125 126 127 128 130 131 132 133 134 135 137 138 139 140 141 142 143 144 145 150 151 152 153 154 155 156 166 166 167 168 171 172 173 174 175 176 177 177 177 177 177 177 177 177 177	10.17 10.25 10.33 10.42 10.50 10.58 10.67 10.75 10.83 10.92 11.00 11.08 11.17 11.25 11.33 11.42 11.50 11.58 11.67 11.75 11.83 11.92 12.00 12.08 12.17 12.25 12.33 12.42 12.50 12.58 12.67 12.75 12.83 12.42 12.50 12.58 12.67 12.75 12.83 12.92 13.00	0.50 0.50 0.50 0.50 0.50 0.67 0.67 0.67 0.67 0.63 0.63 0.63 0.63 0.63 0.63 0.87 0.97 0.97 0.97 0.97 0.97 0.97 0.77 0.87	0.120 0.120 0.120 0.120 0.160 0.160 0.160 0.160 0.152 0.152 0.152 0.152 0.152 0.152 0.152 0.152 0.202 0.202 0.203 0.204 0.204 0.205 0.208 0.208 0.208 0.208 0.207 0.272 0.216 0.216 0.216 0.216 0.216 0.216 0.216 0.216 0.216 0.216 0.216 0.226	(0.552) (0.544) (0.544) (0.541) (0.538) (0.536) (0.533) (0.528) (0.523) (0.523) (0.523) (0.512) (0.512) (0.512) (0.510) (0.507) (0.507) (0.507) (0.495) (0.495) (0.495) (0.483) (0.473) (0.473) (0.473) (0.473) (0.473) (0.473) (0.473) (0.466) (0.466) (0.466) (0.466) (0.466) (0.454) (0.452) (0.447) (0.445) (0.445) (0.445) (0.445) (0.445) (0.446) (0.446) (0.452) (0.447) (0.447) (0.448) (0.447) (0.448) (0.447) (0.443) (0.443) (0.443) (0.443) (0.443) (0.434) (0.431) (0.427) (0.427) (0.427) (0.427)	0.099 0.099 0.099 0.099 0.099 0.132 0.132 0.132 0.132 0.132 0.132 0.126 0.126 0.126 0.126 0.126 0.126 0.126 0.127 0.172 0.185 0.192	0.021 0.021 0.021 0.021 0.021 0.028 0.028 0.028 0.028 0.026 0.026 0.026 0.026 0.025 0.025 0.025 0.034 0.034 0.036 0.039 0.039 0.040 0.040 0.047
166 167 168 169 170 171 172	13.83 13.92 14.00 14.08 14.17 14.25 14.33	0.77 0.77 0.77 0.90 0.90 0.90 0.87	0.184 0.184 0.184 0.216 0.216 0.216 0.208	(0.443) (0.440) (0.438) (0.436) (0.434) (0.431) (0.422)	0.152 0.152 0.152 0.179 0.179 0.179 0.172	0.032 0.032 0.032 0.037 0.037 0.037

197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217	16.42 16.50 16.58 16.67 16.75 16.83 16.92 17.00 17.08 17.17 17.25 17.33 17.42 17.50 17.58 17.67 17.75 17.83 17.92 18.00 18.08	0.13 0.13 0.10 0.10 0.10 0.10 0.10 0.17 0.17 0.17 0.17 0.17 0.17 0.17 0.17 0.17 0.17 0.13 0.13 0.13	0.032 0.032 0.024 0.024 0.024 0.024 0.024 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.032 0.032	(0.378) (0.376) (0.377) (0.372) (0.370) (0.368) (0.366) (0.361) (0.361) (0.357) (0.357) (0.355) (0.352) (0.352) (0.348) (0.347) (0.341) (0.341)	0.026 0.026 0.020 0.020 0.020 0.020 0.020 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033	0.006 0.004 0.004 0.004 0.004 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007
218 219 220 221 222 223 224 225 226 227 230 231 232 233 234 235 236	18.17 18.25 18.33 18.42 18.50 18.58 18.67 18.75 18.83 19.00 19.08 19.17 19.25 19.33 19.42 19.50 19.58 19.67	0.13 0.13 0.13 0.13 0.10 0.10 0.10 0.07 0.07 0.07 0.07 0.10 0.10 0.11 0.10 0.10	0.032 0.032 0.032 0.032 0.032 0.024 0.024 0.016 0.016 0.016 0.024 0.024 0.024 0.032 0.032 0.032 0.032	(0.338) (0.336) (0.335) (0.332) (0.332) (0.328) (0.327) (0.327) (0.325) (0.324) (0.322) (0.321) (0.319) (0.316) (0.315) (0.313)	0.026 0.026 0.026 0.026 0.020 0.020 0.020 0.013 0.013 0.013 0.020 0.020 0.020 0.020	0.006 0.006 0.006 0.006 0.004 0.004 0.003 0.003 0.003 0.004 0.004 0.004 0.006 0.006
237 238 239 240 241 242 243 244 245 246 247 248 250 251 252 253 254 256	19.75 19.83 19.92 20.00 20.08 20.17 20.25 20.33 20.42 20.50 20.58 20.67 20.75 20.83 20.92 21.00 21.08 21.17	0.10 0.07 0.07 0.10 0.10 0.10 0.10 0.10	0.024 0.016 0.016 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.016 0.016 0.016 0.024 0.024	(0.312) (0.310) (0.309) (0.308) (0.306) (0.305) (0.301) (0.302) (0.301) (0.300) (0.298) (0.297) (0.296) (0.295) (0.295) (0.292) (0.291) (0.290) (0.288) (0.288)	0.020 0.013 0.013 0.020 0.020 0.020 0.020 0.020 0.020 0.020 0.020 0.020 0.013 0.013 0.013 0.020 0.020	0.004 0.003 0.003 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.003
256 257 258 259 260 261 262 263 264 265 266 267 268 270 271	21.33 21.42 21.50 21.58 21.67 21.75 21.83 21.92 22.00 22.08 22.17 22.25 22.33 22.42 22.50 22.58	0.07 0.07 0.07 0.10 0.10 0.10 0.07 0.07	0.016 0.016 0.016 0.024 0.024 0.024 0.016 0.016 0.024 0.024 0.024 0.016 0.016	(0.291) (0.290) (0.288) (0.287) (0.286) (0.284) (0.283) (0.282) (0.281) (0.280) (0.279) (0.279) (0.278) (0.277) (0.276) (0.275) (0.273) (0.272)	0.013 0.013 0.013 0.020 0.020 0.020 0.013 0.013 0.020 0.020 0.020 0.020 0.013 0.013	0.003 0.003 0.004 0.004 0.003 0.003 0.003 0.004 0.004 0.003 0.003 0.003

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278
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281
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285 23.75
                   0.07
                                                                                       0.003
                   0.07
                                                                                     0.003
286 23.83
287 23.92
                   0.07
288 24.00
                   0.07
                                                                     0.013
                                                                                       0.003
                    (Loss Rate Not Used)
                 100.0
     Sum =
                                                                        Sum = 4.1
        Flood volume = Effective rainfall 0.34(In)
        times area 0.6(Ac.)/[(In)/(Ft.)] = 0.0(Ac.Ft)
Total soil loss = 1.66(In)
Total soil loss = 0.083(Ac.Ft)
Total rainfall = 2.00(In)
Flood volume = 749.2 Cubic Feet
Total soil loss = 3606.8 Cubic Feet
         -----
          Peak flow rate of this hydrograph = 0.028(CFS)
        24 - HOUR STORM
Runoff Hydrograph
                       Hydrograph in 5 Minute intervals ((CFS))
 Time(h+m) Volume Ac.Ft Q(CFS) 0 2.5 5.0 7.5 10.0
   0.0001
                                0.00 Q
0.00 Q
    0 + 35
    0+40
                 0.0001
                0.0001
                                0.00
    0+45
                0.0001
                                0.00
    0 + 50
    0 + 55
                0.0002
0.0002
                                0.00
    1+ 5
                                  0.00
    1+10
                 0.0002
                                 0.00
                0.0002
    1+15
                                 0.00
                 0.0003
                                  0.00
    1+20
                 0.0003
                                 0.00
    1+25
                 0.0003
                                 0.00
    1+30
    1+35
                 0.0003
                                  0.00
    1+40
                 0.0003
                                 0.00
                 0.0004
                                 0.00
    1 + 45
                                 0.00
                 0.0004
    1+50
    1+55
                 0.0004
                                0.00
                  0.0004
    2+ 0
                                  0.00
    2+ 5
                 0.0004
                                 0.00 QV
                 0.0005
                                0.00 QV
    2+10
    2+15
                 0.0005
                                 0.00
    2+20
                 0.0005
                                 0.00 QV
                  0.0005
                                  0.00 QV
    2+25
    2+30
                  0.0006
                                  0.00
                                          QV
    2+35
                 0.0006
                                 0.00 QV
    2+40
                  0.0006
                                  0.00 QV
                 0.0006
                                 0.00 QV
    2+45
                0.0007
0.0007
0.0007
                0.0007 0.00 QV
0.0007 0.00 QV
0.0007 0.00 QV
0.0008 0.00 QV
    2+50
    2+55
    3+ 0
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15:440							
15+45	15+40	0.0150	0.02	0	1 1	l v l	
15+50					i i		
15+55	15+50	0.0153	0.02		i i	i v i	
16+5	15+55		0.02			V	
16+10	16+ 0	0.0155	0.02	Q		V	
16+15				Q]]	: :	
16+20 0.0156 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					!!!		
16+25							
16+30							
16+35							
16+40					i i		
16+45					i i		
16+50	16+45				i i		
17+ 0			0.00			V	
17+5					!!!		
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17+20							
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17+40	17+30	0.0159	0.00		į į	į v į	
17+45				Q			
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17+55							
18+ 0							
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18+50					i i		
19+ 0 0.0163 0.00 Q V 19+ 5 0.0163 0.00 Q V 19+10 0.0164 0.00 Q V 19+15 0.0164 0.00 Q V 19+20 0.0164 0.00 Q V 19+30 0.0164 0.00 Q V 19+30 0.0165 0.00 Q V 19+40 0.0165 0.00 Q V 19+45 0.0165 0.00 Q V 19+45 0.0165 0.00 Q V 19+50 0.0165 0.00 Q V 20+ 0 0.0165 0.00 Q V 20+ 0 0.0165 0.00 Q V 20+ 5 0.0166 0.00 Q V 20+15 0.0166 0.00 Q V 20+20 0.0166 0.00 Q V 20+25 0.0166 0.00 Q V 20+30 0.0166 0.00 Q V 20+30 0.0166 0.00 Q V 20+45 0.0167 0.00 Q V	18+50		0.00		j j	j v j	
19+ 5					!!!		
19+10 0.0164 0.00 Q V 19+15 0.0164 0.00 Q V 19+20 0.0164 0.00 Q V 19+25 0.0164 0.00 Q V 19+30 0.0164 0.00 Q V 19+35 0.0165 0.00 Q V 19+40 0.0165 0.00 Q V 19+45 0.0165 0.00 Q V 19+50 0.0165 0.00 Q V 20+ 5 0.0165 0.00 Q V 20+ 5 0.0166 0.00 Q V 20+10 0.0166 0.00 Q V 20+15 0.0166 0.00 Q V 20+20 0.0166 0.00 Q V 20+30 0.0166 0.00 Q V							
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19+40	19+30		0.00			V	
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20+15 0.0166 0.00 Q V 20+20 0.0166 0.00 Q V 20+25 0.0166 0.00 Q V 20+30 0.0166 0.00 Q V 20+35 0.0167 0.00 Q V 20+40 0.0167 0.00 Q V 20+45 0.0167 0.00 Q V 20+50 0.0167 0.00 Q V 21+0 0.0167 0.00 Q V 21+0 0.0167 0.00 Q V 21+15 0.0168 0.00 Q V 21+20 0.0168 0.00 Q V 21+35 0.0168 0.00 Q V 21+40 0.0168 0.00 Q V 21+35 0.0168 0.00 Q V				Q			
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20+25 0.0166 0.00 Q V 20+30 0.0166 0.00 Q V 20+35 0.0167 0.00 Q V 20+40 0.0167 0.00 Q V 20+45 0.0167 0.00 Q V 20+50 0.0167 0.00 Q V 20+55 0.0167 0.00 Q V 21+ 0 0.0167 0.00 Q V 21+ 5 0.0167 0.00 Q V 21+10 0.0168 0.00 Q V 21+20 0.0168 0.00 Q V 21+25 0.0168 0.00 Q V 21+30 0.0168 0.00 Q V 21+40 0.0168 0.00 Q V 21+45 0.0169 0.00 Q V <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
20+30 0.0166 0.00 Q V 20+35 0.0167 0.00 Q V 20+40 0.0167 0.00 Q V 20+45 0.0167 0.00 Q V 20+50 0.0167 0.00 Q V 20+55 0.0167 0.00 Q V 21+ 0 0.0167 0.00 Q V 21+ 5 0.0167 0.00 Q V 21+10 0.0168 0.00 Q V 21+20 0.0168 0.00 Q V 21+25 0.0168 0.00 Q V 21+30 0.0168 0.00 Q V 21+40 0.0168 0.00 Q V 21+35 0.0168 0.00 Q V 21+45 0.0169 0.00 Q V <td></td> <td></td> <td></td> <td></td> <td> </td> <td></td> <td></td>							
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0.0169	0.00	Q			V
0.0170	0.00	Q			V
0.0170	0.00	Q			V
0.0170	0.00	Q			V
0.0170	0.00	Q	I		V
0.0170	0.00	Q	I		V
0.0170	0.00	Q	I		V
0.0170	0.00	Q	I		V
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24+13 U.U1/2 U.UU Q | | |

Unit Hydrograph Analysis

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```
Riverside County Synthetic Unit Hydrology Method
      RCFC & WCD Manual date - April 1978
      Program License Serial Number 6586
       English (in-lb) Input Units Used
       English Rainfall Data (Inches) Input Values Used
       English Units used in output format
       ______
      22-0192 - MVCC PARK
      ONSITE UNIT HYDROGRAPH ANALYSIS - DMA W-1
      DEVELOPED CONDITION, 2-YEAR 24-HOUR
      FN: ONSITEPOSTW1.OUT- RSB
      ______
      Drainage Area = 4.90(Ac.) = 0.008 Sq. Mi.
      Drainage Area for Depth-Area Areal Adjustment = 4.90(Ac.) =
0.008 Sq. Mi.
      Length along longest watercourse =
                                     454.00(Ft.)
      Length along longest watercourse measured to centroid = 59.00(Ft.)
      Length along longest watercourse = 0.086 Mi.
      Length along longest watercourse measured to centroid = 0.011 Mi.
      Difference in elevation = 16.00(Ft.)
Slope along watercourse = 186.0793 Ft./Mi.
      Average Manning's 'N' = 0.025
      Lag time = 0.016 Hr.
      Lag time = 0.95 Min.
      25% of lag time = 0.24 Min.
40% of lag time = 0.38 Min.
      Unit time = 5.00 Min.
      Duration of storm = 24 Hour(s)
      User Entered Base Flow = 0.00(CFS)
      2 YEAR Area rainfall data:
```

```
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
      4.90
                    2.00
                                        9.80
100 YEAR Area rainfall data:
Area(Ac.)[1] Rainfall(In)[2] Weighting[1*2]
                                  26.46
      4.90
                5.40
STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 5.400(In)
Point rain (area averaged) =
                           2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)
Sub-Area Data:
Area(Ac.) Runoff Index Impervious % 4.900 69.00 0.370
Total Area Entered = 4.90(Ac.)
RI
         Infil. Rate Impervious Adj. Infil. Rate Area%
                                                     F
     RI
AMC2 AMC-1 (In/Hr) (Dec.%) (In/Hr) (Dec.) (In/Hr) 69.0 49.8 0.574 0.370 0.383 1.000 0.383
                                          Sum(F) = 0.383
Area averaged mean soil loss (F) (In/Hr) = 0.383
Minimum soil loss rate ((In/Hr)) = 0.191
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.604
    Unit Hydrograph
                   VALLEY S-Curve
______
            Unit Hydrograph Data
______
Unit time period Time % of lag Distribution Unit Hydrograph (hrs) Graph % (CFS)
   1 0.083

    1
    0.083
    525.420
    72.140

    2
    0.167
    1050.841
    27.860

                                              3.562
                                              1.376
                  Sum = 100.000 Sum= 4.938
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time	Pattern	Storm Rain	Loss	rate(In	./Hr)	Effective
00	(Hr.)	Percent	(In/Hr)	Max		DW	(In/Hr)
1	0.08	0.07	0.016		579)	0.010	0.006
2	0.17	0.07	0.016	•	576)	0.010	0.006
3	0.25	0.07	0.016	•	573)	0.010	0.006
4	0.33	0.10	0.024	•	571)	0.014	0.010
5	0.42	0.10	0.024	•	568)	0.014	0.010
6	0.50	0.10	0.024	•	566)	0.014	0.010
7	0.58	0.10	0.024	•	563)	0.014	0.010
8	0.67	0.10	0.024	•	560)	0.014	0.010
9	0.75	0.10	0.024	•	558)	0.014	0.010
10	0.83	0.13	0.032	•	555)	0.019	0.013
11	0.92	0.13	0.032	•	553)	0.019	0.013
12	1.00	0.13	0.032	•	550)	0.019	0.013
13	1.08	0.10	0.024	•	547)	0.014	0.010
14	1.17	0.10	0.024	•	545)	0.014	0.010
15	1.25	0.10	0.024	•	542)	0.014	0.010
16	1.33	0.10	0.024	•	540)	0.014	0.010
17	1.42	0.10	0.024	•	537)	0.014	0.010
18	1.50	0.10	0.024	•	535)	0.014	0.010
19	1.58	0.10	0.024	•	532)	0.014	0.010
20	1.67	0.10	0.024	•	530)	0.014	0.010
21	1.75	0.10	0.024	•	527)	0.014	0.010
22	1.83	0.13	0.032	•	525)	0.019	0.013
23	1.92	0.13	0.032	•	522)	0.019	0.013
24	2.00	0.13	0.032	•	520)	0.019	0.013
25	2.08	0.13	0.032	•	5 1 7)	0.019	0.013
26	2.17	0.13	0.032	•	5 1 5)	0.019	0.013
27	2.25	0.13	0.032	•	512)	0.019	0.013
28	2.33	0.13	0.032	•	510)	0.019	0.013
29	2.42	0.13	0.032	•	507)	0.019	0.013
30	2.50	0.13	0.032	•	505)	0.019	0.013
31	2.58	0.17	0.040		502)	0.024	0.016
32	2.67	0.17	0.040	•	500)	0.024	0.016
33	2.75	0.17	0.040	•	597)	0.024	0.016
34	2.83	0.17	0.040		595)	0.024	0.016
35	2.92	0.17	0.040		592)	0.024	0.016
36	3.00	0.17	0.040		590)	0.024	0.016
37	3.08	0.17	0.040	(0.5	587)	0.024	0.016
38	3.17	0.17	0.040	(0.5	585)	0.024	0.016
39	3.25	0.17	0.040		583)	0.024	0.016
40	3.33	0.17	0.040		580)	0.024	0.016
41	3.42	0.17	0.040	(0.5	578)	0.024	0.016
42	3.50	0.17	0.040		575)	0.024	0.016
43	3.58	0.17	0.040		573)	0.024	0.016
44	3.67	0.17	0.040	•	570)	0.024	0.016
45	3.75	0.17	0.040	(0.5	568)	0.024	0.016
46	3.83	0.20	0.048		566)	0.029	0.019
47	3.92	0.20	0.048	(0.5	563)	0.029	0.019

48	4.00	0.20	0.048	(0.561)	0.029	0.019
49	4.08	0.20	0.048	(0.559)	0.029	0.019
50	4.17	0.20	0.048	ì	0.556)	0.029	0.019
51	4.25	0.20	0.048	ì	0.554)	0.029	0.019
52	4.33	0.23	0.056	~	0.551)	0.034	0.022
53	4.42	0.23	0.056	(0.549)	0.034	0.022
54	4.50	0.23	0.056	:	0.547)	0.034	0.022
				(•		
55	4.58	0.23	0.056	(0.544)	0.034	0.022
56	4.67	0.23	0.056	(0.542)	0.034	0.022
57	4.75	0.23	0.056	(0.540)	0.034	0.022
58	4.83	0.27	0.064	(0.537)	0.039	0.025
59	4.92	0.27	0.064	(0.535)	0.039	0.025
60	5.00	0.27	0.064	(0.533)	0.039	0.025
61	5.08	0.20	0.048	(0.530)	0.029	0.019
62	5.17	0.20	0.048	(0.528)	0.029	0.019
63	5.25	0.20	0.048	(0.526)	0.029	0.019
64	5.33	0.23	0.056	(0.523)	0.034	0.022
65	5.42	0.23	0.056	(0.521)	0.034	0.022
66	5.50	0.23	0.056	(0.519)	0.034	0.022
67	5.58	0.27	0.064	(0.517)	0.039	0.025
68	5.67	0.27	0.064	(0.514)	0.039	0.025
69	5.75	0.27	0.064	į	0.512)	0.039	0.025
70	5.83	0.27	0.064	ì	0.510)	0.039	0.025
71	5.92	0.27	0.064	ì	0.508)	0.039	0.025
72	6.00	0.27	0.064	ì	0.505)	0.039	0.025
73	6.08	0.30	0.072	ì	0.503)	0.043	0.029
74	6.17	0.30	0.072	ì	0.501)	0.043	0.029
75	6.25	0.30	0.072	ì	0.499)	0.043	0.029
76	6.33	0.30	0.072	ì	0.496)	0.043	0.029
77	6.42	0.30	0.072	(0.494)	0.043	0.029
78	6.50	0.30	0.072	(0.492)	0.043	0.029
79	6.58	0.33	0.080	(0.490)	0.048	0.032
80	6.67	0.33	0.080	(0.488)	0.048	0.032
81	6.75	0.33	0.080	(0.485)	0.048	0.032
82				(•		
	6.83 6.92	0.33	0.080	(•	0.048	0.032
83		0.33	0.080	(0.481)	0.048	0.032
84	7.00	0.33	0.080	(0.479)	0.048	0.032
85	7.08	0.33	0.080	(0.477)	0.048	0.032
86	7.17	0.33	0.080	(0.474)	0.048	0.032
87	7.25	0.33	0.080	(0.472)	0.048	0.032
88	7.33	0.37	0.088	(0.470)	0.053	0.035
89	7.42	0.37	0.088	(0.468)	0.053	0.035
90	7.50	0.37	0.088	(0.466)	0.053	0.035
91	7.58	0.40	0.096	(0.464)	0.058	0.038
92	7.67	0.40	0.096	(0.462)	0.058	0.038
93	7.75	0.40	0.096	(0.459)	0.058	0.038
94	7.83	0.43	0.104	(0.457)	0.063	0.041
95	7.92	0.43	0.104	(0.063	0.041
96	8.00	0.43	0.104	(0.063	0.041
97	8.08	0.50	0.120	(0.451)	0.072	0.048

98	8.17	0.50	0.120	(0.449)	0.072	0.048
99	8.25	0.50	0.120	į	0.447)	0.072	0.048
100	8.33	0.50	0.120	ì	0.445)	0.072	0.048
101	8.42	0.50	0.120	ì	0.443)	0.072	0.048
102	8.50	0.50	0.120	(0.441)	0.072	0.048
103	8.58	0.53	0.128	(0.438)	0.077	0.051
				(•		
104	8.67	0.53	0.128	(0.436)	0.077	0.051
105	8.75	0.53	0.128	(0.434)	0.077	0.051
106	8.83	0.57	0.136	(0.432)	0.082	0.054
107	8.92	0.57	0.136	(0.430)	0.082	0.054
108	9.00	0.57	0.136	(0.428)	0.082	0.054
109	9.08	0.63	0.152	(0.426)	0.092	0.060
110	9.17	0.63	0.152	(0.424)	0.092	0.060
111	9.25	0.63	0.152	(0.422)	0.092	0.060
112	9.33	0.67	0.160	(0.420)	0.097	0.063
113	9.42	0.67	0.160	(0.418)	0.097	0.063
114	9.50	0.67	0.160	(0.416)	0.097	0.063
115	9.58	0.70	0.168	(0.414)	0.101	0.067
116	9.67	0.70	0.168	(0.412)	0.101	0.067
117	9.75	0.70	0.168	(0.410)	0.101	0.067
118	9.83	0.73	0.176	(0.408)	0.106	0.070
119	9.92	0.73	0.176)	0.406)	0.106	0.070
120	10.00	0.73	0.176)	0.404)	0.106	0.070
121	10.08	0.50	0.120	ì	0.402)	0.072	0.048
122	10.17	0.50	0.120	ì	0.400)	0.072	0.048
123	10.25	0.50	0.120		0.398)	0.072	0.048
124	10.33	0.50	0.120		0.396)	0.072	0.048
125	10.42	0.50	0.120	(0.395)	0.072	0.048
126	10.50	0.50	0.120	(0.393)	0.072	0.048
127	10.58	0.67	0.160	(0.391)	0.097	0.063
128	10.58	0.67	0.160		0.389)	0.097	0.063
129	10.75	0.67	0.160	(0.387)	0.097	0.063
				(0.385)	0.097	0.063
130	10.83	0.67 0.67	0.160	(•		
131	10.92		0.160	(0.383)	0.097	0.063
	11.00		0.160	(0.097	0.063
133	11.08	0.63	0.152	(0.379)	0.092	0.060
134	11.17	0.63	0.152	(0.377)	0.092	0.060
135	11.25	0.63	0.152	(0.376)	0.092	0.060
136	11.33	0.63	0.152	(0.374)	0.092	0.060
137	11.42	0.63	0.152	(0.372)	0.092	0.060
138	11.50	0.63	0.152	(0.370)	0.092	0.060
139	11.58	0.57	0.136	(0.368)	0.082	0.054
140	11.67	0.57	0.136	(0.366)	0.082	0.054
141	11.75	0.57	0.136	(0.365)	0.082	0.054
142	11.83	0.60	0.144	(0.363)	0.087	0.057
143	11.92	0.60	0.144	(0.361)	0.087	0.057
144	12.00	0.60	0.144	(0.359)	0.087	0.057
145	12.08	0.83	0.200	(0.357)	0.121	0.079
146	12.17	0.83	0.200	(0.356)		0.079
147	12.25	0.83	0.200	(0.354)	0.121	0.079

148	12.33	0.87	0.208	(0.352)	0.126	0.082
149	12.42	0.87	0.208	(0.350)	0.126	0.082
150	12.50	0.87	0.208	(0.348)	0.126	0.082
151	12.58	0.93	0.224	(0.347)	0.135	0.089
152	12.67	0.93	0.224	(0.345)	0.135	0.089
153	12.75	0.93	0.224	(0.343)	0.135	0.089
154	12.83	0.97	0.232	(0.342)	0.140	0.092
155	12.92	0.97	0.232	(0.340)	0.140	0.092
156	13.00	0.97	0.232	(0.338)	0.140	0.092
157	13.08	1.13	0.272	(0.336)	0.164	0.108
158	13.17	1.13	0.272	(0.335)	0.164	0.108
159	13.25	1.13	0.272	(0.333)	0.164	0.108
160	13.33	1.13	0.272	(0.331)	0.164	0.108
161	13.42	1.13	0.272	(0.331)	0.164	0.108
162	13.50	1.13	0.272	· · · · · · · · · · · · · · · · · · ·	0.164	0.108
163	13.58	0.77	0.184	: :	0.111	0.108
164	13.67	0.77	0.184	(0.326) (0.325)	0.111	
165	13.75	0.77		• •	0.111	0.073
			0.184	(0.323)		0.073
166	13.83	0.77	0.184	(0.321)	0.111	0.073
167	13.92	0.77	0.184	(0.320)	0.111	0.073
168	14.00	0.77	0.184	(0.318)	0.111	0.073
169	14.08	0.90	0.216	(0.316)	0.130	0.086
170	14.17	0.90	0.216	(0.315)	0.130	0.086
171	14.25	0.90	0.216	(0.313)	0.130	0.086
172	14.33	0.87	0.208	(0.312)	0.126	0.082
173	14.42	0.87	0.208	(0.310)	0.126	0.082
174	14.50	0.87	0.208	(0.308)	0.126	0.082
175	14.58	0.87	0.208	(0.307)	0.126	0.082
176	14.67	0.87	0.208	(0.305)	0.126	0.082
177	14.75	0.87	0.208	(0.304)	0.126	0.082
178	14.83	0.83	0.200	(0.302)	0.121	0.079
179	14.92	0.83	0.200	(0.301)	0.121	0.079
180	15.00	0.83	0.200	(0.299)	0.121	0.079
181	15.08	0.80	0.192	(0.297)	0.116	0.076
182	15.17	0.80	0.192	(0.296)	0.116	0.076
183	15.25	0.80	0.192	(0.294)	0.116	0.076
184	15.33	0.77	0.184	(0.293)	0.111	0.073
185	15.42	0.77	0.184	(0.291)	0.111	0.073
186	15.50	0.77	0.184	(0.290)	0.111	0.073
187	15.58	0.63	0.152	(0.288)	0.092	0.060
188	15.67	0.63	0.152	(0.287)	0.092	0.060
189	15.75	0.63	0.152	(0.285)	0.092	0.060
190	15.83	0.63	0.152	(0.284)	0.092	0.060
191	15.92	0.63	0.152	(0.283)	0.092	0.060
192	16.00	0.63	0.152	(0.281)	0.092	0.060
193	16.08	0.13	0.032	(0.280)	0.019	0.013
194	16.17	0.13	0.032	(0.278)	0.019	0.013
195	16.25	0.13	0.032	(0.277)	0.019	0.013
196	16.33	0.13	0.032	(0.275)		0.013
197	16.42	0.13	0.032	(0.274)	0.019	0.013
				•		

198	16.50	0.13	0.032	(0.273)	0.019	0.013
199	16.58	0.10	0.024	(0.271)	0.014	0.010
200	16.67	0.10	0.024	(0.270)	0.014	0.010
201	16.75	0.10	0.024	(0.268)	0.014	0.010
202	16.83	0.10	0.024	(0.267)	0.014	0.010
203	16.92	0.10	0.024	(0.266)	0.014	0.010
204	17.00	0.10	0.024	(0.264)	0.014	0.010
205	17.08	0.17	0.040	(0.263)	0.024	0.016
206	17.17	0.17	0.040	(0.262)	0.024	0.016
207	17.25	0.17	0.040	(0.260)	0.024	0.016
208	17.33	0.17	0.040	(0.259)	0.024	0.016
209	17.42	0.17	0.040	(0.258)	0.024	0.016
210	17.50	0.17	0.040	(0.257)	0.024	0.016
211	17.58	0.17	0.040	(0.255)	0.024	0.016
212	17.67	0.17	0.040	(0.254)	0.024	0.016
213	17.75	0.17	0.040	(0.253)	0.024	0.016
214	17.83	0.13	0.032	(0.251)	0.019	0.013
215	17.92	0.13	0.032	(0.250)	0.019	0.013
216	18.00	0.13	0.032	(0.249)	0.019	0.013
217	18.08	0.13	0.032	(0.248)	0.019	0.013
218	18.17	0.13	0.032	(0.247)	0.019	0.013
219	18.25	0.13	0.032	(0.245)	0.019	0.013
220	18.33	0.13	0.032	(0.244)	0.019	0.013
221	18.42	0.13	0.032	(0.243)	0.019	0.013
222	18.50	0.13	0.032	(0.242)	0.019	0.013
223	18.58	0.10	0.024	(0.241)	0.014	0.010
224	18.67	0.10	0.024	(0.239)	0.014	0.010
225	18.75	0.10	0.024	(0.238)	0.014	0.010
226	18.83	0.07	0.016	(0.237)	0.010	0.006
227	18.92	0.07	0.016	(0.236)	0.010	0.006
228	19.00	0.07	0.016	(0.235)	0.010	0.006
229	19.08	0.10	0.024	(0.234)	0.014	0.010
230	19.17	0.10	0.024	(0.233)	0.014	0.010
231	19.25	0.10	0.024	(0.232)	0.014	0.010
232	19.33	0.13	0.032	(0.231)	0.019	0.013
233	19.42	0.13	0.032	(0.229)	0.019	0.013
234	19.50	0.13	0.032	(0.228)	0.019	0.013
235	19.58	0.10	0.024	(0.227)	0.014	0.010
236	19.67	0.10	0.024	(0.226)	0.014	0.010
237	19.75	0.10	0.024	(0.225)	0.014	0.010
238	19.83	0.07	0.016	(0.224)	0.010	0.006
239	19.92	0.07	0.016	(0.223)	0.010	0.006
240	20.00	0.07	0.016	(0.222)	0.010	0.006
241	20.08	0.10	0.024	(0.221)	0.014	0.010
242	20.17	0.10	0.024	(0.220)	0.014	0.010
243	20.25	0.10	0.024	(0.219)	0.014	0.010
244	20.33	0.10	0.024	(0.218)	0.014	0.010
245	20.42	0.10	0.024	(0.218)	0.014	0.010
246	20.50	0.10	0.024	(0.217)	0.014	0.010
247	20.58	0.10	0.024	(0.216)	0.014	0.010

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248
     20.67
               0.10
                          0.024
                                          0.215)
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249
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257
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258
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269
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270 22.50
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272
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273
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274
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275
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276
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278
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279
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280
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281
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282
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284
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285
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286
     23.83
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                                          0.192)
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287
     23.92
               0.07
                          0.016
                                          0.192)
                                                        0.010
                                                                      0.006
288
     24.00
               0.07
                          0.016
                                           0.191)
                                                        0.010
                                                                      0.006
                 (Loss Rate Not Used)
    Sum =
               100.0
                                                         Sum =
                                                                    9.5
       Flood volume = Effective rainfall
                                                 0.79(In)
                          4.9(Ac.)/[(In)/(Ft.)] =
        times area
                                                           0.3(Ac.Ft)
       Total soil loss =
                                1.21(In)
       Total soil loss =
                               0.493(Ac.Ft)
       Total rainfall =
                               2.00(In)
       Flood volume =
                             14087.2 Cubic Feet
       Total soil loss =
                                 21486.5 Cubic Feet
```

Peak flow rate of this hydrograph = 0.532(CFS)
++++++++++++++++++++++++++++++++++++++
Hydrograph in 5 Minute intervals ((CFS))

 Time(h+m)	Volume Ac.Ft	Q(CFS	6) 0	2.5	5.0	7.5	10.6
0+ 5	0.0002	0.02	Q			 	
0+10	0.0004	0.03	Q	ĺ	ĺ	ĺ	ĺ
0+15	0.0006	0.03	Q	1		I	
0+20	0.0009	0.04	Q	1		1	
0+25	0.0012	0.05	Q	1		1	
0+30	0.0015	0.05	Q			1	
0+35	0.0019	0.05	Q			1	
0+40	0.0022	0.05	Q			1	
0+45	0.0025	0.05	Q			1	
0+50	0.0029	0.06	Q			1	
0+55	0.0033	0.06	Q	ļ	ļ	ļ	ļ
1+ 0	0.0038	0.06	Q	l			
1+ 5	0.0041	0.05	Q	ļ		Į	ļ
1+10	0.0044	0.05	Q	ļ	ļ	ļ	ļ
1+15	0.0048	0.05	Q	ļ	ļ	ļ	ļ
1+20	0.0051	0.05	Q	ļ	ļ	ļ	ļ
1+25	0.0054	0.05	Q	ļ		ļ	ļ
1+30		0.05	Q	ļ	ļ	ļ	ļ
1+35	0.0061	0.05	Q	ļ	ļ	ļ	ļ
1+40	0.0064	0.05	Q	ļ	ļ	ļ	ļ
1+45	0.0067	0.05	Q	ļ	ļ	ļ	ļ
1+50	0.0071	0.06	Q	ļ	ļ	ļ	ļ
1+55	0.0075	0.06	Q	ļ	ļ	ļ	ļ
2+ 0	0.0080	0.06	Q	ļ	ļ	ļ	ļ
2+ 5	0.0084	0.06	QV	ļ	ļ	ļ	ļ
2+10	0.0088	0.06	QV	ļ	ļ	ļ	ļ
2+15	0.0093	0.06	QV	ļ	ļ	ļ	ļ
2+20	0.0097	0.06	QV	ļ	ļ	ļ	ļ
2+25	0.0101	0.06	QV	ļ	ļ	ļ	ļ
2+30	0.0106	0.06	QV	ļ	ļ	ļ	ļ
2+35	0.0111	0.07		ļ	ļ	ļ	ļ
2+40	0.0116	0.08	QV	ļ	ļ	ļ	ļ
2+45	0.0121	0.08	QV	ļ	ļ		ļ
2+50	0.0127	0.08	QV	ļ	ļ		ļ
2+55	0.0132	0.08	QV	ļ	ļ	ļ	ļ
3+ 0	0.0138	0.08	QV	ļ	ļ	ļ	ļ
3+ 5	0.0143	0.08	QV	ļ	ļ	ļ	ļ
3+10	0.0148	0.08	QV				

3+15	0.0154	0.08	QV	1 1	1
3+20	0.0159	0.08	QV		
3+25	0.0165	0.08	Q V		
3+30	0.0170	0.08	Q V	j j	ĺ
3+35	0.0175	0.08	Q V j	j j	İ
3+40	0.0181	0.08	ųν	j j	į
3+45	0.0186	0.08	ϙ̈́ν	i i	i
3+50	0.0192	0.09	ųν	i i	i
3+55	0.0199	0.09	ϙ̈́ν	i i	į
4+ 0	0.0205	0.09	ϙ̈́ν	i i	i
4+ 5	0.0212	0.09	ϙ̈́ν	i i	į
4+10	0.0218	0.09	ųν	i i	i
4+15	0.0225	0.09	ųν	i i	i
4+20	0.0232	0.11	Qν	i i	i
4+25	0.0239	0.11	Qν	i i	i
4+30	0.0247	0.11	Q V	i i	i
4+35	0.0254	0.11	Q V	i i	i
4+40	0.0262	0.11	Q V		i
4+45	0.0270	0.11	Q V		i
4+50	0.0278	0.12	Q V		i
4+55	0.0286	0.13	Q V		i
5+ 0	0.0295	0.13	Q V		i i
5+ 5	0.0302	0.10	Q V		i i
5+10	0.0309	0.09	Q V		ł
5+15	0.0315	0.09	Q V		i
5+20	0.0322	0.11	Q V		-
5+25	0.0330	0.11	Q V		-
5+30	0.0337	0.11	Q V Q V		-
5+35	0.0346	0.11	•		-
5+40	0.0354	0.12	•		-
5+45	0.0363	0.13	•		-
5+50	0.0372	0.13	•		ł
			• !		ļ
5+55	0.0380	0.13	Q V		l I
6+ 0	0.0389	0.13	Q V		ļ
6+ 5	0.0398	0.14	Q V		ļ
6+10	0.0408	0.14	Q V		
6+15	0.0418	0.14	Q V	[
6+20	0.0427	0.14	Q V		ļ
6+25	0.0437	0.14	Q V		ļ
6+30	0.0447	0.14	Q V	[
6+35	0.0457	0.15	Q V	[
6+40	0.0468	0.16	Q V		ļ
6+45	0.0479	0.16	Q V		ļ
6+50	0.0490	0.16	Q V	!!!	
6+55	0.0500	0.16	Q V	ļ	
7+ 0	0.0511	0.16	Q V	!!!	ļ į
7+ 5	0.0522	0.16	Q V	ļ ļ	ļ
7+10	0.0533	0.16	Q V	į į	ļ
7+15	0.0544	0.16	Q V	į į	ļ
7+20	0.0555	0.17	Q V	1	

7+25	0.0567	0.17 Q	V		Į.
7+30	0.0579	0.17 Q	V		!
7+35	0.0591	0.18 Q	V		Į.
7+40	0.0604	0.19 Q	V		ļ.
7+45	0.0617	0.19 Q	V		ļ
7+50	0.0631	0.20 Q	V		
7+55	0.0645	0.20 Q	V		
8+ 0	0.0659	0.20 Q	V		
8+ 5	0.0675	0.23 Q	V		1
8+10	0.0691	0.23 Q	V		
8+15	0.0707	0.23 Q	V		
8+20	0.0723	0.23 Q	V	į į	Ĺ
8+25	0.0739	0.23 Q	νİ	i i	į
8+30	0.0755	0.23 Q	νİ	i i	į
8+35	0.0772	0.25 Q	νİ	i i	į
8+40	0.0790	0.25 Q	νİ	i i	į
8+45	0.0807	0.25 Q	νİ	i i	į
8+50	0.0825	0.26 Q	V	i i	i
8+55	0.0843	0.27 Q	V	i i	i
9+ 0	0.0862	0.27 Q	V	i i	i
9+ 5	0.0881	0.29 Q	V	i i	i
9+10	0.0902	0.30 Q	ĪV	i i	i
9+15	0.0922	0.30 Q	ĺv	i i	i
9+20	0.0944	0.31 Q	ĺv		i
9+25	0.0965	0.31 Q	I V		-
9+30	0.0987	: -	l V		-
9+35	0.1009	: -	V V		-
		: -	I V		
9+40	0.1032	0.33 Q			ļ
9+45	0.1054	0.33 Q	V		!
9+50	0.1078	0.34 Q	V		-
9+55	0.1102	0.34 Q	V		!
10+ 0	0.1125	0.34 Q	V		!
10+ 5	0.1144	0.27 Q	l V	!!!	!
10+10	0.1160	0.23 Q	l V	!!!	ļ
10+15	0.1176	0.23 Q	Į V		ļ
10+20	0.1192	0.23 Q	Į V		!
10+25	0.1208	0.23 Q	į v		!
10+30	0.1224	0.23 Q	į v		ļ.
10+35	0.1244	0.29 Q	į v		ļ
10+40	0.1266	0.31 Q	Į V		ļ
10+45	0.1288	0.31 Q	V		ļ
10+50	0.1309	0.31 Q	V		
10+55	0.1331	0.31 Q	V		1
11+ 0	0.1352	0.31 Q	V		
11+ 5	0.1373	0.30 Q	V		1
11+10	0.1394	0.30 Q	V		1
11+15	0.1414	0.30 Q	j v	ĺ	ĺ
11+20	0.1434	0.30 Q	j v	l İ	İ
11+25	0.1455	0.30 Q	j v	l İ	İ
11+30	0.1475	0.30 Q	j V	į į	į
			•	•	•

11+35	0.1494	0.27	Q	V
11+40	0.1513	0.27	ĮQ	i vi i i
11+45	0.1531	0.27	ĮQ	i vi i i
11+50	0.1550	0.28	ĮQ	i vi i i
11+55	0.1570	0.28	ĺQ	i vi i i
12+ 0	0.1589	0.28	Įõ	i vi i i
12+ 5	0.1614	0.36	ĮQ	i vi i i
12+10	0.1641	0.39	ĮQ	i v i i
12+15	0.1668	0.39	Q	v i i
12+20	0.1695	0.40	Q	V I I
12+25	0.1723	0.41	Q	i v i
12+30	0.1751	0.41	Q	l v l
12+35	0.1781	0.43	Q	l v l
12+40	0.1811	0.44	Q Q	
12+45	0.1841	0.44	Q Q	
12+50	0.1872	0.45	Q Q	
12+55	0.1904	0.45		
13+ 0	0.1935	0.45 0.45	Q	
13+ 5	0.1933		Q	l v l
13+ 3 13+10		0.51	Q	l v l
	0.2007	0.53	Q	
13+15	0.2043	0.53	Q	
13+20	0.2080	0.53	Q	
13+25	0.2117	0.53	Q	l V l
13+30	0.2153	0.53	Q	V
13+35	0.2181	0.41	Q	V
13+40	0.2206	0.36	Q	V
13+45	0.2231	0.36	ĮQ	V
13+50	0.2256	0.36	Q	V
13+55	0.2281	0.36	ĮQ	V
14+ 0	0.2305	0.36	ĮQ	V
14+ 5	0.2333	0.41	ĮQ	V
14+10	0.2362	0.42	ĮQ	V
14+15	0.2391	0.42	ĮQ	l VI
14+20	0.2420	0.41	Q	V
14+25	0.2448	0.41	Q	V
14+30	0.2476	0.41	Q	V
14+35	0.2504	0.41	Q	V
14+40	0.2532	0.41	Q	V
14+45	0.2560	0.41	Q	V
14+50	0.2587	0.40	Q	V
14+55	0.2614	0.39	Q	V
15+ 0	0.2641	0.39	Q	V
15+ 5	0.2667	0.38	Q	V
15+10	0.2693	0.38	ĮQ	j j v j
15+15	0.2719	0.38	ĮQ	j j v j
15+20	0.2744	0.36	ĮQ	j j v j
15+25	0.2769	0.36	Įõ	i i v i
15+30	0.2794	0.36	Įõ	i i v i
15+35	0.2815	0.31	Įõ	i i v i
15+40	0.2836	0.30	ĮQ	i i v i

15+45	0.2856	0.30	Q		V	
15+50	0.2877	0.30	Q		V	
15+55	0.2897	0.30	Q		V	
16+ 0	0.2918	0.30	Q		V	
16+ 5	0.2927		Q	j j	j v j	
16+10	0.2931		Q	j j	j v j	
16+15	0.2935		Q	j j	j v j	
16+20	0.2940		Q	j j	j v j	
16+25	0.2944		Q	j j	j v j	
16+30	0.2948		Q	j j	i v i	
16+35	0.2952		Q	j j	i v i	
16+40	0.2955		Q	j j	i v i	
16+45	0.2958		Q	i i	i v i	
16+50	0.2961		Q	i i	i v i	
16+55	0.2965		Q	i i	i v i	
17+ 0	0.2968		Q	i i	i v i	
17+ 5	0.2973		Q	i i	i v i	
17+10	0.2978		Q	i i	i v i	
17+15	0.2983		Q	i i	i v i	
17+20	0.2989		Q	i i	i v i	
17+25	0.2994		Q	i i	i vi	
17+30	0.3000		Q	i i	i vi	
17+35	0.3005		Q	i i	i vi	
17+40	0.3010		Q	i i	i v i	
17+45	0.3016		Q	i i	i v i	
17+50	0.3020		Q	i i	i v i	
17+55	0.3025		Q	i i	i vi	
18+ 0	0.3029		Q	i i	i v i	
18+ 5	0.3033		Q	i	i v i	
18+10	0.3038		Q	i i	i v i	
18+15	0.3042		Q	i i	i vi	
18+20	0.3046		Q	i i	i vi	
18+25	0.3051		Q	i	i v i	
18+30	0.3055		Q Q	i i	i v i	
18+35	0.3058		Q	i i	i v i	
18+40	0.3062		Q	i i	i v i	
18+45	0.3065		Q	i	i v i	
18+50	0.3067		Q	i i	i v i	
18+55	0.3070		Q	i i	i v i	
19+ 0	0.3072		Q	i i	i v i	
19+ 5	0.3075		Q	i i	i vi	
19+10	0.3078		Q	; ;	i vi	
19+15	0.3081		Q	! !	i vi	
19+13	0.3085		Q Q		V	
19+25	0.3089		Q Q		V	
19+23	0.3094		Q	ı 	V	
19+36	0.3097		Q Q	ı 	V V	
19+33 19+40	0.3100		Q Q	1 	V V	
19+40 19+45	0.3104		Q Q		V V	
19+45 19+50	0.3104		Q Q	I	V V	
19TJU	0.3100	0.04	ų.	1	ı v ı	

19+55	0.3108	0.03	Q		V
20+ 0	0.3110	0.03	Q		V
20+ 5	0.3113	0.04	Q		V
20+10	0.3117	0.05	Q	i i	j v j
20+15	0.3120	0.05	Q	i i	i vi
20+20	0.3123	0.05	Q	i i	i vi
20+25	0.3126	0.05	Q	į į	i vi
20+30	0.3130	0.05	Q	i i	i vi
20+35	0.3133	0.05	Q	i i	i vi
20+40	0.3136	0.05	Q	į į	i vi
20+45	0.3139	0.05	Q	i i	i vi
20+50	0.3142	0.04	Q	i i	i vi
20+55	0.3144	0.03	Q	i i	i vi
21+ 0	0.3146	0.03	Q	i i	i vi
21+ 5	0.3149	0.04	Q	i i	i vi
21+10	0.3152	0.05	Q	i i	i vi
21+15	0.3155	0.05	Q	i i	i vi
21+20	0.3158	0.04	Q	i i	i vi
21+25	0.3160	0.03	Q	i i	i vi
21+30	0.3162	0.03	Q	i i	i vi
21+35	0.3165	0.04	Q	i i	i vi
21+40	0.3168	0.05	Q	i i	i vi
21+45	0.3172	0.05	Q	i i	i vi
21+50	0.3174	0.04	Q	i i	i vi
21+55	0.3176	0.03	Q	i i	i vi
22+ 0	0.3178	0.03	Q		i vi
22+ 5	0.3181	0.04	Q	i i	i vi
22+10	0.3185	0.05	Q	i i	i vi
22+15	0.3188	0.05	Q	i i	i vi
22+20	0.3190	0.04	Q		i vi
22+25	0.3192	0.03	Q	i i	i vi
22+30	0.3195	0.03	Q	i i	i vi
22+35	0.3197	0.03	Q	i i	i vi
22+40	0.3199	0.03	Q	i i	i vi
22+45	0.3201	0.03	Q	i i	i vi
22+50	0.3203	0.03	Q	i i	i vi
22+55	0.3205	0.03	Q	i i	i vi
23+ 0	0.3207	0.03	Q	i i	j vj
23+ 5	0.3210	0.03	Q	i i	i vi
23+10	0.3212	0.03	Q	i i	i vi
23+15	0.3214	0.03	Q	i i	i vi
23+20	0.3216	0.03	Q	i i	i vi
23+25	0.3218	0.03	Q	i i	i vi
23+30	0.3220	0.03	Q	į į	i vi
23+35	0.3223	0.03	Q	į į	j vj
23+40	0.3225	0.03	Q	į į	i vi
23+45	0.3227	0.03	Q	į į	i vi
23+50	0.3229	0.03	Q	į į	j vj
23+55	0.3231	0.03	Q	į į	i vi
24+ 0	0.3233	0.03	Q	į į	j vj
			-		

24+ 5 0.3234 0.01 Q | | V

Appendix 8: Source Control

Pollutant Sources/Source Control Checklist

*To be provided during final engineering

Appendix 9: O&M

Operation and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms

*To be provided during final engineering

Appendix 10: Educational Materials

BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information

*To be provided during final engineering