



Central Coast Blue

Responses to Comments on Final Addendum to the Central Coast Blue EIR

prepared by

City of Pismo Beach

760 Mattie Road

Pismo Beach, California 93449 Contact: Matt Downing, AICP, Community
Development Director

prepared with the assistance of

Rincon Consultants, Inc.

1530 Monterey Street, Suite D

San Luis Obispo, California 93401

September 2023



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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Table of Contents

Responses to Comments on the Draft Addendum.....1
 Letter 1.....2
 Letter 2.....7
 Letter 3.....16

Attachments

- Attachment 1 Lithology for IW-5A and IW-5B
- Attachment 2 Geotechnical Reports
- Attachment 3 Phase I and II Environmental Site Assessments

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Responses to Comments on the Draft Addendum

This section includes comments received during the circulation of the Draft Addendum to the Central Coast Blue Project Final Environmental Impact Report (EIR) prepared for the Central Coast Blue Project (Project).

The Draft Addendum to the Final EIR was voluntarily circulated for a 30-day public review period that began on June 7, 2023, and ended on July 7, 2023. The City of Pismo Beach received three comment letters on the Draft Addendum to the Final EIR. The commenters and the page number on which each commenter’s letter appear are listed below.

Letter No. and Commenter	Page No.
1 Andrew Mutziger, Manager – Planning, Outreach & Grants Division, San Luis Obispo County Air Pollution Control District	2
2 Miguel Cabrera Director, Northern District Deputy, California Department of Conservation Geologic Energy Management Division	7
3 Jeff Edwards and Julie Tacker	16

The comment letters and responses follow. The comment letters have been numbered sequentially and each separate issue raised by the commenter, if more than one, has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.1, for example, indicates that the response is for the first issue raised in comment Letter 1).

Letter 1

Annaliese Torres

From: Andrew Mutziger <amutziger@co.slo.ca.us>
Sent: Thursday, June 22, 2023 4:32 PM
To: Annaliese Torres
Cc: Matt Downing; Dora Drexler; Karl Tupper; Ashley S. Goldlist
Subject: [EXT] RE: NOI to Adopt an Addendum to the Central Coast Blue Project Final EIR
Attachments: 20210914-APCDemailCommentsOnCentralCoastBlue.pdf

CAUTION: This email originated from outside of Rincon Consultants. Be cautious before clicking on any links, or opening any attachments, until you are confident that the content is safe .

Hi Annaliese,
SLO County APCD has no additional comments for this project's FEIR addendum than those we shared in my 14 Sep 2021 email (attached).
Thank you,

1.1

Andy Mutziger
Manager - Planning, Outreach & Grants Division
SLO County APCD
805-781-5956
amutziger@co.slo.ca.us
slocleanair.org

From: APCD_slocleanair <APCD_slocleanair@co.slo.ca.us>
Sent: Monday, June 12, 2023 8:16 AM
To: Andrew Mutziger <amutziger@co.slo.ca.us>; Ashley S. Goldlist <AGoldlist@co.slo.ca.us>; Vince Kirkhuff <vkirkhuff@co.slo.ca.us>
Subject: FW: [EXT]NOI to Adopt an Addendum to the Central Coast Blue Project Final EIR

FYI-

APCD STAFF

SLO COUNTY AIR POLLUTION CONTROL DISTRICT
3433 ROBERTO COURT, SAN LUIS OBISPO CA 93401
(W) 805-781-5912

SLOCleanAir.org • SLOCarFree.org



From: Annaliese Torres <atorres@rinconconsultants.com>
Sent: Wednesday, June 7, 2023 8:00 AM
Cc: Matt Downing <mdowning@pismobeach.org>
Subject: [EXT]NOI to Adopt an Addendum to the Central Coast Blue Project Final EIR

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Hello!

On behalf of the City of Pismo Beach, I am providing the attached Notice of Intent to Adopt an Addendum to the Central Coast Blue Project Final Environmental Impact Report. Information on the scope of the Addendum as well as the timing of the public review period for the Draft Addendum, the location and time of the planned public meeting, and how to submit comments on the Draft Addendum to the City are all included in the attachment.

Thank you!

Annaliese Torres, Senior Environmental Planner

657-999-8337 Direct | 805-644-4455 Main

atorres@rinconconsultants.com



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Andrew Mutziger

From: Andrew Mutziger
Sent: Tuesday, September 14, 2021 11:21 AM
To: Lacey Minnick; PL_Pre-App; Jerry Hittleman; Stephanie Hawner; Annaliese Miller; Matt Downing; Emi D. Sugiyama; Shaun E. Cooper; Nick Franco; Leslie Terry; Airlin Singewald
Cc: Xzandrea D. Fowler; Jon Ansolabehere; Trevor Keith; Tanya M. Richardson; Tim Fuhs
Subject: Air Quality Permitting Language for Conditions of Approval - RE: PRE2021-00135 - Central Coast Blue - Phase II

Hi All,
Per APCD's input during today's meeting on potential Federal, State, or APCD air quality permitting needs for the Central Coast Blue project, below are two construction phase and one operational phase permitting statements that may be applicable to the project. I recommend that these statements be applied to the project's conditions of approval so if any of these situations come up during the project, there is a clear understanding of how to handle the air quality permitting needs. If there are any air quality permitting questions, please contact SLO County APCD's Engineering and Compliance Division at 805-781-5912.

If you have any questions about applying these permitting statements to the project, please contact me.

Tim – the OIS Planning number for this project is 4199.

Sincerely,

Andy Mutziger | Division Manager

Planning, Monitoring & Grants

SLO County Air Pollution Control District

(805) 781-5956 VM • amutziger@co.slo.ca.us • SLOCleanAir.org



Potential Construction Phase Air Quality Permitting Needs

Proper Abatement of Asbestos-Containing Material (ACM)

Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, abatement, and disposal of asbestos-containing material (ACM). ACM could be encountered during the demolition or remodeling of existing structures or the disturbance, demolition, or relocation of above or below ground utility pipes/pipelines (e.g., transite pipes or insulation on pipes). If this project will include any of these activities, then it may be subject to various regulatory jurisdictions, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - asbestos NESHAP). NESHAP requirements include but are not limited to:

- 1) Written notification to the APCD, within at least 10 business days of activities commencing.
- 2) Asbestos survey report conducted by a Certified Asbestos Consultant.
- 3) Written work plan addressing asbestos handling procedures in order to prevent visible emissions.

Go to www.slocleanair.org/rules-regulations/asbestos.php for more information.

Construction Permit Requirements

Portable equipment, 50 horsepower (hp) or greater, used during construction activities may require California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit. The following list is provided as a guide to equipment and operations that may have permitting requirements but should not be viewed as an exclusive list. For a more detailed listing, please refer to the following webpage: slocleanair.org/library/download-forms.

- Power screens, conveyors, diesel engines, and/or crushers;
- Portable generators and equipment with engines that are 50 hp or greater;
- Electrical generation plants or the use of standby generators;

- Internal combustion engines;
- Rock and pavement crushing;
- Tub grinders; and
- Trommel screens.

Potential Operational Phase Air Quality Permitting Needs

Operational Permit Requirements

Operational sources may require APCD permits. The following list is provided as a guide to equipment and operations that may have permitting requirements but should not be viewed as exclusive. For a more detailed listing, please refer to the following webpage: slocleanair.org/library/download-forms.

- Portable generators and equipment with engines that are 50 hp or greater;
- Electrical generation plants or the use of standby generator;
- Internal combustion engines; and
- Cogeneration facilities.

Most facilities applying for an Authority to Construct or Permit to Operate with stationary diesel engines greater than 50 hp, should be prioritized or screened for facility wide health risk impacts. A diesel engine-only facility limited to 20 non-emergency operating hours per year or has demonstrated to have overall diesel particulate emissions less than or equal to 2 lb./yr. does not need to do additional health risk assessment.

-----Original Appointment-----

From: Lacey Minnick <lminnick@co.slo.ca.us>

Sent: Wednesday, August 18, 2021 6:47 PM

To: Lacey Minnick; PL_Pre-App; Jerry Hittleman; Stephanie Hawner; Annaliese Miller; Matt Downing; Emi D. Sugiyama; Jackie Mansoor; Shaun E. Cooper; Nick Franco; Leslie Terry; Airlin Singewald

Cc: Xzandrea D. Fowler; Jon Ansolabehere; Trevor Keith

Subject: PRE2021-00135 - Central Coast Blue - Phase II

When: Tuesday, September 14, 2021 10:00 AM-11:00 AM (UTC-08:00) Pacific Time (US & Canada).

Where: Microsoft Teams Meeting

Please reserve this time for Pre-Application Meeting PRE2021-00135.

The meeting packet is attached to this calendar entry.

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

Or call in (audio only)

[+1 831-296-4487,,729253598#](tel:+18312964487729253598#) United States, Salinas

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Letter 1

COMMENTER: Andrew Mutziger, Manager – Planning, Outreach & Grants Division, San Luis Obispo County Air Pollution Control District (SLO County APCD)

DATE: June 22, 2023

Response 1.1

The commenter states SLO County APCD has no additional comments on the Addendum to the Final EIR other than those shared in its September 14, 2021 comment letter.

The comment is noted. The September 14, 2021, comment letter was provided by SLO County APCD to the project team following a pre-application meeting with County of San Luis Obispo (County) staff regarding the project's coastal development permit application. The September 14, 2021, comment letter contained three permitting statements (two construction-phase and one operational-phase) that SLO County APCD recommended be applied to the project's conditions of approval. The Modified Project would be required to comply with all conditions of approval included in its coastal development permit as well as all applicable air quality regulations and rules promulgated by SLO County APCD.



Letter 2

July 6, 2023

VIA EMAIL

Mr. Matthew Downing, Planning Manager
City of Pismo Beach, Public Works Department
760 Mattie Road
Pismo Beach, CA 93449
mdowning@pismo-beach.org

Dear Mr. Downing:

PROJECT TITLE: CENTRAL COAST BLUE PROJECT ADDENDUM NO. 1
SCH : 2019120560

The California Geologic Energy Management Division (CalGEM) appreciates the opportunity to submit comments on the Amended project referenced above (Project).

CalGEM has previously commented on this project and our recommendations remain the same. Please find the August 28, 2020 letter addressed to Mr. Matthew Downing with comments from The City of Pismo Beach attached.

2.1

Thank you for considering CalGEM's comments. If you have any questions, please contact our District office at (805) 937-7246 or via email at CalGEMNorthern@conservation.ca.gov

Sincerely,

Trey Powell
Senior Oil and Gas Engineer

Signature on behalf of

Miguel Cabrera
Northern District Deputy

Enclosure

ZN:jj:kv

cc: Chrono, CSWR

State of California Natural Resources Agency | Department of Conservation

Northern District

Orcutt Office and Mail: 195 S. Broadway, Suite 101, Orcutt, CA 93455 | T: (805) 937-7246 | F: (805) 937-0673
Sacramento Office and Mail: 715 P Street, MS 1803, Sacramento, CA 95814 | T: (916) 322-1110 | F: (916) 445-3319
Ventura Office: 1000 S. Hill Road, Suite 116, Ventura, CA 93003 | T: (805) 937-7246 | F: (805) 654-4765
Ventura Mail: 195 S. Broadway, Suite 101, Orcutt, CA 93455
conservation.ca.gov



August 28, 2020

Comment 1

VIA EMAIL

Mr. Matthew Downing, Planning Manager
City of Pismo Beach, Public Works Department
760 Mattie Road
Pismo Beach, CA 93449
mdowning@pismo-beach.org

Dear Mr. Downing:

PROJECT TITLE: CENTRAL COAST BLUE PROJECT
SCH : 2019120560

Public Resources Code (PRC) section 3208.1 establishes well re-abandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received and reviewed the above referenced project. To assist local permitting agencies, property owners, and developers in making wise land use decisions regarding potential development near oil, gas, or geothermal wells, CalGEM provides the following well evaluation.

The project is located in San Luis Obispo County, outside of oil and gas field boundaries.

Our records indicate there is one known plugged and abandoned oil or gas well located approximately ¼ mile from proposed injection wells IW-5A and IW-5B, as shown below (Figure 1). The injection wells are proposed for injection at a depth of approximately 200 to 600 feet below ground surface. The details of the oil or gas well located near the injection wells is discussed below.

1



Figure 1. Proposed injection wells (IW-5A & IW-5B) and plugged and abandoned oil well ("Oceano" 1). To view information and locations for oil and gas wells visit <https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx>

Well	Status
<p>"Oceano" 1 Madonna Construction Co. API: 079-00329</p>	<p>The record review process shows that this well is not abandoned consistent with current PRC and California Code of Regulations, title 14, (CCR) as of August 24, 2020.</p> <p>Based on the well records:</p> <ol style="list-style-type: none"> 1. Casing shoe plug is not to current standards (CCR section 1723.3). 2. Surface plug is not to current standards (CCR section 1723.5). <p>The base of freshwater is at approximately 1,000 feet measured depth according to the electric log run on 3/14/1957. A cement plug was placed from 1,100 feet to 777 feet according to records. The cement plug meets current standards for freshwater protection.</p>

CalGEM recommends that the plugged and abandoned oil well be considered in any modeling of injection pressure and fluid flow. CalGEM recommends that injection wells be completed in a stratigraphically equivalent or higher zone positioned above the base of freshwater plug, if there is potential for the injection wells to influence the well. Careful consideration of the proposed injection interval placement may reduce the potential risk for downward or upward flow between the injection interval and the portion of the plugged and abandoned well below the base of freshwater plug.

1
(cont.)

Mr. Matthew Downing

August 28, 2020

CalGEM categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure.

2

There are no guarantees a well abandoned in compliance with current CalGEM requirements as prescribed by law will not start leaking in the future. It always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. CalGEM acknowledges wells plugged and abandoned to the most current CalGEM requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantees that such abandonments will not leak.

CalGEM advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations should be provided to CalGEM in Latitude and Longitude, NAD 83 decimal format. CalGEM expects any wells found leaking to be reported to it immediately and failure to plug and re-abandon the well may result in enforcement action, including an order to perform re-abandonment well work, pursuant to PRC section 3208.1, and 3224.

PRC section 3208.1 gives CalGEM the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment, or if the well is not accessible or visible. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for re-abandonment as:

3

1. The property owner - If the well was plugged and abandoned in conformance with CalGEM requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.
2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with CalGEM requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from

Mr. Matthew Downing

August 28, 2020

the supervisor or district deputy as to whether the previously abandoned well is required to be re-abandoned, or to follow the advice of the supervisor or district deputy not to undertake the construction, then the person or entity causing the construction over or near the well shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

- 3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with CalGEM requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the re-abandonment.

3
(cont.)

No well work may be performed on any oil, gas, or geothermal well without written approval from CalGEM. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. CalGEM also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR section 1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below grade. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from CalGEM is required before work can start.

CalGEM makes the following additional recommendations to the local permitting agency, property owner, and developer:

- 1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, CalGEM recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.
- 2. CalGEM recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

4

5

As indicated in PRC section 3106, CalGEM has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to CalGEM's authority to order work on wells pursuant to PRC section's 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC

6

Mr. Matthew Downing

August 28, 2020

section's 3236, 3236.5, and 3359 for violations within CalGEM's jurisdictional authority. CalGEM does not regulate grading, excavations, or other land use issues.

6
(cont.)

If during development activities, any wells are encountered that were not part of this review, the property owner is expected to immediately notify CalGEM's construction site well review engineer in the Coastal district office, and file for CalGEM review an amended site plan with well casing diagrams. The District office will send a follow-up well evaluation letter to the property owner and local permitting agency.

7

Should you have any questions, please contact Mr. Jordan Martin at (805) 465-9638 or via email at Jordan.Martin@conservation.ca.gov

Sincerely,



Patricia A. Abel
Coastal District Deputy

JM:ks

cc: OLRA olra@conservation.ca.gov
State Clearinghouse state.clearinghouse@opr.ca.gov
Tharon Wright Tharon.Wright@conservation.ca.gov
Chrono File
CEQA File
CSWR File
Well File

Letter 2

COMMENTER: Terry Powell, Northern District Deputy, California Department of Conservation
Geologic Energy Management Division (CalGEM)

DATE: July 6, 2023

Response 2.1

The commenter states they have previously commented on this project and their recommendations remain the same as those stated in their August 28, 2020, letter.

The comment is noted. Responses to the commenter's August 28, 2020, letter were provided in Chapter 9, *Responses to Comments on the Draft EIR*, of the Central Coast Blue Project Final EIR (see Comment 1).

Letter 3

July 7, 2023

The City of Pismo Beach
Attn: Matt Downing
760 Mattie Road
Pismo Beach, CA 93449

Via email: mdowning@pismobeach.org

RE: Tacker/Edwards comments on Draft Addendum to the Central Coast Blue Final Environmental Impact Report (EIR) Phase 1 (SCH #2019120560) dated June 5, 2023

Hello Mr. Downing,

Introduction

Central Coast Blue (CCB) has been in a state of flux since the proposal was first conceived in 2012 as the Groundwater Reuse and Replenishment Project. Understanding the evolution of CCB may help understand where the proposal is today and why challenges continue to face the project. Originally, the City of Pismo Beach wanted to construct an Advanced Treatment Facility (ATF) at the South San Luis Obispo County Sanitation District (SSLOCSD) wastewater treatment plant on Aloha Place in Oceano. The City of Pismo Beach's treated wastewater was intended for delivery to agricultural interests in Oceano south of Arroyo Grande Creek for irrigation purposes. When this option did not work, Pismo Beach considered purple pipe to public spaces and landscaping, however none of these or other options proved feasible. With nowhere to send the treated wastewater, Pismo Beach decided to co-opt the 2009 false seawater intrusion narrative and morphed the projects' goal to "stop" seawater intrusion by injecting the water in strategic locations to create a barrier or "curtain". This, like the very notion of seawater intrusion, became the false premise for the project. Pismo Beach also embraced the mantra of "groundwater replenishment" after learning that the State of California was encouraging these types of projects by way of generous grant funding opportunities and creating financial traction for Pismo Beach and CCB. Unfortunately, the CCB project has yet to fully acquire, with binding agreements, the land for a single injection well site and other project components. It appears the CCB partners want to risk starting construction of the ATF before Waste Discharge Requirements are approved by the Central Coast Regional Water Quality Control Board for the injection wells. The most challenging part of any recycled water project is how to beneficially deploy the treated wastewater. Presently, CCB has yet to overcome this hurdle.

3.1

Please accept these comments on the Draft Addendum to the Central Coast Blue (CCB) Final Environmental Impact Report (FEIR).

Why is a stable project description important?

Per the CEQA Portal Topic Paper, Project Description: “Typically, the larger the change in the project description, the more likely that some reanalysis will be required. As an example, changing the location of a project may change the species and habitats potentially affected, the cultural resources affected, the streets and highways affected by project traffic, whether sensitive noise and air quality receptors are potentially affected by the project, whether the project is consistent with general plan and zoning designations, whether the project would be visible from a scenic highway, whether important farmland or lands under a Williamson Act contract would be affected, as well as many other analyses. However, even small changes to a project such as its orientation may affect analyses such as aesthetic effects and noise effects. While changes to the project description may be unavoidable in some cases, the implications of these changes and the tradeoff of benefits and costs should be understood.”

The proposed changes to CCB are reflected in Section 2.2 of the Draft Addendum on pages 8-12 where Table 1, Modified Project Components, summarizes the modified or new iteration of the project. It appears, all CCB components have been modified including the ATF Complex with the addition of Pismo Beach Well #23, all Concentrate Pipelines, 4 of the 5 Injection Wells, the addition of three new Monitoring Wells and relocation of six totaling 9 of 13 changed, a new or modified location for virtually all the Secondary Effluent Pipelines and modified locations for almost all the Purified Water Distribution Pipelines. The pipelines alone have nearly doubled in length from 18,000 lineal feet (3.4 miles) up to 30,000 lineal feet (5.7 miles). The additional transmission pipeline length is a result of the numerous changes in the location of both Injection and Monitoring wells. With changes to the well sites and the additional transmission pipelines needed, it will require more dewatering, utility conflict resolution, more repaving and more concrete for curb, gutter, and sidewalk replacement.

As an estimate, at least 80% of the CCB components have changed since the certification of the FEIR. It is inconceivable that the addition of over two miles of transmission pipelines, on top of all the other project changes, would not add impacts or substantially increase the severity of impacts already analyzed. These substantial changes to CCB by way of modified or new locations for most project components trigger the requirement for a subsequent environmental document per Section 15162 of the CEQA Guidelines. The Modified Project is, in essence, a new project and should be reviewed accordingly in accordance with CEQA.

For example, the location and number of injection and monitoring wells continues to change even after the publication of the Draft Addendum due to the inability to make the necessary land acquisitions. For example, additional monitoring wells (MW-NCMA North A/B/C and South A/B/C) have been proposed to be sited in the agricultural area south of Arroyo Grande creek necessitating an underground creek crossing. The potential increase in impacts from these new Monitoring Wells extends beyond those analyzed in the Final EIR. The Draft Addendum, as a vehicle for CEQA compliance, inappropriately discounts the potential impacts. Likewise, many CCB project components continue to change including

3.2

the number of Injection Wells (2-5), location, depth, and quantity of water that will be injected in each injection well.

As further examples, in three recent separate meetings regarding CCB, representations regarding the number of Injection Wells varied from three (3) to five (5). On June 5, 2023, at a meeting of the Joint Powers Authority/Joint City Councils, it was stated there would be four (4) injection wells. Then, on June 14, 2023, at a presentation before the Oceano Community Services District (non-participating member of CCB), project representatives indicated there would be three (3) to four (4) injection wells, and lastly, on June 19, 2023, at a meeting of the Joint Powers Authority it was represented that five (5) injections wells would be constructed.

By way of background, the original project called for three (3) Injection Wells at the Coastal Dunes RV Park and Campground, one injection well just south of the Grover Beach train station and one at the South San Luis Obispo County Sanitation District (SSLOCSD), which is the only original Injection Well (IW-5A) still being proposed. Even with IW-5A there remains considerable uncertainty with respect to receipt of the required Federal Aviation Administration approval for construction of the injection well at this location adjacent to Oceano County Airport (L52).

3.3

Not only is the number and location of injection wells in question, but also the depth and resulting quantity of treated wastewater to be injected per well. The FEIR indicated CCB will inject water to a depth of approximately 200 to 600 feet. The Draft Addendum has expanded the injection zone to between 160 to 680 feet. It is unclear what the differences in depth for injection is intended to accomplish. The shallower the Injection Wells used to discharge treated wastewater, the greater the potential for surfacing effluent and/or groundwater.

Furthermore, if only three Injection Wells are ultimately constructed, it would mean each Injection Well would receive up to 100,000,000 gallons per year or approximately 270,000 gallons per day. The Draft Addendum's Paleontological Resources Assessment – Update #1 indicates each injection well would be capable of injecting 500 acre-feet per year (AFY).” With approximately 900 AFY of treated water for disposal, this capacity would suggest only two Injection wells may be utilized. It appears improbable one Injection Well could take 163,000,000 gallons per year. The potential for surfacing effluent and displaced groundwater would be likely. Neither the FEIR nor Draft Addendum analyzes this potentiality through computer modelling, use of test injection well results or other calculations.

Presently, CCB has not secured, by way of easements, licenses, or other agreements, for any of the locations for Injection and most Monitoring Wells. There are no encroachment permits from either the County of San Luis Obispo or the City of Grover Beach for the construction of Injection and Monitoring Wells in the public street rights-of-way. Likewise, there is no agreement with Oceano CSD for the use of the Oceano Depot parking lot, owned by the district or for Monitoring Wells (MW-5D/5E/5F). Nor is there an agreement with the SSLOCSD for use of their site. Additionally, Cal Trans and Union Pacific Railroad

3.4

easements are required and have not been obtained. If agreements for the use of any real property for project components cannot be obtained, the location of such components will continue to be modified, which has been the trend with CCB for many years.

3.4 cont.

Addendum vs. Supplemental EIR

On page 21 of the Draft Addendum it states, “As discussed in the impact analysis below, the environmental impacts of the Modified Project are substantially similar to those analyzed in the certified EIR for the Original Project. The modifications between the Original Project and the Modified Project would not introduce new significant environmental impacts or increase the severity of significant environmental impacts beyond those which have already been identified and characterized in the certified EIR.” The Modified Project deviates from the Original Project significantly and the changes cannot be considered minor or minimal. This statement supporting the use of an addendum is conclusory given the project description remains fluid and the increase in severity of significant environmental impacts beyond those which have already been identified and characterized in the certified EIR, have not been determined or analyzed and cannot until there is a fixed project description.

3.5

Subsequent and Supplemental EIRs

Per the CEQA Portal Topic Paper, Subsequent and Supplemental EIRs: “Subsequent environmental review is environmental analysis prepared for a later discretionary approval after an agency has certified a prior EIR or adopted a ND2 (PRC Section 21166; CEQA Guidelines Section 15162). Prior to approving a later project based on a program EIR, an agency must first determine whether the project is “within the scope” of the program EIR and whether it triggers the requirements for subsequent environmental review. Both determinations must be supported by substantial evidence. If the agency is required to conduct subsequent environmental review after a program EIR, the later analysis may rely on the program EIR for some portion of the subsequent review (CEQA Guidelines Sections 15168[c][1], 15152).

3.6

The decision to prepare a Draft Addendum instead of a Supplemental or Subsequent EIR was not based on substantial evidence. To the contrary, the modified project components, notwithstanding the significant changes, were determined to not result in any new significant environmental effects or substantial increase in the severity of previously identified significant effects. Due to the inability to fully quantify impacts, it is not possible to fully assess the likely cumulative environmental effects of the proposal.

Per CEQA Portal Topic Paper Subsequent and Supplemental EIRs and Streamlining When Is a Supplemental or Subsequent EIR Required? When an agency has prepared a program EIR and a further discretionary approval is necessary, a subsequent or supplemental EIR is required only where the later activity, which is within the scope of the program EIR, would have effects that were not examined in the program EIR (CEQA Guidelines Section 15168[c][1]). The requirements for subsequent and supplemental review are limited in order to balance “CEQA’s central purpose of promoting consideration

3.7

of the environmental consequences of public decisions with interests in finality and efficiency” (*Friends of the College of San Mateo Gardens v. San Mateo County Community College Dist.* [2016] 1 Cal.5th 937, 949). The agency must first determine, based on substantial evidence, whether the previous EIR retains some informational value (*Friends of the College of San Mateo Gardens v. San Mateo County Community College Dist.* [2016] 1 Cal.5th 937, 949). If so, the agency may prepare an initial study to determine whether the project triggers the requirements for subsequent review (PRC Section 21094[c]). When a program EIR or project-level EIR has been certified, a subsequent EIR is not required unless (PRC Section 21166; CEQA Guidelines Section 15162): (1) “Substantial changes are proposed in the project which will require major revisions” to the EIR “due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects”; (2) “Substantial changes occur with respect to the circumstances,” and those changes will require “major revisions” to the EIR “due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects”; or (3) “New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time” of preparation of the EIR, becomes available. Such information must show either: the project will have one or more significant effects not discussed in the previous EIR; significant effects previously examined will be substantially more severe; mitigation measures or alternatives previously found to be infeasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative. If the conditions in either section (1), (2), or (3), above, are triggered, an agency must prepare a subsequent environmental document. Clearly, CEQA Guidelines Section 15162(1) has been triggered.

3.7
(cont.)

Dewatering

It is unclear if the project proponent used a piezometer in project component areas where it’s critical to determine depth to groundwater, i.e., at the ATF site and the detention basins. Likewise, it does not appear a Soils Investigation was performed for the same areas. The project’s impacts related to construction encountering groundwater are seriously understated. The proposed project includes discharge of dewatering water to “temporary storage and timed release to the sanitary or storm sewer or trucking up to one mile for percolation into a stormwater retention basin.”

3.8

Only two detention basins were identified.

Basin No. 1

The Barca Basin is an approximately 0.06-acre detention basin on the west side of Barca Street. This basin is seasonally flooded, and currently discharges to Meadow Creek upstream of Oceano Lagoon. This basin’s biological investigation reveals it is an active wetland. This detention basin is surrounded by development, including the current use of

an automobile junk/storage yard at the south end of Huber where the ATF is proposed to be built. The basin floor is dominated by California bulrush and its banks are dominated by arroyo willow and non-native grasses. These hydrophytic plants indicate wetlands and shallow groundwater. Standing water was also observed during the survey at the bottom of the basin. In review of historical Google images, this basin contains water following average rain events. The project biologists were unable to access the property to sample the wetland, however, they “assumed this seasonally wet depression contains all three wetland parameters” based on the limits of each vegetation community using aerial imagery. This basin would not be a good location to discharge the dewatering water due to its proximity to the source of groundwater so near to the surface. In essence, the discharged groundwater would be absorbed into the ground only to be pumped back up and discharged again and again at this location. This basin is small and would be inadequate for the estimated volume of dewatering discharges described in the Draft Addendum. During the rainy season, it appears this basin is already accepting runoff and cannot hold additional water from the dewatering operation.

Basin No. 2

The Pike Basin is adjacent to the busy intersection of South 13th Street and The Pike. This basin was defined as a “lake/pond feature” by USGS and is only about 0.10-acre. This detention basin is surrounded by agriculture operations, roadways, and residential buildings. The basin contained non-native, upland vegetation including iceplant along its banks. Based on historical aerials, this basin typically does not hold water for an extended period. The limits of the basin surface water at the time of the survey were mapped digitally using aerial photography. The project biologists were unable to access the property to sample the wetland, however, they “assumed this seasonally wet depression contains all three wetland parameters” based on the limits of each vegetation community using aerial imagery. This basin may be able to handle a small quantity of the dewatering water from the project, but not without significant impacts to traffic at the corner of 13th St. and The Pike. It is severely undersized to be able to accept the estimated volume of dewatering water from the project, let alone the ATF site, as the project proponents represented throughout the Draft Addendum.

Several statements in the Draft Addendum relate specifically to the construction dewatering at the ATF:

- Construction dewatering would also be required at the ATF complex, and disposal of produced groundwater would require approximately 72 truck trips per day on average.
- Average of 72 round-trip truck trips for hauling produced groundwater one mile to stormwater detention basin.
- Produced groundwater would be disposed of via one of several methods, including connections to the City’s existing ocean outfall pipeline that runs under State Route 1, temporary storage and timed release to the sanitary or storm sewer, or trucking up to one mile for percolation into a stormwater retention basin, which would require approximately 1,250 truck trips per injection and production well,

3.8
(cont.)

approximately 60 truck trips per monitoring well, and approximately 72 truck trips per day on average for the ATF complex.

The Draft Addendum does not say how much water each of the 72 trucks will carry. As described in the above statements, the proposed scenario could look like this: Seventy-two (72) trucks carrying 5,000 gallons each would deliver 360,000 gallons (over an acre foot) each day to the detention basin(s). It is unlikely the 0.10 ac. Basin could hold this much water daily, if at all. Seventy-two (72) trucks in an eight (8) hour day would equate to one truck filled and driven to and from the detention basin every 6 minutes. The same number of trucks hauling water over a 12-hour day would equate to one truck filled and driven to and from the basin every ten (10) minutes. It is unclear if a single truck could be filled every 6-10 minutes to accomplish this task, indicating there would be many trucks waiting to be filled at the ATF site and many trucks lined up to dispose at the detention basin. Again, significantly impacting traffic at the basin location and in and around the ATF site.

3.8
(cont.)

The Draft Addendum suggests construction of the ATF will take 2 years; it does not say how long dewatering will continue at this location.

Discharge to a sanitary sewer

Any discharge to a sanitary sewer will require the wastewater treatment plant to increase treatment volumes which has impacts on operations at the plant. Any discharge to a storm sewer or ocean outfall is a waste of water. The dewatering plan should clearly state that the primary option for dewatering is to land. These land disposal locations should be identified and analyzed for environmental impacts associated with large volumes of groundwater disposal.

3.9

Beneficial use of groundwater

In the project area, groundwater is a natural barrier to seawater intrusion. It is unfathomable that one of CCB's purported benefits is to mitigate seawater intrusion, yet the current plan for construction dewatering may exacerbate it.

3.10

Groundwater quality at the ATF

This groundwater is of unknown quality. It is unclear from either the FEIR and/or the Draft Addendum, what the groundwater quality is at the proposed 1.5-acre ATF site. 980 Huber contains several unpaved storage yards separated with chain link fencing that has been used and continues to be used for the storage of automobiles, trucks, recreational vehicles, storage containers, boats, trailers and miscellaneous equipment. The northwestern portion of the parcel is occupied by American Roof Removal/American Roofing Co. The decades of these activities at this site present the likelihood of leaked gasoline, motor oil, brake fluid and other fluids from boats and vehicles into the groundwater. The level of groundwater and ground surface contamination/pollution is not disclosed in the Draft Addendum or FEIR. The Draft Addendum does not analyze or otherwise address any clean up necessary for the use of the site as an ATF. The FEIR and Draft Addendum fail to identify where will all these vehicles be disposed of and who is responsible for them and what the environmental impacts of cleaning up the site are.

3.11

Absent from both the FEIR and the Draft Addendum is an analysis of the groundwater quality that is going to be dewatered at the ATF site and what proper method of treatment and disposal will occur.



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Biological Resources Assessment Meadow Creek Lagoon

The Draft Addendum does not reference the Biological Resources Assessment Meadow Creek Lagoon, prepared by Terra Verde in October 2012 (attached for your reference). This report identified Pacific Pond Turtle and California Red Legged Frog in the vicinity of the South San Luis Obispo County Sanitation District/Meadow Creek/Oceano Airport properties. This study would be helpful to understand the diversity of species in the vicinity and potential impacts of the CCB proposed pipelines in these biologically diverse sensitive areas which were not analyzed. Study area pictured below:



3.12

California Red Legged Frog (CRLF)

The CRLF, pictured below, was observed at the footbridge that was installed by SSLOCSD many years ago. The footbridge was recently removed due to homeless encampment activities, on the westerly boundary of the SSLOCSD property.



Photo 18. Individual California red-legged frog observed near footbridge during night eyeshine survey (May 30, 2012).

Pacific Pond Turtle

Additionally, several Pacific Pond Turtles were found in areas near and around Norswing Drive, the Meadow Creek Lagoon and the airport property.

The Draft Addendum fails to consider this study to determine the potential for the project to encounter these species.

Construction Noise

In the winter of 2021, the City of Pismo Beach, as the lead agency for CCB, built a test injection well in the San Luis Obispo County Coastal Dunes RV Park and Campground. Permitted by SLO County, the construction of that well included sound walls to attenuate the noise associated with the 24 hr./7 days a week well drilling. The sound wall approved in the permit was considerably smaller than what was built. The resulting sound wall was large in scale, unsightly and remained in place for several months. The Draft Addendum makes no mention of any sound walls as noise mitigation measures for any of the many wells to be constructed for the project. Only the well proposed at the SSLOCSD property is distanced away from residences, yet the San District itself has employees that work on the property seven days a week that are sensitive receptors whose work may be disrupted by the continuous noise. All other Monitoring and Injection Wells are in or near residential neighborhoods. If the project includes sound walls, their unsightly visual appearance, mass as an obstruction to roads and streets should be analyzed as part of the project. The inconvenience to travelers to and from their homes will be frustrating.

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3.13



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(cont.)

Conclusion

The most challenging part of any recycled water project is how and where to deploy the treated wastewater and so far, CCB project proponents have not solved that problem. Unfortunately, CCB has been designed and pursued based upon grant eligibility and consultant direction rather than specific project goals and objectives. CCB has never enjoyed a stable project description. Until the proposal can be described in sufficient detail, it is impossible to fully analyze the potential adverse environmental consequences, let alone craft mitigation measures to lessen the severity of impacts. Nor is the determination of the cumulative impacts possible. Moreover, the Draft Addendum is absent of substantial evidence to support the findings in the document with respect to the project changes or impacts and as a result cannot be adopted to complement the CCB FEIR.

3.14

Recommendations

Secure necessary agreements, including any easements, encroachment permits, fee title land acquisition or other legal vehicles to ensure the land is part of the project. This would allow the project description to become fixed and an Initial Study may be performed, and a subsequent environmental document may be prepared for that version of CCB. Lastly, we encourage the CCB member cities and their respective councils to read the project documents including grant & loan applications, so decision making about the project is informed and not merely as cheerleaders, as it, unfortunately, has been to date.

3.15

Sincerely,

Jeff Edwards

Julie Jucker

Attachment: Biological Resources Assessment Meadow Creek Lagoon, prepared by Terra Verde in October 2012

Copies:

Geoff English, CCB General Manager

John Peschong, SLO Co. Board of Supervisors Chair

Trevor Keith, , SLO Co. Director of Planning and Building

Jon Ansolabehere, SLO Co. Deputy County Counsel

Jane Gray, CCRWQCB Board Chair

Matt Keeling, CCRWQCB Executive Officer

James Bishop, CCRWQCB Engineering Geologist

Allene Villa, OCSD President

Will Clemons, OCSD General Manager

Kate Huckelbridge, CCC Executive Director

Dan Carl, CCC Central Coast District, Deputy Director

Kira Smith, SWRCB DFA

Jeff Dinsmore, SWRCB DDW

Gary Willey, SLO Co. APCD

Wade Crowfoot, CA Natural Resources Agency Secretary



Biological Resources Assessment

Meadow Creek Lagoon



Prepared for:

San Luis Obispo County
Flood Control and Water Conservation District
County Government Center, Room 207
San Luis Obispo, California 93408

Prepared by:

Terra Verde Environmental Consulting, LLC
3765 South Higuera Street, Suite 102
San Luis Obispo, California 93401

October 2012



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“As a County-approved biologists, we hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and we further certify that a senior biologist was present throughout the site visit(s) associated with this report.”

A handwritten signature in black ink, appearing to read "B.M. Am", written over a horizontal line.

Signature line

27 September 2012

Date

A handwritten signature in black ink, appearing to read "Brooke Jung", written over a horizontal line.

Signature line

27 September 2012

Date



EXECUTIVE SUMMARY

This biological resources assessment was prepared at the request of the San Luis Obispo County Flood Control and Water Conservation District (District) for the Meadow Creek Lagoon and surrounding riparian, wetland, and coastal dune habitat. The lagoon is located in the community of Oceano, on the south coast of San Luis Obispo County, California. A survey area of approximately 49.02 acres was defined in order to address all potential environmental constraints during the planning process.

The survey area is mostly undeveloped, with the exception of a few private residences and established trails that occur within the survey boundary. However, the survey area is immediately surrounded by commercial, residential, and recreational uses, including the County-owned-and-operated Oceano Airport, and, thus, experiences a high level of human disturbance.

Terra Verde Environmental Consulting, LLC (Terra Verde) staff conducted a total of 13 field surveys between May 9 and September 21, 2012, including vegetation community mapping, botanical surveys, a fisheries assessment, protocol-level surveys for California red-legged frog (*Rana draytonii*), water quality analysis, wildlife inventory, and wetlands delineation. Ten natural vegetation communities were observed within the survey area, as well as anthropogenic and ruderal areas. Additionally, a large portion of the survey area is covered by open water.

Four sensitive plants were observed within the survey area; Blochman's leafy daisy (*Erigeron blochmaniae*), California spineflower (*Mucronea californica*), Blochman's ragwort (*Senecio blochmaniae*), and southwestern spiny rush (*Juncus acutus* subsp. *leopoldii*). Additionally, three sensitive habitat communities were observed: Central dune scrub, Central foredunes, and Coastal and valley freshwater marsh. The survey area also has the potential to support twenty-eight sensitive wildlife species. Of these, Terra Verde staff observed the following within the survey area: tidewater goby (*Eucyclogobius newberryi*), California red-legged frog, Pacific pond turtle (*Actinemys marmorata*), white-tailed kite (*Elanus leucurus*), and monarch butterfly (*Danaus plexippus*).



Contents

EXECUTIVE SUMMARYi

INTRODUCTION 1

Existing Site Conditions 1

METHODOLOGY2

Soils Assessment and Wetland Delineation 4

Botanical Surveys and Vegetation Community Mapping..... 4

Fisheries Assessment..... 5

Water Quality Analysis 5

USFWS Protocol-level California Red-legged Frog Surveys..... 6

Avian Survey 7

Wildlife Inventory 7

Sufficiency of Biological Data 8

RESULTS8

Soils..... 8

Vegetation Communities 9

Wildlife..... 13

Sensitive Species 17

Sensitive Plant Species 18

Sensitive Fish Species..... 20

Sensitive Amphibian Species..... 21

Sensitive Reptilian Species 23

Sensitive Avian Species 25

Sensitive Mammal Species 30

Sensitive Invertebrate Species 31

REFERENCES33

- Appendix A: Maps
- Appendix B: Observed Plant and Wildlife Species List
- Appendix C: Potential Sensitive Species List
- Appendix D: Site Photographs
- Appendix E: CNDDDB California Native Species Field Survey Forms
- Appendix F: Field Survey Forms



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INTRODUCTION

This biological resources assessment summarizes the results of a series of surveys conducted by Terra Verde of the Meadow Creek Lagoon and adjacent coastal and riparian habitat features in Oceano, California (see Appendix A, Figure 1: Location Map). This report is intended to provide a comprehensive review of the existing biological resources within the Meadow Creek Lagoon, as well as along the surrounding habitat areas. This assessment may be utilized to assist the District in designing and implementing future flood control and drainage projects within the area.

Existing Site Conditions

The survey area is located in the coastal community of Oceano in southern San Luis Obispo County, where Meadow Creek merges into Arroyo Grande Creek before flowing into the Pacific Ocean. Development and flood control infrastructure near the confluence of Meadow Creek and Arroyo Grande Creek have contributed to the creation of Meadow Creek Lagoon. Elevations within the survey area range from approximately 0 to 25 feet (0 to 7.62 m) above mean sea level (msl). The survey area consists primarily of the open water of the Meadow Creek Lagoon and surrounding riparian and coastal dune habitat, as well as a small portion of the Arroyo Grande Creek corridor. A portion of the northeastern extent of the survey area consists of a maintained public park. The survey area wraps around the northwest-southeast axis of the Oceano Airport in an approximately horseshoe shape. It is bordered by Pier Avenue and residential housing to the north, Arroyo Grande Creek to the south, and a mix of residential housing, recreational facilities, and the Oceano Airport along the east and west boundaries. Lakeside Avenue roughly bisects the approximately horseshoe-shaped survey area (see Figure 2: Survey Area).

The climate within San Luis Obispo County is highly variable and ranges from a cool, coastal climate in the west to a hotter, more typical Mediterranean climate in the east. The survey area is situated within the historic and current floodplain of Meadow Creek and Arroyo Grande Creek. Due to its proximity to the coast, the survey area receives regular coastal fog and experiences a strong maritime influence.

The survey area is located within the Oceano U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle adjacent to the Oceano Airport, west of Highway 1, between Pier Avenue and Arroyo Grande Creek in Oceano, California. The riparian corridor of Arroyo Grande Creek and associated flood control levee comprise the southern boundary of the survey area and Pismo Beach borders the survey area to the west (see Figure 2 and Figure 3: Topographic Map). The purpose of this biological resources assessment is to report the results of the biological surveys conducted within the project area, which includes the following:

- Review existing relevant scientific literature and other pertinent information related to the survey area, including recent reports regarding field work conducted by others in the area;
- creation of a list of regionally occurring special-status species determined to have the potential to occur within the habitat communities identified within the survey area;



- evaluation of the potential for the occurrence of special-status plant and wildlife species within the survey area;
- characterization of the vegetation communities present within the survey area;
- determination of the presence/absence of special-status plant species within the survey area, based on the list of potentially occurring species;
- assess the potential for proposed activities to adversely impact existing biological resources; and
- recommend mitigation measures designed to avoid or minimize any potential impacts to biological resources.

This biological resources assessment was prepared according to the guidance provided by San Luis Obispo County (County) for biologists that are pre-approved for environmental work within San Luis Obispo County and meets all of the associated County requirements.

METHODOLOGY

For purposes of this report, the survey area covers an approximately 49.02-acre area including the entire Meadow Creek Lagoon, surrounding riparian and coastal dune habitat features, and the western-most extent of the Arroyo Grande Creek corridor. The survey area extends from the traffic bridge over Meadow Creek along Pier Avenue in the north, downstream to the flap gates at the southern extent of the lagoon where it merges with Arroyo Grande Creek. The undeveloped dune habitat on the eastern side of the Oceano Airport was also included in the survey area (see Figure 2). To the extent that access was feasible, all undeveloped areas surrounding Meadow Creek Lagoon were included in the survey efforts. A comprehensive biological resources assessment was conducted within the survey area, which included:

- Botanical surveys and vegetation community mapping
- Fisheries assessment and water quality analysis
- United States Fish and Wildlife Service (USFWS) protocol-level California red-legged frog (CRLF) surveys
- Avian surveys
- Wildlife inventory

Details regarding the methodology used for each of the focused surveys are summarized below. A total of 13 surveys were conducted between May 9 and September 21, 2012. Refer to Table 1 below for all survey dates, times, surveyors, and site conditions. All plant and wildlife species encountered during survey efforts were noted to the lowest possible taxonomic level, which is required for accurate identification and reporting.



Table 1. Field Survey Schedule

Date	Survey Type	Biologists	Site Conditions	Areas Surveyed
May 9, 2012	Focused botanical and wildlife	Brian Dugas Jessica Adinolfi	Partly cloudy to sunny. Temperatures in the mid 60s F. Light NW winds.	Coastal foredune habitat areas located east and west of the Meadow Creek Lagoon
May 25, 2012	Focused botanical and wetlands	Brian Dugas Brooke Langle Jessica Peak Jessica Adinolfi	Partly cloudy to sunny. Temperatures in the low 60s F. Light NW winds.	Meadow Creek Lagoon and wetland complex located east of Oceano Airport
May 29, 2012	Focused botanical and wetlands	Brian Dugas Brooke Langle Jessica Peak Jessica Adinolfi	Partly cloudy to sunny. Temperatures in the mid 60s F. Light NW winds.	Meadow Creek Lagoon and wetland complex located east of Oceano Airport
May 30, 2012	California red-legged frog daytime	Brian Dugas Rhett Blanton	Clear. Air temperature 71° F, water temperature 65° F. Light W winds.	Meadow Creek Lagoon & Arroyo Grande Creek mouth
May 30, 2012	California red-legged frog eyeshine	Brian Dugas Brooke Langle Rhett Blanton Peter Giles Halden Peterson Jessica Adinolfi	Clear. Air temperature 60° F, water temperature 69° F. No wind.	Meadow Creek Lagoon & Arroyo Grande Creek mouth
June 15, 2012	Fisheries inventory	Brian Dugas Nick Fernella Peter Giles Rhett Blanton	Clearing fog. Air temperature 54° F, water temperature 68° F. 2 - 3 mph winds.	Shoreline to 40 feet off shore from the northeastern portion of Meadow Creek Lagoon (Oceano Memorial Park)
June 18, 2012	Fisheries inventory	Brian Dugas Nick Fernella Peter Giles Rhett Blanton	Clearing fog. Air temperature 66° F, water temperature 68° F. 0 - 2 mph winds.	Location 1: 10 to 40 feet off shore from the northern channel bank, behind trailer park. Location 2: 500 feet west of Location 1.
June 19, 2012	Fisheries inventory	Brian Dugas Nick Fernella Peter Giles Rhett Blanton	Clearing fog. Air temperature 66° F, water temperature 59 °F. 0 - 1 mph winds.	Location 1: north side of Meadow Creek Lagoon flap gates. Location 2: Arroyo Grande Creek side of flap gates.
July 6, 2012	Rare plant survey and vegetation community mapping, and avian survey	Theo Fitanides Jessica Adinolfi	Clearing fog. Air temperature 58 - 61° F. 0 – 9 mph winds.	Meadow Creek Lagoon & Arroyo Grande Creek mouth



Date	Survey Type	Biologists	Site Conditions	Areas Surveyed
July 27, 2012	Rare plant survey and vegetation community mapping	Jessica Adinolfi Kristen Nelson	High marine layer, good survey visibility, Air temperature 55° F, 0 – 3 mph winds.	Meadow Creek Lagoon vicinity, Arroyo Grande Creek mouth
August 1, 2012	California red-legged frog eyeshine	Brian Dugas Peter Giles Rhett Blanton Halden Peterson	High marine layer, good survey visibility, Air temperature 61.5° F, water temperature 62 °F. 0 – 1.5 mph winds.	Arroyo Grande Creek mouth and upstream, Meadow Creek Lagoon vicinity, Meadow Creek, downstream pool below footbridge in Meadow Creek.
August 16, 2012	Water quality assessment and wildlife surveys	Brian Dugas Peter Giles	Temperature: 65° F Wind: 9 mph NW	Meadow Creek Lagoon & Arroyo Grande Creek mouth
September 21, 2012	Final rare plant and wetlands mapping	Brian Dugas Jessica Adinolfi	Clearing fog. Air temperature 60-70° F. 0 – 10 mph winds	Coastal foredune habitat areas located east and west of the Meadow Creek Lagoon and wetland features bordering lagoon

Soils Assessment and Wetland Delineation

General information about soil profiles within the survey area was determined using the United States Department of Agriculture (USDA) Web Soil Survey (see Figure 4: Soils Map). Additional analysis was conducted as part of the wetland delineation conducted within the survey area. Details of the survey methodology and results for the wetland delineation are summarized in a separate document.

Botanical Surveys and Vegetation Community Mapping

Five botanical surveys were conducted within the survey area on May 9, 25, 29, and July 6 and 27, 2012. Field surveys were pedestrian in nature and lasted between three and seven hours each day. During the surveys, the vegetation communities on site were classified, mapped, and further evaluated for the occurrence of and the overall potential to support special-status plant and wildlife species (see Figure 5: Vegetation Communities). Vegetation community characterization was based on the classification systems presented in *A Manual of California Vegetation* (MCV) (Sawyer, Keeler-Wolf, and Evens 2008). Survey conditions and timing were suitable for detection of all potentially occurring sensitive plant species. Given the comprehensive and floristic methods that were used, any special-status plant species not previously identified within a five-mile radius of the survey area would be identified, with the exception of the lower channel of Arroyo Grande Creek which not included in the survey area. Plant species identification, nomenclature, and taxonomy followed *The Jepson Manual: Vascular Plants of California* (Baldwin et al 2012).



Fisheries Assessment

A fisheries assessment was conducted within the Meadow Creek Lagoon, which included all accessible, open water areas within the survey area. The lagoon was sampled by a team of four biologists over the course of three days on June 15, 18, and 19, 2012. These efforts consisted of two and a half days of seine fishing and a half-day of snorkel surveys. One narrow channel of water in the southern extent of the survey area with restricted access was sampled by hand-netting; another larger channel of water in the southern extent of the survey area was not surveyed due to inaccessibility for seine fishing, and lack of visibility for snorkel surveys (see Figure 6: Fisheries Assessment and Water Quality Analysis). A beach seine 22 meters (m) long by 1.8 m deep and with a mesh size of approximately 3 millimeters was the primary sampling tool used to capture fish. A 1-foot by 1-foot hand net with similar mesh size was used when the seine was not applicable. In most cases, the seine was deployed by two to four biologists that utilized traditional seining tactics. The large seine allowed for the potential capture of benthic, semi-pelagic, and pelagic species. A two-man canoe was also utilized to deploy the seine in areas of deep water (greater than five feet deep).

Netting began at the northeast end of Meadow Creek Lagoon and continued south towards the floodgate at the lagoon's historic confluence with the Arroyo Grande Estuary. Locations of each seine drag were selected to attain sampling coverage throughout the spatial spectrum of the lagoon. Each seine location was selected with the criterion of adequate space to deploy and retrieve the seine, accessibility to open water with minimal bank vegetation disruption, and limited aquatic vegetation to minimize seine drag and improve overall capture rates.

In addition to the seining effort, a half-day of sampling via underwater observation for species presence was conducted. The crew was able to access portions of the lagoon that were not feasible to sample using the beach seine. Crew members entered these areas in groups of two and proceeded in an upstream direction (see Figure 6), concentrating efforts on the outer margins of the lagoon. Each surveyor used a dive light that was used to inspect areas of dense cover with reduced ambient light.

The final component of the fisheries survey included a hand-netting effort in the narrow channel near the Oceano Sewer Treatment Plant. This aquatic feature was too small for either seine fishing or snorkel surveys. The hand net was used to pull through the water in various areas of the channel.

Individuals of each species caught were temporarily contained in an aerated live bait container, identified, enumerated as quickly as possible, and returned to the water. *A Field Guide to Freshwater Fishes of California* (McGinnis 2006) was used as a reference guide, when needed.

Water Quality Analysis

In order to gain a better understanding of the fisheries composition and overall health of Meadow Creek Lagoon, water quality samples were taken at each seine-pull location. The survey was conducted by a two-person team working from the shoreline on August 16, 2012. The following attributes were measured at each location using an YSI/556-02 Multiparameter Water Sampling



Unit: temperature, conductivity, percent dissolved oxygen (DO), dissolved oxygen (milligrams per liter [mg/L]), and pH. The aforementioned attributes are critical factors when determining fish habitat suitability in freshwater systems, particularly temperature and percent DO.

USFWS Protocol-level California Red-legged Frog Surveys

Terra Verde conducted USFWS protocol-level surveys to determine the presence or absence of CRLF within the survey area. Survey methods followed the USFWS *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (USFWS 2005) and consisted of three main components: 1) background research, 2) habitat assessment, and 3) field surveys.

Prior to initiating field surveys, a desktop analysis was completed utilizing the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB) to identify known CRLF occurrences within a five-mile radius of the survey area (see Figure 7: Five-mile CNDDDB – CRLF). Scientific literature and past studies of the area were also utilized to gather information regarding CRLF occurrences in the vicinity of the survey area. Following background research, a habitat assessment was performed on May 30, 2012 to identify suitable habitat areas within the survey boundary. All accessible aquatic habitat, shorelines, and immediately surrounding riparian habitat areas were included within the CRLF survey area. Aquatic habitat up to one mile was not surveyed due to the known occurrences of CRLF in Arroyo Grande Creek and lack of access to private property. Identification, nomenclature, and taxonomic notes were referenced using the *Field Guide to Western Reptiles and Amphibians* (Stebbins 2003).

Field surveys were timed appropriately to allow for one daytime survey and two nighttime surveys during the breeding season. The day survey was completed within a 24-hour period of the first night survey on May 30. Timing was such that night surveys were initiated in excess of one hour after sunset, and planned to avoid periods of full lunar illumination. Wind speed was noted during all surveys and did not exceed five miles per hour. Visibility and temperature conditions were also noted during the survey efforts and remained acceptable throughout all surveys.

Per USFWS survey protocol, surveyors listened for CRLF vocalizations before initiating pedestrian or watercraft surveys. Specifically, surveyors spent approximately 10 to 15 minutes listening to and documenting all detectable amphibian vocalizations. Watercraft and pedestrian surveys were initiated shortly thereafter and were conducted in teams of two. Each team was led by an individual trained and with experience identifying CRLF. In general, eyeshine surveys were completed holding an approximately 32,000-candela flashlight held at eye level with the aid of binoculars ranging from 8x42 to 10x42. Each team carried a digital camera to document any CRLF observations.

Although presence of CRLF was confirmed during the first nighttime survey of May 30, 2012, a supplemental survey was conducted in areas not covered by previous CRLF survey efforts and deemed suitable habitat for CRLF per the request of the District. The additional eyeshine survey took place on August 1, 2012 and was performed via watercraft and on foot. Areas surveyed



included the downstream pools along the southern extent of the lagoon, Arroyo Grande Creek banks upstream of the creek outlet and adjacent to the levee, and other isolated habitat features surrounding the lagoon. Prior to and following surveys, gear was sterilized of potential pathogens using the procedures recommended by USFWS in Appendix B of *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (USFWS 2005).

Avian Survey

A focused avian survey was conducted on July 6, 2012 by a team of two, which covered the entire survey area. This survey was pedestrian in nature, and timed appropriately to coincide with the peak avian migration season for the area (generally considered to be March through September). In addition to field survey efforts, California State Parks was contacted to acquire recent survey data regarding nesting birds in the coastal dune habitat, immediately adjacent to the survey area. Identification, nomenclature, and taxonomy followed the *Sibley Field Guide to Birds of Western North America* (Sibley 2003).

Wildlife Inventory

All tracks, scat, and sign of wildlife observed on-site were noted during all survey efforts. Wildlife identification, nomenclature, and taxonomy followed standard reference texts including: *Field Guide to Western Reptiles and Amphibians* (Stebbins 2003) and *Mammals of California* (Jameson and Peeters 2004). See Appendix B for a complete species list of all wildlife observed within the survey area.

A desktop analysis including review of existing literature and available technical reports was conducted prior to commencing field surveys to determine which of these regionally occurring special-status species has potential to occur within the survey area (refer to Appendix C). In summary, Terra Verde staff reviewed the following resources:

- Aerial imagery of the survey area;
- USGS Oceano, California 7.5-minute topographic quadrangle;
- Online Soil Survey of San Luis Obispo County, California – Oceano area (Natural Resources Conservation Service [NRCS] 2012);
- A USFWS list of federally protected special-status species with potential to occur within the County (USFWS 2012);
- A California Natural Diversity Database (CNDDDB) list of state and federally protected special-status species with potential to occur within the Oceano, California 7.5-minute quadrangle and the surrounding seven quadrangles (Arroyo Grande NE, Guadalupe, Nipomo, Pismo Beach, Point Sal, Santa Maria, and Tar Spring Ridge) (CDFG 2012);
- A CNDDDB map of state and federally listed special-status species that have been documented within a five-mile radius of the survey area (CDFG 2012) (see Figure 8: One-mile CNDDDB Map);
- A California Native Plant Society (CNPS) list of special-status plant species with potential to occur within the Oceano, California 7.5-minute quadrangle and the surrounding seven quadrangles (CNPS 2012);



- The Lower Arroyo Grande Creek and Lagoon Fishery and Aquatic Resources Summary Monitoring Reports for 2004, 2005, and 2010 by Douglas Rischbieter;
- The *Draft Arroyo Grande Creek Channel Waterway Management Program Environmental Impact Report* prepared by SWCA Environmental Consultants, 2010;
- *Aquatic Survey: Arroyo Grande Creek and Lagoon* by Douglas Rischbieter, 2011 (California State Parks); and;
- *The Natural Resources of the Nipomo Dunes and Wetlands* by Kent A. Smith, 1976 (CDFG).

A complete list of all of the regionally occurring special-status species reported in the scientific database queries was compiled for the survey area (see Appendix C). An analysis to determine which of these special-status species have the potential to occur within the survey area was conducted. The habitat requirements for each regionally occurring special-status species were assessed and compared to the type and quality of habitats observed on site during the field surveys. Several regionally occurring special-status species were eliminated due to a lack of suitable habitat within the survey area, elevation, range, lack of soils/substrate, and/or distribution. As previously mentioned, the analysis was also based on a review of resource agency materials, pertinent scientific literature, aerial photography of the survey area, topographic maps of the survey area, surveyors personal knowledge of the area, and other local information. Special-status species determined to have the potential to occur within the survey area are discussed below. Special-status species that were not determined to have the potential to occur within the survey area are not discussed further in this report.

Sufficiency of Biological Data

The field surveys that Terra Verde staff conducted are of sufficient technical detail and biological and botanical expertise. The survey efforts occurred during the appropriate bloom periods for the target sensitive plant species and the survey efforts are both adequate and satisfactory for the purpose of determining the presence/absence of potentially occurring sensitive plant and animal species within the survey area.

RESULTS

This section summarizes the results of the surveys and provides further analysis of the data collected in the field. Discussions regarding the existing site conditions, soils on site, terrestrial, and aquatic habitat types identified on site, the potentially occurring special-status species, and special-status species observed are presented below.

Soils

According to the NRCS online soil survey of San Luis Obispo County, four soil units occur within the survey area (NRCS 2012). These include: Dune land; Mocho fine sandy loam; Oceano sand, 0-9 percent slopes; and Psamments and fluvents, wet and are discussed in greater detail below. Although these soil units do not have any listed hydric components or inclusions that



meet the hydric soils criteria, open water covers a significant portion of the survey area (see Figure 4).

134 – Dune land (6.93 acres)

Dune Land soils tend to occur in the toeslope and tread of dunes. Within the survey area, this soil type occurs in the foredunes and stabilized sand dunes.

173 – Mocho fine sandy loam, 0-2 percent slopes (12.70 acres)

The parent material of this soil type is alluvium derived from sedimentary rock. The drainage class of this soil type is well drained, and it is composed of fine sandy loam, silty clay loam, and stratified gravelly sand. Mocho Fine Sandy Loam usually occurs in alluvial flats and fans. This soil type occurs in the middle of the survey area where wetland features are present, such as willow thickets and cattail marsh.

184 – Oceano sand, 0-9 percent slopes (4.77 acres)

The parent material of this soil type is Eolian deposits. The drainage class of this soil type is excessively drained. Oceano Sand usually occurs within the toeslope and tread of dunes. Within the survey area, this soil occurs in a stabilized dune area isolated from the rest of the dune system on site.

193 – Psamments and fluvents, wet, 0-5 percent slopes (3.81 acres)

The parent material of this soil type is alluvium, and it is composed of loamy sand. The drainage class of this soil type is very poorly drained. Psamments and fluvents, Wet soils usually occur within the toeslope and tal of basin floors. Within the survey area, this soil type occurs in the northernmost part of the lagoon.

Vegetation Communities

Ten distinct vegetation communities were observed within the survey area, as well as anthropogenic and ruderal areas. Vegetation communities identified include: Arroyo willow thicket, California bulrush marsh, cattail marshes, coastal brambles, Pacific silverweed marshes, ice plant mat, silver dune lupine-mock heather scrub, dune mat, European beach grass swards, and sea lyme grass patch. A total of 155 vascular plant species were identified within the survey area during appropriately timed surveys. Plants observed consisted of 82 (53 percent) native taxa and 73 (47 percent) non-native taxa. The percentage of non-native taxa is nearly equal to that of native taxa, reflecting a high level of disturbance on site.

Six sensitive vegetation communities were identified in the CNDDDB as potentially occurring on site. Three of the communities occur within the survey area: central dune scrub, central foredunes, and coastal and valley freshwater marsh.

A map illustrating the extent of the vegetation on site is included for reference (see Figure 5). Representative photographs of the survey area are presented in Appendix D.



Arroyo willow thicket

Growing as shrubs and trees, the dominant canopy cover throughout the site is Arroyo willow (*Salix lasiolepis*). It is commonly found in dense stands with other native species such as California wax myrtle (*Morella californica*), bulrush (*Schoenoplectus* spp.), twin berry (*Lonicera involucrata*), coast live oak (*Quercus agrifolia*), and California blackberry (*Rubus ursinus*) along the water's edge and in the upland dune complexes and surrounding areas. The canopy and shrub layer is dense, limiting the understory, which is variable and typically composed of horsetail (*Equisetum* spp.), rush (*Juncus* spp.), poison oak (*Toxicodendron diversilobum*), non-native grasses, bare ground, or water.

This species composition was used in determining the community classification, which most closely corresponds with the *Salix lasiolepis/Rubus* spp. Association of the *Salix lasiolepis* Shrubland Alliance, Arroyo willow thickets, in *A Manual of California Vegetation* (MCV) classification system (Sawyer, Keeler-Wolf, and Evens 2008).

California bulrush marsh

Immediately adjacent to open waters and forming dense mats, southern bulrush (*Schoenoplectus californicus*) is dominant throughout much of the site. This species is tolerant of brackish water and fluctuating water levels, and soils typically have high organic content and are poorly aerated. It is found growing with other native species such as Olney's three-square bulrush (*Schoenoplectus americanus*), broad-leaved cattail (*Typha latifolia*), and Arroyo willow. Giant reed (*Arundo donax*) eradication has been implemented throughout the site; however, a small island in the northern part of the lagoon (near Memorial Park) supports dense bulrush and giant reed.

This species composition was used in determining the community classification, which most closely corresponds with the *Schoenoplectus californicus* Herbaceous Alliance, California bulrush marsh, in the MCV classification system (Sawyer, Keeler-Wolf, and Evens 2008).

Cattail marshes

A wetland in the easternmost part of the survey area, with less coastal influence, supports a slightly different species composition than the California bulrush marsh. Broad-leaved cattail is dominant with southern bulrush as co-dominant; however, lower growing herbaceous species such as tall flat sedge (*Cyperus eragrostis*), broadfruit bur-reed (*Sparganium eurycarpum*), horsetail, brown-headed rush (*Juncus phaeocephalus*), Pacific silverweed (*Potentilla anserina* subsp. *pacifica*), and hedge nettle (*Stachys ajugoides*) are abundant. Arroyo willow surrounds the marsh forming a thicket. Broad-leaved cattail is common and less tolerant of deep water and high salinity; stands are common in local coastal marshes and lagoons.

This species composition was used in determining the community classification, which most closely corresponds with the *Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance, Cattail marshes, in the MCV classification system (Sawyer, Keeler-Wolf, and Evens 2008).



Of the wetland-riparian communities, the California bulrush marsh and cattail marsh communities correspond with the sensitive vegetation community, coastal and valley freshwater marsh, from the CNDDDB.

Coastal brambles

A small area at the southern part of the survey area is brambles, dominated by California blackberry (*Rubus ursinus*), which occur between dense Arroyo willow stands. This community likely has a seral relationship with the neighboring community composed of Arroyo willow, with California wax myrtle (*Morella californica*) and California blackberry as understory.

This species composition was used in determining the community classification, which most closely corresponds with the *Rubus (parviflorus, spectabilis, ursinus)* Shrubland Alliance, Coastal brambles, in the MCV classification system (Sawyer, Keeler-Wolf, and Evens 2008).

Pacific silverweed marshes

This community occupies small areas near the lagoon margin that flood seasonally. The dominant species in the herbaceous layer is Pacific silverweed, which occurs with densely growing sand dune sedge (*Carex pansa*), salt grass (*Distichlis spicata*), and marsh baccharis (*Baccharis glutinosa*). Other species characteristic of this community identified on site include common velvet grass (*Holcus lanatus*), water parsley (*Oenanthe sarmentosa*), and bulrush (*Schoenoplectus* spp.). The herbaceous layer is continuous, and emergent shrubs and trees are sparse to absent. One area on private property in the middle of the site that is characterized as Pacific silverweed marsh showed evidence of recent mowing to be used as a driveway; however, based on personal communication, it does pond during years of typical rainfall.

This species composition was used in determining the community classification, which most closely corresponds with the *Argentina egedii* Herbaceous Alliance, Pacific silverweed marshes, in the MCV classification system (Sawyer, Keeler-Wolf, and Evens 2008).

Ice plant mat

Several species collectively called ice plant are present on site, and small parts of the sand dunes are dominated by freeway iceplant (*Carpobrotus edulis*) and sea fig (*C. chilensis*), which hybridize. Freeway iceplant has high invasivity, as does the hybrid formed with sea fig. Ice plant outcompetes native plants for water, nutrients, and habitat, and is tolerant of a wide range of soil moisture and nutrient conditions. Emergent shrubs such as coyote brush (*Baccharis pilularis*) are present in low cover, and due to the density of the mat, the herbaceous layer beyond the iceplant is nearly absent with some annual grasses occurring occasionally. This community provides habitat for nesting birds, small mammals, and other wildlife.

This species composition was used in determining the community classification, which most closely corresponds with the *Carpobrotus edulis* Semi-Natural Herbaceous Stands, Ice plant mats, in the MCV classification system (Sawyer, Keeler-Wolf, and Evens 2008).



Silver dune lupine – mock heather scrub

This community occurs in the stabilized dunes on site and is composed of emergent shrubs with an intermittent herbaceous understory. Dominant shrubs include silver dune lupine (*Lupinus chamissonis*) and mock heather, with coyote brush as a common to abundant component. The herbaceous layer is composed of both native and non-native species such as telegraph weed (*Heterotheca grandiflora*), ice plant, and annual grasses such as the non-native invasive veldt grass (*Ehrharta calycina*). Several patches of Blochman's leafy daisy (*Erigeron blochmaniae*), which has a California Rare Plant Rank (CRPR) of 1B.2, one population of Blochmans' ragwort (*Senecio blochmaniae*), CRPR 4.2, and California spineflower (*Mucronea californica*), CRPR 4.2, occur within this community.

This species composition was used in determining the community classification, which most closely corresponds with the *Lupinus chamissonis*-*Ericameria ericoides* Shrubland Alliance, Silver dune lupine-mock heather scrub, in the MCV classification system (Sawyer, Keeler-Wolf, and Evens 2008).

Dune mat

This community occurs along the western and eastern boundary of the survey area and is surrounded by willow thicket and dune scrub. The area has sandy soils and shows evidence of disturbance with both native and non-native species present. Vegetation within this community is mostly herbaceous with native shrubs such as silver dune lupine and coyote brush occurring sparsely to occasionally as it transitions into silver dune lupine scrub. Native herbaceous species such as common sand verbena (*Abronia umbellata*), beach-bur (*Ambrosia chamissonis*), and California croton (*Croton californicus*), and non-native species such as veldt grass are dominant and form a sparse herbaceous layer with exposed ground.

This species composition was used in determining the community classification, which most closely corresponds with the *Abronia latifolia*-*Ambrosia chamissonis* Herbaceous Alliance, Dune mat, in the MCV classification system (Sawyer, Keeler-Wolf, and Evens 2008).

Of the coastal sand dune scrub communities, the silver dune lupine – mock heather scrub and dune mat communities correspond with the sensitive vegetation community, central dune scrub, from the CNDDDB.

European beach grass swards

European beach grass (*Ammophila arenaria*) is a large, perennial grass that dominates parts of the sand dunes found along the western dunes of the survey area. It grows in dense, monotypic stands and with both native and non-native species, which are typically found on the fringe of this community. Shrubs such as mock heather and coyote brush are present, and poison oak grows as a vine-like shrub within and on other plants in this community. The herbaceous layer is limited or absent due to the density of the beach grass. Successful vegetative reproduction by rhizomes allows this grass to outcompete other species in the shifting sand of the dunes, which, in turn, reduces suitable habitat for many wildlife species. However, this community does provide habitat for nesting birds and other wildlife.



This species composition was used in determining the community classification, which most closely corresponds with the *Ammophila arenaria* Semi-Natural Herbaceous Stands, European beach grass swards, in the MCV classification system (Sawyer, Keeler-Wolf, and Evens 2008).

Sea lyme grass patch

The foredunes bordering the Arroyo Grande Estuary and shoreline in the western-most part of the survey area are transitional and currently support American dune grass (*Elymus mollis* subsp. *mollis*) with sea rocket (*Cakile maritima*), ice plant (*Carpobrotus spp.*), beach-bur, and other species tolerant to changing and extreme coastal conditions. Commonly referred to as a pioneer dune community, the plants are able to colonize and stabilize the sand carried in from shore. This community is vulnerable to colonization by European beach grass, which is abundant throughout the dunes on site. Vegetation in this community is sparse with low cover and large areas of exposed sand. This community provides habitat for wildlife and nesting birds, including the federally listed western snowy plover (*Charadrius alexandrinus nivosus*) and California least tern (*Sternula antillarum browni*).

This species composition was used in determining the community classification, which most closely corresponds with the *Leymus mollis* Herbaceous Alliance, Sea lyme grass patches, in the MCV classification system (Sawyer, Keeler-Wolf, and Evens 2008).

Of the vegetation communities identified on site, the sea lyme grass patch corresponds with the central foredune community from the CNDDDB.

Anthropogenic

Within and adjacent to the survey area are residences, a public park, an airport, and various structural elements. Typically these areas are dominated by non-native vegetation/horticultural species or are not vegetated. Cultivated species such as baby sun-rose (*Aptenia cordifolia*), umbrella plant (*Cyperus involucratus*), and calla lily (*Zantedeschia aethiopica*) are found throughout the area. Additionally, there is an active dune restoration project in the western part of the site. Although this community is not natural, it provides habitat for wildlife, such as nesting birds.

Ruderal

The walking trails and roadsides throughout the site are dominated by non-native species with high tolerance to regular disturbances. Herbaceous species such as bur clover (*Medicago polymorpha*), Italian thistle (*Carduus pycnocephalus*), and non-native annual grasses are common weeds found in this community.

Wildlife

Terra Verde conducted focused field surveys within the entire survey area for fisheries, California red-legged frog, and avifauna. Additionally, general wildlife species observed on site during the 13 combined field surveys were documented and are discussed below. Wildlife observed during the field studies included both invertebrate and vertebrate species. This includes those species seen or detected by tracks, scat, skeletal remains, burrows and/or vocalization



during the field surveys. Complications in the quantitative assessment of both terrestrial vertebrate and invertebrate populations include:

- Many species may occur in the area only for short periods during migrations;
- many species of amphibians and reptiles become inactive during one or more seasons; and
- seasonal or annual fluctuations in climate or weather patterns may confound observations.

Invertebrates

Terrestrial invertebrates observed within the survey area included orb-weaver spiders (family Araneidae) common pillbug (*Armadillidium vulgare*), honeybee (*Apis mellifera*), common termite (Order Blattodea) European garden snail (*Helix aspersa*), grasshopper (*Melanoplus* sp.), and monarch butterfly (*Danaus plexippus*).

Aquatic invertebrates observed within Meadow Creek Lagoon and associated wetland habitat areas included but were not limited to dragonfly (Order Odonata), mosquito larvae (Order Diptera), common water striders (*Gerris* sp.), water boatman (*Corixa* sp.), crayfish (*Pacifastacus* sp.) and freshwater snail (*Physa* sp.).

Fisheries/Water Quality

Given the historical connectivity with upstream tributaries and convergence with Arroyo Grande Creek, the Meadow Creek Lagoon has the potential to harbor marine, freshwater, and estuarine fishes. The survey efforts resulted in the capture and release of ten distinct fish species of varying abundance and size classes. Fish species identified during surveys included largemouth bass (*Micropterus salmoides*), western mosquitofish (*Gambusia affinis*), golden shiner (*Notemigonus crysoleucas*), tidewater goby (*Eucyclogobius newberryi*), Sacramento sucker (*Catostomus occidentalis*), Pacific staghorn sculpin (*Leptocottus armatus*), bluegill (*Lepomis macrochirus*), prickly sculpin (*Cottus asper*), and three-spine stickleback (*Gasterosteus aculeatus*). An abundance of crayfish (*Pacifastacus* spp.) and bullfrogs (*Lithobates catesbiana*) were also observed during the fisheries assessment. The presence of non-native fish is thought to be a result of local fishing including past largemouth bass and bluegill stocking events and release of bait fish (Smith 1976).

Species diversity was greatest at the northern-most extent of the lagoon, just south of Pier Avenue. Species more common in coastal lagoon habitats, rather than freshwater lagoons, were observed in the pool just south of the levee flap gate, where the lagoon merges with Arroyo Grande Creek.

Sampling in the northern extent of the survey area (Memorial Park) resulted with catch being dominated by golden shiner and non-native centrarchids including largemouth bass and bluegill. Given the lack of overhanging perimeter canopy at this location, centrarchids appear to be occupying the deeper, open water habitat and the golden shiner are prevalent along lagoon margins where some protection from predation is afforded by stands of bulrush. Also notable at



this location was the highest abundance of bull frog captured during the course of the surveys, (see Photo 20 in Appendix D).

Just south of Memorial Park, fish capture continued to be dominated by non-native centrarchids (i.e., large-mouth bass and bluegill). As the Meadow Creek Lagoon becomes more “channelized” moving downstream, golden shiner become sparse and a moderate prevalence of three-spine stickleback emerges. Prickly sculpin and Sacramento sucker were found throughout this area in limited numbers.

The final sampling efforts included locations at the southwest most portions of the Meadow Creek Lagoon. These locations were in close proximity to the levee flap gates. Species assemblage on the north side of the gates was dominated by three-spine stickleback, but in relatively low numbers. No other fish species was noted at this location. Observations during snorkel surveys of the southern reaches of Meadow Creek yielded minimal numbers of individuals and low species diversity. The limited species diversity in this section of the Meadow Creek Lagoon is likely due to several abiotic factors such as temperature, salinity, and dissolved oxygen levels. A lack of visibility (only two-four feet), and extremely turbid substrate may have also attributed to low numbers of species observed.

Surveys on the south side of the levee flap gates resulted in the identification of Pacific staghorn sculpin, three-spine stickleback, and tidewater goby (federally endangered), fish more characteristic of a coastal lagoon. One Sacramento sucker was also detected at this location. The survey effort south of the floodgates was singular in nature, performed with caution to limit the amount of substrate accumulated during seining, and constituents quickly released upon identification. The purpose of this singular effort was to provide a snapshot of comparison between the two semi-isolated habitats on either side of the levee and associated flap gates.

A brief effort was made using netting to observe fish within the narrow concrete drainage channel adjacent to the Oceano Water Treatment Facility. Depth of the drainage ranged from one to three feet. Western mosquito fish were moderately abundant in the net samples. Based on anecdotal information, these fish were most likely introduced by the County as a means to control the local mosquito population. Bullfrog tadpoles were also present in the net on multiple passes.

The results of the water quality analysis closely correlate with the fisheries assessment data, which shows a greater population density and species diversity in areas of the upper lagoon with a higher percent of dissolved oxygen. Factors that determine the percent dissolved oxygen in an aquatic system include diffusion from the air, wind, and other factors that create turbulence at the surface, and photosynthesis (Horne 1994). The greatest percent of dissolved oxygen was observed in the open water habitat of the upper portion of the lagoon. This is likely due to the wind turbulence observed at this location during surveys and the amount of available sunlight to execute photosynthesis. As the lagoon transitions from deep, open water to a shallow, densely vegetated freshwater marsh, the percent of dissolved oxygen declines, along with the overall density of fish populations. Table 2 below summarizes the data collected during the water quality analysis. See Figure 6 for a review of water quality sampling locations.

Table 2. Water Quality Analysis Data Summary

Sample Point	Temperature (°F)	Conductivity (Siemens per meter [S/m])	Percent Dissolved Oxygen	Dissolved Oxygen (mg/L)	pH
1	71.34	0.931	119.60	10.43	7.96
2	71.82	0.937	116.30	10.11	8.02
3	71.46	0.936	119.80	10.48	8.08
4	71.02	0.933	77.60	6.78	7.82
5	70.69	0.943	43.70	3.83	7.74
6	69.82	0.947	47.70	4.24	7.79
7	69.63	0.953	36.00	3.18	7.67
8	63.23	0.919	13.80	1.32	7.35
9	63.65	0.929	19.00	1.79	7.42
10	62.02	1.026	34.90	3.35	7.21
11	64.21	2.190	45.08	4.38	7.47

Amphibians

Generally, amphibians are concentrated in areas near perennial fresh water, inundated soils, and moist understories of decomposing organic material or low-lying herbaceous vegetation. Such habitat requirements are often found adjacent to riparian corridors, marshes, wet meadows, and springs. Juveniles may disperse beyond the aquatic or bank zones utilizing burrows for refugia in the upland and dispersal habitat. Amphibian species observed in the survey area include a federally protected species, CRLF, American bullfrog, and Sierran treefrog (*Pseudacris sierra*). During the first protocol-level survey, an adult CRLF was identified near a footbridge just south of the intersection of Aloha Place and Security Court. A second eyeshine survey conducted on August 1, 2012 resulted in the identification of an adult CRLF along the northern bank of Arroyo Grande Creek, downslope of the levee (see Figure 9: Special Status Species Observations). American bullfrog and Sierran treefrog were found throughout the survey area with the highest densities observed along the lagoon margins at the northeast extent of the survey area (i.e., Memorial Park).

Reptiles

During survey efforts, Pacific pond turtle (*Actinemys marmorata*) was observed at various locations throughout the lagoon (see Figure 9). Non-native red-eared sliders (*Trachemys scripta elegans*) were also documented below the two traffic bridges spanning over Meadow Creek Lagoon at the northern extent of the survey area. Striped racer (*Masticophis lateralis*) and western fence lizard (*Sceloporus occidentalis*) were also observed on site.

Avian Species

The margins of the lagoon provide contiguous canopy coverage supporting riparian avifauna such as Pacific-slope flycatcher (*Empidonax difficilis*), Wilson's warbler (*Cardellina pusilla*), and common yellowthroat (*Geothlypis trichas*). Due to its proximity to the Pacific Ocean, Meadow Creek Lagoon provides refuge and feeding grounds for migratory marine birds in



addition to resident species. In addition to those listed above, avifauna identified in the vicinity of the survey area included, but were not limited to, osprey (*Pandion haliaetus*) white-tailed kite (*Elanus leucurus*; state fully protected), Caspian tern (*Hydroprogne caspia*), Swainson's thrush (*Catharus ustulatus*), song sparrow (*Melospiza melodia*), and purple finch (*Carpodacus purpureus*). Western snowy plover (*Charadrius alexandrinus nivosus*; federally threatened) and California least tern (*Sterna antillarum browni*; federally endangered) were not noted during field surveys, but have the potential to occur on site. Known breeding populations of western snowy plover and California least tern have been identified during surveys performed by California State Parks two miles south of the survey area within coastal dune habitat, similar to habitat features that occur on site (Personal communication, Ronnie Glick, September 6, 2012). A complete list of all avifauna observed during field surveys is located in Appendix C.

Mammals

Understories and margins of riparian corridors can provide mammals with opportunity to forage, access to water, and daytime cover. Passageways such as the Arroyo Grande Creek levee and pedestrian trails throughout the study area allow mammal movement between multiple forage locations. Additionally, thick stands of bulrush on the fringe of open waters and within shallow inundated areas, supply cover for small mammals to seek refuge from predation. American beaver (*Castor canadensis*) dams were observed throughout the Meadow Creek Lagoon and Arroyo Grande Creek during the surveys. Further, beaver were encountered in the open waters of the lagoon during both night surveys. North American river otter (*Lontra canadensis*) were observed on several occasions during daytime surveys and numerous access points (i.e., slides) and tracks were observed along the levee into Arroyo Grande Creek. The existing habitat features within the lagoon as well as the abundance of centrarchid fish and crayfish provide a large prey base for river otters within the lagoon area. Other mammals observed during surveys included Audubon's cottontail (*Sylvilagus audubonii*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), and red fox (*Vulpes vulpes*). Potential exists for a variety of small rodents to be present. One bat night roost was discovered under the four-lane traffic bridge along Pier Avenue (see Appendix D: Site Photographs). The species occupying the bridge deck were not identified, but based on size and features that could be observed without capturing the bats, appear to be Mexican free-tailed (*Tadarida brasiliensis*). A complete list of all mammals observed during field surveys is located in Appendix B.

Sensitive Species

For the purposes of this biological resources assessment, a sensitive species is defined as a species that is of management concern to state and/or federal resource agencies and includes those species that are:

- Listed as endangered, threatened, or candidate for listing under the Federal Endangered Species Act (FESA);
- Listed as rare, endangered, threatened, or proposed for listing under the California Endangered Species Act (CESA);



- Designated as endangered or rare, pursuant to the California Fish and Game Code (Section 1901, Chapter 10 – Native Plant Protection Act);
- Designated as fully protected, pursuant to the California Fish and Game Code (Section 3511, Section 4700, or Section 5050);
- Designated as a species of special concern by CDFG; and
- Plants that meet the definitions of rare, threatened, or endangered under the California Environmental Quality Act (CEQA), including plants listed by CNPS to be “rare, threatened, or endangered in California” (CRPR Lists 1A, 1B, and 2). Local or regional agencies (e.g., County, City) may consider plant species that CNPS believes require additional information (i.e., CRPR List 3) and plant species that have been placed on a watch list (i.e., CRPR List 4) by CNPS.

All occurrences of special-status species and sensitive habitat types previously documented from the CNDDDB within a one-mile radius of the survey area were plotted on a map using geographic information systems (GIS) software (see Figure 8).

Terra Verde staff determined that the project area contains or has the potential to support 19 sensitive plants, three sensitive amphibians, four sensitive reptiles, two sensitive mammals, twelve sensitive bird species, and eight sensitive invertebrates. Detailed descriptions of several of these sensitive species are provided below.

Sensitive Plant Species

Blochman’s leafy daisy (*Erigeron blochmaniae*), California Rare Plant Rank 1B.2

Blochman’s leafy daisy is a perennial herb that occupies sand dunes and hills along the coast of central California. It has a California Rare Plant Rank (CRPR) of 1B.2: rare, threatened or endangered in California and elsewhere, and it is endemic to California. This species was identified throughout the sand dune scrub habitat of the survey area. The largest stand occurs in the western part of the site with a variety of native and non-native species including silver dune lupine, mock heather, and ice plant (see Figure 9). This species co-occurs with two other sensitive species: California spineflower and Blochman’s ragwort.

California spineflower (*Mucronea californica*), California Rare Plant Rank 4.2

California spineflower is an annual herb that occurs on sandy soils below 1,000 m. It is listed as CRPR 4.2; limited distribution and is endemic to California. This species was identified on the slopes of the sand dunes in the western part of the site (see Figure 9). It occurs with a variety of native and non-native species including mock heather, European beachgrass, and ice plant. This species co-occurs with Blochman’s leafy daisy.

Blochman’s ragwort (*Senecio blochmaniae*), California Rare Plant Rank 4.2

Blochman’s ragwort is a subshrub that occupies coastal sand dunes and sandy floodplains along the coast of central California. It is listed as CRPR 4.2; limited distribution and is endemic to California. This species was identified in the dune scrub in the eastern part of the site (see Figure 9). It occurs with other native shrubs including silver dune lupine, mock heather, and coyote



brush, with veldt grass abundant in the herbaceous layer. This species co-occurs with Blochman's leafy daisy.

Southwestern spiny rush (*Juncus acutus* subsp. *leopoldii*), California Rare Plant Rank 4.2
Southwestern spiny rush is a perennial herb that occupies moist saline wetlands, salt marshes, and alkaline seeps at low elevations in central and southern California. It is listed as CRPR 4.2; limited distribution. This species was identified along the transition from dune scrub to wetland vegetation in the western and southwestern parts of the site (see Figure 9). It occurs with native and non-native vegetation including California blackberry, dock, Arroyo willow, Pacific silverweed, and European beachgrass.

La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*) CRPR 1B.1, California Threatened, Federally Endangered
La Graciosa thistle is a biennial or short-lived perennial herb that occupies coastal marshes and dune wetlands in southwestern San Luis Obispo County and northwestern Santa Barbara County. It is localized in the lower valley of the Santa Maria River approximately 10 miles south of the survey area and is known from fewer than 20 occurrences; it is listed as CRPR 1B.1 rare, threatened, or endangered in California and elsewhere.

Although suitable habitat does occur on site, this species was not observed during appropriately timed surveys.

Marsh sandwort (*Arenaria paludicola*) CRPR 1B.1, California Endangered, Federally Endangered
Marsh sandwort is a perennial herb that occupies wet meadows and marshes at elevations below 300 meters. It is known to occur naturally in Black Lake Canyon and at Oso Flaco Lake, which are approximately 5 miles southwest and south of Meadow Creek Lagoon, respectively. It is listed as CRPR 1B.1; rare, threatened, or endangered in California and elsewhere.

Although there are known occurrences within approximately five miles of the survey area, due to the high level of disturbance and abundance of non-native species, this species is not expected to occur on site. Further, this species was not observed on site during appropriately timed surveys.

Gambel's water cress (*Nasturtium gambelii*) CRPR 1B.1, California Threatened, Federally Endangered
Gambel's water cress is a perennial herb that occupies marshes, streambanks, and lake margins at elevations less than 350 m. It is known in California from only four occurrences, and is considered nearly extinct; however, intermediates with the common water cress species (*N. officinale*) are known.

Common water cress was observed during appropriately timed surveys downstream of the flap gate at Arroyo Grande Creek and within flood channels around the site; however, Gambel's water cress was not identified during the surveys. This species is not expected to occur within the Meadow Creek Lagoon area, however it has a low potential to occur within the Arroyo Grande Creek channel.



Sensitive Fish Species

South-central California Coast Steelhead (*Oncorhynchus mykiss irideus*), State Status – Species of Special Concern, Federal Status – Threatened

As an anadromous form of rainbow trout, steelhead rear in freshwater for one to three years before migrating to the ocean. Often, immature steelhead remain in coastal lagoons or estuaries for several weeks prior to entering the Pacific Ocean. These crucial nursery areas allow time for necessary physiological changes to occur in developing steelhead prior to entering the saline-rich environment of the ocean. This species reaches maturity between the ages of two and four while in the ocean before migrating upstream to natal spawning grounds. Steelhead migration ranges from several miles to several hundred miles up fresh water streams. In San Luis Obispo County, adult steelhead enter streams between December and March for spawning, where eggs are laid for fertilization in gravel beds. Suitable water depth, velocity, and adequately sized gravel substrate are dominant factors for successful spawning however suitable temperature, pH, dissolved oxygen concentration, and turbidity are also critical for embryonic development and survival (NMFS 2011). Hatching time varies from three weeks to two months. The south-central California coast steelhead occupies rivers from Santa Cruz County south to Santa Barbara County, excluding the Santa Maria River. Steelhead occurrences are documented throughout Arroyo Grande Creek up to the base of Lopez Dam and throughout Pismo Creek (CNDDDB 2012). Critical habitat has been designated within Arroyo Grande Creek for protection of this species, which overlaps with the southern-most extent of the survey area. Population declines for this species may be attributed to degraded water quality, often a result of increased surface runoff from commercial and residential development, man-made structural barriers such as box culverts resulting in downstream erosive events, and the spread of non-native vegetation, which can outcompete native vegetation that provides overhead canopy and temperature regulation.

This species has been well documented as occurring within Arroyo Grande Creek and tributary channels (Central Coast Salmon Enhancement 2009, Rischbeiter 2004 and 2007). Further, the Arroyo Grande Creek corridor is located within designated critical habitat for this species. However, no steelhead were observed during survey efforts. Further, fisheries surveys revealed that the northern extent of Meadow Creek Lagoon has unsuitable substrate for steelhead spawning. Specifically, steelhead require riffle habitat areas with clean, coarse gravels for the purposes of spawning. The lagoon substrate is comprised almost entirely of accumulated fine silts and sediments which is unsuitable for steelhead. Moreover, the abundance of centrarchids and other non-native fish species within Meadow Creek Lagoon further decreases the quality of habitat to support steelhead.

However, due to documented annual occurrences of steelhead in Arroyo Grande Creek, there is a low potential for steelhead to occur within the survey area. Although structural barriers, such as the existing levee flap gates, likely hinder anadromous fish migration up into the Meadow Creek watershed, the potential exists for steelhead to enter the lagoon complex during periods of higher flows in Meadow Creek when the flap gates remain open.



Tidewater Goby (*Eucyclogobius newberryi*), State Status – Species of Special Concern, Federal Status – Endangered

Tidewater goby generally inhabits lagoons, estuaries, marshes, and coastal streams that are protected from the Pacific Ocean by sand bars creating cool, brackish water conditions, preferably with nearby emergent vegetation. Salinities under 10 parts per thousand (ppt) are favorable although this species has been found in the upper reaches of streams which are tributaries to brackish water. Tidewater goby is known to occur from the mouth of the Smith River in Del Norte County, south to Agua Hedionda Lagoon in San Diego County. This species may occur in groups under a dozen or in large aggregations of several hundred. Habitat with sandy bottom substrate is preferred to allow subsurface burrowing by males prior to mate selection. Tidewater goby complete life cycles annually with adults rarely exceeding two inches in length. Threats to the goby include sand bar breaching for tidal flushing, wetland draining, and pollutant accumulation in lagoons. Currently, critical habitat is designated for tidewater goby and new critical habitat is proposed to include state lands within San Luis Obispo County (USFWS 2011). The survey area is not included in designated critical habitat for this species.

A query of the CNDDDB located occurrences of tidewater goby within the Arroyo Grande Creek Estuary and Pismo Creek, two miles north of the survey area (CNDDDB 2012). Conditions within Meadow Creek Lagoon present suitable habitat for tidewater goby. This species was identified within the survey area immediately downstream of the flap gates during a single seining event (see Figure 9). Furthermore, extensive surveys by California State Parks have revealed tidewater goby to have successfully spawned in the Arroyo Grande Creek Estuary in 2010 and to be present in multiple years over the last decade (Rischbieter 2010). Therefore, the potential exists, however low, for tidewater goby to enter the lagoon complex during periods when the flap gates are open.

Sensitive Amphibian Species

California Red-legged Frog (*Rana draytonii*), State Status – Species of Special Concern, Federal Status – Threatened

CRLF are generally found along marshes, streams, ponds, and other permanent sources of water where dense scrubby vegetation such as willows, cattails, and bulrushes dominate and water quality is suitable. Breeding sites occur along watercourses with pools that persist long enough for breeding and larval development. Breeding time depends on winter rains but is usually between late November and late April (Jennings 1986).

This species range currently occurs from Mills Creek in Mendocino County, where it overlaps with the range of the Northern red-legged frog (*Rana aurora*) to Big Creek in Mendocino County, southward along the coast and Coast Ranges to the southernmost extent in Northern Baja California. The CRLF range extends eastward through northern Sacramento Valley where it's northernmost population occurs in Shasta County, then southward along the Sierra Nevada foothills and into Fresno County. CRLF are found widespread throughout drainages in Monterey County and San Luis Obispo County, while populations are found to be most dense in San Mateo, Marin, and Monterey Counties. The survey area is located within the current and historic range of CRLF (Stebbins 2003, USFWS 2005).



Population declines have been attributed to loss of habitat and an increase in predator densities. Habitat loss may stem from a variety of land use practices such as urbanization, agriculture, farming, and livestock grazing (USFWS 2005). Urbanization directly reduces available aquatic and terrestrial habitat through conversion of natural habitat areas to impermeable surfaces (i.e., asphalt and concrete) and imposes impassible movement barriers (e.g., roads, fences, walls, and structures). Impassible barriers to movement tend to isolate breeding populations and alter historic migration patterns. Agricultural operations also present threats to CRLF through direct habitat loss and by decreasing watershed area. CRLF populations have also declined due to the introduction of predators such as American bullfrog, centrarchid fish species (e.g., sunfish, blue gill, largemouth bass, etc.), and crayfish.

There are twelve occurrences of CRLF documented throughout the Arroyo Grande Creek watershed (CNDDDB 2012). The Arroyo Grande Creek corridor borders the survey area on the south, and has high habitat suitability for CRLF. Two CRLF were identified at separate locations within the survey area during eyesight surveys (see Figure 9). Thus, there is a high potential for CRLF to occur within the Meadow Creek Lagoon and surrounding wetland areas and associated flood channels. Although American bullfrog and centrarchid fish populations may limit CRLF distribution throughout the survey area, confirmed presence of CRLF and suitable habitat on site make it highly likely that CRLF will be present.

Coast Range Newt (*Taricha torosa*), State Status – Species of Special Concern

Coast Range newts occupy a variety of terrestrial habitats during non-breeding months, such as wet forests, oak forests, chaparral, rolling grasslands and abandoned animal burrows. Newts may be found underneath areas of woody debris, moist leaf litter, or rock crevices. Adults enter water for reproduction. Breeding sites include ponds, reservoirs, or slow-moving pools within creeks and streams with suitable water quality. Newts have been documented as far as two miles away from suitable breeding habitat and have been noted as being instinctual by returning to the same breeding pools year after year. Breeding typically occurs from December to February, but may extend past February during years of late or extended annual rainfall. Females lay egg masses just below the surface of the water under the protection of submerged rocks, vegetation, and branches. Incubation lasts anywhere from 14 to 52 days with the larval development extending into the summer or fall. Sub-adults leave the water and return to terrestrial environments, where they feed on worms, snails, slugs, and insects. Endemic to California, Coast Range newts are found along the coast and Coast Range Mountains from Mendocino County south to San Diego County. Predators such as crayfish, mosquito fish, and bullfrog prey on the non-poisonous larvae and egg masses.

This species has not been documented within five miles of the survey area (CNDDDB 2012), and it was not observed during survey efforts. The closest known occurrence of Coast Range newt is in the upper watershed of Arroyo Grande Creek at the base of Lopez Dam, approximately 15 miles from the survey area. Much of the waters in the survey area support dense populations of centrarchids and predatory mammal species, significantly reducing the potential for survivorship. Shallow, inundated portions of the survey area with emergent vegetation are likely to be unsuitable for Coast Range newt due to impaired water quality. Due to impaired water quality



and extreme threat of predation, this species has low potential of occurring within the survey area.

Western Spadefoot Toad (*Spea hammondi*), State Status – Species of Special Concern
Western spadefoot toads generally require grassland, open chaparral, or valley foothill woodland habitats for feeding and aestivation. It also requires aquatic habitats including permanent or temporary wetlands, rivers, creeks, pools in intermittent streams, or stock ponds for breeding. Western spadefoot toad is a predominantly terrestrial species and enters water only for reproduction. It breeds from January through March, but the breeding season can extend through May in wetter years. Further research is required to determine the dispersal distance of western spadefoot toads from aquatic habitats to upland refugia. Some studies suggest that the dispersal distance can be nearly a quarter mile (368 m). This species occurs throughout the Central Valley from Shasta County south through western Kern County. In the Coast Ranges it occurs from northern San Benito County, south through Monterey and San Luis Obispo counties to the Mexican border. It is known to occur at elevations that range from approximately 0 to 4,470 feet (1,363) m above msl. Population declines for this species are primarily the result of habitat loss. Specifically, conversion of native habitat to urban or agricultural land eliminates temporary rain pools used for breeding and juvenile development (Californiaherps.com).

This species is often difficult to detect due to extended periods of its life cycle being spent underground. This species has not been previously documented within a five-mile radius of the survey area (CNDDDB 2012), and was not observed during field surveys. The survey area contains suitable habitat for spadefoot toad, however potential for occurrence is considered low due to historic site disturbance, abundance of potential predators, and the lack of nearby occurrences.

Sensitive Reptilian Species

Coast Horned Lizard (*Phrynosoma blainvillii*), State Status – Species of Special Concern
Coast horned lizard typically inhabits areas of loose sands or soils with patchy vegetation. Habitat types can vary from grasslands and foothills at sea level to coniferous forest and chaparral communities up to 8,000 feet (2,438 m) above msl. The primary food source for Coast horned lizard is harvester ants (*Pogonomyrmex barbatus*), but they will also prey on other small invertebrates. This species can often be found near ant mounds where loose, friable soil conditions exist. Non-native ants, such as Argentine ants (*Iridomyrmex humilis*), displacing native harvester ants contributes to the decline in food sources for this species. Coast horned lizard occurs along the Pacific coast from the San Francisco Bay to Baja California, but is threatened by land development throughout its historic range (Californiaherps.com).

One occurrence of coast horned lizard is documented within five miles of the survey area along margins of coastal dune habitat near Oso Flaco Lake (CNDDDB 2012). No coast horned lizards were observed within the survey area. However, existing dune habitat along the western boundary of the survey area presents suitable habitat. Thus, there is moderate potential for coast horned lizard to occur within the survey area.



Pacific Pond Turtle (*Actinemys marmorata*), State Status – Species of Special Concern

Pacific pond turtles are commonly found in a variety of freshwater aquatic habitats including ponds, lakes, rivers, streams, and marshes. Preferentially, this species utilizes deeper pools with abundant vegetation and muddy bottoms where it can burrow in the mud to hibernate during winter months or aestivate during summer droughts. Pond turtles are omnivorous, utilizing food sources such as aquatic plants, invertebrates, frog eggs, crayfish, and occasionally fish. Historically, this turtle was distributed along the entire west coast from British Columbia to Baja California, but has become extirpated in much of its southern range as well as highly fragmented north of California (Californiaherps.com).

Pacific pond turtle has been documented in numerous locations within a five-mile radius of the survey area in both naturally-occurring and artificial water bodies (CNDDDB 2012). This species was also observed in open water of Meadow Creek Lagoon and basking along bank margins during survey efforts (see Figure 9).

Silvery Legless Lizard (*Anniella pulchra pulchra*), State Status – Species of Special Concern
Silvery legless lizard requires sandy or loose loamy soils within coastal dune scrub, coastal sage scrub, chaparral, woodland, riparian, or forest habitats. It requires cover such as logs, leaf litter, or rocks and will cover itself with loose soil. Relatively little is known about the specific behavior and ecology of this species, but it is thought to be a diurnal species that breeds between the months of March and July. It gives live birth to young in the early fall. This species occurs from Antioch in Contra Costa County south through the Coast, Transverse, and Peninsular Ranges, along the western edge of the Sierra Nevada, and in parts of the San Joaquin Valley and Mojave Desert to El Consuelo in Baja. Silvery legless lizard is known to occur at elevations that range from approximately 0 to 5,904 feet (1,800 m) above msl. Population declines have been attributed to agricultural development, sand mining, use of off-road recreational vehicles, and habitat loss through spread of invasive, non-native vegetation such as freeway iceplant (*Carpobrotus edulis*).

This species has been documented approximately 4.5 miles south of the survey area near Oso Flaco Lake (CNDDDB 2012). No silvery legless lizard were observed during field efforts, although detection of this species is difficult without disruption of understory duff or excavation within dune habitat. There is a high potential for this species to occur within the survey area due to the presence of suitable habitat (i.e., dune scrub, riparian understory litter, and decomposing matter).

Two-striped Gartersnake (*Thamnophis hammondi*), State Status – Species of Special Concern

This highly aquatic species forages primarily in and along stream corridors, preying on fish and amphibians, especially trout and sculpins. The preferred nocturnal retreats of this active diurnal snake include mammal burrows, crevices, and surface objects (Rathburn et al. 1993). During the day, it will often bask on streamside rocks or on densely vegetated stream banks. When disturbed it usually retreats rapidly to water. In milder climates, mammal burrows and surface objects such as rocks and rotting logs serve as winter refuges. Courtship and mating normally occur soon after spring emergence. Live birth occurs in late summer, usually in secluded locations such as under



the loose bark of rotting logs or in dense vegetation near pond or stream margins (Cunningham 1959, Rossman et al. 1996).

Two-striped gartersnake occurs from the southeastern slope of the Diablo Range and the Salinas Valley south along the South Coast and Transverse ranges to the Mexican border, and on Santa Catalina Island (Jennings and Hayes 1994). Historically common, it is associated with permanent or semi-permanent bodies of water in a variety of habitats from sea level to 7,872 feet (2,400 m). It is now extirpated from about 40 percent of its historical range (Jennings and Hayes 1994).

This species has not previously been documented within five miles of the survey area (CNDDDB 2012). Habitat suitability is moderate to high throughout the survey area. This species was not observed within the survey area, however, potential for occurrence is considered high due to habitat suitability and available prey species.

Sensitive Avian Species

California Black Rail (*Laterallus jamaicensis coturniculus*), State Status – Threatened

The California black rail is found in limited habitat, primarily tidal marshes bordering large bays where it occupies a narrow section between ordinary high tide line and upland habitat where topography is plateaued or gently sloped (Evans 2000). Resident to California, these tidal emergent wetlands where rails can be found are dominated by pickleweed (*Salicornia pacifica*) or in brackish marshes supporting bulrushes (*Schoenoplectis* spp.) with pickleweed and salt grass. These “high wetlands” are near the upper limits of tidal flooding, not in low wetland areas (Zeiner et. al. 1990). Prey of the California black rail includes isopods, insects, and other arthropods from the surface of mud or other vegetation. Currently, populations are found in San Francisco Bay, the Sacramento-San Joaquin River Delta, and Morro Bay. Historically, California black rails occurred in coastal wetlands from Santa Barbara County to San Diego County, but breeding populations have been extirpated from these areas due to land conversions including construction of levees, dikes, salt ponds, sewage treatment plants, and agricultural operations. Declines in populations have also been attributed to predators such as domestic cat (*Felis catus*) and herons (*Ardea* spp. and *Egretta* spp.).

A search of the CNDDDB revealed documented occurrences of California black rail at Oso Flaco Lake, five miles south of the survey area and in the vicinity of Morro Bay Estuary (CNDDDB 2012). Locally, breeding populations appear to be restricted in distribution and are known to occur in Los Osos Creek, Chorro Creek, Sweet Springs, Shark Inlet, and Morro Bay State Park. Although suitable marsh habitat exists in the survey area, frequent disturbance and a lack of past detection indicate there is a low potential for this species to occur within the survey area.

California Least Tern (*Sternula antillarum browni*), State Status – Endangered, Federal Status – Endangered

Locally, California least tern is a migratory visitor that utilizes marine and estuarine shores from San Francisco Bay south to Baja California during the breeding season (Natural Resources Agency 2010). This species establishes loose colonies on sandy soils with little vegetation along oceans, lagoons, creek mouths, and bays. Arrival at breeding sites begins in early April and lasts



into September (Zeiner et. al. 1990). Generally, this bird prefers nest sites on open, sandy or gravelly shores near unpolluted, shallow water in estuaries or lagoons where small fish are abundant. Feeding can also occur near shore in open ocean habitat. Nests are formed from shallow depressions lined with shells or other debris. This species will readily abandon nests if disturbed by humans or predators such as domestic cat, herons, crows, or falcons.

One occurrence of California least tern is documented near Oso Flaco Lake, roughly five miles south of the survey area (CNDDDB 2012). Personal communication with California State Parks revealed that this species nested two miles south of the survey area in 2012 (pers. comm. R. Glick, 2012). This species was not observed within the survey area. Nesting potential within the survey area is considered low due to a high level of human disturbance and the presence of multiple known predator species.

Cooper's Hawk (*Accipiter cooperii*), State Status – Species of Special Concern while nesting. Nesting habitat for this species is primarily in dense stands of coast live oak (*Quercus agrifolia*), riparian deciduous, or other forests near streams. This species nests and forages in close proximity to open water or riparian vegetation (Zeiner et. al. 1990). Prey for Cooper's hawk consists of birds, small mammals, amphibians, and reptiles. This species is present in the southern United States and Mexico, from coast to coast. Tolerant to human activity, Cooper's hawk will nest in relatively close contact to humans and within suburban areas. Declines in California populations can be attributed to loss of habitat through urbanization and development (Reeser 2006).

Cooper's hawk was not reported within a five-mile radius of the survey area (CNDDDB 2012), and was not observed during field surveys. Suitable nesting and foraging habitat are present in the riparian habitat surrounding Meadow Creek Lagoon, therefore, there is a high potential for this species to occur within the survey area.

Least Bell's Vireo (*Vireo bellii pusillus*), State Status – Endangered, Federal Status – Endangered

The least Bell's vireo is a summer resident of southern California (Zeiner et al., 1990). This species primarily occurs in association with low, dense riparian growth in the vicinity of water or dry river bottoms. Nesting usually occurs in shrubs, including low-growing species of willow. Breeding and nesting for this species primarily occurs in May and June (Zeiner et al., 1990). The historic distribution of least Bell's vireo ranged from central-northern California through the Sacramento and San Joaquin valleys and Sierra Nevada foothills and from the south Coast Ranges (including the Santa Clara River watershed) to Baja California (Kus 2002, USWFS 1998). Historic populations have also been documented in Owens Valley, Death Valley, and scattered locations in the Mojave Desert (USFWS 1998, Kus 2002).

Locally, individuals of this species have been reported in the vicinity of Camp Roberts, north of Paso Robles. Potential nesting habitat for this species occurs primarily in association with portions of the Salinas River riparian corridor, in northern San Luis Obispo County. One individual was documented in Los Osos in 2009 (SWCA 2010).



Least Bell's vireo has not been documented within a five-mile radius of the survey area (CNDDDB 2012) and was not observed during any survey efforts. Although suitable riparian habitat exists in the survey area, frequent disturbance and a lack of past detection indicate there is a low potential for this species to occur within the survey area.

Prairie Falcon (*Falco mexicanus*), State Status – Species of Special Concern

Prairie falcons inhabit grasslands, shrub lands, savannahs, deserts, and other open habitats at elevations up to 10,000 feet (3,048 m) in the western United States. During winter months, prairie falcons may be found in cultivated fields, along lake shores, or in feed lots with large populations of European starlings (*Sturnus vulgaris*), which serve as a food source. Mating takes place between February and April with incubation lasting roughly a month. Prairie falcons preferentially nest on cliffs up to 500 feet, but may also utilize trees, telephone poles, or buildings. Females are extremely protective and territorial of nests and are often identified by their screech before sightings occur.

This species has not been previously documented within a five-mile radius of the survey area (CNDDDB 2012) and was not observed within or adjacent to the survey area. Due to lack of suitable foraging or nesting habitat, there is a low potential for this species to occur within the survey area.

Purple Martin (*Progne subis*), State Status – Species of Special Concern

This uncommon species occurs in a variety of habitats including riparian, valley-foothill, hardwood-conifer, and redwood forests during the breeding season. It arrives from South America in late spring and is a resident of California during the summer and sometimes fall. Generally, nesting occurs in tall, multi-layered open forests, and often within old woodpecker cavities. During winter migration, purple martins may be observed foraging in grasslands, wet meadows, or fresh water wetlands (Zeiner et. al. 1990). Threats to purple martin may be attributed to loss of riparian habitat and competition with European starlings for nesting cavities (Remsen 1978).

Purple martin has not been documented within a five-mile radius of the survey area (CNDDDB 2012) and was not observed during survey efforts. Due to a lack of suitable nesting habitat on site, there is low potential for this species to occur within the survey area.

Sharp-shinned Hawk (*Accipiter striatus*), State Status – Species of Special Concern during nesting periods

The sharp-shinned hawk inhabits a variety of natural and urban habitat communities, including aspen, pine, and fir forests and urban, rural, and agricultural areas. This species typically nests in conifer trees, 20 to 60 feet above the ground where there is sufficient overhead shading. Peak nesting season for this species is from March to June, but often extends through the summer. Breeding range for this species typically occurs in colder areas, including high elevation forests in the Rocky Mountains, large areas of Canada, Alaska, and much of the northeastern United States. Breeding grounds also extend into portions of northern California, Nevada, and Washington.



This species has not been documented within a five-mile radius of the survey area (CNDDDB 2012) and was not observed within or adjacent to the survey area. Suitable forage and nesting habitat for this species is not present within the survey area and, therefore, is unlikely to occur on site.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*), State Status – Endangered
The southwestern willow flycatcher is a summer resident, requiring dense riparian habitats with nearby standing water, streams, pools, or saturated soils. This species eats primarily flying insects. Nest territories are set up for breeding, and there is some site fidelity to nest territories. Southwestern willow flycatchers arrive at breeding grounds in late April and stay as late as September. Degradation and loss of dense riparian habitat is the primary threat to the flycatcher, as well as human disturbance, which may result in nest abandonment at nesting sites (USFWS 2011). Critical habitat has been designated for this species but does not occur within or within the vicinity of the survey area.

This species has not been previously documented within a five-mile radius of the survey area (CNDDDB 2012) and there are no documented occurrences of this species breeding within San Luis Obispo County (SWCA 2010). Although riparian vegetation is prevalent throughout the survey area, human-related disturbance in this area is high. Based on the threat of disturbance and the lack of previous documentation of this species breeding in the County, it is unlikely for this species to occur within the survey area.

Western Snowy Plover (*Charadrius alexandrinus nivosus*), Federal Status – Threatened
Western snowy plover is a year-round resident in coastal areas throughout California (Warriner, et al., 1986). Inland snowy plovers may migrate to locations along the coastline but are distinct from the western plover population. Historically, western snowy plover occurs on sandy, gravelly beaches along the coast. Nesting locations occur above the high tide lines in flat, open areas with sandy or saline substrates where vegetation and driftwood are sparse or absent (Widrig 1980, Stenzel *et. al.* 1981), within 100 m of water (Page and Stenzel 1981). The breeding period occurs from early March through late September, with a peak from mid-April to mid-June, and the wintering period is from late October through mid-February. This species forages on small invertebrates in the wet and dry beach sand within low foredune habitat. The historic range spans from coastal Washington to Baja California. However, habitat disturbance as a result of development and recreational activities has attributed to population declines and loss of suitable breeding locations. A 669-acre critical habitat area has been designated for this species, which spans along the wind-blown sand dunes between 0.4 mile north of Mussel Point and Arroyo Grande Creek (Federal Register 2012). The southwest end of the survey area overlaps with the critical habitat area for this species.

A search of the CNDDDB revealed documented occurrences of western snowy plover in the coastal dune habitat bordering the western limits of the survey area and extending southward (CNDDDB 2012). No western snowy plover were observed in the survey area during field surveys however, 2012 surveys performed by California State Parks located nesting sites approximately two miles south of Meadow Creek Lagoon along coastal foredune habitat (pers. comm., R. Glick, 2012). Surveys in 2010 found snowy plover nesting north of Grand Avenue (pers. comm.,



R. Glick, 2012). Further communication with Mr. Glick suggested western snowy plover may winter in foredune habitat directly adjacent to the survey area. Due to recent documented occurrences, there is a high potential for western snowy plover occurrence within the western, coastal foredune portion of the survey area bordering the Arroyo Grande Creek Estuary.

Western Yellow-billed Cuckoo (*Coccyzus americanus*), Federal Status – Candidate, State Status – Endangered

Habitat requirements for the western yellow-billed cuckoo include dense riparian woodland with well-developed understories for breeding. Roosting and nesting occurs in willows and other deciduous trees and shrubs. During the breeding months, this species is confined to humid microclimates such as river bottoms or along slow-moving creeks and streams (CDFG 2000). Nest sites are located in dense foliage of deciduous trees or shrubs, between 2 and 2.5 feet off the ground. This species is a rare summer resident in scattered locations in California. Formerly, Western yellow-billed cuckoo was much more common and widespread in lowland valleys of California but habitat loss has caused declines in populations. Current population estimates predict that there are only 50 breeding pairs left in California (Zeiner et. al 1990). Prey items for this species include grasshoppers, cicadas, caterpillars, and other large insects, as well as frogs, lizards, and fruits upon occasion (Bent 1940, Preble 1957).

No records of western yellow-billed cuckoo have been recorded in the CNDDDB within a five-mile radius of the survey area (CNDDDB 2012) and there are no known breeding locations within San Luis Obispo County for this species (SWCA 2010). This species was not observed during field surveys. Suitable nesting and foraging habitat exists within the survey area, but there is a low potential for this species to occur in the survey area due to its extreme rarity and lack of any recent documented occurrences in San Luis Obispo County.

White-tailed Kite (*Elanus leucurus*), State Status – Fully Protected

The white-tailed kite is a resident to coastal valleys and lowlands of California where it inhabits herbaceous and open stands of various habitats near agricultural operations. Typical prey items include voles and other small diurnal mammals, but it will occasionally feed on birds, insects, reptiles, and amphibians (Zeiner et. al. 1990). Nesting occurs within thick, upper canopies of oaks, willows, or other tree stands in close proximity to open foraging area.

White-tailed kite has not been previously reported within five miles of the survey area (CNDDDB 2012). This species was observed foraging over dune habitat along the western boundary of the survey area during field surveys, but suitable nesting habitat does not occur within the survey area. Thus, there is low potential for this species to be impacted during any future flood control maintenance activities within Meadow Creek Lagoon.

Yellow Warbler (*Dendroica petechia brewsteri*), State Status – Species of Special Concern during nesting periods

This migratory species is widely distributed throughout North America. In California, populations are predominately in the northern and coastal portions of the State. Yellow warblers generally occupy riparian vegetation in close proximity to water and commonly nest in riparian



habitats in San Luis Obispo and Santa Barbara counties (Lawther et al. 1999). Nesting season is typically from mid-April to late August.

No record of this species has been recorded within five miles of the survey area (CNDDDB 2012) and it was not observed during survey efforts. However, there is a high potential for this species to occur in the survey area due to the presence of suitable nesting and foraging habitat.

Migratory Nesting Birds

The federal Migratory Bird Treaty Act (MBTA) and the Convention for the Protection of Migratory Birds and Animals, agreements between the United States and Canada and the United States and Mexico, respectively, afford protection for migratory birds by making it unlawful to collect, sell, pursue, hunt, or kill native migratory birds, their eggs, nests or any parts thereof. Certain game birds have been omitted from this protection. The laws were adopted to eliminate the commercial market for migratory bird feathers and parts, especially those of larger raptors and other birds of prey.

Riparian corridors offer protection from predation for smaller migratory birds, ample foraging grounds, and provide temperature regulation. During avian surveys and other field efforts, numerous migratory birds were observed within the survey area. Although no active nests were observed, there is a high potential for migratory birds to nest in the thick riparian corridors surrounding Meadow Creek, Arroyo Grande Creek, and the Meadow Creek Lagoon.

Sensitive Mammal Species

American Badger (*Taxidea taxus*), State Status – Species of Special Concern

American badger is a non-migratory species that occurs throughout most of California. It occurs in open and arid habitats including grasslands, meadows, savannahs, open-canopy desert scrub, and open chaparrals. It requires friable soils in areas with low to moderate slopes. American badger is known to occur in nearly every region of California except for the North Coast region which includes Del Norte, Humboldt, Mendocino, Sonoma, and Marin counties. This species occurs at elevations that range from approximately 0 to nearly 12,000 feet (3,600 m) above msl. American badger typically breeds from May through September, but it may not breed every year.

Suitable habitat and typical climate conditions where American badger is found are not present within the survey area. Although this species has been previously documented within a five-mile radius of the survey area (CNDDDB 2012), it was not observed within the survey area nor were any potentially active or remnant burrows for this species observed. Potential for American badger occurrence within the survey area is considered low.

Sensitive Bat Species

Bats in California occur at elevations ranging from below sea level to almost 11,000 feet. Bats, like other mammals, have hair, nurse their young, and produce body heat internally. Unlike all other mammals, bats fly, using wings formed by a flexible, leathery skin membrane stretched between highly modified elongated fingers and forearms, leg bones, and the tail. But unlike most small mammals, bats are long-lived (up to 30 years or more for some species), and most species



produce only one young per year (CDFG 2010). Despite myths about bats being blind, most bats locate food and orient themselves using well-developed eyes and a strong sense of smell. All of California's bat species are insect eaters except the Mexican long-tongued bat (*Choeronycteris mexicana*), which occurs in the extreme southwestern part of California.

Only 4 of California's 24 bat species regularly tolerate human presence and are commonly found in buildings: the Mexican free-tailed bat (*Tadarida brasiliensis*), the Yuma myotis (*Myotis yumanensis*, CDFG special animal), the little brown bat (*Myotis lucifugus*), and the big brown bat (*Eptesicus fuscus*). Six additional species are occasionally found in buildings: the western mastiff bat (*Eumops perotis californicus*, California species of special concern (CSC)), the pallid bat (*Antrozous pallidus*, CSC), Townsend's big eared bat (*Corynorhinus townsendii*, CSC), the long-eared myotis (*Myotis evotis*, CDFG special animal), the fringed myotis (*Myotis thysanodes*, CDFG special animal), and the long-legged myotis (*Myotis volans*, CDFG special animal).

Suitable night roosting habitat exists for these ten disturbance-tolerant species along the underside of each of the three bridges spanning Meadow Creek Lagoon. An unidentified bat species was observed from watercraft roosting under the traffic bridge along Pier Avenue during nighttime amphibian surveys. Suitable day roosts or maternity roost sites (i.e., large hollow snags or suitable cavities within cottonwood (*Populus fremontii*) or similarly structured trees) were not observed within the survey area. Although no record of sensitive bat species has been documented within a five-mile radius of the survey area (CNDDDB 2012), roosting bats were detected on site during surveys and have the potential to occur within the survey area.

Sensitive Invertebrate Species

Monarch Butterfly (*Danaus plexippus*), State Status – Special Animal

This species is not formally listed as an endangered or threatened species; however, over-wintering monarch butterflies are considered to be a "special animal" by CDFG. Monarch butterfly wintering sites are classified as rare and of restricted range within California. Monarch butterfly will begin migrating to over-wintering sites in early November and December where there are warmer climates in southern California and Mexico. They will fly north for breeding as the milkweed plants come into bloom in the spring. Wintering aggregations of monarch butterflies in California can primarily be found on Monterey pines (*Pinus radiata*) and in eucalyptus (*Eucalyptus* sp.) groves (Sakai and Calvert, 1991). Wintering habitat components frequently include sources of moisture such as streams, ponds or abundant morning dew. Other habitat preferences include little direct sunlight, minimal wind, and moist ambient conditions. There are ten documented occurrences of wintering monarch butterflies within five miles of the survey area, the closest one being less than 0.25 mile north, adjacent to the Meadow Creek corridor (CNDDDB, 2012). However, there are no large groves of pine and/or eucalyptus within the survey area, therefore, the likelihood of monarch butterfly wintering within survey area is considered low.



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APPENDIX A: MAPS



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Morro Bay

San Luis Obispo

San Luis Obispo County

Santa Barbara County



Project Location



County Line

Oceano Lagoon Biological Assessment
Figure 1: Project Location



01 Oct 2012





Memorial Park

Pier Avenue

Security Court

Alpha Place

Fountain Avenue

Arroyo Grande Creek

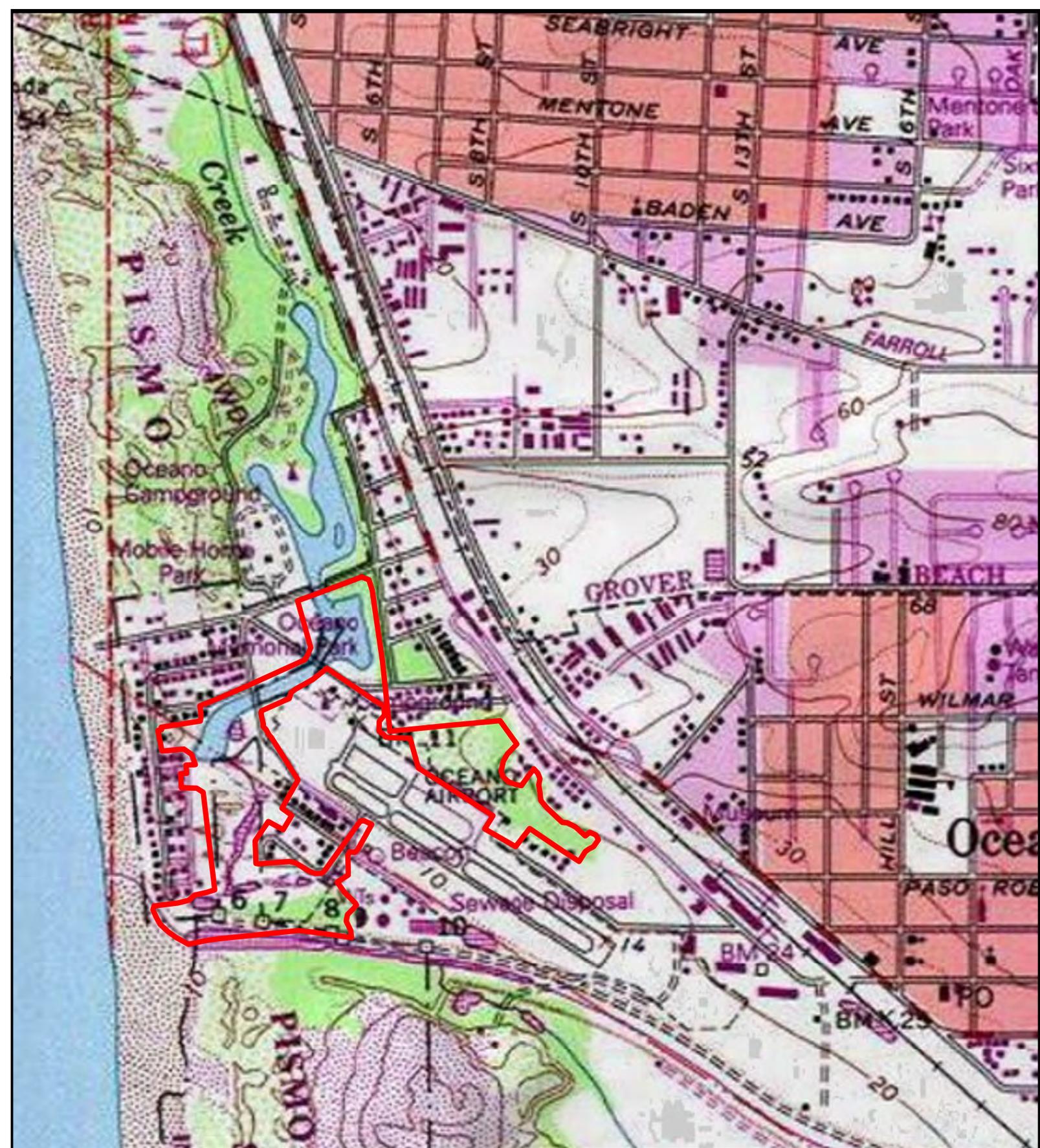
Oceanoo Lagoon Biological Assessment
Figure 2: Survey Area

 Survey Area

0 250 500 Feet

N 

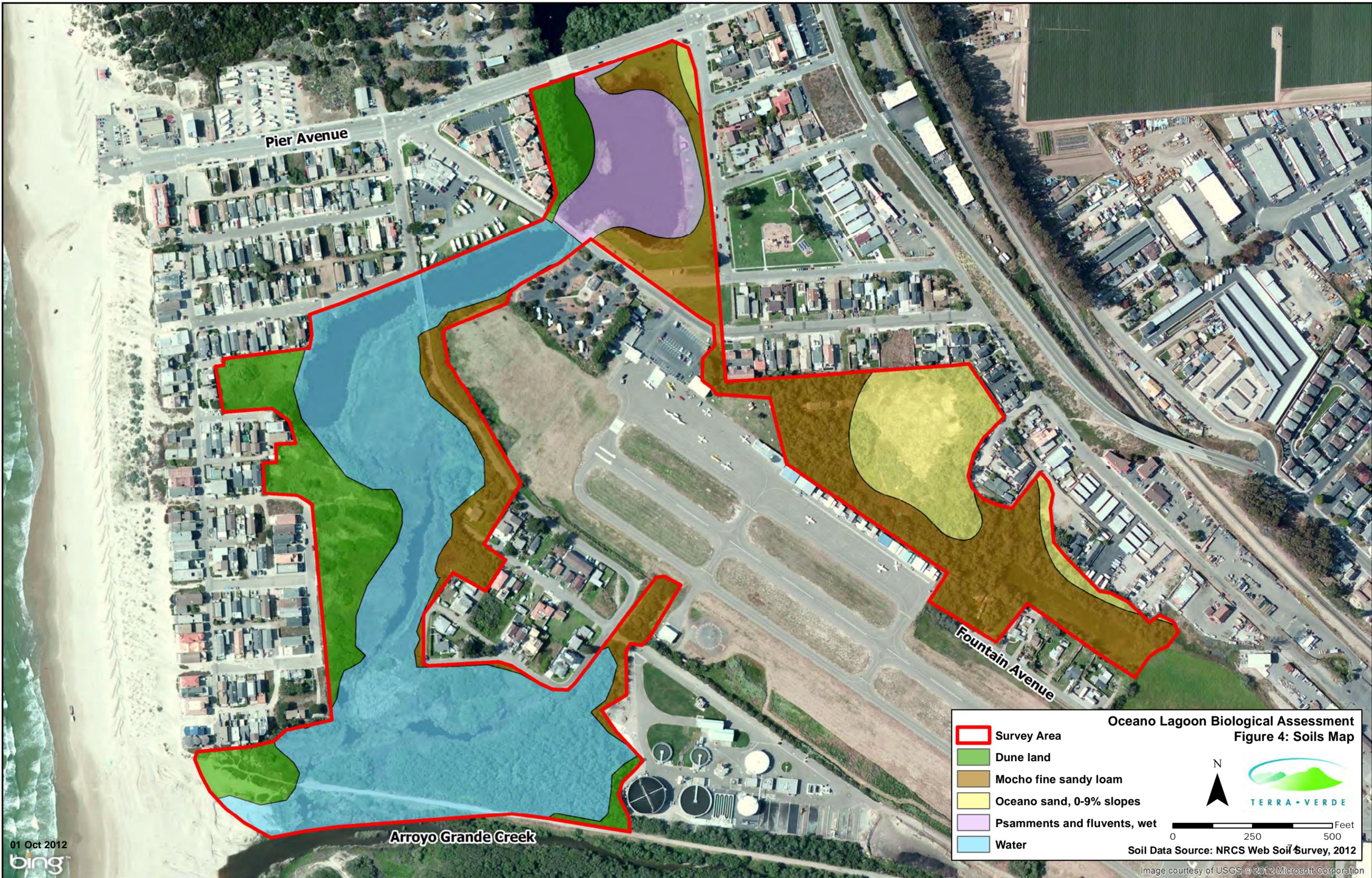
 TERRA VERDE

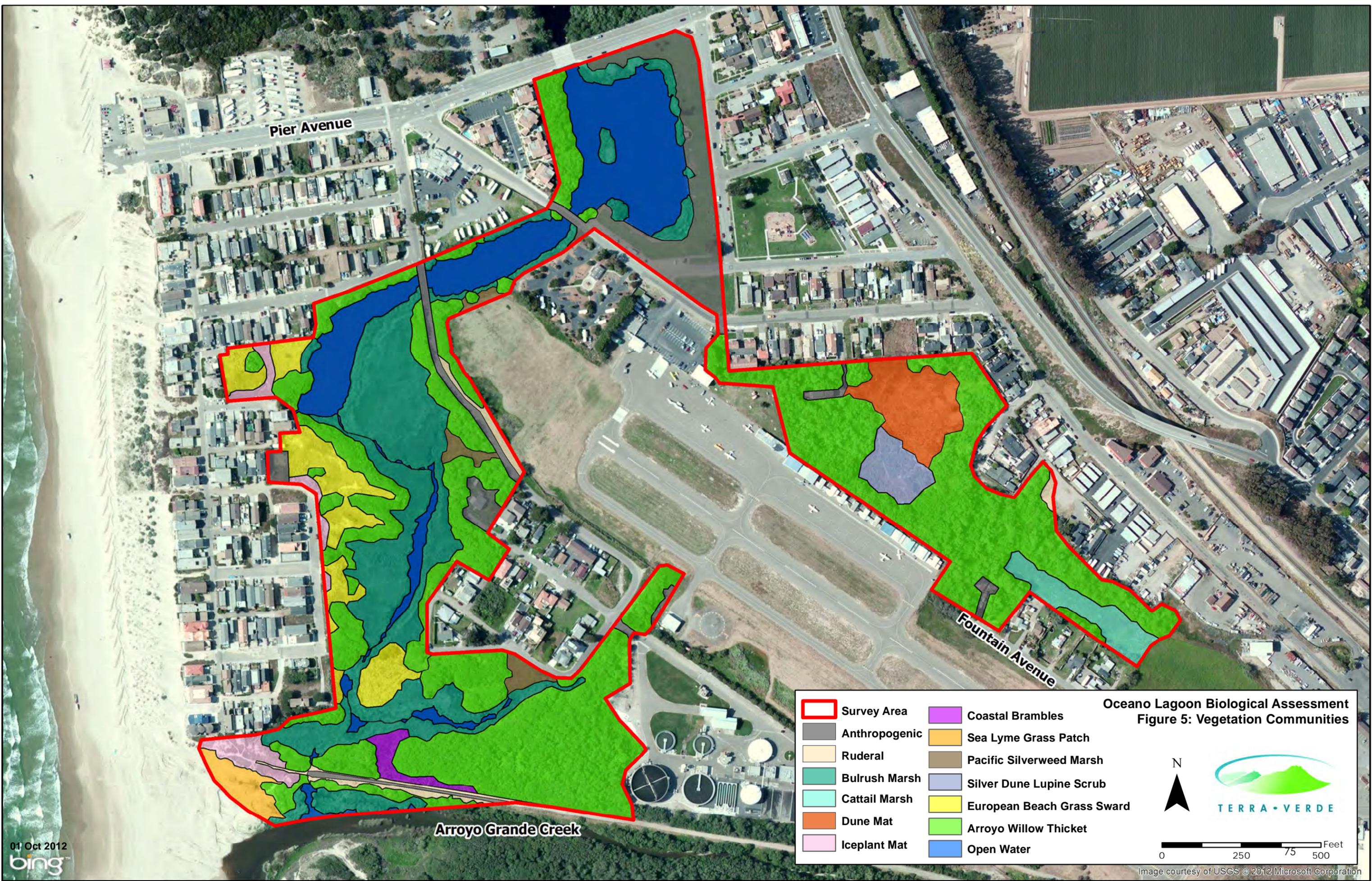


 Survey Area

Oceano Lagoon Biological Assessment
Figure 3: Topographic Map







Pier Avenue

Fountain Avenue

Arroyo Grande Creek

- | | |
|---|--|
|  Survey Area |  Coastal Brambles |
|  Anthropogenic |  Sea Lyme Grass Patch |
|  Ruderal |  Pacific Silverweed Marsh |
|  Bulrush Marsh |  Silver Dune Lupine Scrub |
|  Cattail Marsh |  European Beach Grass Sward |
|  Dune Mat |  Arroyo Willow Thicket |
|  Iceplant Mat |  Open Water |

Oceano Lagoon Biological Assessment
Figure 5: Vegetation Communities





Memorial Park

Pier Avenue

Arroyo Grande Creek

Pulls 10-13

Pulls 1-8

Pull 9

Pulls 14-17

Pulls 18-20

Pulls 21-22

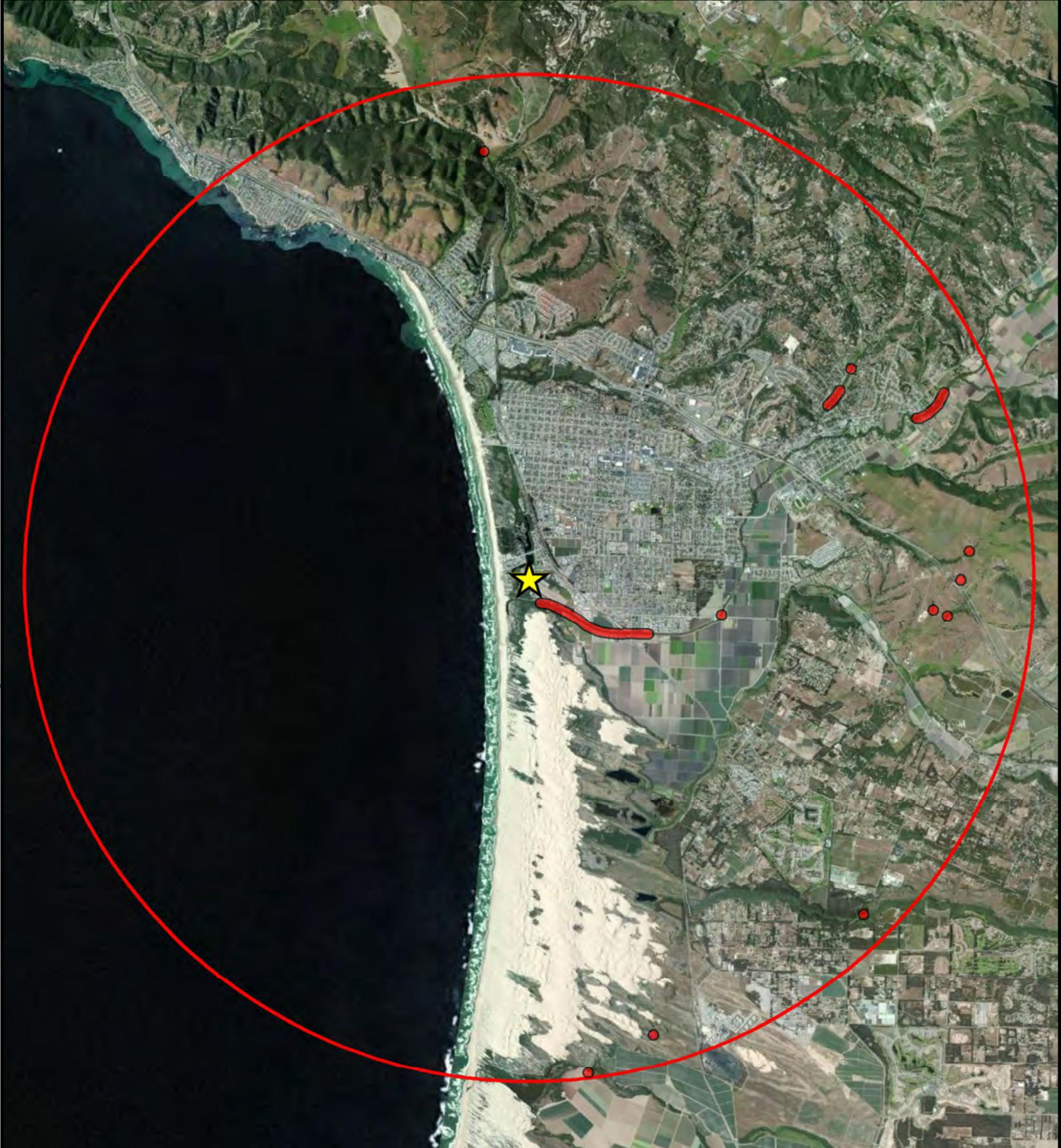
Pull 23

Pulls 24-25

Pull 26

This pond was inaccessible for seine fishing and too turbulent for snorkel surveys; no surveys occurred in this pond.

<ul style="list-style-type: none"> Survey Area Seine Pull Locations Hand-Netting Locations Unsurveyed Pond ➔ Snorkel Survey Route ● Water Quality Sample Locations ● Tidewater Goby Observed 	<p>Fisheries Survey Data</p> <p>June 15, 2012 (Day 1): Seine Pulls 1 - 13</p> <p>June 18, 2012 (Day 2): Seine Pulls 14 - 23</p> <p>June 19, 2012 (Day 3): Seine Pulls 24 - 26 Snorkel Surveys Hand Netting *Tidewater Goby Observed</p>	<p>Oceano Lagoon Biological Assessment Figure 6: Fisheries Assessment & Water Quality Analysis</p> <div style="text-align: center;">  <p>N</p> </div> <div style="text-align: center;">  <p>TERRA • VERDE</p> </div> <div style="text-align: center;">  <p>0 250 76 500 Feet</p> </div>
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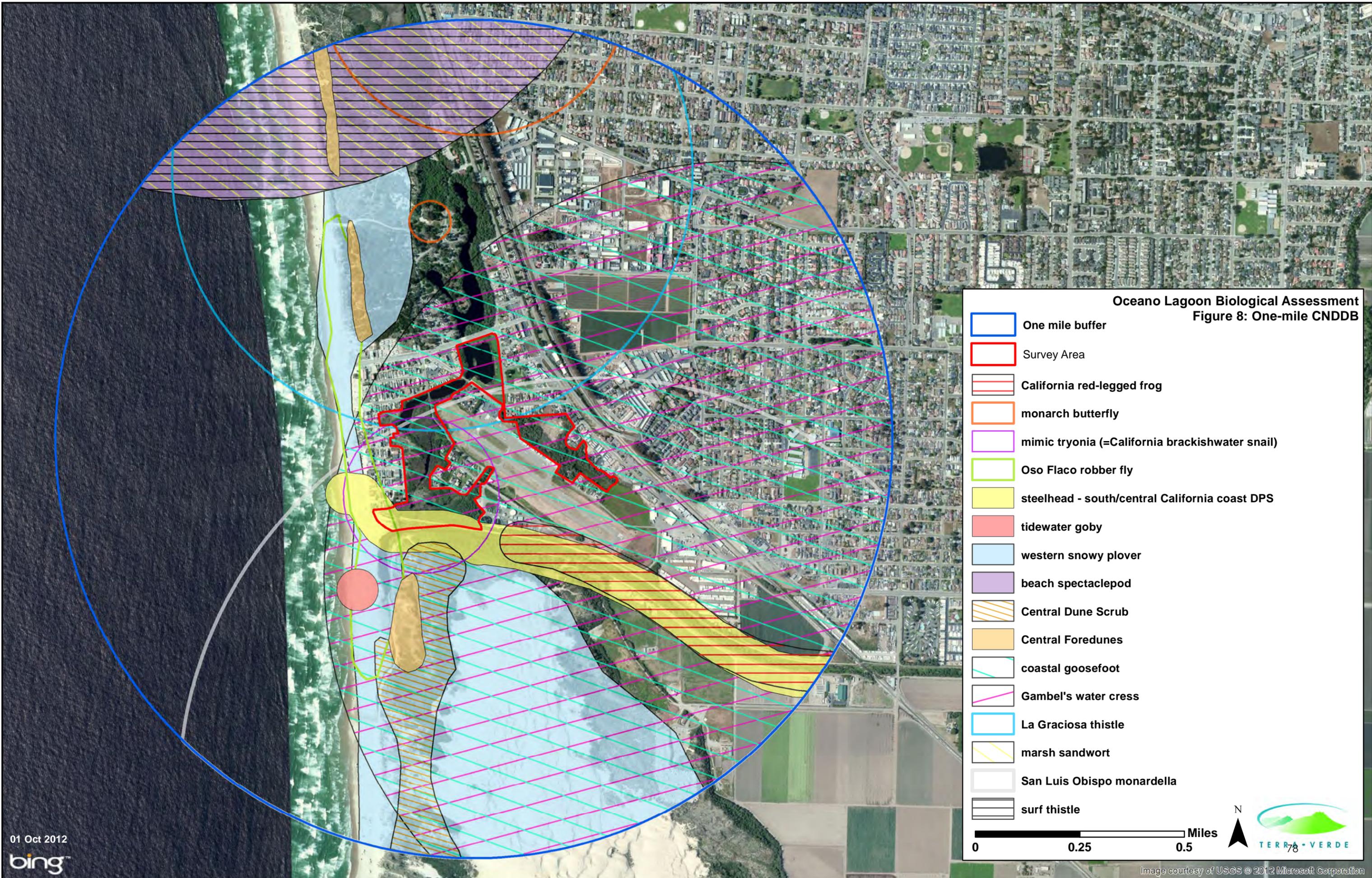
Oceano Lagoon Biological Assessment
Figure 7: Five-mile CNDDDB - CRLF

 5-mile Buffer

 California red-legged frog (CRLF)

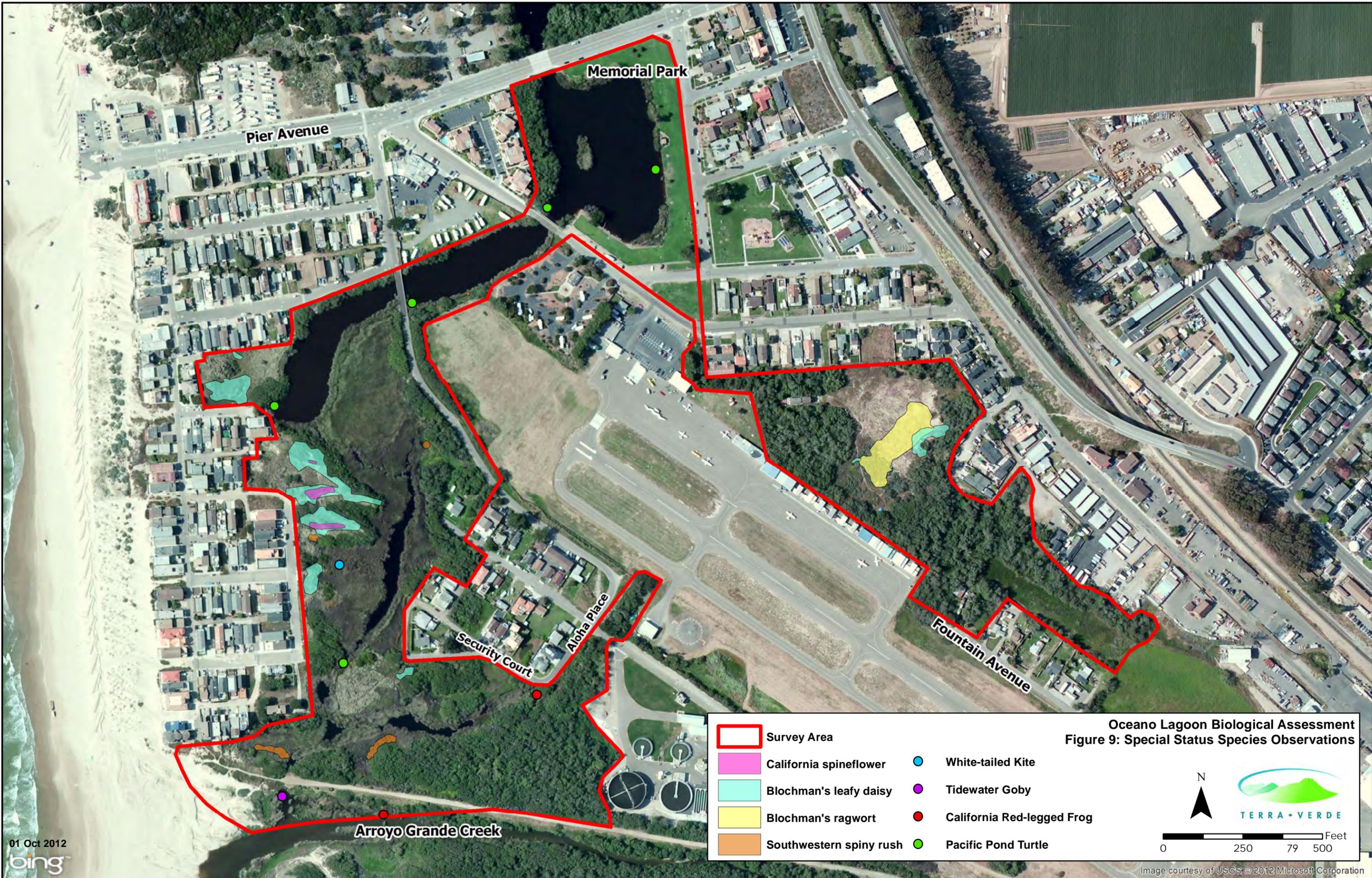
0 0.5 1 2 3 4 5 Miles

N 



Oceano Lagoon Biological Assessment
Figure 8: One-mile CNDDB

- One mile buffer
- Survey Area
- California red-legged frog
- monarch butterfly
- mimic tryonia (=California brackishwater snail)
- Oso Flaco robber fly
- steelhead - south/central California coast DPS
- tidewater goby
- western snowy plover
- beach spectaclepod
- Central Dune Scrub
- Central Foredunes
- coastal goosefoot
- Gambel's water cress
- La Graciosa thistle
- marsh sandwort
- San Luis Obispo monardella
- surf thistle



Oceano Lagoon Biological Assessment
 Figure 9: Special Status Species Observations

- | | | | |
|---|-------------------------|---|----------------------------|
|  | Survey Area |  | White-tailed Kite |
|  | California spineflower |  | Tidewater Goby |
|  | Blochman's leafy daisy |  | California Red-legged Frog |
|  | Blochman's ragwort |  | Pacific Pond Turtle |
|  | Southwestern spiny rush | | |

N




0 250 79 500 Feet



APPENDIX B: OBSERVED PLANT AND WILDLIFE SPECIES LISTS



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Meadow Creek Lagoon Plant Species Observed On-Site

May 9, 25, and 29, and July 06, and 27, 2012

Scientific Name	Common Name
AIZOACEAE	FIG-MARIGOLD OR ICEPLANT FAMILY
<i>Aptenia cordifolia</i> *	Baby sun-rose
<i>Carpobrotus chilensis</i> *	Sea fig
<i>Carpobrotus edulis</i> *	Freeway ice plant)
<i>Conicosia pugioniformis</i> *	Narrow-leaved ice plant
<i>Lampranthus sp.</i> *	Miniature ice plant
<i>Tetragonia tetragonioides</i>	New Zealand spinach
ANACARDIACEAE	SUMAC OR CASHEW FAMILY
<i>Toxicodendron diversilobum</i>	Poison oak
APIACEAE	CARROT FAMILY
<i>Apium graveolens</i> *	Celery
<i>Conium maculatum</i> *	Poison hemlock
<i>Foeniculum vulgare</i>	Fennel
<i>Oenanthe sarmentosa</i>	Water parsley
APOCYNACEAE	DOGBANE FAMILY
<i>Vinca major</i> *	Greater periwinkle
ARACEAE	ARUM FAMILY
<i>Lemna sp.</i>	Duckweed
<i>Zantedeschia aethiopica</i> *	Calla lily
ARALIACEAE	GINSENG FAMILY
<i>Hedera helix</i> *	English ivy
<i>Hydrocotyle verticillata</i>	Whorled marsh pennywort
ASPARAGACEAE	ASPARAGUS FAMILY
<i>Dracaena sp.</i> **	Dragon tree
ASTERACEAE	SUNFLOWER FAMILY
<i>Achillea millefolium</i>	Yarrow
<i>Ambrosia chamissonis</i>	Beach-bur
<i>Ambrosia psilostachya</i>	Western ragweed
<i>Artemisia douglasiana</i>	Mugwort
<i>Baccharis glutinosa (B. douglasii)</i>	Marsh baccharis
<i>Baccharis pilularis</i>	Coyote brush
<i>Carduus pycnocephalus</i> *	Italian thistle
<i>Centaurea melitensis</i>	Tocalote
<i>Cirsium vulgare</i> *	Bull thistle

Scientific Name	Common Name
<i>Corethrogyne filaginifolia</i> (<i>Lessingia f.</i> var. <i>filaginifolia</i>)	Cudweed aster
<i>Delairea odorata</i> * (<i>Senecio milkanoides</i>)	German Ivy
<i>Dimorphotheca sinuata</i> *	African daisy
<i>Ericameria ericoides</i>	Mock heather
<i>Erigeron blochmaniae</i> +	Blochman's leafy daisy
<i>Erigeron bonariensis</i> * (<i>Conyza b.</i>)	Flax-leaved horseweed
<i>Helminthotheca echioides</i> * (<i>Picris e.</i>)	Bristly ox-tongue
<i>Heterotheca grandiflora</i>	Telegraph weed
<i>Hypochaeris glabra</i> *	Cat's-ear
<i>Isocoma menziesii</i>	Menzies' goldenbush
<i>Jaumea carnosa</i>	Fleshy jaumea
<i>Lactuca serriola</i> *	Prickly wild lettuce
<i>Malacothrix clevelandii</i>	Cleveland's dandelion
<i>Matricaria discoidea</i> * (<i>Chamomilla suaveolens</i>)	Pineapple weed
<i>Psuedognaphalium californicum</i> (<i>Gnaphalium c.</i>)	Green everlasting
<i>Senecio blochmaniae</i> +	Blochman's ragwort
<i>Senecio vulgaris</i>	Common groundsel
<i>Sonchus asper</i>	Spiny sowthistle
<i>Sonchus oleraceus</i> *	Prickly sow thistle
<i>Tragopogon porrifolius</i> *	Salsify, Oyster plant
BORAGINACEAE	BORAGE FAMILY
<i>Cryptantha leiocarpa</i>	Coast cryptantha
<i>Heliotropium curassavicum</i>	Salt heliotrope
<i>Phacelia distans</i>	Common phacelia
BRASSICACEAE	MUSTARD FAMILY
<i>Brassica nigra</i> *	Black mustard
<i>Cakile maritima</i>	Sea rocket
<i>Hirschfeldia incana</i>	Wild mustard
<i>Lobularia maritima</i> *	Sweet alyssum
<i>Raphanus sativus</i>	Radish
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY
<i>Lonicera involucrata</i>	Twinberry
<i>Lonicera japonica</i> *	Japanese honeysuckle
CARYOPHYLLACEAE	PINK FAMILY
<i>Stellaria media</i> *	Common chickweed
CHENOPODIACEAE	GOOSEFOOT FAMILY
<i>Chenopodium californicum</i>	Goosefoot
<i>Salicornia pacifica</i> (<i>S. virginica</i>)	Pickleweed

Scientific Name	Common Name
CONVOLVULAECEAE	MORNING-GLORY FAMILY
<i>Convolvulus arvensis</i> *	Bindweed
<i>Ipomoea cairica</i> *	Morning glory
CUPRESSACEAE	CYPRESS FAMILY
<i>Cupressus macrocarpa</i> **	Monterey cypress
CYPERACEAE	SEDGE FAMILY
<i>Carex pansa</i>	Sanddune sedge
<i>Cyperus eragrostis</i>	Tall flat sedge
<i>Cyperus involucratus</i>	Umbrella sedge
<i>Isolepis cernua (Scirpus cernuus)</i>	Low bulrush
<i>Schoenoplectus americanus (Scirpus a.)</i>	Olney's three-square bulrush
<i>Schoenoplectus californicus (Scirpus c.)</i>	Southern bulrush
<i>Scirpus microcarpus</i>	Panicled bulrush
EQUISETACEAE	HORSETAIL FAMILY
<i>Equisetum arvense</i>	Common horsetail
<i>Equisetum laevigatum</i>	Smooth horsetail
<i>Equisetum telmateia</i> subsp. <i>braunii</i>	Giant horsetail
EUPHORBACEAE	SPURGE FAMILY
<i>Croton californicus</i>	California croton
FABACEAE	LEGUME FAMILY
<i>Acacia longifolia</i> **	Sydney golden wattle
<i>Hoita orbicularis</i>	Round-leaved leather root
<i>Lotus corniculatus</i> *	Bird's-foot trefoil
<i>Lupinus arboreus</i>	Yellow bush lupine
<i>Lupinus chamissonis</i>	Silver dune lupine
<i>Lupinus nanus</i>	Sky lupine
<i>Medicago polymorpha</i> *	Bur clover
<i>Melilotus indicus</i> *	Sourclover
<i>Trifolium hirtum</i> *	Rose clover
<i>Vicia sativa</i> var. <i>sativa</i>	Spring vetch
<i>Vicia villosa</i>	Hairy vetch
FAGACEAE	OAK FAMILY
<i>Quercus agrifolia</i>	Coast live oak
<i>Quercus lobata</i>	Valley oak
FRANKENIACEAE	FRANKENIA FAMILY
<i>Frankenia salina</i>	Alkali heath
GERANIACEAE	GERANIUM FAMILY
<i>Geranium dissectum</i> *	Cut-leaf geranium
IRIDACEAE	IRIS FAMILY
<i>Chasmanthe floribunda</i> **	African cornflag
<i>Iris pseudacorus</i> *	Iris

Scientific Name	Common Name
JUNCACEAE	RUSH FAMILY
<i>Juncus acutus</i> subsp. <i>leopoldii</i> +	Spiny rush
<i>Juncus breweri</i>	Salt/Brewer's rush
<i>Juncus bufonius</i>	Toad rush
<i>Juncus phaeocephalus</i>	Brown-head rush
LAMIACEAE	MINT FAMILY
<i>Stachys ajugoides</i>	Hedge nettle
MALVACEAE	MALLOW FAMILY
<i>Malva arborea</i> * (<i>Lavatera a.</i>)	Tree mallow
<i>Malva parviflora</i> *	Cheese weed
MONTIACEAE	MINER'S LETTUCE FAMILY
<i>Claytonia parviflora</i> subsp. <i>parviflora</i>	Streambank spring beauty
MYRICACEAE	WAX MYRTLE FAMILY
<i>Morella californica</i> (<i>Myrica c.</i>)	Wax myrtle
MYRTACEAE	MYRTLE FAMILY
<i>Eucalyptus globulus</i> *	Blue gum
NYCTAGINACEAE	FOUR O'CLOCK FAMILY
<i>Abronia umbellata</i>	Common sand-verbena
ONAGRACEAE	EVENING PRIMROSE FAMILY
<i>Camissoniopsis cheiranthifolia</i> (<i>Camissonia c.</i>)	Mustard primrose
<i>Camissoniopsis micrantha</i> (<i>Camissonia m.</i>)	Miniature suncup
<i>Epilobium ciliatum</i>	Fringed willowherb
<i>Oenothera elata</i> ssp. <i>hookeri</i>	Hooker's evening primrose
PAPAVERACEAE	POPPY FAMILY
<i>Eschscholzia californica</i>	California poppy
PINACEAE	PINE FAMILY
<i>Pinus attenuata</i> **	Knobcone pine
<i>Pinus radiata</i> **	Monterey pine
PLANTAGINACEAE	PLANTAIN FAMILY
<i>Plantago coronopus</i> *	Buckhorn plantain
<i>Plantago lanceolata</i> *	Narrowleaf or English plantain
<i>Plantago major</i> *	Common plantain
POACEAE	GRASS FAMILY
<i>Agrostis exarata</i>	Spike bentgrass
<i>Ammophila arenaria</i> *	European beachgrass
<i>Arundo donax</i> *	Giant reed
<i>Avena barbata</i> *	Slender wild oat
<i>Bromus arenarius</i>	Australian brome
<i>Bromus catharticus</i>	Rescue grass
<i>Bromus diandrus</i> *	Ripgut grass
<i>Cortaderia selloana</i>	Pampas grass

Scientific Name	Common Name
<i>Cynodon dactylon</i>	Bermuda grass
<i>Dactylis glomerata</i>	Orchard grass
<i>Digitaria sanguinalis</i>	Crab grass
<i>Distichlis spicata</i>	Salt grass
<i>Ehrharta calycina</i> *	Veldt grass
<i>Elymus mollis</i> subsp. <i>mollis</i>	American dune grass
<i>Elymus triticoides</i> (<i>Leymus t.</i>)	Creeping wild-rye
<i>Festuca myuros</i> (<i>Vulpia m.</i>)	Rattail fescue
<i>Festuca perennis</i> * (<i>Lolium multiflorum</i>)	Italian ryegrass
<i>Holcus lanatus</i>	Common velvet grass
<i>Hordeum marinum</i>	Seaside barley
<i>Hordeum murinum</i> subsp. <i>leporinum</i> *	Hare barley
<i>Pennisetum clandestinum</i>	Kikuyu grass
<i>Poa annua</i>	Annual bluegrass
<i>Polypogon monspeliensis</i> *	Rabbits-foot grass
<i>Schismus arabicus</i>	Mediterranean grass
<i>Stipa miliacea</i> var. <i>miliacea</i> (<i>Piptatherum miliaceum</i>)	Smilo grass
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Mucrona californica</i> +	California spineflower
<i>Rumex conglomeratus</i>	Clustered dock
<i>Rumex crispus</i> *	Curly dock
<i>Rumex salicifolius</i>	Willow dock
PRIMULACEAE	PRIMROSE FAMILY
<i>Anagallis arvensis</i> *	Scarlet pimpernel
RANUNCULACEAE	BUTTERCUP FAMILY
<i>Clematis ligusticifolia</i>	Virgin's bower
ROSACEAE	ROSE FAMILY
<i>Potentilla anserina</i> subsp. <i>pacifica</i>	Pacific silverweed
<i>Rubus ursinus</i>	California blackberry
RUBIACEAE	MADDER FAMILY
<i>Galium aparine</i>	Goose grass
SALICACEAE	WILLOW FAMILY
<i>Salix lasiolepis</i>	Arroyo willow
SCROPHULARIACEAE	FIGWORT FAMILY
<i>Myoporum laetum</i> *	Myoporum
<i>Veronica anagallis-aquatica</i> *	Water speedwell
SOLANACEAE	NIGHTSHADE FAMILY
<i>Solanum douglasii</i>	Douglas' nightshade
TYPHACEAE	CATTAIL FAMILY
<i>Sparganium eurycarpum</i>	Broadfruit bur-reed



Scientific Name	Common Name
<i>Typha latifolia</i>	Broad-leaved cattail
URTICACEAE	NETTLE FAMILY
<i>Urtica dioica</i>	Stinging nettle

- * Indicates non-native species.
- + Indicates special-status species.



Meadow Creek Lagoon Wildlife Species Observed and Potentially Occurring On-Site

May 9, 25, 29, and 30, June 15, 18, and 19, July 6 and 27, August 1 and 16, and
September 21, 2012

Common Name	Scientific Name	Observed On Site	Listing Status
Fish			
Bluegill	<i>Lepomis macrochirus</i>	X	-
Blue catfish	<i>Ictalurus furcatus</i>	-	-
Bullhead catfish	<i>Ictalurus natalis</i>	-	-
Channel catfish	<i>Ictalurus punctatus</i>	-	-
Coastal prickly sculpin	<i>Cottus asper</i>	X	-
Pacific staghorn sculpin	<i>Leptocottus armataus</i>	X	-
Common carp	<i>Cyprinus carpio</i>	-	-
Large-mouth bass	<i>Micropterus salmoides</i>	X	-
Mosquito fish	<i>Gambusia affinis</i>	X	-
Small-mouth bass	<i>Micropterus dolomieu</i>	-	-
South-central California coast steelhead	<i>Oncorhynchus mykiss irideus</i>	-	FT, CSC
Speckled dace	<i>Rhinichthys osculus</i>	-	-
Spotted bass	<i>Micropterus punctulatus</i>	-	-
Striped bass	<i>Morone saxatilis</i>	-	-
Threespine stickleback	<i>Gasterosteus aculeatus</i>	X	-
Tidewater goby	<i>Eucyclogobius newberryi</i>	X	FE, SE
White bass	<i>Morone chrysops</i>	-	-
Golden Shiner	<i>Notemigonus crysoleucas</i>	X	-
Sacramento sucker	<i>Catostomus occidentalis</i>	X	-
Amphibians			
Black-bellied slender salamander	<i>Batrachoseps attenuatus</i>	-	-
Bullfrog	<i>Lithobates catesbeiana</i>	X	-
California red-legged frog	<i>Rana draytonii</i>	X	FT, CSC
California tiger salamander	<i>Ambystoma californiense</i>	-	FT, CSC
California toad	<i>Anaxyrus boreas halophilus</i>	-	-
Coast Range newt	<i>Taricha torosa</i> subsp. <i>torosa</i>	-	CSC
Sierran treefrog	<i>Pseudacris sierra</i>	X	-
Western spadefoot	<i>Spea hammondi</i>	-	CSC
Western toad	<i>Anaxyrus boreas</i>	-	-
Reptiles			
Aquatic garter snake	<i>Thamnophis aquaticus</i>	-	-
Black legless lizard	<i>Anniella pulchra nigra</i>	-	-
California kingsnake	<i>Lampropeltis getula californiae</i>	-	-

Common Name	Scientific Name	Observed On Site	Listing Status
Coast garter snake	<i>Thamnophis elegans terrestris</i>	-	-
Striped racer	<i>Masticophis lateralis</i>	X	-
Coast horned lizard	<i>Phrynosoma blainvillii</i>	-	-
Common garter snake	<i>Thamnophis sirtalis</i>	-	-
Eastern snapping turtle	<i>Chelydra serpentina serpentina</i>	-	-
Gopher snake	<i>Pituophis catenifer</i>	-	-
Pacific pond turtle	<i>Actinemys marmorata</i>	X	CSC
Red-eared slider	<i>Trachemys scripta elegans</i>	X	-
Side-blotched lizard	<i>Uta stansburiana elegans</i>	-	-
Silvery legless lizard	<i>Anniella pulchra pulchra</i>	-	CSC
Southern alligator lizard	<i>Elgaria multicarinata</i>	-	-
Striped racer	<i>Coluber constrictor</i>	-	-
Western fence lizard	<i>Sceloporus occidentalis</i>	X	-
Western rattlesnake	<i>Crotalus viridis</i>	-	-
Western skink	<i>Eumeces skiltonianus</i>	-	-
Western whiptail	<i>Cnemidophorus tigris</i>	-	-
Birds			
Allen's hummingbird	<i>Selasphorus sasin</i>	-	M
American coot	<i>Fulica americana</i>	X	M
American crow	<i>Corvus brachyrhynchos</i>	X	M
American goldfinch	<i>Carduelis tristis</i>	X	M
American kestrel	<i>Falco sparverius</i>	-	M
American robin	<i>Turdus migratorius</i>	-	M
American wigeon	<i>Anas americana</i>	-	M
Anna's hummingbird	<i>Calypte anna</i>	X	M
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>	-	M
Band-tailed pigeon	<i>Columbia fasciata</i>	-	M
Barn owl	<i>Tyto alba</i>	-	M
Barn swallow	<i>Hirundo rustica</i>	X	M
Belted kingfisher	<i>Ceryle alcyon</i>	-	M
Bewick's wren	<i>Thryomanes bewickii</i>	-	M
Black-chinned hummingbird	<i>Archilochus alexandri</i>	-	M
Black-crowned night heron	<i>Nycticorax nycticorax</i>	X	M
Black-headed grosbeak	<i>Pheucticus melanocephalus</i>	-	M
Black phoebe	<i>Sayornis nigricans</i>	X	M
Blue-gray gnatcatcher	<i>Poliptila caerulea</i>	-	M
Blue grosbeak	<i>Guiraca caerulea</i>	-	M
Blue-winged teal	<i>Anas crecca</i>	-	M
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	X	M
Brown-headed cowbird	<i>Molothrus ater</i>	-	M
Brown pelican	<i>Pelecanus occidentalis</i>	X	-
Bullock's oriole	<i>Icterus bullockii</i>	-	M
Bushtit	<i>Psaltiriparus minimus</i>	X	M

Common Name	Scientific Name	Observed On Site	Listing Status
Cackling goose	<i>Branta hutchinsii</i>	X	M
California black rail	<i>Laterallus jamaicensis</i>	-	ST, FP, M
California gull	<i>Larus californicus</i>	X	M
California horned lark	<i>Eremophila alpestris</i>	-	M, CSC
California least tern	<i>Sterna antillarum browni</i>	-	M, SE, FT
California quail	<i>Callipepla californica</i>	-	-
California thrasher	<i>Toxostoma redivivum</i>	-	M
California towhee	<i>Pipilo crissalis</i>	X	M
Caspian tern	<i>Hydroprogne caspia</i>	X	M
Cassin's kingbird	<i>Tyrannus vociferans</i>	-	M
Cedar waxwing	<i>Bombycilla cedrorum</i>	-	M
Chestnut-backed chickadee	<i>Poecile rufescens</i>	X	-
Cinnamon teal	<i>Anas cyanoptera</i>	-	M
Cliff swallow	<i>Hirundo pyrrhonota</i>	X	M
Common raven	<i>Corvus corax</i>	-	M
Common snipe	<i>Gallinago gallinago</i>	-	M
Common yellowthroat	<i>Geothlypis trichas</i>	X	M
Cooper's hawk	<i>Accipiter cooperii</i>	-	M, CSC (nesting)
Costa's hummingbird	<i>Calypte costae</i>	-	M, CSC (nesting)
Dark-eyed junco	<i>Junco hyemalis</i>	X	M
Double-crested cormorant	<i>Phalacrocorax auritis</i>	X	M
Elegant tern	<i>Thalasseus elegans</i>	X	M
Eurasian collared-dove	<i>Streptopelia decaocto</i>	X	M
European starling	<i>Sturnus vulgaris</i>	X	-
Golden crowned sparrow	<i>Zonotrichia atricapilla</i>	-	M
Golden eagle	<i>Aquila chrysaetos</i>	-	BE & GEPA
Great blue heron	<i>Ardea herodias</i>	X	M
Great egret	<i>Ardea alba</i>	X	M
Great horned owl	<i>Bubo virginianus</i>	X	M
Great-tailed grackle	<i>Quiscalus mexicanus</i>	X	M
Heermann's gull	<i>Larus heermanni</i>	X	M
Hermit thrush	<i>Catharus guttatus</i>	-	M
Hooded oriole	<i>Icterus cucullatus</i>	X	M
House finch	<i>Carpodacus mexicanus</i>	X	M
House sparrow	<i>Passer domesticus</i>	X	-
House wren	<i>Troglodytes aedon</i>	-	M
Hutton's vireo	<i>Vireo huttoni</i>	-	M
Killdeer	<i>Charadrius vociferus</i>	-	M
Lark sparrow	<i>Chondestes grammacus</i>	-	M
Lazuli bunting	<i>Passerina amoena</i>	-	M
Lesser goldfinch	<i>Carduelis psaltria</i>	X	M
Loggerhead shrike	<i>Lanius ludovicianus</i>	-	M, CSC (nesting)
Mallard	<i>Anas platyrhynchos</i>	X	M
Marsh wren	<i>Cistothorus palustris</i>	X	M
Mourning dove	<i>Zenaida macroura</i>	X	M

Common Name	Scientific Name	Observed On Site	Listing Status
Northern flicker	<i>Colaptes auratus</i>	-	M
Northern harrier	<i>Circus cyaneus</i>	-	M, CSC (nesting)
Northern mockingbird	<i>Mimus polyglottos</i>	X	M
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>	X	M
Northern shoveler	<i>Anas clypeata</i>	-	M
Nuttall's woodpecker	<i>Picoides nuttallii</i>	X	M
Oak titmouse	<i>Baeolophus inornatus</i>	-	M
Orange-crowned warbler	<i>Vermivora celata</i>	-	M
Osprey	<i>Pandion haliaetus</i>	X	M
Pacific-slope flycatcher	<i>Empidonax difficilis</i>	X	M
Pied-billed grebe	<i>Podilymbus podiceps</i>	X	M
Prairie falcon	<i>Falco mexicanus</i>	-	M
Purple finch	<i>Carpodacus purpureus</i>	X	M
Red-shouldered hawk	<i>Buteo lineatus</i>	X	M
Red-tailed hawk	<i>Buteo jamaicensis</i>	X	M
Red-winged blackbird	<i>Agelaius phoeniceus</i>	X	M
Ring-billed gull	<i>Larus delawarensis</i>	X	M
Rock pigeon	<i>Columba livia</i>	X	-
Ruby-crowned kinglet	<i>Regulus calendula</i>	-	M
Ruddy duck	<i>Oxyura jamaicensis</i>	X	M
Rufous-crowned sparrow	<i>Aimophila ruficeps</i>	-	M
Savannah sparrow	<i>Passerculus sandwichensis</i>	-	M
Say's phoebe	<i>Sayornis saya</i>	-	M
Sharp-shinned hawk	<i>Accipiter striatus</i>	-	M, CSC (nesting)
Short-billed dowitcher	<i>Limnodromus griseus</i>	-	M
Snow goose	<i>Chen caerulescens</i>	X	M
Song sparrow	<i>Melospiza melodia</i>	X	M
Spotted towhee	<i>Pipilo maculatus</i>	X	M
Swainson's thrush	<i>Catharus ustulatus</i>	X	M
Tree swallow	<i>Tachycineta bicolor</i>	X	M
Tri-colored blackbird	<i>Agelaius tricolor</i>	-	M, CSC (nesting)
Turkey vulture	<i>Cathartes aura</i>	X	M
Violet-green swallow	<i>Tachycineta thalassina</i>	-	M
Warbling vireo	<i>Vireo gilvus</i>	-	M
Western bluebird	<i>Sialia mexicana</i>	-	M
Western gull	<i>Larus occidentalis</i>	X	M
Western meadowlark	<i>Sturnella neglecta</i>	-	M
Western scrub-jay	<i>Aphelocoma californica</i>	X	M
Western wood-pewee	<i>Contopus sordidulus</i>	-	M
Western snowy plover	<i>Charadrius nivosus</i>	-	M, FT
Western tanager	<i>Piranga ludoviciana</i>	X	M
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	X	M
White-tailed kite	<i>Elanus leucurus</i>	X	M, FP
Wilson's warbler	<i>Cardellina pusilla</i>	X	M
Wood duck	<i>Aix sponsa</i>	-	M

Common Name	Scientific Name	Observed On Site	Listing Status
Wrentit	<i>Chamaea fasciata</i>	X	M
Yellow-rumped warbler	<i>Setophaga coronata</i>	-	M
Mammals			
Audubon's cottontail	<i>Sylvilagus audubonii</i>	X	-
Big brown bat	<i>Eptesicus fuscus</i>	-	-
Black rat	<i>Rattus rattus</i>	-	-
Black-tailed deer	<i>Odocoileus hemionus</i>	-	-
Black-tailed jackrabbit	<i>Lepus californicus</i>	-	-
Bobcat	<i>Lynx rufus</i>	-	-
Botta's pocket gopher	<i>Thomomys bottae</i>	-	-
California ground squirrel	<i>Spermophilus beecheyi</i>	-	-
California myotis	<i>Myotis californicus</i>	-	-
California pocket mouse	<i>Perognathus californicus</i>	-	CSC
California vole	<i>Microtus californicus</i>	-	-
Coyote	<i>Canis latrans</i>	-	-
Cow	<i>Bos taurus</i>	-	-
Deer mouse	<i>Peromyscus maniculatus</i>	-	-
Dusky-footed woodrat	<i>Neotoma fuscipes</i>	-	CSC
Feral cat	<i>Felis catus</i>	-	-
Feral pig	<i>Sus scrofa</i>	-	-
Fringed myotis	<i>Myotis thysanodes</i>	-	SA
Gray fox	<i>Urocyon cinereoargenteus</i>	-	-
House mouse	<i>Mus musculus</i>	-	-
Hoary bat	<i>Lasiurus cinereus</i>	-	-
Little brown bat	<i>Myotis lucifugus</i>	-	-
Long-eared myotis	<i>Myotis evotis</i>	-	SA
Long-legged myotis	<i>Myotis volans</i>	-	SA
Long-tailed weasel	<i>Mustela frenata</i>	-	-
Mexican free-tailed bat	<i>Tadarida brasiliensis</i>	-	-
Muskrat	<i>Ondatra zibethica</i>	-	-
North American beaver	<i>Castor canadensis</i>	X	-
North American river otter	<i>Lontra canadensis</i>	X	-
Pacific kangaroo rat	<i>Dipodomys agilis</i>	-	-
Pallid bat	<i>Antrozous pallidus</i>	-	CSC
Raccoon	<i>Procyon lotor</i>	X	-
Red bat	<i>Lasiurus borealis</i>	-	-
Red fox	<i>Vulpes vulpes</i>	X	-
Ringtail	<i>Bassariscus astutus</i>	-	-
Striped skunk	<i>Mephitis mephitis</i>	-	-
Townsend's big eared bat	<i>Corynorhinus townsendii</i>	-	CSC
Virginia opossum	<i>Didelphis virginiana</i>	X	-
Western harvest mouse	<i>Reithrodontomys megalotis</i>	-	-
Western gray squirrel	<i>Sciurus griseus</i>	-	-
Western mastiff bat	<i>Eumops perotis californicus</i>	-	CSC



Common Name	Scientific Name	Observed On Site	Listing Status
Yuma myotis	<i>Myotis yumanensis</i>	-	SA
Invertebrates			
Crayfish	<i>Pacifastacus</i> spp.	X	-
Mimic tryonia (CA brackishwater snail)	<i>Tryonia imitator</i>	-	SA
Monarch butterfly	<i>Danaus plexippus</i>	X	SA
Morro Bay blue butterfly	<i>Plebejus icarioides moroensis</i>	-	SA
Oso Flaco flightless moth	<i>Areniscythris brachypteris</i>	-	SA
Oso Flaco patch butterfly	<i>Chlosyne leanira elegans</i>	-	SA
Oso Flaco robber fly	<i>Ablautus schlingeri</i>	-	SA
Sandy beach tiger beetle	<i>Cicindela hirticollis grvida</i>	-	SA
White sand bear scarab beetle	<i>Lichnanthe albipilosa</i>	-	SA

Protected Status

- FE – Federal-listed Endangered Species
- FT – Federal-listed Threatened Species
- FPT - Federal-listed Candidate Species
- FPT - Federal-listed Candidate Species
- SE – State-listed Endangered Species
- ST – State-listed Threatened Species
- CP – Protected under California Fish and Game Code
- CSC – California Species of Special Concern
- SA – California Special Animal
- BE & GEPA – Bald Eagle & Golden Eagle Protection Act
- M – Migratory Bird Treaty Act Species



APPENDIX C: POTENTIAL SENSITIVE SPECIES LIST



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Potential Sensitive Species for Oceano and surrounding 7.5 quadrangles: Arroyo Grande NE, Guadalupe, Nipomo, Pismo Beach, Point Sal, Santa Maria, and Tar Spring Ridge (CNDDDB 2012).

VEGETATION COMMUNITIES			
Community Name	Description	Observed on Site?	Comments
Central Dune Scrub	Restricted to coastal areas with stabilized back dunes, slopes, ridges, and flats. Vegetation consists of shrubs, subshrubs, and herbs less than one meter tall. Indicator species include <i>Lupinus chamissonis</i> .	Yes	Coastal sand dunes as described observed on site. <i>Lupinus chamissonis</i> occurs as a dominant species and as co-dominant in the shrub layer with <i>Ericameria ericoides</i> .
Central Foredunes	Adjacent to shoreline with harsh environmental conditions such as strong, salt-laden breezes and salt water inundation. Characterized by plants that are prostrate; with deep taproots; fleshy roots, stems, and leaves; and leaves covered with thick mats of gray hairs. Often referred to as pioneer dune community or coastal strand.	Yes	The southwestern part of the site is adjacent to bare sand and exposed to harsh coastal conditions and marine influence, such as wind and salt. Species present within this community include <i>Elymus mollis</i> subsp. <i>mollis</i> , <i>Cakile maritima</i> , <i>Ambrosia chamissonis</i> , and <i>Carpobrotus</i> spp.
Central Maritime Chaparral	Associated with well drained/dry soils. Exposed upland location with moderate to high cover. Typically dominated by <i>Arctostaphylos</i> species that develop into dense patches of vegetation.	No	This community was not observed, and no <i>Arctostaphylos</i> species were identified on site.

VEGETATION COMMUNITIES			
Community Name	Description	Observed on Site?	Comments
Coastal and Valley Freshwater Marsh	Dominated by perennial, emergent, and tall monocots that often form closed canopies. Tend to be <i>Typha</i> -dominated and permanently flooded with fresh water which result in deep peaty soils.	Yes	This community is present on site and typically occurs adjacent to the open water. Both <i>Schoenoplectus</i> -dominated and <i>Typha</i> -dominated marshes are present.
Southern Vernal Pool	Seasonal, depressional wetlands with impermeable soils that support a diverse array of plant and wildlife species. During the wet season, plants generally grow in concentric rings and die or go dormant when conditions are dry.	No	This community was not observed; soils on site are typically well-drained and sandy.
Valley Needlegrass Grassland	Associated with fine textured/clay soils or moist, water logged soils. Vegetation dominated by bunches of <i>Stipa pulchra</i> with other natives and introduced annuals. Often associated with oak woodlands.	No	This community was not observed; no clay soils are present, and no <i>Stipa pulchra</i> was identified on site.

PLANTS					
Scientific/Common Name	Listing Status	Blooming Period	Habitat Type	Observed on Site?	Comments
<i>Agrostis hooveri</i> Hoover's bent grass	CRPR 1B.2	April - July	Closed-cone coniferous forest, chaparral, cismontane woodland, valley and foothill grassland/usually sandy. Elevation; < 600 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Aphanisma blitoides</i> Aphanisma	CRPR 1B.2	March - June	Coastal bluff scrub, coastal dunes, and coastal scrub, with sandy soils. Elevation; < 100 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Arctostaphylos luciana</i> Santa Lucia manzanita	CRPR 1B.2	December - March	Chaparral, cismontane woodlands with shale outcrops. Elevation; 500 - 700 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Arctostaphylos morroensis</i> Morro manzanita	CRPR 1B.1	December - March	Chaparral (maritime), cismontane woodland, coastal dunes, coastal scrub/sandy loam soils. Elevation; < 200 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Arctostaphylos pechoensis</i> Pecho manzanita	CRPR 1B.2	November - March	Shale outcrops, chaparral, coniferous forest. Elevation; <850 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Arctostaphylos pilosula</i> Santa Margarita manzanita	CRPR 1B.2	December - March	Shale outcrops, slopes, chaparral. Elevation; 300 - 1,100 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.

PLANTS					
<i>Arctostaphylos rudis</i> Sand mesa manzanita	CRPR 1B.2	November - February	Chaparral (maritime), coastal scrub/sandy soils. Elevation; < 150 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Arenaria paludicola</i> Marsh sandwort	Fed: Endangered State: Endangered CRPR 1B.1	May - August	Marshes and swamps (freshwater or brackish), and meadows. Elevation; > 300 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Astragalus didymocarpus</i> var. <i>milesianus</i> Miles's milk-vetch	CRPR 1B.2	March - June	Clay or serpentine soils in coastal scrub, grassy areas near coast. Elevation; 0 - 90 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Atriplex serenana</i> var. <i> davidsonii</i> Davidson's saltscale	CRPR 1B.2	April - October	Coastal scrub, coastal bluff scrub, alkaline soils. Elevation; < 200 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Calochortus obispoensis</i> San Luis mariposa lily	CRPR 1B.2	May - July	Dry serpentine soils or chaparral environments. Elevation; 100 - 500 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Calochortus simulans</i> San Luis Obispo mariposa lily	CRPR 1B.3	April - May	Grassland, oak woodland, pine forest, on sand, granite or serpentine. Elevation; < 1100 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Calystegia subacaulis</i> ssp. <i>episcopalis</i> Cambria morning glory	CRPR 4.2	April - June	Dry, open scrub, woodland, foothill or grasslands. Elevation; 0 - 1,640 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Castilleja densiflora</i> ssp. <i>obispoensis</i> San Luis Obispo owl's clover	CRPR 1B.2	March - May	Meadows and seeps, valley and foothill grassland/sometimes serpentine. Elevation; 0 - 328 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.

PLANTS					
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	CRPR 1B.2	May - October	Valley and foothill grasslands (alkaline). Elevation; 0 - 230 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Chenopodium littoreum</i> Coastal goosefoot	CRPR 1B.2	April - August	Coastal dunes, sandy soil. Elevation; < 200 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Chorizanthe breweri</i> Brewer's spineflower	CRPR 1B.3	April - August	Chaparral, foothill woodland on serpentine. Elevation; < 800 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Chorizanthe rectispina</i> Straight-awned spineflower	CRPR 1B.3	April - July	Chaparral, dry woodland in sandy soil. Elevation; 200-600 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Cirsium fontinale</i> var. <i>obispoense</i> Chorro Creek bog thistle	Fed: Endangered State: Endangered CRPR 1B.2	February - July	Serpentine seeps and streams. Elevation; < 300 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Cirsium rhothophilum</i> Surf thistle	State: Threatened CRPR 1B.2	April - June	Coastal bluff scrub, coastal dunes. Elevation; < 60 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Cirsium scariosum</i> var. <i>loncholepis</i> La Graciosa thistle	Fed: Endangered State: Threatened CRPR 1B.1	May - August	Coastal dune, scrub, cismontane woodland, valley and foothill grasslands with mesic/sandy soils. Elevation; 0 - 220 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Cladium californicum</i> California sawgrass	CRPR 2.2	June - September	Freshwater marsh, swamps, alkaline sink, wetland riparian. Elevation; 0 - 600 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.

PLANTS					
<i>Clarkia speciosa</i> ssp. <i>immaculata</i> Pismo clarkia	Fed: Endangered State: Rare List 1B.1	May - July	Chaparral (margins, openings), cismontane woodland, valley and foothill grasslands with sandy soils. Elevation; < 100 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Deinandra increscens</i> ssp. <i>foliosa</i> Leafy tarplant	CRPR 1B.2	June - September	Foothill and valley grasslands/sandy. Elevation; 300 – 500 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Deinandra increscens</i> ssp. <i>villosa</i> Gaviota tarplant	Fed: Endangered State: Endangered CRPR 1B.1	May - October	Coastal scrub, coastal bluff scrub, coastal fields, valley and foothill grassland. Elevation; < 50 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i> Dune larkspur	CRPR 1B.2	April - May	Chaparral and coastal dunes. Elevation; 0 - 200 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Delphinium parryi</i> ssp. <i>eastwoodiae</i> Eastwood's larkspur	CRPR 1B.2	February - May	Coastal, chaparral (openings), valley and foothill grassland, ultramafic, serpentinite. Elevation; 75 – 500 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Delphinium umbraculorum</i> Umbrella larkspur	CRPR 1B.3	April - June	Cismontane woodland, moist oak forest. Elevation; 400-1,600 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Dithyrea maritima</i> Beach spectaclepod	State: Threatened CRPR 1B.1	March - May	Coastal dunes, coastal scrub (sandy). Elevation; 0 - 50 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.

PLANTS					
<i>Dudleya abramsii</i> ssp. <i>murina</i> Mouse-gray dudleya	CRPR 1B.3	May - June	Chaparral, cismontane woodland, valley and foothill grassland/serpentinite. Elevation; 90 - 400 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	CRPR 1B.1	April - June	Open, rocky slopes, often serpentine or clay soils. Elevation; 450 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Erigeron blochmaniae</i> Blochman's leafy daisy	CRPR 1B.2	July - October	Sand dunes and hills. Elevation; < 30 m.	Yes	Observed within coastal dune scrub communities.
<i>Eriodictyon altissimum</i> Indian Knob mountainbalm	Fed: Endangered State: Endangered CRPR 1B.1	March - June	Chaparral (maritime), foothill woodland, cismontane woodland, coastal scrub/sandstone. Elevation; 80 - 270 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Eryngium aristulatum</i> var. <i>hooveri</i> Hoover's button-celery	CRPR 1B.1	July - August	Freshwater wetland, wetland- riparian, Vernal pools. Elevation; 3 - 45 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Horkelia cuneata</i> ssp. <i>puberula</i> Mesa horkelia	CRPR 1B.1	February - July (September)	Dry, sandy coastal chaparral. Elevation; 70 - 810 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Horkelia cuneata</i> ssp. <i>sericea</i> Kellog's horkelia	CRPR 1B.1	April - September	Closed cone conifer forests, chaparral (maritime), coastal dune and scrub with sandy/gravelly openings. Elevation; 10 - 200 m.	No	Marginally suitable habitat on site. Not observed during appropriately timed surveys.
<i>Layia jonesii</i> Jones's layia	CRPR 1B.2	March - May	Open serpentine or clay slopes. Elevation; < 400 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.

PLANTS					
<i>Lupinus ludovicianus</i> San Luis Obispo County lupine	CRPR 1B.2	April - June	Chaparral, cismontane woodland/sandstone or sandy. Elevation; 50 - 525 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Lupinus nipomensis</i> Nipomo Mesa lupine	Fed: Endangered State: Endangered CRPR 1B.1	December - May	Coastal dunes. Elevation; 10 - 50 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Monardella frutescens</i> San Luis Obispo monardella	CRPR 1B.2	May - September	Coastal dunes, coastal scrub (sandy). Elevation; 10 - 200 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Monardella undulata</i> ssp. <i>crispa</i> Crisp monardella	CRPR 1B.2	April - August	Coastal dunes, coastal scrub. Elevation; 10 - 120 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Nasturtium gambelii</i> Gambel's water cress	Fed: Endangered State: Threatened CRPR 1B.1	April - October	Freshwater or brackish marshes. Elevation; 5 - 330 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Nemacaulis denudata</i> var. <i>denudata</i> Coast woolly-heads	CRPR 1B.2	April - September	Coastal dunes, beaches. Elevation; < 100 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.
<i>Nemacladus secundiflorus</i> var. <i>robbinsii</i> Robbins' nemacladus	CRPR 1B.2	April - June	Openings in chaparral and valley and foothill grassland, dry, gravelly slopes. Elevation; 200 - 2,000 m.	No	No suitable habitat on site. Not observed during appropriately timed surveys.
<i>Orobanche parishii</i> ssp. <i>brachyloba</i> Short-lobed broom-rape	CRPR 4.2	April - October	Coastal dunes, coastal scrub, coastal bluff scrub, sandy soil near ocean. Parasitic on shrubs such as <i>Isocoma menziesii</i> . Elevation; < 300 m.	No	Suitable habitat on site. Not observed during appropriately timed surveys.

PLANTS

<p><i>Scrophularia atrata</i> Black-flowered figwort</p>	<p>CRPR 1B.2</p>	<p>March - July</p>	<p>Closed cone coniferous forest, coastal dunes, coastal scrub, and riparian scrub. Calcareous (sometimes diatomaceous) soils. Elevation; < 500 m.</p>	<p>No</p>	<p>Marginally suitable habitat on site. Not observed during appropriately timed surveys.</p>
<p><i>Symphotrichum defoliatum</i> San Bernardino aster</p>	<p>CRPR 1B.2</p>	<p>July - November</p>	<p>Cismontane woodlands, meadows, seeps, coastal scrub, foothill/valley grasslands near streams, ditches or springs. Elevation; < 2,040 m.</p>	<p>No</p>	<p>No suitable habitat on site. Not observed during appropriately timed surveys.</p>

WILDLIFE					
Scientific/Common Name	Listing Status	Nesting/ Breeding Period	Habitat Type	Observed on Site?	Comments
<i>Ablautus schlingeri</i> Oso Flaco robber fly	Special animal	Unknown	Occurs on sand dunes in the vicinity of Oso Flaco Lake.	No	Suitable habitat on site; not observed during surveys.
<i>Accipiter striatus</i> Sharp-shinned hawk	Special animal Watch List	March - June	Nests in forests, usually with conifers. Winters in a variety of habitats, including urban and suburban areas.	No	No suitable nesting habitat on site; not observed during surveys.
<i>Actinemys marmorata</i> Pacific pond turtle	State: CSC	April - August	Permanent or semi-permanent streams, ponds, and lakes, logs, rocks, and mats for basking. May enter brackish water.	Yes	Individuals observed at multiple locations throughout survey area.
<i>Ambystoma californiense</i> California tiger salamander	Fed: Threatened State: Threatened State: CSC	December - February	Found in grasslands, oak savannah, and edges of mixed woodland and lower elevation coniferous forest.	No	No suitable habitat on site; not observed during surveys.
<i>Anniella pulchra pulchra</i> Silvery legless lizard	State: CSC	May - September	Moist loose soil with plant cover and under leaf litter. Found in beach dunes, chaparral, foothill woodlands, desert scrub, sandy washes, and stream terraces.	No	Suitable habitat on site; not observed during surveys.
<i>Areniscythis brachypteris</i> Oso Flaco flightless moth	Special animal	Unknown	Dunes along the Central Coast of San Luis Obispo. Larvae eat and are reared on a variety of dune vegetation.	No	Suitable habitat on site; not observed during surveys.

WILDLIFE

Scientific/Common Name	Listing Status	Nesting/ Breeding Period	Habitat Type	Observed on Site?	Comments
<i>Athene cunicularia</i> Burrowing owl	State: CSC	March - July	Open, dry grasslands, often short grasses without trees. Relies on ground burrowing animals for terrestrial habitat.	No	No suitable nesting habitat on site; not observed during surveys.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	Fed: Threatened	Rainy season	Vernal pools, depressions, in grasslands.	No	No suitable habitat on site; not observed during surveys.
<i>Charadrius alexandrinus nivosus</i> Western snowy plover	Fed: Threatened State: CSC Watch List	March - August	Sandy beaches, salt pond levees, shorelines of large alkali lakes. Needs friable soil for nesting.	No	Suitable nesting habitat on site; not observed during surveys; CA State Parks reported seeing nest sites within 2 miles of project site this year.
<i>Chlosyne leanira elegans</i> Oso Flaco patch butterfly	Special animal	Unknown	Dunes within the Oso Flaco Lake system.	No	Suitable habitat on site; not observed during surveys.
<i>Cicindela hirticollis gravida</i> Sandy beach tiger beetle	Special animal	Unknown	Found in moist sand near the ocean, for example in swales behind dunes or upper beaches beyond normal high tides. Adjacent to non-brackish water near the coast. Clean, dry light colored sand in the upper zone.	No	Suitable habitat on site; not observed during surveys.

WILDLIFE					
Scientific/Common Name	Listing Status	Nesting/ Breeding Period	Habitat Type	Observed on Site?	Comments
<i>Danaus plexippus</i> Monarch butterfly	Special animal	Spring	Rely on milkweed and need protected stands of trees for roosting. Found in fields, meadows, weedy areas, marshes, and along roadsides.	Yes	Marginally suitable habitat on site; observed during surveys.
<i>Eucyclogobius newberryi</i> Tidewater goby	Fed: Endangered State: CSC	Year - round (April - November)	Found in shallow water lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Yes	One individual observed within lagoon during survey efforts.
<i>Falco mexicanus</i> Prairie falcon	Watch List	February - April	Primarily inhabits dry grasslands, woodlands, savannahs, cultivated fields, lake shores, and rangelands. Nests on cliffs, canyons, and rock outcrops.	No	No suitable nesting habitat on site; not observed during surveys.
<i>Gila orcuttii</i> Arroyo chub	State: CSC	Unknown	Inhabits sandy and muddy bottoms of flowing pools and headwaters of small to medium freshwater streams; often found in intermittent streams.	No	Marginally suitable habitat on site; not observed during surveys.
<i>Gymnogyps californianus</i> California condor	Fed: Endangered State: Endangered Watch List	Early Spring - Summer	Rocky scrubland, montane coniferous forest, valley and foothill grasslands, oak savannah, chaparral, woodland/ forest habitats. Nesting on cliffs and trees.	No	No suitable nesting habitat on site; not observed during surveys.

WILDLIFE

Scientific/Common Name	Listing Status	Nesting/ Breeding Period	Habitat Type	Observed on Site?	Comments
<i>Laterallus jamaicensis coturniculus</i> California black rail	Fully Protected State: Threatened Watch List	February - June	Saltwater, brackish, and freshwater marshes.	No	Suitable nesting habitat on site; not observed during surveys.
<i>Lichnanthe albipilosa</i> White sand bear scarab beetle	Special animal	Unknown	Inhabits coastal dunes of San Luis Obispo County, in the vicinity of dune lakes.	No	Suitable habitat on site; not observed during surveys.
<i>Oncorhynchus mykiss irideus</i> Steelhead – South/Central California Coast DPS	Fed: Threatened State: CSC	February - April	Federal listing refers to runs in coastal basins from Pajaro River south to, but not including, the Santa Maria River.	No	Suitable habitat on site; not observed during surveys.
<i>Phrynosoma blainvillii</i> Coast horned lizard	State: CSC	May - September	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	No	Suitable habitat on site; not observed during surveys.
<i>Plebejus icarioides moroensis</i> Morro Bay blue butterfly	Special animal	March - July	Found on the immediate coast of San Luis Obispo and Santa Barbara Counties. Host plant is <i>Lupinus chamissonis</i> .	No	Host plant present on site, but habitat is fragmented, subject to disturbance, and not suitable for roosting; not observed during surveys.

WILDLIFE					
Scientific/Common Name	Listing Status	Nesting/ Breeding Period	Habitat Type	Observed on Site?	Comments
<i>Rana draytonii</i> California red-legged frog	Fed: Threatened State: CSC	January - March	Lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation. Breed in permanent or ephemeral water sources.	Yes	Individual observed in southern part of site.
<i>Spea hammondi</i> Western spadefoot toad	State: CSC	January - August	Seasonal/vernal pools in grassland, coastal scrub, chaparral, woodland habitat, and open areas with sandy or gravelly soils.	No	Suitable habitat on site; not observed during surveys.
<i>Sternula antillarum browni</i> California least tern	Fed: Endangered State: Endangered Fully Protected Watch List	April - June	Coastal areas, nests on beach in loose sandy soils.	No	Suitable nesting habitat on site; not observed during surveys.
<i>Taricha torosa</i> Coast Range newt	State: CSC	December - May	Slow moving streams, ponds, and lakes with surrounding evergreen and oak forests, chaparral, and grasslands along coast.	No	No suitable habitat on site; not observed during surveys.
<i>Taxidea taxus</i> American badger	State: CSC	February - May	Needs friable soils in open ground with abundant food source such as California ground squirrels.	No	No suitable habitat on site; not observed during surveys.

WILDLIFE

Scientific/Common Name	Listing Status	Nesting/ Breeding Period	Habitat Type	Observed on Site?	Comments
<i>Thamnophis hammondi</i> Two-striped gartersnake	State: CSC	April - November	Typically found near pools, creeks, cattle tanks, and other water sources, often in rocky areas, in oak woodland, chaparral, brush land, and coniferous forest.	No	Suitable habitat on site; not observed during surveys.
<i>Tryonia imitator</i> Mimic tryonia (California brackishwater snail)	Special animal	Unknown	Found in brackish salt marshes, coastal lagoons and estuaries; able to withstand a wide range of salinities.	No	Suitable habitat on site; not observed during surveys.



APPENDIX D: SITE PHOTOGRAPHS



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Photo 1. View southwest of roadside drainage ditch that flows into the Lagoon (May 25, 2012).



Photo 2. View northwest of wetland behind residences off Fountain Avenue (May 25, 2012).



Photo 3. View south of main lagoon, island, and wetland vegetation (May 29, 2012).



Photo 4. View northwest of main lagoon, island, and waterfowl (June 15, 2012).



Photo 5. View east of northern part of Memorial Park from Pier Avenue (May 29, 2012).



Photo 6. View southwest of wetland vegetation near Security Court and Aloha Place neighborhood.
(May 29, 2012)



Photo 7. View northeast of roadside drainage ditch along Aloha Place. (May 29, 2012)



Photo 8. View south of wetland and dune vegetation characteristic of the site (May 29, 2012).



Photo 9. View south of foredunes and Arroyo Grande Creek mouth (May 09, 2012).



Photo 10. View of trail within dense wetland-riparian vegetation in the southeastern part of the site (May 09, 2012).



Photo 11. View east of ponded water adjacent to the trail in the southeastern part of the site (September 21, 2012).



Photo 12. View north of cleared paths to flap gate near Arroyo Grande Creek mouth (May 09, 2012).



Photo 13. View east of wetland and dune vegetation characteristic of the site (May 09, 2012).



Photo 14. View southeast of dune mat community in the eastern part of the site (May 9, 2012).



Photo 15. View east of dune scrub adjacent to Laguna Drive (May 9, 2012).



Photo 16. View southwest of dune colonized by dense European dune grass (May 9, 2012).



Photo 17. View northwest of wetland feature that occurs in a residence driveway off of Lakeside Avenue (May 9, 2012).



Photo 18. Individual California red-legged frog observed near footbridge during night eyeshine survey (May 30, 2012).



Photo 19. View of bats observed under Pier Avenue bridge during night eyeshine survey (May 30, 2012).



Photo 20. American bullfrog tadpoles caught in seine net (June 15, 2012).



Photo 21. Seining along the eastern perimeter of Memorial Park (June 15, 2012).



Photo 22. Largemouth bass captured during seining efforts at Memorial Park (June 15, 2012).



Photo 23. California spineflower, a special-status species, was observed in the dune scrub community (May 9, 2012).



Photo 24. Blochman's leafy daisy, a special-status plant, was found in several areas throughout the site (July 6, 2012).



Photo 25. Blochman's ragwort, a special-status plant, was observed in the stabilized dunes in the eastern part of the site (September 21, 2012).



Photo 26. Southwestern spiny rush, a special-status plant, was observed growing among bulrush and other wetland species in several areas throughout the site (September 21, 2012).



APPENDIX E: CNDDDB CALIFORNIA NATIVE SPECIES FIELD SURVEY FORMS



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Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811

Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

For Office Use Only

Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 05/30/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Rana draytonii

Common Name: California red-legged frog

Species Found? Yes No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Brian Dugas, Terra Verde Environmental

Address: 3765 South Higuera, Suite 102
San Luis Obispo, CA 93401

E-mail Address: bdugas@terraverdeweb.com

Phone: (805) 701-4648

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown _____
 wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Along the margin of the lagoon, adjacent to a foot bridge in the southeast portion of the Oceano lagoon.

County: San Luis Obispo

Landowner / Mgr.: County of San Luis Obispo

Quad Name: Oceano

Elevation: _____

T _____ R _____ Sec _____, _____ ¼ of _____ ¼, Meridian: H M S

Source of Coordinates (GPS, topo. map & type): ArcMap 10.1

T _____ R _____ Sec _____, _____ ¼ of _____ ¼, Meridian: H M S

GPS Make & Model _____

DATUM: NAD27 NAD83 WGS84

Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 35°6'3.886" N
120°37'33.339" W

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Observed foraging along shoreline among wetland species *Schoenoplectus* spp., *Hedera helix*, *Rubus ursinus*, and *Potentilla anserina*.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Residential, industrial, recreational

Visible disturbances: None

Threats: Development, invasive predators (e.g., *Rana catesbeiana*, *Procyon lotor*, etc.)

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): _____
 Compared with specimen housed at: _____
 Compared with photo / drawing in: _____
 By another person (name): Brooke Langle, Jessica Adinolfi
 Other: _____

Photographs: (check one or more)

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

May we obtain duplicates at our expense? yes no

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

For Office Use Only

Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 08/01/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Rana draytonii*

Common Name: California red-legged frog

Species Found? Yes No If not, why? _____

Total No. Individuals _____ Subsequent Visit? yes no

Is this an existing NDDDB occurrence? _____ no unk.
Yes, Occ. # _____

Collection? if yes: _____
Number _____ Museum / Herbarium _____

Reporter: Brian Dugas, Terra Verde Environmental

Address: 3765 South Higuera, Suite 102
San Luis Obispo, CA 93401

E-mail Address: bdugas@terraverdeweb.com

Phone: (805) 701-4648

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown _____
 wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

On the bank of Arroyo Grande Creek, just east where the lagoon drains through a culvert into Arroyo Grande Creek.

County: San Luis Obispo

Landowner / Mgr.: County of San Luis Obispo

Quad Name: Oceano

Elevation: _____

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S

Source of Coordinates (GPS, topo. map & type): ArcMap 10.1

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S

GPS Make & Model _____

DATUM: NAD27 NAD83 WGS84

Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR

Geographic (Latitude & Longitude)

Coordinates: 35°6'0.03" N
120°37'38.938" W

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Observed foraging along the bank of Arroyo Grande Creek near the creek mouth. Dominant vegetation is *Salix lasiolepis* with other wetland-riparian vegetation.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Residential and industrial

Visible disturbances: None

Threats: Development, invasive predators (e.g., *Rana catesbeiana*, *Procyon lotor*, etc.)

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): _____
 Compared with specimen housed at: _____
 Compared with photo / drawing in: _____
 By another person (name): Brooke Langele, Eric Blanton
 Other: _____

Photographs: (check one or more)

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

May we obtain duplicates at our expense? yes no

Mail to:
California Natural Diversity Database
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1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

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Source Code _____ Quad Code _____
EIm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 07/06/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Erigeron blochmaniae*

Common Name: Blochman's leafy daisy

Species Found? Yes No If not, why? _____

Total No. Individuals 150 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number Museum / Herbarium

Reporter: Jessica Adinolfi, Terra Verde Environmental

Address: 3765 South Higuera, Suite 102
San Luis Obispo, CA 93401

E-mail Address: jadinolfi@terraverdeweb.com

Phone: (714) 478-8765

Plant Information

Phenology: 2% vegetative 97% flowering 1% fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
 wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Several patches throughout dune system around Oceano Lagoon.

County: San Luis Obispo

Landowner / Mgr.: County of San Luis Obispo

Quad Name: Oceano

Elevation: 14 ft.

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S

Source of Coordinates (GPS, topo, map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S

GPS Make & Model Trimble GeoExplorer 6000

DATUM: NAD27 NAD83 WGS84

Horizontal Accuracy 1 m. _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR

Geographic (Latitude & Longitude)

Coordinates:

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Several patches in stabilized coastal dune system, growing with *Ericameria ericoides*, *Carpobrotus* spp., *Ammophila arenaria*, and *Ehrharta calycina*. Found on various aspects in sandy soils.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Residential, industrial, recreational

Visible disturbances: hiking trails/walking paths

Threats: Development, recreation, invasive plants

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): The Jepson Manual, Vascular Plants of California
 Compared with specimen housed at: _____
 Compared with photo / drawing in: CalFlora database
 By another person (name): Brian Dumas
 Other: _____

Photographs: (check one or more)

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

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Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

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Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 07/06/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Erigeron blochmaniae*

Common Name: Blochman's leafy daisy

Species Found? Yes No If not, why? _____

Total No. Individuals 50 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Jessica Adinolfi, Terra Verde Environmental

Address: 3765 South Higuera, Suite 102
San Luis Obispo, CA 93401

E-mail Address: jadinolfi@terraverdeweb.com

Phone: (714) 478-8765

Plant Information

Phenology: 1% vegetative 99% flowering 0% fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
 wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

A disjointed stabilized coastal sand dune within a residential neighborhood and surrounded by dense Arroyo willow thicket off of Air Park Drive in Oceano.

County: San Luis Obispo Landowner / Mgr.: County of San Luis Obispo

Quad Name: Oceano Elevation: 14 ft

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model Trimble GeoExplorer 6000

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 1 m _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: See attached map

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna)

Locally abundant in stabilized coastal dune scrub habitat, growing with *Senecio blochmaniae*, *Ericameria ericoides*, *Lupinus chamissonis*, and *Baccharis pilularis*. The site is relatively flat with sandy soils.

Please fill out separate form for other rare taxa seen at this site. *Senecio blochmaniae*

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Residential and industrial

Visible disturbances: Signs of vehicle use nearby (driveway), signs of vagrant habitation and fire use

Threats: Development, recreation, vagrant habitat and associated activities

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): The Jepson Manual, Vascular Plants of California
 Compared with specimen housed at: _____
 Compared with photo / drawing in: CalFlora database
 By another person (name): Brian Dugas
 Other: _____

Photographs: (check one or more)

Slide Print Digital
Plant / animal
Habitat
Diagnostic feature

May we obtain duplicates at our expense? yes no

Mail to:
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Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

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Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 09/21/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Juncus acutus ssp. leopoldii*

Common Name: Southwestern spiny rush

Species Found? Yes No If not, why? _____

Total No. Individuals 20 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Jessica Adinolfi, Terra Verde Environmental

Address: 3765 South Higuera, Suite 102
San Luis Obispo, CA 93401

E-mail Address: jadinolfi@terraverdeweb.com

Phone: (714) 478-8765

Plant Information

Phenology: _____% vegetative _____% flowering 100% fruiting

Animal Information

adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown _____
 wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Coastal dune wetland system of Oceano Lagoon.

County: San Luis Obispo Landowner / Mgr.: County of San Luis Obispo

Quad Name: Oceano Elevation: 14 ft.

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: M S GPS Make & Model Trimble GeoExplorer 6000

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 1 m. _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: _____

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Edge of bulrush marsh community and Arroyo willow thickets, with *Ammophila arenaria*, *Rubus ursinus*, *Schoenoplectus* spp., *Potentilla anserina*, *Rumex* spp., and *Salix lasiolepis*

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Residential and industrial

Visible disturbances: hiking trails/walking paths

Threats: Development, recreation

Comments: _____

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): The Jepson Manual, Vascular Plants of California
- Compared with specimen housed at: _____
- Compared with photo / drawing in: CalFlora database
- By another person (name): Brian Dugas
- Other: _____

Photographs: (check one or more)

Slide Print Digital
Plant / animal
Habitat
Diagnostic feature

May we obtain duplicates at our expense? yes no

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California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811

Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

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Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 05/09/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Mucronea californica*

Common Name: California spineflower

Species Found? Yes No If not, why? _____

Total No. Individuals 50 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Jessica Adinolfi, Terra Verde Environmental

Address: 3765 South Higuera, Suite 102
San Luis Obispo, CA 93401

E-mail Address: jadinolfi@terraverdeweb.com

Phone: (714) 478-8765

Plant Information

Phenology: 40 % 60 % 0 %
vegetative flowering fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
 winterring breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Observed within stabilized dune system near Oceano Lagoon off of Laguna Drive.

County: San Luis Obispo

Landowner / Mgr.: County of San Luis Obispo

Quad Name: Oceano Elevation: 14 ft.

T _____ R _____ Sec _____, _____ % of _____ %, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ % of _____ %, Meridian: H M S GPS Make & Model Trimble GeoExplorer 6000

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 1 m. _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: (1) 35°6'10.907" N / 120°37'41.967" W (2) 35°6'10.004" N / 120°37'41.645" W (3) 35°6'8.823" N / 120°37'41.441" W

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Stabilized coastal dune scrub habitat, growing with *Juncus breweri*, *Carex pansa*, *Ericameria ericoides*, and *Erigeron blochmaniae*.
Observed mostly on north-facing slopes of sand dunes.

Please fill out separate form for other rare taxa seen at this site. Erigeron blochmaniae

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Residential and industrial

Visible disturbances: hiking trails/walking paths

Threats: Development, recreation

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): The Jepson Manual, Vascular Plants of California
 Compared with specimen housed at: _____
 Compared with photo / drawing in: CalFlora database
 By another person (name): Brian Davis
 Other: _____

Photographs: (check one or more) Slide Print Digital
Plant / animal
Habitat
Diagnostic feature

May we obtain duplicates at our expense? 133 yes no

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

For Office Use Only

Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 09/21/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Senecio blochmaniae*

Common Name: Blochman's ragwort

Species Found? Yes No If not, why? _____

Total No. Individuals 50 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number Museum / Herbarium

Reporter: Jessica Adinolfi, Terra Verde Environmental

Address: 3765 South Higuera, Suite 102
San Luis Obispo, CA 93401

E-mail Address: jadinolfi@terraverdeweb.com

Phone: (714) 478-8765

Plant Information

Phenology: 2% vegetative 98% flowering 0% fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
 wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

A disjointed stabilized coastal sand dune within a residential neighborhood and surrounded by dense Arroyo willow thicket off of Air Park Drive in Oceano.

County: San Luis Obispo

Landowner / Mgr.: County of San Luis Obispo

Quad Name: Oceano

Elevation: 14 ft

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S

Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S

GPS Make & Model Trimble GeoExplorer 6000

DATUM: NAD27 NAD83 WGS84

Horizontal Accuracy 1 m _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: See attached map

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Locally abundant in stabilized coastal dune scrub habitat, growing with *Erigeron blochmaniae*, *Ericameria ericoides*, *Lupinus chamissonis*, and *Baccharis pilularis*. The site is relatively flat with sandy soils.

Please fill out separate form for other rare taxa seen at this site. *Erigeron blochmaniae*

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Residential and industrial

Visible disturbances: Signs of vehicle use nearby (driveway), signs of vagrant habitation and fire use

Threats: Development, recreation, vagrant habitat and associated activities

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): The Jepson Manual, Vascular Plants of California
 Compared with specimen housed at: _____
 Compared with photo / drawing in: CalFlora database
 By another person (name): Brian Douglas
 Other: _____

Photographs: (check one or more)

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



APPENDIX F: FIELD SURVEY FORMS



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AQUATIC SURVEY DATA FORM

DATE: 05/30/2012		PROJECT: Oceano Lagoon	
SURVEY BIOLOGIST(S): Halden Peterson, Brian Dugas			
Time Start: <u>2030</u>	Time End: <u>2330</u>	Survey Duration: <u>3 hours</u>	Unit-Effort: <u>Lagoon team</u>

LOCATION

City/County Oceano/San Luis Obispo; _____ ¼; _____ -¼ Section _____ Township _____ Range _____
 Latitude 35°6'27"N Longitude 120°37'36"; Quadrangle _____; Elevation 12 feet
 ATTACH MAP (include habitat types, important features, and species locations)

TYPE OF SURVEY

Day Night; Breeding Non-Breeding; Survey Number: (1) 2 3 4 5 6 7 8
 Brand name/model of light used: MagLite LED Brand/model/power of binoculars used: Nikon 10x40

WEATHER CONDITIONS AT START OF SURVEY

Air Temperature 60.6 °F (3"); Water Temperature 69 °F; Wind Speed: 0 mph; Wind Direction NA; Cloud Cover 0 %
 Precipitation 0 in.; Humidity 60 %; Moon Phase waxing gibbous (60%); Visibility Conditions clear

AQUATIC HABITAT TYPE

River Stream Swale Ditch Lake Natural Pond Stock Pond Impoundment Vernal Pool Marsh/Wetland
 Hydrogeomorphology Class: Depression Slope Riverine

HYDROPERIOD

Permanent Intermittent Ephemeral

STREAM MORPHOMETRY/FEATURES

River/Creek Name _____ River Mile _____ Stream Order _____
 Hydroperiod: Permanent Intermittent Ephemeral Reach Length _____ Right Bank Height _____ Left Bank Height _____
 Top Bank Width _____ Stream Width _____ Channel Width @ OHWM _____ Right Bank Slope _____ Left Bank Slope _____
 Water Depth _____ Sinuosity Index _____ Stream Gradient _____ Flow Velocity _____ Wetted Perimeter _____
 Water Clarity: Clear Turbid Water Color: Clear Stained (Color __ __)
 Instream Structure: Riffles Pools (max. depth _____) Glides Undercut Banks LOD (jams/snags) Other __ __
 Channel Condition: Terracing Bank or Bed Degradation

LAKE/POND MORPHOMETRY/FEATURES

Pond/Lake Name: Oceano Lagoon and unnamed associated wetland features Hydroperiod: Permanent Seasonal
 Area: **See map Maximum Width _____ Maximum Length _____ Maximum Depth _____
 Shore Line _____ Shoreline Development _____ Width of Drawdown Zone _____
 Water Clarity: Clear Turbid Water Color: Clear Stained (Color green/brown)
 Instream Structure: Shoals Undercut Banks LOD (jams/snags) Other vegetation, footbridge



AQUATIC SURVEY DATA FORM

SUBSTRATE (Percent)

Silt
 Sand
 Gravel
 Cobble
 Boulder
 Bedrock
 Other:

STREAM/POND VEGETATION

Canopy Cover(mid-day): 10%; Emergent Vegetation: 40%; Floating Vegetation 3%; Open Water 50%
 Dominant Species: Schoenoplectus spp., Typha latifolia, Salix lasiolepis, herbs along shore and in understory

ADJACENT COVER TYPE(S)

Woodland
 Shrub
 Savanna
 Grassland
 Wetland
 Agriculture
 Developed
 Other

SPECIES AND NUMBERS OBSERVED

Species	Egg Masses	Larvae	Metamorphs (w/legs)	Juvenile	Adult	Detection Method
<i>Rana draytonii</i>					1	<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
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						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight

Describe potential threats to California red-legged frogs observed, including non-native and native fish predators such as fish, bullfrogs, and raccoons:
 bullfrogs observed near survey area

DIAGRAM

NOTES

Survey was conducted on foot with chest waders within and along the main lagoon and associated wetland features

AQUATIC SURVEY DATA FORM

DATE: <u>5/30/2012</u>	PROJECT: <u>Oceano Lagoon (Biological Assessment)</u>		
SURVEY BIOLOGIST(S): <u>Brian O'gus / Rhett Blanton</u>			
Time Start: <u>1300</u>	Time End: <u>1515</u>	Survey Duration: <u>2.25 hr</u>	Unit-Effort: _____

LOCATION

City/County Oceano, San Luis Obispo; _____ %; _____ -% Section _____ Township _____ Range _____
 Latitude 35° 16' 27" N Longitude 120° 37' 36" W; Quadrangle _____; Elevation _____
 ATTACH MAP (include habitat types, important features, and species locations)

TYPE OF SURVEY

Day Night; Breeding Non-Breeding; Survey Number: 0 2 3 4 5 6 7 8
 Brand name/model of light used: _____ Brand/model/power of binoculars used: _____

WEATHER CONDITIONS AT START OF SURVEY

Air Temperature 71.2 °F (3"); Water Temperature 65 °F; Wind Speed: 1.6 mph; Wind Direction W; Cloud Cover 0 %
 Precipitation 0 in.; Humidity _____%; Moon Phase N/A; Visibility Conditions clear/no obstruction

AQUATIC HABITAT TYPE

River Stream Swale Ditch Lake Natural Pond Stock Pond Impoundment Vernal Pool Marsh/Wetland
 Hydrogeomorphology Class: Depression Slope Riverine

HYDROPERIOD

Permanent Intermittent Ephemeral

STREAM MORPHOMETRY/FEATURES

River/Creek Name Oceano Lagoon, Arroyo Grande Creek River Mile _____ Stream Order _____
 Hydroperiod: Permanent Intermittent Ephemeral Reach Length _____ Right Bank Height _____ Left Bank Height _____
 Top Bank Width _____ Stream Width _____ Channel Width @ OHWM _____ Right Bank Slope _____ Left Bank Slope _____
 Water Depth _____ Sinuosity Index _____ Stream Gradient _____ Flow Velocity _____ Wetted Perimeter _____
 Water Clarity: Clear Turbid Water Color: Clear Stained (Color brown)
 Instream Structure: Riffles Pools (max. depth 4') Glides Undercut Banks LOD (jams/snags) Other _____
 Channel Condition: Terracing Bank or Bed Degradation

LAKE/POND MORPHOMETRY/FEATURES

Pond/Lake Name: _____ Hydroperiod: Permanent Seasonal
 Area: _____ Maximum Width _____ Maximum Length _____ Maximum Depth _____
 Shore Line _____ Shoreline Development _____ Width of Drawdown Zone _____
 Water Clarity: Clear Turbid Water Color: Clear Stained (Color _____)
 Instream Structure: Shoals Undercut Banks LOD (jams/snags) Other _____

AQUATIC SURVEY DATA FORM

SUBSTRATE (Percent)

Silt
 Sand
 Gravel
 Cobble
 Boulder
 Bedrock
 Other: *small amounts sand/gravel at A.V. Creek outfall, (Lagoon infiltrated w/ fine sediment)*

STREAM/POND VEGETATION

Canopy Cover (mid-day) *10-50%*; Emergent Vegetation: ; Floating Vegetation ; Open Water
 Dominant Species: *Lythra*

ADJACENT COVER TYPE(S)

Woodland
 Shrub
 Savanna
 Grassland
 Wetland
 Agriculture
 Developed
 Other
mostly riparian (Salix) ad. some areas border res. property

SPECIES AND NUMBERS OBSERVED

Species	Egg Masses	Larvae	Metamorphs (w/legs)	Juvenile	Adult	Detection Method
<i>Red-earr'd Sider (1)</i>					1	<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
<i>Rana (texasiana) (1)</i>			1			<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
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						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight

Describe potential threats to California red-legged frogs observed, including non-native and native fish predators such as fish, bullfrogs, and raccoons:
evidence of raccoon at edge of riverine h.o.b, Bullfrog present throughout.

DIAGRAM

NOTES



AQUATIC SURVEY DATA FORM

DATE: 05/30/2012		PROJECT: Oceano Lagoon	
SURVEY BIOLOGIST(S): Brooke Langle, Jessica Adinolfi			
Time Start: <u>2030</u>	Time End: <u>2330</u>	Survey Duration: <u>3 hours</u>	Unit-Effort: <u>AG Creek team</u>

LOCATION

City/County Oceano/San Luis Obispo; _____ ¼; _____ -¼ Section _____ Township _____ Range _____
 Latitude 35°6'27"N Longitude 120°37'36"; Quadrangle _____; Elevation 12 feet
 ATTACH MAP (include habitat types, important features, and species locations)

TYPE OF SURVEY

Day Night; Breeding Non-Breeding; Survey Number: 1 2 3 4 5 6 7 8
 Brand name/model of light used: MagLite LED Brand/model/power of binoculars used: Alpen Shasta Ridge 10x42

WEATHER CONDITIONS AT START OF SURVEY

Air Temperature 60.6 °F (3"); Water Temperature 69 °F; Wind Speed: 0 mph; Wind Direction NA; Cloud Cover 0 %
 Precipitation 0 in.; Humidity 60 %; Moon Phase waxing gibbous (60%); Visibility Conditions clear

AQUATIC HABITAT TYPE

River Stream Swale Ditch Lake Natural Pond Stock Pond Impoundment Vernal Pool Marsh/Wetland
 Hydrogeomorphology Class: Depression Slope Riverine

HYDROPERIOD

Permanent Intermittent Ephemeral

STREAM MORPHOMETRY/FEATURES

River/Creek Name Arroyo Grande Creek River Mile 0.5 – 0.75 Stream Order 1°
 Hydroperiod: Permanent Intermittent Ephemeral Reach Length 700 ft Right Bank Height 6 ft Left Bank Height 8 ft
 Top Bank Width _____ Stream Width 60 ft Channel Width @ OHWM _____ Right Bank Slope _____ Left Bank Slope _____
 Water Depth ≤ 5 feet Sinuosity Index _____ Stream Gradient _____ Flow Velocity _____ Wetted Perimeter _____
 Water Clarity: Clear Turbid Water Color: Clear Stained (Color green - brown)
 Instream Structure: Riffles Pools (max. depth _____) Glides Undercut Banks LOD (jams/snags) Other beaver dam
 Channel Condition: Terracing Bank or Bed Degradation



AQUATIC SURVEY DATA FORM

LAKE/POND MORPHOMETRY/FEATURES

Pond/Lake Name: _____ Hydroperiod: Permanent Seasonal
 Area: _____ Maximum Width _____ Maximum Length _____ Maximum Depth _____
 Shore Line _____ Shoreline Development _____ Width of Drawdown Zone _____
 Water Clarity: Clear Turbid Water Color: Clear Stained (Color _____)
 Instream Structure: Shoals Undercut Banks LOD (jams/snags Other _____

SUBSTRATE (Percent)

Silt Sand Gravel Cobble Boulder Bedrock Other:

STREAM/POND VEGETATION

Canopy Cover(mid-day): 10%; Emergent Vegetation: 2%; Floating Vegetation 3%; Open Water 85%
 Dominant Species: Arroyo willow (*Salix lasiolepis*), mostly open water with majority of veg along bank

ADJACENT COVER TYPE(S)

Woodland Shrub Savanna Grassland Wetland Agriculture Developed Other

SPECIES AND NUMBERS OBSERVED

Species	Egg Masses	Larvae	Metamorphs (w/legs)	Juvenile	Adult	Detection Method
<i>Pseudacris sierra</i>					X	<input type="checkbox"/> Visual <input checked="" type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
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						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight

Describe potential threats to California red-legged frogs observed, including non-native and native fish predators such as fish, bullfrogs, and raccoons:
 Raccoon observed during survey, bullfrogs observed near survey area



AQUATIC SURVEY DATA FORM

DIAGRAM

NOTES

Survey was conducted on foot with chest waders along stream bank and within channel



TERRA-VERDE
Environmental Consulting

AQUATIC SURVEY DATA FORM

DATE: <u>5/30/2012</u>	PROJECT: <u>Oceano Lagoon (Biological Assessment)</u>		
SURVEY BIOLOGIST(S): <u>Rhett Blanton / Peter Giles</u>			
Time Start: <u>2030</u>	Time End: <u>2330</u>	Survey Duration: <u>3hr</u>	Unit-Effort: <u>open water team</u>

LOCATION

City/County Oceano / San Luis Obispo County; _____ %; _____ -1/4 Section _____ Township _____ Range _____
 Latitude 35° 6' 27" N Longitude 120° 37' 36" W; Quadrangle _____; Elevation _____
 ATTACH MAP (include habitat types, important features, and species locations)

TYPE OF SURVEY

Day Night; Breeding Non-Breeding; Survey Number: 1 (2) 3 4 5 6 7 8
 Brand name/model of light used: maglight Brand/model/power of binoculars used: Nikon ¹⁰ 10/40

WEATHER CONDITIONS AT START OF SURVEY

Air Temperature 60.0 °F (3"); Water Temperature 69 °F; Wind Speed 8 mph; Wind Direction 8; Cloud Cover 8 %
 Precipitation 0 in.; Humidity _____%; Moon Phase 60% (waxing gibbous); Visibility Conditions clear, no obstruction

AQUATIC HABITAT TYPE

River Stream Swale Ditch Lake Natural Pond Stock Pond Impoundment Vernal Pool Marsh/Wetland
 Hydrogeomorphology Class: Depression Slope Riverine

HYDROPERIOD

Permanent Intermittent Ephemeral

STREAM MORPHOMETRY/FEATURES

River/Creek Name Upper Oceano Lagoon River Mile _____ Stream Order _____
 Hydroperiod: Permanent Intermittent Ephemeral Reach Length _____ Right Bank Height _____ Left Bank Height _____
 Top Bank Width _____ Stream Width _____ Channel Width @ OHWM _____ Right Bank Slope _____ Left Bank Slope _____
 Water Depth _____ Sinuosity Index _____ Stream Gradient _____ Flow Velocity _____ Wetted Perimeter _____
 Water Clarity: Clear Turbid Water Color: Clear Stained (Color _____)
 Instream Structure: Riffles Pools (max. depth _____) Glides Undercut Banks LOD (jams/snags) Other _____
 Channel Condition: Terracing Bank or Bed Degradation

LAKE/POND MORPHOMETRY/FEATURES

Pond/Lake Name: Upper Oceano Lagoon Hydroperiod: Permanent Seasonal
 Area: ~4 ac. Maximum Width 300' Maximum Length 600' Maximum Depth 8'
 Shore Line _____ Shoreline Development _____ Width of Drawdown Zone _____
 Water Clarity: Clear Turbid Water Color: Clear Stained (Color brown/green)
 Instream Structure: Shoals Undercut Banks LOD (jams/snags) Other Some overhanging wet veg, thick stands of typha



AQUATIC SURVEY DATA FORM

SUBSTRATE (Percent)

Silt Sand Gravel Cobble Boulder Bedrock Other:

STREAM/POND VEGETATION

Canopy Cover(mid-day): 5% ; Emergent Vegetation: X ; Floating Vegetation _____ ; Open Water X
 Dominant Species: Typha, cover only at perimeter, mostly open water habitat

ADJACENT COVER TYPE(S)

Woodland Shrub Savanna Grassland Wetland Agriculture Developed Other

developed rec. park, wetland/riparian as well as riparian (SUEIX) along periphery

SPECIES AND NUMBERS OBSERVED

Species	Egg Masses	Larvae	Metamorphs (w/legs)	Juvenile	Adult	Detection Method
<u>Pana Cateblana</u>			<u>20+</u>			<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
<u>"</u>				1	<u>3</u>	<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input checked="" type="checkbox"/> Capture <input checked="" type="checkbox"/> Spotlight
<u>"</u>					<u>2</u>	<input type="checkbox"/> Visual <input checked="" type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
<u>Carp</u>					<u>1</u>	<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
<u>Beaver</u>					<u>1</u>	<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
<u>Crayfish 30+(stage unk)</u>						<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
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						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight

Describe potential threats to California red-legged frogs observed, including non-native and native fish predators such as fish, bullfrogs, and raccoons:

Open water dominated by largemouth/periphery has extremely large bullfrog pops.

DIAGRAM

Survey done in canoe along interior edge of open-water habitat.

NOTES

* Supplemental Survey



AQUATIC SURVEY DATA FORM

DATE: <u>8/1/2012</u>	PROJECT: <u>Oceano Lagoon</u>		
SURVEY BIOLOGIST(S): <u>Brian Dwyer, Rhet Blanker, Peter Gilen, Holden Peterson</u>			
Time Start: <u>2100</u>	Time End: <u>0030 (8/2/12)</u>	Survey Duration: <u>3.5 hrs</u>	Unit-Effort: <u>14 hrs</u>

LOCATION

City/County Oceano San Luis Obispo; _____ %; _____ -1/4 Section _____ Township _____ Range _____
 Latitude 35° 16' 27" N Longitude 120° 57' 30" W; Quadrangle _____; Elevation _____
 ATTACH MAP (include habitat types, important features, and species locations)

TYPE OF SURVEY

Day Night; Breeding Non-Breeding; Survey Number: 1 2 3 4 5 6 7 8
 Brand name/model of light used: Maglight 3200 candle Brand/model/power of binoculars used: Nikon 10x40

WEATHER CONDITIONS AT START OF SURVEY

Air Temperature 61.5 °F (3"); Water Temperature 62 °F; Wind Speed: 0-1.5 mph; Wind Direction W; Cloud Cover _____ %
 Precipitation 0 in.; Humidity 77 %; Moon Phase nearly full; Visibility Conditions good ↓
high marine layer ≈ 80%

AQUATIC HABITAT TYPE

River Stream Swale Ditch Lake Natural Pond Stock Pond Impoundment Vernal Pool Marsh/Wetland
 Hydrogeomorphology Class: Depression Slope Riverine

HYDROPERIOD

Permanent Intermittent Ephemeral

STREAM MORPHOMETRY/FEATURES

River/Creek Name A. F. Creek, Oceano Lagoon, meadow Creek River Mile _____ Stream Order _____
 Hydroperiod: Permanent Intermittent Ephemeral Reach Length _____ Right Bank Height _____ Left Bank Height _____
 Top Bank Width _____ Stream Width _____ Channel Width @ OHWM _____ Right Bank Slope _____ Left Bank Slope _____
 Water Depth 1-4' Sinuosity Index _____ Stream Gradient _____ Flow Velocity _____ Wetted Perimeter _____
 Water Clarity: Clear Turbid Water Color: Clear Stained (Color _____)
 Instream Structure: Riffles Pools (max. depth _____) Glides Undercut Banks LOD (jams/snags) Other _____
 Channel Condition: Terracing Bank or Bed Degradation

LAKE/POND MORPHOMETRY/FEATURES

Pond/Lake Name: _____ Hydroperiod: Permanent Seasonal
 Area: _____ Maximum Width _____ Maximum Length _____ Maximum Depth _____
 Shore Line _____ Shoreline Development _____ Width of Drawdown Zone _____
 Water Clarity: Clear Turbid Water Color: Clear Stained (Color _____)
 Instream Structure: Shoals Undercut Banks LOD (jams/snags) Other _____



AQUATIC SURVEY DATA FORM

SUBSTRATE (Percent)

Silt
 Sand
 Gravel
 Cobble
 Boulder
 Bedrock
 Other:

STREAM/POND VEGETATION

Canopy Cover(mid-day): 10%; Emergent Vegetation: 30%; Floating Vegetation _____; Open Water 60%
 Dominant Species: varies, mostly (perimeter) Salix, sphenocallis

ADJACENT COVER TYPE(S)

Woodland riparian wetland
 Shrub
 Savanna
 Grassland Dune
 Wetland
 Agriculture
 Developed
 Other

SPECIES AND NUMBERS OBSERVED

Species	Egg Masses	Larvae	Metamorphs (w/legs)	Juvenile (Sub-adult)	Adult	Detection Method
Bullfrog (Lagoon)				3		<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
Bullfrog (Lagoon)						<input type="checkbox"/> Visual <input checked="" type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
Red Legged frog (Ag Creek)				1		<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
" (at bridge at corner)				1		<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
by bridge - Honolulu				1		<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
Y						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
Chorus frog					1	<input checked="" type="checkbox"/> Visual <input checked="" type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
crayfish (all areas)					many	<input checked="" type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight
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						<input type="checkbox"/> Visual <input type="checkbox"/> Call <input type="checkbox"/> Capture <input type="checkbox"/> Spotlight

Describe potential threats to California red-legged frogs observed, including non-native and native fish predators such as fish, bullfrogs, and raccoons:
Various centrarchids present as well as bullfrogs within the aquatic riparian habitat. Bullfrogs present present in wetlands as well.

DIAGRAM

NOTES



REPORT OF FIELD OBSERVATIONS

Project: Oceano Lagoon Bio Assessment	Date: 6/15/2012	M	T	W	T	F	S	S
Client: SLO County	Activity: Fisheries Inventory							
Location: Oceano, CA	Weather: Water-68F, Wind 2-3mph, Air-54F, low fog cover early, fog lifted as temps increased							
Observer: Brian Dugas, Nick Fernella, Pete Giles, Rhett Blanton	Observation Period	Start: 0930	Stop: 1530					

Description: 13 sampling attempts were performed from the shoreline to approximately 40 feet off shore along the eastern bank of the lagoon at Oceano Memorial Park. Results of the sampling were as follows:

Pull #	Large-mouth bass	Mosquito fish	Roach	Tidewater goby	Sacramento sucker	Pacific staghorn sculpin	Bluegill	Golden Shiner	Surf Perch	Prickly Sculpin	Crayfish	3-spine stickleback	Bullfrog (tad/meta)
1	43	1	-	-	-	-	-	-	-	-	1	-	-
2	28	-	-	-	-	-	-	95	-	-	-	-	-
3	34	-	-	-	-	-	-	-	1	2	-	-	-
4	8	-	-	-	-	-	-	1	1	-	-	-	-
5	64	-	--	-	-	-	-	121	4	-	-	-	-
6	12	-	-	-	-	-	-	300+	5	-	-	-	-
7	6	-	-	-	-	-	-	86	18	-	-	-	-
8	15	-	-	-	-	-	-	-	-	1	-	-	-
9	24	-	-	-	-	-	-	-	4	-	12	1	50+
10	5	-	-	-	-	-	-	-	67	-	-	-	-
11	2	-	-	-	-	-	-	-	30	-	-	-	-
12	-	-	-	-	-	-	-	-	20	-	-	-	-
13	4	-	-	-	-	-	-	-	9	1	-	-	-
Total	244	1		0		1		603	159	4	12	1	50+

REPORT OF FIELD OBSERVATIONS

Project: Oceano Lagoon Bio Assessment	Date: 6/18/2012	M	T	W	T	F	S	S
Client: SLO County	Activity: Fisheries Inventory							
Location: Oceano, CA	Weather: Water-68F, Wind 0-2 mph, Air-66F, high fog present early							
Observer: Brian Dugas, Nick Fernella, Pete Giles, Rhett Blanton	Observation Period	Start: 0945	Stop: 1545					

Description: 10 sampling attempts were performed from the shoreline to approximately 40 feet off shore from the northern channel bank located at the back of the trailer park, the second location (pulls 18-23) were approximately 500 feet west of location 1. Results of the sampling were as follows:

Pull #	Large-mouth bass	Mosquito fish	Roach	Tidewater goby	Sacramento sucker	Pacific staghorn sculpin	Bluegill	Golden Shiner	Surf Perch	Prickly Sculpin	Crayfish	3-spine stickleback	Bullfrog (tad/meta)
14	12	-	-	-	-	-	1	-	-	-	1	-	-
15	6	-	-	-	-	-	11	-	-	-	-	-	2
16	1	-	-	-	1	-	44	3	-	1	-	-	-
17	5	-	-	-	-	-	12	1	-	-	-	-	-
18	-	-	-	-	-	-	1	-	-	-	-	-	-
19	12	-	-	-	1	-	2	-	-	1	-	-	-
20	-	-	-	-	-	-	-	1	-	-	-	-	-
21	6	-	-	-	-	-	7	-	-	-	-	-	-
22	8	-	-	-	-	-	10	1	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	23	-
Total	50	0	0	0	2	0	88	6	0	2	1	23	2



REPORT OF FIELD OBSERVATIONS

Project: Oceano Lagoon Bio Assessment	Date: 6/19/2012	M	T	W	T	F	S	S
Client: SLO County	Activity: Fisheries Inventory							
Location: Oceano, CA	Weather: Water-59F, Wind 0-1 mph, Air-66F, high fog present early, cleared by 1130							
Observer: Brian Dugas, Nick Fernella, Pete Giles, Rhett Blanton	Observation Period	Start: 0930	Stop: 1330					

Description: 3 sampling attempts were performed of the lagoon at the flap gates. Pull 24 and 25 were from the north east side while pull 26 was done on the backside of the gates (Arroyo Grande Creek side). Results of the sampling were as follows:

Pull #	Large-mouth bass	Mosquito fish	Roach	Tidewater goby	Sacramento sucker	Pacific staghorn sculpin	Bluegill	Golden Shiner	Surf Perch	Prickly Sculpin	Crayfish	3-spine stickleback	Bullfrog (tad/meta)
24	-	-	-	-	-	-	-	-	-	-	-	11	-
25	-	-	-	-	-	-	-	-	-	-	-	4	-
26	-	-	-	1	1	4	-	-	-	-	-	9	-
Total	0	0	0	1	1	4	0	0	0	0	0	24	0

A hand held net was used to sample the drainage swale in front of the water treatment facility and 300 feet downstream, 2 mosquito fish and 3 bullfrog tadpoles were observed during this effort. During snorkel surveys numerous crayfish and one Pacific pond turtle was observed.

Letter 3

COMMENTER: Jeff Edwards and Julie Tacker

DATE: July 7, 2023

Response 3.1

The commenter provides a summary of the project's history and expresses concern regarding the motivation and need for the project, the status of land acquisition for the project, the implementation timing for the project, and the potential for advanced purified water produced by the project to be beneficially used.

This comment is noted. This comment does not pertain to the environmental impact analysis contained in the Draft Addendum but will be considered by decision makers. No revisions to the Addendum are warranted in response to this comment.

Response 3.2

The commenter quotes an excerpt from the Association of Environmental Professionals' *CEQA Portal Topic Paper - Project Description* and provides a summary of the Modified Project components as compared to the Original Project components. The commenter expresses an opinion that the changes included in the Modified Project are substantial enough that additional impacts or more severe impacts beyond those already analyzed in the Final EIR would occur. The commenter suggests the Modified Project triggers the requirement for preparation of a subsequent environmental document pursuant to CEQA Guidelines Section 15162. The commenter expresses concern that the location and number of injection and monitoring wells as well as the location, depth, and quantity of water that would be injected in each injection well continues to change. The commenter also expresses concern that MW-NCMA North A/B/C and MW-NCMA South A/B/C would require an underground creek crossing that would result in additional environmental impacts that were not analyzed in the Draft Addendum.

Pursuant to CEQA Guidelines Section 15162, the requirement for preparation of Subsequent EIR is not predicated on whether substantial changes to the project have occurred. Rather, a Subsequent EIR is only required if substantial changes proposed in a project would require major revisions of the previous EIR due to 1) the involvement of new significant environmental effects or 2) a substantial increase in the severity of previously identified significant effects. The Draft Addendum to the Final EIR contains a comprehensive and thorough analysis of the environmental impacts of the Modified Project as compared to the Original Project and determines that, based on substantial evidence, the changes included in the Modified Project would not result in new significant environmental effects and would not substantially increase the severity of significant effects previously identified in the Final EIR. The commenter does not specify what new or substantially more severe significant environmental impacts would occur as a result of the Modified Project that were not previously identified in the Final EIR.

The project description included in the Draft Addendum reflects the most current project engineering proposal and is consistent with the project description that will be submitted to the California Coastal Commission as part of the project's Coastal Development Permit application, which represents the primary land use permit governing the Modified Project. All changes to project

components that have occurred since certification of the Final EIR in 2021 have been incorporated into the Modified Project, which is analyzed in the Draft Addendum.

Contrary to the commenter's assertion, installation of MW-NCMA North A/B/C and MW-NCMA South A/B/C would not require an underground creek crossing. Each monitoring well is an independent facility at which water quality data can be monitored via readings at the well site and/or remotely. Installation of monitoring wells does not involve installation of pipelines because no water is being conveyed to or from each well. Given that no pipelines or underground creek crossings would be required for these two monitoring wells, the Draft Addendum adequately analyzes their potential environmental impacts.

No revisions to the Addendum are warranted in response to this comment.

Response 3.3

The commenter expresses concern that recent presentations regarding the Modified Project have stated varying numbers of injection wells would be included in the Modified Project and that uncertainty with regard to the receipt of approval from the Federal Aviation Administration (FAA) may result in future changes to the location of IW-5A and IW-5B. The commenter notes the Modified Project includes a change in the range of injection depths and questions why the change in depth is necessary. The commenter expresses concern that a shallower depth of discharge could result in greater potential for advanced purified water and/or groundwater to surface. The commenter expresses concern that if fewer injection wells are constructed and the same amount of advanced purified water is produced, the potential for advanced purified water and/or groundwater to surface would be greater. The commenter states an opinion that neither the Final EIR nor the Draft Addendum address this potential scenario.

The Draft Addendum evaluates the installation of up to seven injection wells at five sites over the course of two project phases (Phase I and Phase II) and thus provides a comprehensive assessment of potential project impacts. The June 19, 2023 presentation at the Central Coast Blue Regional Recycled Water Joint Powers Authority meeting provided an overview of the Draft Addendum, which evaluates installation of four wells during Phase I and three injection wells during Phase II, as stated on page 18 in Section 2, *Background and Project Description*, of the Draft Addendum. This project proposal is consistent with the presentation given at the June 5, 2023 Joint Council meeting, which summarized the results of groundwater modeling that validated the efficacy of operating four injection wells during Phase I. However, in an effort to minimize the construction cost of Phase I and reduce temporary construction impacts to the Oceano community, efforts are ongoing to evaluate whether construction of any project components can be deferred from Phase I to Phase II while still achieving project benefits. Specifically, at the June 14, 2023 presentation to the Oceano Community Services District Board of Directors, it was noted that the project team was evaluating whether one of the injection wells could be deferred to Phase II, potentially reducing the number of Phase I injection wells from four to three. Should fewer injection wells be installed during Phase I of the project, the environmental impacts of Phase I would be reduced as compared to those evaluated in the Draft Addendum, and the City would evaluate whether increasing the number of injection wells installed during Phase II would necessitate preparation of subsequent CEQA documentation.

CEQA does not require a project proponent or applicant to obtain all required approvals prior to preparing a CEQA document. The project team has been coordinating with the FAA through the County with regard to the permanent airport utility easements that would need to be granted by the County and approved by the FAA for the proposed pipelines through the airport property, and

responses from the FAA have been supportive to date. In addition, the project will be required to comply with the FAA requirement to submit a Notice of Proposed Construction or Alteration due to the height of the drill rig necessary for construction activities for IW-5A and IW-5B as well as other project components within 2,500 feet of the Oceano County Airport runway. This notification will be submitted to the FAA once design documents are finalized and a construction date has been determined.

The estimated well depths for the Original Project were based on preliminary assumptions available at the time of development of the Draft and Final EIRs. The Modified Project includes updated assumptions and incorporates more recent information obtained during preliminary well design, the modeled lithology at each of the modified well locations, and the varying depth of the target aquifers for injection across the Modified Project area. The range in depth of target aquifers and their confining layers varies throughout the Modified Project area and the range of injection well depths has been updated to reflect those conditions. The Modified Project involves injection of advanced purified water into confined deep aquifers (see Attachment 1), and although the estimated depth of injection was updated in the Draft Addendum, the same confined aquifers as those contemplated in the Final EIR are proposed for injection of advanced purified water. In addition, the proposed injection wells have been designed using data obtained from the pilot injection well as well as groundwater modeling to confirm that injection of advanced purified water would not result in surfacing of water. Furthermore, the Modified Project includes installation of controls that would monitor groundwater levels and adjust injection rates accordingly to prevent surfacing. To clarify these items, the following revisions have been made to the text in Section 2.2, *Modified Central Coast Blue Project*, of the Draft Addendum:

Under the Modified Project, the advanced purified water would be injected at a depth of approximately 160 to 680 feet below ground surface, which is slightly different than the depth range of 200 to 600 feet originally anticipated for the Original Project. Although the range of injection depths has changed, the Modified Project involves injection of advanced purified water into the same confined deep aquifers as those contemplated in the Final EIR for the Original Project. The Modified Project would result in injection of similar quantities of advanced purified water into the groundwater basin under Phases I and II as compared to the Original Project. In addition, the Modified Project includes provisions to monitor groundwater levels that would facilitate adjustment to injection rates accordingly to prevent surfacing of advanced purified water and/or groundwater.

The actual injection capacity of each well will vary among the wells and will be determined during construction based on the local hydrogeology encountered. The Draft Addendum evaluates a maximum operational injection rate for each well rather than an average injection rate to capture the reality that flow to each well would vary over time and may be higher or lower depending on Advanced Treatment Facility (ATF) operations, injection capacity of each well, the number of operational wells, and other factors. If fewer injection wells are operational, a higher average injection rate would be used at each well, but this average injection rate would still be dependent on local hydrogeologic conditions and ultimately would be lower than the maximum injection rate evaluated in the Draft Addendum.

Response 3.4

The commenter states that no easements, licenses, encroachment permits, or other agreements for most of the injection well and monitoring well locations have been acquired. The commenter

expresses that if such agreements cannot be obtained, the location of project components may continue to be modified.

CEQA does not require a project proponent to obtain all required easements, licenses, encroachment permits, or other agreements prior to preparing a CEQA document. Instead, Public Resources Code Section 21080 requires compliance with CEQA prior to public agencies carrying out discretionary projects and/or issuing discretionary approvals for a project, such as certain discretionary land use permits. The need for approvals to be issued by several public agencies was outlined in Section 2.10, *Other Public Agencies Whose Approval Is Required*, in Section 2, *Project Description*, of the Final EIR.

Nevertheless, all well sites located in public rights-of-way have been reviewed with the appropriate authorities responsible for encroachment permits to confirm feasibility. Encroachment permit applications will be submitted once design documents are finalized and construction dates are identified for each relevant component. In addition, property negotiations are ongoing for the IW-2A/IW-2B site, and the locations of these project components have been coordinated with the property's developer. In case negotiations are not successful, a viable alternative for this site in the public right-of-way has been identified, and this site is evaluated in the Draft Addendum as IW-2A/IW-2B Alternate. Furthermore, the South San Luis Obispo County Sanitation District (SSLOCSO) has been consulted regarding design of IW-5A, IW-5B, and MW-5A/5B/5C, and an agreement will be pursued once design documents are finalized. Lastly, both the California Department of Transportation and Union Pacific Railroad have been consulted on the design of project components within their rights-of-way/property, and permit approvals and agreements are in various stages of review and approval. Furthermore, completion of this Addendum to the Final EIR is a key step in the permitting process and will inform the public agencies issuing permits and approvals of the environmental impacts of the Modified Project.

The project description included in the Draft Addendum reflects the most current project engineering proposal and is consistent with the project description that will be submitted to the California Coastal Commission as part of the project's Coastal Development Permit application, which represents the primary land use permit governing the Modified Project. Should it become necessary to modify the location of project components in the future, the City will review the proposed modifications and determine whether subsequent environmental documentation is necessary to satisfy the requirements of CEQA.

No revisions to the Addendum are warranted in response to this comment.

Response 3.5

The commenter expresses an opinion that the Modified Project is significantly different from the Original Project and that the changes should not be considered minor or minimal. The commenter expresses concern that a statement on page 21 of the Draft Addendum is conclusory because the project description is fluid and the increase in severity of significant environmental impacts beyond those identified in the certified EIR has not been determined or analyzed and cannot be until there is a fixed project description.

As stated in Response 3.2, pursuant to CEQA Guidelines Section 15162, the requirement for preparation of a Subsequent EIR is not predicated on whether changes to the project are minor or minimal. Rather, a Subsequent EIR is only required if substantial changes proposed in a project would require major revisions of the previous EIR due to 1) the involvement of new significant environmental effects or 2) a substantial increase in the severity of previously identified significant

effects. The Draft Addendum to the Final EIR contains a comprehensive and thorough analysis of the environmental impacts of the Modified Project as compared to the Original Project that provides substantial evidence to support the statement on page 21 of the Draft Addendum that “the environmental impacts of the Modified Project are substantially similar to those analyzed in the certified EIR for the Original Project. The modifications between the Original Project and the Modified Project would not introduce new significant environmental impacts or increase the severity of significant environmental impacts beyond those which have already been identified and characterized in the certified EIR.”

As stated in Response 3.4, the project description included in the Draft Addendum reflects the most current project engineering proposal and is consistent with the project description that will be submitted to the California Coastal Commission as part of the project’s Coastal Development Permit application, which represents the primary land use permit governing the Modified Project. As a result, the project description is accurate, finite, fixed, and stable and provides an adequate basis for analyzing the environmental impacts of the Modified Project in the Draft Addendum.

No revisions to the Addendum are warranted in response to this comment.

Response 3.6

The commenter quotes an excerpt from the Association of Environmental Professionals’ *CEQA Portal Topic Paper – Subsequent and Supplemental EIRs and Streamlining*. The commenter expresses an opinion that the decision to prepare an Addendum rather than a Supplemental or Subsequent EIR was not based on substantial evidence. The commenter expresses an opinion that it is not possible to fully assess the likely cumulative environmental effects of the Modified Project due to the inability to fully quantify impacts.

The Draft Addendum to the Final EIR contains a comprehensive and thorough analysis of environmental impacts of the Modified Project, including quantification of air quality, energy, greenhouse gas, and noise impacts, as compared to the Original Project. The analysis contained in the Draft Addendum provides substantial evidence to support the City’s determination that an Addendum is the appropriate document to evaluate the environmental impacts of the Modified Project as compared to a Subsequent or Supplemental EIR. The commenter does not provide an explanation as to why it is not possible to fully quantify the environmental impacts of the Modified Project and does not provide evidence that the quantification of the Modified Project’s air quality, energy, greenhouse gas, and noise impacts in the Draft Addendum is insufficient. The commenter also does not specify what the likely cumulative environmental effects of the Modified Project are.

No revisions to the Addendum are warranted in response to this comment.

Response 3.7

The commenter quotes an excerpt from the Association of Environmental Professionals’ *CEQA Portal Topic Paper – Subsequent and Supplemental EIRs and Streamlining*. The commenter expresses an opinion that CEQA Guidelines Section 15162(1) has been triggered.

As stated in Response 3.2, pursuant to CEQA Guidelines Section 15162(1), preparation of a Subsequent EIR is only required if substantial changes proposed in a project would require major revisions of the previous EIR due to 1) the involvement of new significant environmental effects or 2) a substantial increase in the severity of previously identified significant effects. The Draft Addendum to the Final EIR contains comprehensive and thorough analysis of the Modified Project

as compared to the Original Project and determines that, based on substantial evidence, the changes included in the Modified Project would not result in new significant environmental effects or substantially increase the severity of significant effects previously identified in the Final EIR. The commenter does not specify what new or substantially more severe significant environmental impacts would occur as a result of the Modified Project that were not previously identified in the Final EIR.

No revisions to the Addendum are warranted in response to this comment.

Response 3.8

The commenter questions whether a piezometer was used in project component areas to determine depth to groundwater and whether a soils investigation was performed. The commenter expresses a concern that project impacts related to encountering groundwater during construction are understated. The commenter expresses concern that the Barca and Pike Basins would not be adequate locations to discharge groundwater produced during construction. The commenter questions how much water each of the 72 trucks would carry for disposal of groundwater produced during construction dewatering. The commenter expresses an opinion that construction dewatering would result in significant traffic impacts at the ATF site and at the detention basin locations. The commenter questions how long dewatering would continue at the ATF site after construction is complete.

Depth to groundwater at the locations of project components was measured as part of geotechnical investigations. A truck-mounted hollow-stem auger drill rig extended exploratory borings to depths of up to 50 feet below ground surface. Soil samples were collected from each boring, and groundwater levels were determined based on extending a sounding device within each boring or by noting changes in soil saturation. The borings were backfilled and restored with the exception of two borings that were completed as temporary monitoring wells. Groundwater levels within the two temporary monitoring wells are being monitored during design from Solinst Level Loggers installed in each well. Groundwater levels will continue to be monitored during construction to provide information during dewatering. The two geotechnical reports that have been prepared for the project are included as Attachment 2.

The ultimate locations of groundwater disposal during construction would be determined by the construction contractor's means and methods. For the purposes of the Draft Addendum, the City has conservatively estimated the volume of water that would be dewatered and comprehensively evaluated the environmental impacts of multiple potential methods that may be used for disposal, including the Barca Basin, Pike Basin, and Mentone Drainage Basin. However, at this time, the primary method of discharge is anticipated to be through a connection to the existing Pismo Beach outfall pipeline that runs below State Route 1, which is also evaluated in the Draft Addendum.

Dewatering at the ATF site would not be necessary following the completion of construction activities because the ATF structures would be designed to resist uplift from buoyancy forces and prevent seepage in or out of the structures. To clarify this point, the following revisions have been made to the text in Section 2.2, *Modified Central Coast Blue Project*, of Draft Addendum:

No changes in operation and maintenance characteristics would occur under the Modified Project as compared to the Original Project. As with the Original Project, dewatering at the ATF site would not be necessary following the completion of construction activities under the Modified Project because the ATF structures would be designed to resist uplift from buoyancy forces and prevent seepage in or out of the structures.

Response 3.9

The commenter expresses an opinion that any discharge to the sanitary sewer would require the wastewater treatment plant to increase treatment volumes, which would impact plant operations, and that discharging produced groundwater to a storm sewer or ocean outfall is a waste of water. The commenter suggests the dewatering plan include a statement that the primary option for discharging produced groundwater is to land and that the land disposal locations should be identified and analyzed for environmental impacts.

Prior to discharging groundwater produced during construction to the sanitary sewer system, the project team would be required to obtain a determination from SSLOCSO that adequate capacity is available for treatment and disposal of the anticipated volume of water. The purpose of the Addendum is not to evaluate the merits of various design and construction alternatives for the Modified Project but rather to evaluate the environmental impacts of the Modified Project as proposed. The Draft Addendum evaluates the environmental impacts of the proposed methods of disposal, which are stated on page 19 in Section 2.2, *Modified Central Coast Blue Project*, of the Draft Addendum. These methods consist of disposal via connections to the existing Pismo Beach outfall pipeline that runs below State Route 1, timed release to the sanitary or storm sewer, and trucking up to one mile for percolation into a storm retention basin such as the Mentone Basin Park (i.e., land disposal). The environmental impacts of the first option were evaluated in the Final EIR, and the Draft Addendum includes an evaluation of the environmental impacts of the latter two options.

No revisions to the Addendum are warranted in response to this comment.

Response 3.10

The commenter expresses concern that there is a discrepancy between the project's objective of mitigating seawater intrusion and the proposed construction-phase dewatering may exacerbate this condition.

Dewatering for construction of the project would be short-term (i.e., six months or less for each project component) and localized, and the quantity of water pumped from shallow groundwater aquifers during construction dewatering would be of a different magnitude as compared to the groundwater pumped from the Santa Maria Groundwater Basin for municipal, agricultural, and other uses. In addition, seawater intrusion is a threat to the deeper confined municipal drinking water aquifers, not the shallow alluvial aquifers that would be encountered during construction.

No revisions to the Addendum are warranted in response to this comment.

Response 3.11

The commenter requests information on the groundwater quality at the proposed ATF site and expresses a concern that past uses at the site may have resulted in ground surface and/or groundwater contamination. The commenter expresses an opinion that the Draft Addendum does not analyze or address any cleanup activities that may be required to use the site for the ATF. The commenter also expresses a concern that the method and responsibility for disposal of the existing vehicles on-site as well as the environmental impacts of such activities are not specified in the Draft Addendum. In addition, the commenter states an opinion that the Final EIR and Draft Addendum do not include an analysis of the quality of the groundwater that will be dewatered at the ATF site and what the method of treatment and disposal of this groundwater will be.

Phase I and II Environmental Site Assessments (ESA) were prepared for the 980 Huber Street property (i.e., the ATF site) in 2019 prior to the acquisition of this property by the City of Pismo Beach (see Attachment 3).^{1, 2} The Phase I ESA identified that former agricultural use of the property, current use of the property for automobile/truck/RV/boat/trailer/equipment storage, and adjacent automobile repair facilities and towing/vehicle storage yards may have impacted soil beneath the property. As a result, a Phase II ESA was conducted to determine whether on-site soils were impacted by contamination from former, current, and adjacent uses. As indicated in the Phase II ESA, none of the soil samples at the property exceeded the environmental screening levels for residential or commercial soil for total petroleum hydrocarbons, polyaromatic hydrocarbons, pesticides, or metals except for arsenic and thallium. Concentrations of arsenic exceeded the residential and commercial environmental screening levels but were within the naturally-occurring background range for arsenic in California soils and therefore were determined to not pose a concern for site use. Concentrations of thallium exceeded the residential screening level but not the commercial screening level. Because the property is not proposed for residential use, this exceedance does not pose a concern for site use as an ATF. Therefore, no cleanup or disposal of contaminated on-site soils is anticipated to be necessary as part of the Modified Project.

The current tenant of the ATF site is a towing company who uses the site as a storage yard and who will be responsible for removing the vehicles off the site prior to the start of construction.

As indicated on page 67 in Section 4.8, *Hydrology/Water Quality*, of the Draft Addendum, discharge of groundwater produced during construction would be required to comply with the water quality standards outlined in National Pollutant Discharge Elimination System No. CAG993002 (Order No. R3-2016-0035 for discharges of highly treated groundwater). The proposed methods of groundwater disposal are stated on page 19 in Section 2.2, *Modified Central Coast Blue Project*, of the Draft Addendum. These methods consist of disposal via connections to the existing Pismo Beach outfall pipeline that runs below State Route 1, timed release to the sanitary or storm sewer, and trucking up to one mile for percolation into a storm retention basin such as the Mentone Basin Park (i.e., land disposal).

No revisions to the Addendum are warranted in response to this comment.

Response 3.12

The commenter expresses a concern that the Draft Addendum does not reference a 2012 Biological Resources Assessment (BRA) prepared for Meadow Creek Lagoon, which identified Pacific pond turtle (*Actinemys marmorata*) and California red legged frog (*Rana draytonii*; CRLF) in the vicinity of the SSLOCSDD WWTP, Meadow Creek, and Oceano Airport. The commenter suggests the results of this report would add to the understanding of biological resources in the project area and expresses an opinion that the potential impacts of the proposed pipelines included in the Modified Project to biological resources in this area, in particular these two species, were not analyzed in the Draft Addendum.

The biological resources analysis included in the Draft Addendum is based on the project-specific 2023 BRA that relies on the most up-to-date information on known special-status species

¹ Rincon Consultants, Inc. 2019. Phase I Environmental Site Assessment of Approximately 1.5 Acre Parcel, Huber Street, Grover Beach, California. June 21, 2129.

² Rincon Consultants, Inc. 2019. Phase II Environmental Site Assessment of Approximately 1.5 Acre Parcel, Huber Street, Grover Beach, California. July 22, 2019.

occurrences and current site conditions, including presence of suitable habitat for special status species. As stated on pages 38 and 39 in Section 4.2, *Biological Resources*, of the Draft Addendum and further described in the 2023 BRA included as Appendix B to the Draft Addendum, CRLF has potential to occur within the Modified Project site. The Modified Project would potentially result in significant direct and indirect impacts to individuals of CRLF as well as direct impacts to CRLF habitat during construction and ground-disturbing maintenance activities associated with IW-5A, IW-5B, MW-5A/5B/5C, the pump station at the SSLOCSD WWTP, and pipeline locations. As a result, as indicated in the Draft Addendum, Mitigation Measures BIO-1(a) and BIO-1(b) from the Final EIR are applicable to the Modified Project to address these impacts. Mitigation Measure BIO-1(a) applies to project components near native vegetation communities, such as arroyo willow riparian habitat, and Mitigation Measure BIO-1(b) applies to project components within the SSLOCSD WWTP and those within 50 feet of Arroyo Grande Creek and Meadow Creek.

Pacific pond turtle and southwestern pond turtle (*Emys marmorata*) are interchangeable names for the same species of turtle. (Both turtle species included in the genus *Actinemys* are sometimes also included in the genus *Emys*.) As stated on pages 38 and 39 in Section 4.2, *Biological Resources*, of the Draft Addendum and further described in the 2023 BRA included as Appendix B to the Draft Addendum, southwestern pond turtle has potential to occur within the Modified Project site. The Modified Project would potentially result in significant impacts to southwestern pond turtles through harassment, injury, and mortality of individuals; destruction of nest sites; general habitat disturbance or removal and disruption of foraging or breeding activities that could impact the reproductive success of the local and regional population, specifically at the locations of IW-5A, IW-5B, MW-5A/5B/5C, and the pump station at the SSLOCSD WWTP adjacent to Arroyo Grande Creek as well as along portions of the pipeline alignments. As a result, as indicated in the Draft Addendum, Mitigation Measure BIO-1(c) from the Final EIR is required for the Modified Project to address these impacts. Mitigation Measure BIO-1(c) applies to project components within the SSLOCSD WWTP and those within 50 feet of Arroyo Grande Creek and Meadow Creek.

Therefore, the 2012 BRA provided by the commenter provides no new information that was not considered in the Draft Addendum and its supporting 2023 BRA, and the Draft Addendum adequately analyzes impacts to biological resources under CEQA, including to CRLF and southwestern pond turtle (also known as Pacific pond turtle). No revisions to the Addendum are warranted in response to this comment.

Response 3.13

The commenter expresses a concern that the Draft Addendum does not mention the use of sound walls as construction noise mitigation measures for any of the proposed injection and monitoring wells. The commenter expresses an opinion that employees at the SSLOCSD WWTP are sensitive receptors whose work may be disrupted by continuous noise. The commenter suggests that if sound walls would be included in the project, their impacts to aesthetics and transportation should be analyzed as part of the project.

Mitigation Measure N-1, outlined on pages 83 and 84 in Section 4.10, *Noise*, of the Draft Addendum, includes a requirement for the installation of temporary sound barriers/blankets of varying heights during certain phases of construction for the injection, production, and monitoring wells, including those located at the SSLOCSD WWTP property (IW-5A, IW-5B, and MW-5A/5B/5C). These temporary sound barriers would be installed within the footprint of the project site and would not result in any additional lane or roadway closures beyond those already evaluated in the Draft Addendum for the Modified Project. As stated on page 92 in Section 4.11, *Transportation*, of the Draft Addendum,

“Similar to the Original Project, construction of Modified Project would result in temporary access restrictions along public roadways throughout the Modified Project area that could conflict with programs, plans, ordinances, and policies addressing the circulation system as well as result in inadequate emergency access. Mitigation Measure T-1 would continue to apply to construction activities for the Modified Project and would reduce these impacts to a less-than-significant level.”

Under CEQA, the evaluation of aesthetic impacts is focused on the impairment of scenic vistas, the damage of scenic resources within view of a state scenic highway, conflicts with applicable zoning and other regulations governing scenic quality in urbanized areas, and the creation of new sources of substantial light and glare. As indicated in Section 4.12, *Effects Found Not to Be Significant*, of the Final EIR, scenic views in the project area include views of the ocean to the west and views of the foothills north of U.S. Highway 101. In addition, State Route 1 is officially designated as a state scenic highway throughout the entire length of San Luis Obispo County. Based on the locations of injection, monitoring, and production wells and the presence of intervening topography, vegetation, and development, temporary sound barriers/blankets would not have the potential to block public views of the ocean or foothills or damage scenic resources within view of State Route 1. In addition, the visual appearance of temporary sound barriers/blankets is not subject to zoning regulations and would therefore not conflict with regulations governing scenic quality. Lastly, temporary sound barriers/blankets installed during construction would not include sources of light or glare. Therefore, temporary sound barriers/blankets would not result in significant secondary impacts related to aesthetics. To amplify the analysis contained in the Draft Addendum, the following revisions have been made to the text in Section 4.12, *Effects Found Not to Be Significant*, of the Draft Addendum:

Similar to the Original Project, underground components of the Modified Project, such as pipelines, would not be visible after construction, and aboveground components under the Modified Project would be low-profile and similar in height to existing development such that they would not impede scenic vistas. There are no Modified Project components within potential view of SR 1, an officially designated scenic highway, with the exception of IW-3, located in the public right-of-way of Monroe Drive to the west of SR 1, and the existing MW-3A/3B and IW-4, which are located in the Coastal Dunes RV Park and Campground. All of these components have small footprints and are either at-grade or have a low height profile. As with the Original Project, Modified Project components would not be visible from U.S. Highway 101, which is an eligible state scenic highway (Caltrans 2018). Modified Project components would continue to be consistent with the underlying zoning designations and would not result in impacts related to visual character or scenic quality due to zoning conflicts. In addition, the Modified Project would introduce similar types of lighting and glare sources as those included in the Original Project.

Based on the locations of injection, monitoring, and production wells and the presence of intervening topography, vegetation, and development, the temporary sound barriers/blankets required under Mitigation Measure N-1 for the Modified Project would not have the potential to block public views of the ocean or foothills or damage scenic resources within view of State Route 1. In addition, the visual appearance of these temporary sound barriers/blankets is not subject to zoning regulations and would therefore not conflict with regulations governing scenic quality. Lastly, temporary sound barriers/blankets installed during construction pursuant to Mitigation Measure N-1 would not include sources of light or glare. Therefore, similar to the Original Project, aesthetic impacts under the Modified Project would be less than significant. As such, the Modified

Project would not result in new significant impacts related to aesthetics and would not increase the severity of significant impacts identified in the certified EIR.

As noted on page 71 in Section 4.10, *Noise*, of the Draft Addendum, noise-sensitive receivers in the Modified Project area include residential neighborhoods, schools, hotels, motels, nursing homes, libraries, museums, parks, playgrounds, public assembly and entertainment venues, office buildings, restaurants, and Arroyo Grande Community Hospital. As shown in Table 4.10-3 in Section 4.10, *Noise*, of the Final EIR, the municipal codes of the Cities of Pismo Beach, Grover Beach, and Arroyo Grande and the County do not include workers at industrial facilities in their definitions of noise-sensitive receivers. Therefore, employees at the SSLOCSD WWTP are not considered noise-sensitive receivers. The noise level limits established by the City of Grover Beach and the County are applicable only to noise-sensitive receivers (County of San Luis Obispo General Plan Noise Element Table 3-2; San Luis Obispo County Code Sections 22.10.120[B-C], 23.06.044, and 23.06.046; City of Grover Beach General Plan Noise Element Table 3; Grover Beach Municipal Code Sections 3120.8 and 3120.9) and do not apply to employees at the SSLOCSD WWTP. Therefore, for the purpose of determining whether the Modified Project would result in a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance under CEQA, construction noise impacts to employees at the SSLOCSD WWTP are not evaluated because no such standards exist.

No revisions to the Addendum are warranted in response to this comment.

Response 3.14

The commenter expresses a concern that the partner agencies have not resolved how and where to use the advanced purified water produced by the project. The commenter expresses an opinion that the project-level and cumulative environmental impacts of the project cannot be fully analyzed and mitigation measures cannot be developed until the project can be described in sufficient detail. The commenter also suggests that the Draft Addendum does not include substantial evidence to support its findings and should not be adopted.

The purpose of the Addendum is not to evaluate the feasibility of the Modified Project but rather to provide an unbiased analysis of the physical impacts of the Modified Project on the environment as proposed. More specifically, the purpose of the Addendum is to explore environmental impacts that could not have been considered in the original environmental document (*Friends of College of San Mateo, Supra*, at 949-950). The project description provided in Section 2, *Background and Project Description*, of the Draft Addendum indicates how and where the advanced purified water will be used. The project description is also detailed, comprehensive, accurate, finite, and stable and reflects the most current project engineering proposal. Therefore, the project description provides an adequate basis for analyzing the project-level and cumulative environmental impacts of the Modified Project in the Draft Addendum. The Draft Addendum to the Final EIR contains a thorough analysis of the environmental impacts of the Modified Project as compared to the Original Project that provides substantial evidence to support its findings, and the commenter has not provided specific evidence to the contrary. No revisions to the Addendum are warranted in response to this comment.

Response 3.15

The commenter recommends acquiring the necessary agreements to ensure the desired land is part of the project and to allow the project description to become fixed. The commenter suggests that

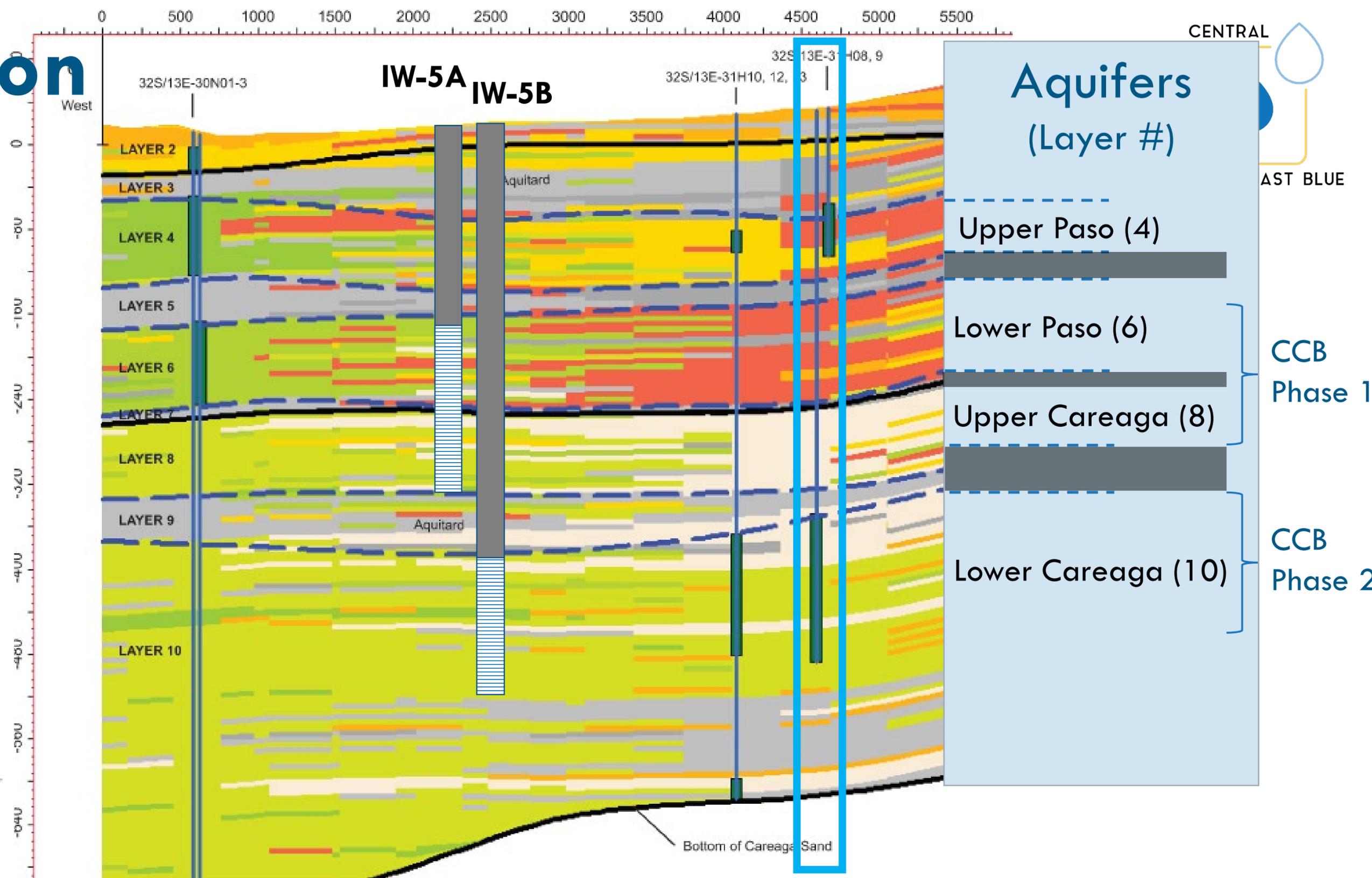
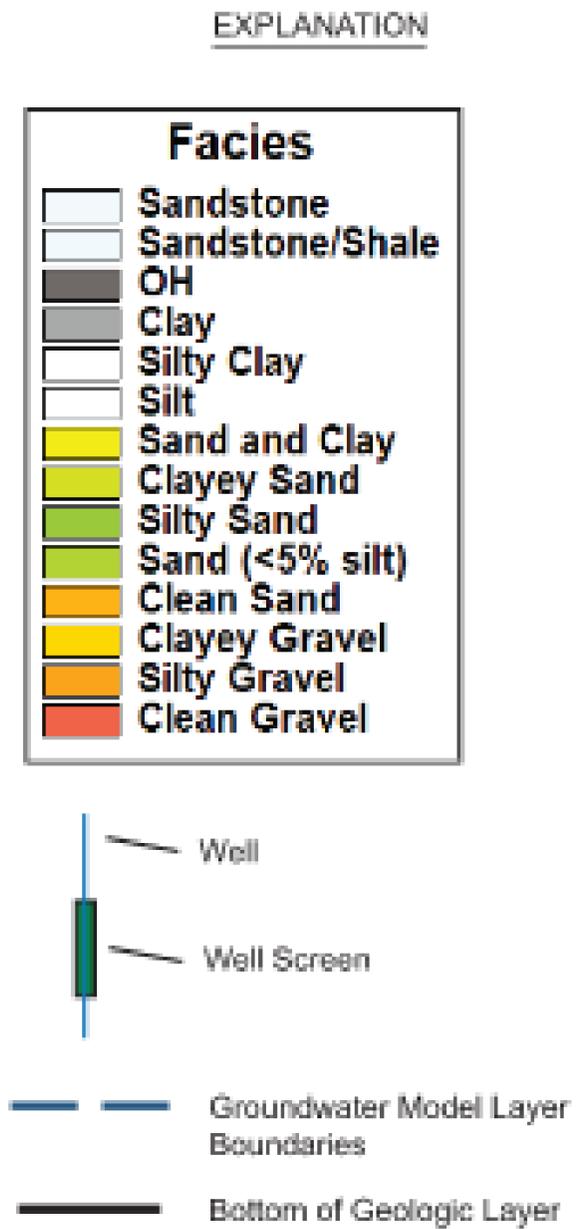
once this is complete, subsequent environmental documentation can be prepared for that version of the project. The commenter also suggests partner cities and their respective councils review project documents to inform their decision making.

As noted under Response 3.4, CEQA does not require a project proponent to obtain all necessary real estate agreements prior to preparing a CEQA document. The project description included in the Draft Addendum reflects the most current project engineering proposal and is accurate, finite, and stable. As such, the project description is adequate to use as the basis for the comprehensive and thorough environmental impact analysis contained in the Draft Addendum. The commenter's suggestion to partner cities and their respective councils does not pertain to the environmental impact analysis contained in the Draft Addendum but will be considered by decision makers. No revisions to the Addendum are warranted in response to this comment.

Attachment 1

Lithology for IW-5A and IW-5B

Stratification



OCSD Well #8

Attachment 2

Geotechnical Reports



Converse Consultants

Geotechnical Engineering
Environmental & Groundwater Science
Inspection & Testing Services

GEOTECHNICAL INVESTIGATION REPORT

CENTRAL COAST BLUE ADVANCED WATER TREATMENT PROJECT
972 HUBER STREET
GROVER BEACH, CALIFORNIA

CONVERSE PROJECT No. 21-31-323-01

Prepared For:

CAROLLO ENGINEERS

Mr. Vincent Roquebert, PE, PMP
Senior Design Manager
3150 Bristol Street, Suite 500
Costa Mesa, California 92626

Presented By:

CONVERSE CONSULTANTS

717 South Myrtle Avenue
Monrovia, California 91016
626-930-1200

June 15, 2022



Converse Consultants

Geotechnical Engineering, Environmental & Groundwater Science, Inspection & Testing Services

June 15, 2022

Mr. Vincent Roquebert, PE, PMP
Senior Design Manager
Carollo Engineers
3150 Bristol Street, Suite 500
Costa Mesa, California 92626

Subject: **GEOTECHNICAL INVESTIGATION REPORT**
Central Coast Blue Advanced Water Treatment Project
972 Huber Street, Grover Beach, California
Converse Project No. 21-31-323-01

Dear Mr. Roquebert:

Converse Consultants (Converse) is pleased to submit this geotechnical investigation report to assist with the design and construction of the Central Coast Blue Advanced Water Treatment Project (hereinafter the "Project"), located at 972 Huber Street, in the City of Grover Beach, San Luis Obispo County, California. This report was prepared in accordance with our proposal dated December 9, 2021.

Based upon our field investigation, laboratory data, and analyses, the proposed project is considered feasible from a geotechnical standpoint, provided the recommendations presented in this report are incorporated into the design and construction of the project.

We appreciate the opportunity to be of service to Carollo Engineers and City of Grover Beach. Should you have any questions, please do not hesitate to contact us at 626-930-1275.

Sincerely,

CONVERSE CONSULTANTS

Siva K. Sivathasan, PhD, PE, GE, DGE, QSD, F. ASCE
Senior Vice President / Principal Engineer

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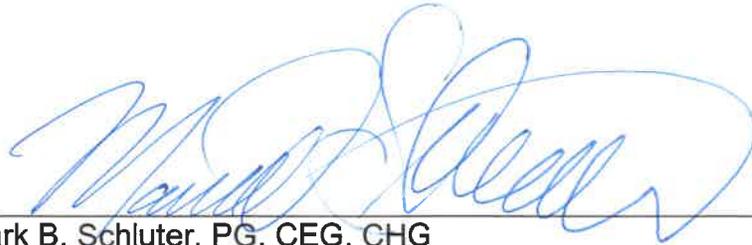
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PROFESSIONAL CERTIFICATION

This report has been prepared by the following professionals whose seals and signatures appear herein.

The findings, recommendations, specifications and professional opinions contained in this report were prepared in accordance with generally accepted professional engineering and engineering geologic principles and practice in this area of Southern California. We make no other warranty, either expressed or implied.



Mark B. Schluter, PG, CEG, CHG
Senior Engineering Geologist



Siva K. Sivathasan, PhD, PE, GE, DGE, QSD, F.ASCE
Senior Vice President / Principal Engineer



EXECUTIVE SUMMARY

The following is a summary of our geotechnical investigation, conclusions and recommendations, as presented in the body of this report. Please refer to the appropriate sections of the report for complete conclusions and recommendations. In the event of a conflict between this summary and the report, or an omission in the summary, the report shall prevail.

- The proposed advanced water treatment system will have a new building with dimensions of 161 feet x 111 feet. Pump wet wells will be 24 feet deep from building finished floor elevation to top of tank floor. The proposed building will house the following equipment:
 - New purified water pump station
 - New UV reactor
 - New CIP and BW equalization tanks
 - 3 - RO train and 4 - MF train
 - Chemical containment area and tanks
- We understand that the proposed treatment facility building will be supported on shallow footing and reinforced concrete slab-on-grade foundation. CO₂ and chemical tanks will be constructed outside of the building within the project area.
- The proposed Central Coast Blue Advanced Water Treatment Project is located at 972, Huber Street in Grover Beach, San Luis Obispo County, California. The proposed project site is bounded by Huber Street on the East, Barca Street and South 4th Street along the West, Calvin Court on the South and by an existing building and parking lot on the North. Existing ground surface elevations range from approximately 20 to 22 feet above mean sea level.
- Five exploratory borings (BH-1 to BH-5) were drilled on May 13, 2022, to investigate the subsurface conditions at the site. The borings were drilled with a truck-mounted drill rig equipped with an 8-inch diameter hollow stem auger. The borings were drilled and sampled to 51.5 feet below existing ground surface (bgs). Percolation tests were performed in borings PT-1, PT-2, PT-3, and PT-4, drilled on July 6, 2022, up to depth of 6 feet below existing ground surface.
- The project site is located along the central California coast on a coastal plain in Grover Beach approximately 0.45 miles from Pacific Ocean. The site is in a coastal marine environment due to its close proximity to the Pacific Ocean. The project site is underlain by existing fill soils placed during previous site grading that consists of silty sands and sands. The fill soils are underlain by marine and non-marine alluvial sediments that have gradually filled the coastal basin over time to form a broad coastal plain.



- The native alluvial sediments consisted of silty sands, sandy clays, and poorly graded sands with variable amounts of silt. The alluvial sediments consisted of medium stiff to very stiff clays and dense to very dense sands and sands with silt to the maximum explored depth of 51.5 feet below ground surface (bgs). Some layers and lenses of gravels and small cobbles were encountered in the alluvial sediments.
- Groundwater was encountered at shallow depths during drilling in three of the deeper the exploratory borings to a maximum depth of 51.5 feet. Groundwater was encountered in Boring No. 1 at 11 feet, in Boring No. 2 at 13 feet, and in Boring No. 3 at 13.8 feet below existing ground surface. Groundwater was not encountered in Boring Nos. 4 and 5 drilled to depths of 11.5 feet below ground surface. Historic highest groundwater level was interpreted to be approximately 5 feet below ground surface.
- Groundwater is expected to be encountered during deeper construction of pump wet wells for the project. Since ground water encountered approximately 11 feet below ground level and proposed structures may be constructed below 10 feet below ground level, dewatering will be required during construction.
- The site is not located within a current California Geologic Survey (CGS) mapped potential liquefaction zone. The Oceano Quadrangle has not been mapped by the California Geologic Survey for geologic hazards and liquefaction potential. The potential for liquefaction and associated seismic settlement at the site based on the Boring No. 2 liquefaction analyses is 0.6 inches. Dry sand settlement is negligible.
- The project site is not located within a currently designated State of California Earthquake Fault Zone (formerly Alquist-Priolo Special Studies Zones) for surface fault rupture.
- The topography at the project site and in the immediate vicinity of the site is relatively flat, with no significant nearby slopes or embankments. Under these circumstances, the potential for lateral spreading at the subject site is considered low.
- The sulfate contents of the sampled soils correspond to American Concrete Institute (ACI) exposure category S0 for these sulfate concentrations. No concrete type restrictions are specified for exposure category S0. A minimum compressive strength of 2,500 psi is recommended. The chloride contents of the sampled soils correspond to American Concrete Institute (ACI) exposure category C1 (concrete is exposed to moisture, but not to external sources of chlorides). For exposure



category C1, ACI provides concrete compressive strength of at least 2,500 psi and a maximum chloride content of 0.3 percent.

- The measured value of the minimum electrical resistivity of the sample when saturated was 12,225 ohm-cm. This indicates that the soils tested are corrosive to ferrous metals in contact with the soil. The site is in a coastal marine environment. Converse does not practice in the area of corrosion consulting. If needed, a qualified corrosion consultant should provide appropriate corrosion mitigation measures for any ferrous metals in contact with the site soils.
- Prior to the start of construction, all existing underground utilities and appurtenances should be located at the project site. Such utilities should either be protected in-place or removed and replaced during construction as required by the project specifications. All excavations should be conducted in such a manner as to not cause loss of bearing and/or lateral support of existing utilities.
- Footing subgrades founded on native soils (alluvium) should have at-least 3 feet of compacted fill below the bottom of footings compacted at least to 90 percent of the laboratory maximum dry density. All over-excavations should extend laterally at least 3 feet or equal to the depth of over-excavation, whichever is greater, outside the entire level portions of the building pad area.
- The surface and subsurface soil materials at the site are expected to be excavatable by conventional heavy-duty earth moving and trenching equipment.
- Excavated on-site earth materials cleared of deleterious matter and oversize rock materials can be moisture conditioned and re-used as compacted fill.
- All fill placed at the project site should be compacted to at least 90 percent of the laboratory maximum dry densities as determined by ASTM Standard D1557 test method unless a higher compaction is specified herein.
- Footings should be at least 18 inches in width and embedded to at least 18 inches below the lowest adjacent grade. The footing dimensions and reinforcement should be based on structural design. Continuous and isolated footings can be designed based on an allowable net bearing capacity of 2,000 psf.
- Mat foundation recommendations are presented in the Section 10.2 *Mat Foundation Design Parameters*.
- The total settlement of shallow footings from static structural loads and short-term settlement of properly compacted fill is anticipated to be 1 inch or less. The differential settlement resulting from static loads is anticipated to be 0.5 inches or less over a horizontal distance of 30 feet.



- Based on our liquefaction analyses, liquefaction settlement is 0.6 inches for the subject site. Dry sand settlement is negligible. If the proposed development will be constructed 20 feet below ground level, then liquefaction settlement can be negligible.
- Recommendations for temporary sloped excavations are provided in the text of this report.
- Shoring and dewatering may be needed for construction of wet well.
- Buoyancy force on the wet well below water table should be considered in the design.
- Percolation test results are presented in Appendix D of this report.

Based on our investigation, it is our professional opinion that the project is suitable for construction of the project, provided the findings, conclusions and recommendations presented in this geotechnical investigation report are considered in the planning, design and construction of the project.



TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 PROJECT DESCRIPTION	1
3.0 SITE DESCRIPTION	1
4.0 SCOPE OF WORK	2
4.1 DOCUMENT REVIEW	2
4.2 PROJECT SET-UP	2
4.3 SUBSURFACE EXPLORATION	2
4.4 LABORATORY TESTING	3
4.5 ANALYSIS AND REPORT PREPARATION	3
5.0 LABORATORY TEST RESULTS	3
5.1 PHYSICAL TESTING	3
5.2 CHEMICAL TESTING - CORROSIVITY EVALUATION	4
6.0 SITE CONDITIONS	4
6.1 SURFACE CONDITIONS.....	5
6.2 SUBSURFACE PROFILE	5
6.3 GROUNDWATER	5
6.4 EXCAVATABILITY	6
6.5 SUBSURFACE VARIATIONS	6
7.0 ENGINEERING GEOLOGY	6
7.1 REGIONAL GEOLOGY	6
7.2 LOCAL GEOLOGY.....	6
8.0 FAULTING AND SEISMICITY	7
8.1 SEISMIC CHARACTERISTICS OF NEARBY FAULTS.....	7
8.2 CBC SEISMIC DESIGN PARAMETERS.....	8
8.3 SECONDARY EFFECTS OF SEISMIC ACTIVITY.....	12
9.0 EARTHWORK RECOMMENDATIONS	14
9.1 GENERAL.....	14
9.2 REMEDIAL GRADING	15
9.3 OVER-EXCAVATION AND RE-COMPACTION.....	15
9.4 FILL MATERIALS	16
9.5 COMPACTED FILL PLACEMENT	17
9.6 SITE DRAINAGE.....	17
9.7 UTILITY TRENCH BACKFILL.....	17
10.0 DESIGN RECOMMENDATIONS	20
10.1 SHALLOW FOUNDATION DESIGN PARAMETERS	20
10.2 MAT FOUNDATION DESIGN PARAMETERS	21
10.3 LATERAL EARTH PRESSURES AND RESISTANCE TO LATERAL LOADS.....	21
10.4 SETTLEMENT	23
10.5 SOIL PARAMETERS FOR PIPE DESIGN	23
10.6 BEARING PRESSURE FOR ANCHOR AND THRUST BLOCKS.....	24
10.7 SOIL CORROSIVITY.....	24
10.8 FLEXIBLE PAVEMENT.....	25



10.9	RIGID PAVEMENT	26
11.0	CONSTRUCTION RECOMMENDATIONS	27
11.1	GENERAL.....	27
11.2	TEMPORARY SLOPED EXCAVATIONS	27
11.3	SLOT CUT RECOMMENDATIONS	28
11.4	SHORING DESIGN.....	28
12.0	GEOTECHNICAL SERVICES DURING CONSTRUCTION.....	31
13.0	CLOSURE.....	31
14.0	REFERENCES.....	33

FIGURES

	Following Page Number
Figure No. 1, Site Location Map.....	1
Figure No. 2, Approximate Boring Location Map.....	1
Figure No. 3, Regional Geologic Map	5
Figure No. 4, Southern California Regional Fault Map	8
Figure No. 5, Epicenter Map of Southern California Earthquakes (1800-1999)	8
Figure No. 6, Site Specific Design Response Spectrum per ASCE 7-16 and 2019 CBC.....	11
Figure No. 7, Tsunami Hazard Map	14

TABLES

	Page Number
Table No. 1, Summary of Regional Faults.....	8
Table No. 2, 2019 CBC Seismic Design Mapped Parameters.....	9
Table No. 3, 2019 CBC Mapped Acceleration Parameters.....	9
Table No. 4, Probabilistic Response Spectrum Data.....	10
Table No. 5, Probabilistic MCE _R Spectral Acceleration (g)	11
Table No. 6, Site-Specific Response Spectrum Data	11
Table No. 7, Site-Specific Seismic Design Parameters	12
Table No. 8, Over-excavation Depths	15
Table No. 9, Recommended Foundation Parameters.....	20
Table No. 10, Active and At-Rest Earth Pressures.....	22
Table No. 11, Soil Parameters for Pipe Design	23
Table No. 12, Correlation Between Resistivity and Corrosion	25
Table No. 13, Flexible Pavement Structural Sections.....	25
Table No. 14, Rigid Pavement Structural Sections.....	26
Table No. 15, Slope Ratios for Temporary Excavations	28

APPENDICES

Appendix A	Field Exploration
Appendix B	Laboratory Testing Program
Appendix C	Liquefaction and Settlement Analysis
Appendix D	Percolation Testing



1.0 INTRODUCTION

This report presents the results of our geotechnical investigation performed for the Central Coast Blue Advanced Water Treatment Project, located at 972 Huber Street, in the City of Grover Beach, San Luis Obispo County, California. The project location is shown on Figure No. 1, *Site Location Map*.

The purposes of this investigation were to determine the nature and engineering properties of the subsurface soils, and to provide design and construction recommendations for the project.

This report is prepared for the project described herein and is intended for use solely by Carollo Engineers and their authorized agents for design purposes. It should not be used as a bidding document but may be made available to the potential contractors for information on factual data only. For bidding purposes, the contractors should be responsible for making their own interpretation of the data contained in this report.

2.0 PROJECT DESCRIPTION

The proposed advanced water treatment system will have a new building with approximate dimensions of 161 feet x 111 feet. Pump wet wells will be 24 feet deep from building finished floor elevation to top of tank floor. The proposed building will house the following equipment:

- New purified water pump station
- New UV reactor
- New CIP and BW Equalization tanks
- 3 - RO train and 4 - MF train
- Chemical Containment area and tanks

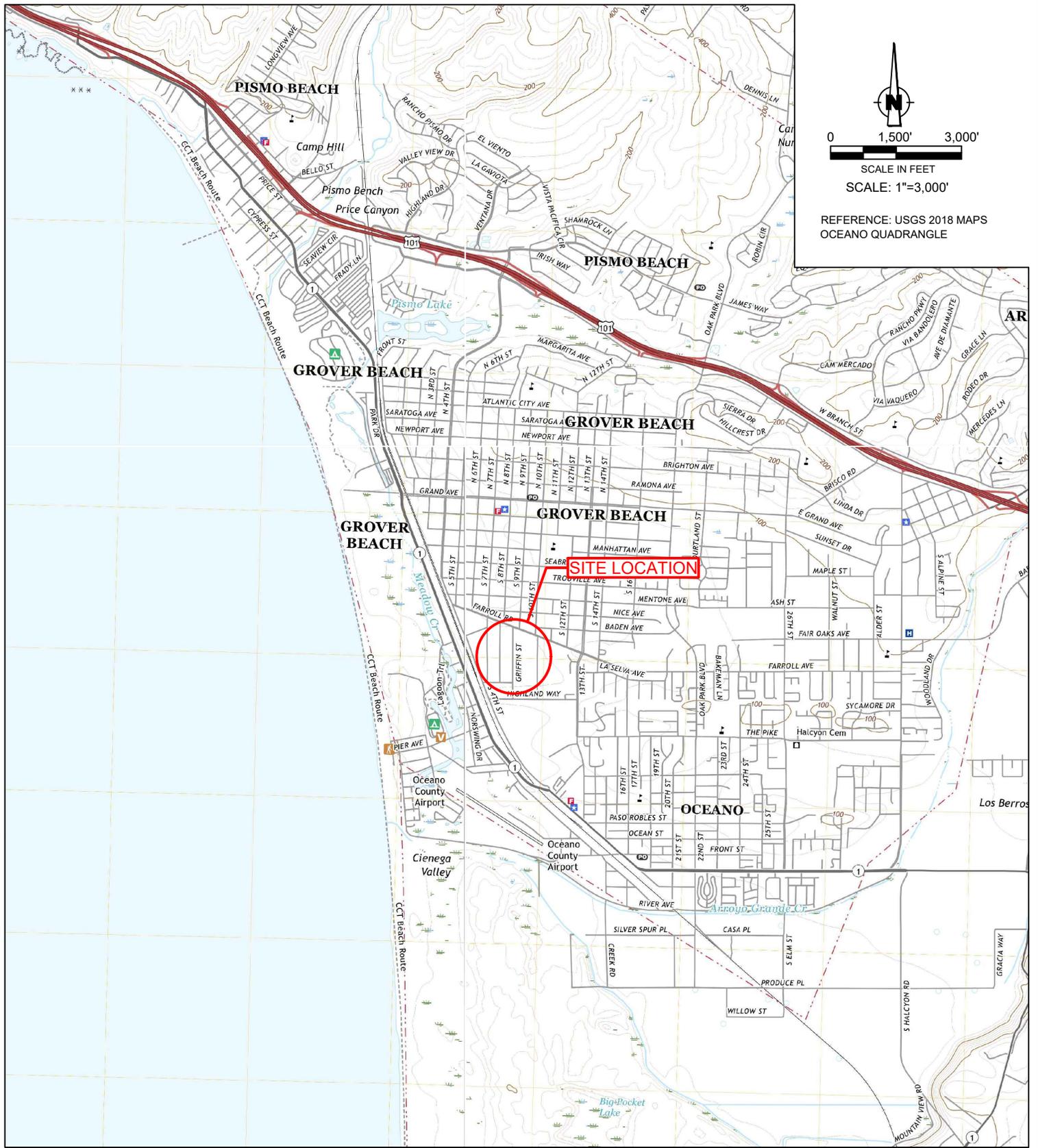
We understand that the proposed treatment facility building will be supported on shallow footings and reinforced concrete slab-on-grade foundations. CO₂ and chemical tanks will be constructed outside of the building within the project area.

3.0 SITE DESCRIPTION

The proposed Central Coast Blue Advanced Water Treatment Project is located at 972, Huber Street in Grover Beach, California. The proposed project site is bounded by Huber Street on the East, Barca Street and South 4th Street along the West, Calvin Court on the South and by an existing building and parking lot in the North. Ground surface elevations range from approximately 20 to 22 feet above mean sea level. Approximate boring locations are indicated on Figure No. 2, *Approximate Boring Location Map*. Approximate project coordinates are 35.1108, -120.6229



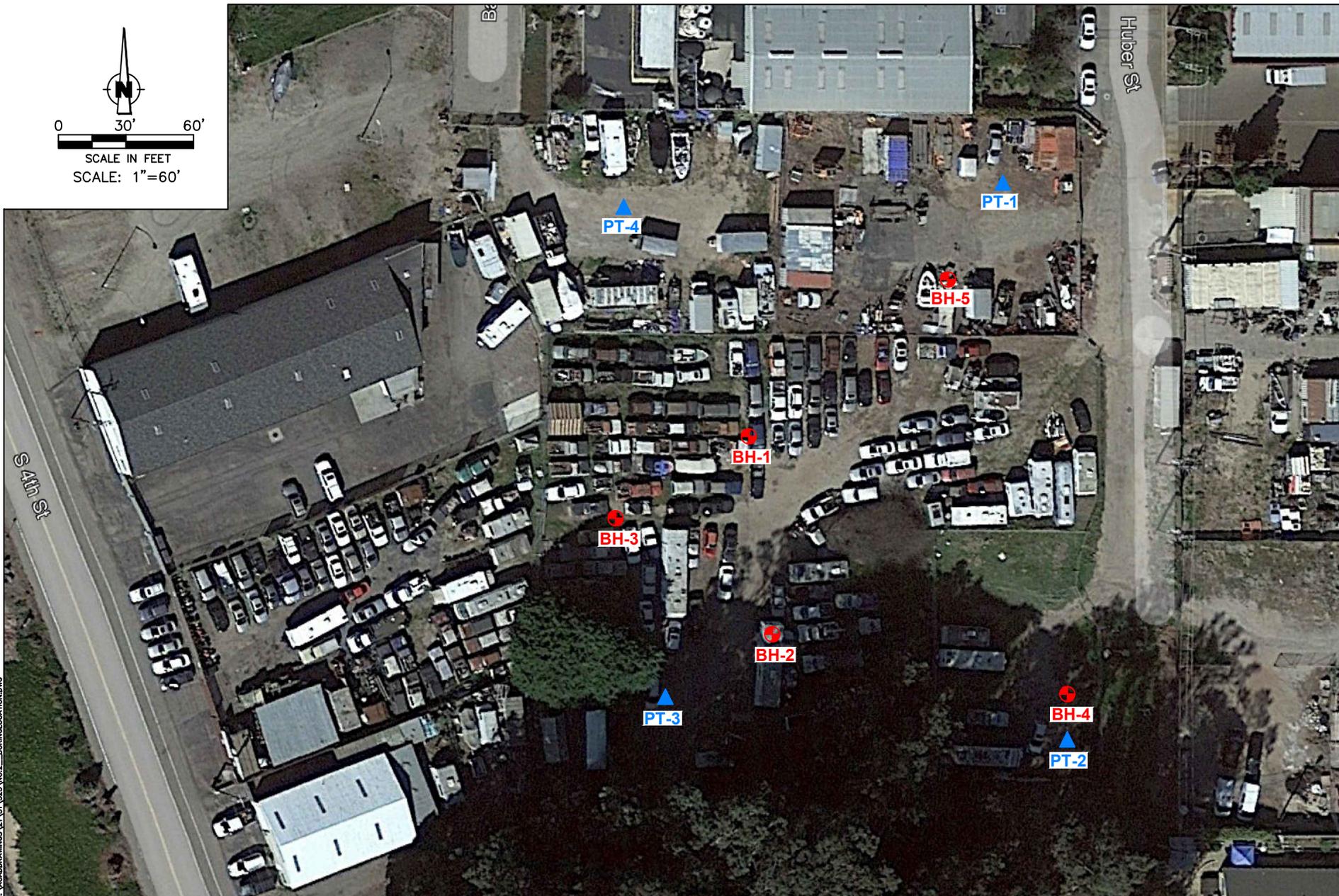
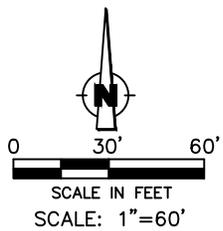
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SITE LOCATION MAP

Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-01

Project No.
 21-31-323-01



Approximate Borings Location Map

PT-3 ▲ PERCOLATION TEST
BH-2 ● SPT BOREHOLE



Converse Consultants

Central Coast Blue Advanced Water Treatment
972 Huber Street, Grover Beach, California
Converse Project No. 21-31-323-01
For: - Carollo

Project No.
21-31-323-01

Figure No.
2

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4.0 SCOPE OF WORK

The scope of this investigation included project set-up, subsurface exploration, laboratory testing, engineering analysis, and preparation of this report, as described in the following sections.

4.1 Document Review

We reviewed geologic maps, groundwater data and other information pertaining to the project area to assist in the evaluation of geologic hazards that may be present. Besides, pertinent information (the documents cited in Section 14, *References*) were used to understand the subsurface conditions and plan the investigation for this project.

4.2 Project Set-up

The project set-up consisted of the following tasks:

- Coordinated with Carollo Engineers and WSC for the site access.
- Conducted a field reconnaissance and marked the borings such that the drill rig access to all locations was available.
- Notified Underground Service Alert (USA) at least 48 hours prior to drilling to clear the boring locations of any conflict with existing underground utilities.
- Underground utility scanning by GPRS.
- Engaged a California-licensed driller to drill exploratory borings.

4.3 Subsurface Exploration

Five exploratory borings (BH-1 to BH-5) were drilled on May 13, 2022, to investigate the subsurface conditions at the site. The borings were drilled with a truck-mounted drill rig equipped with an 8-inch diameter hollow stem auger. The borings were drilled and sampled to 51.5 feet below existing ground surface (bgs). Additional four (4) borings were drilled at the subject project site and percolation tests were performed utilizing four borings PT-1, PT-2, PT-3 and PT-4, on July 6, 2022. Percolation test results are presented in Appendix D of this report.

Approximate boring locations are indicated in Figure No. 2, *Approximate Boring Location Map*. For a description of the field exploration and sampling program, see Appendix A, *Field Exploration*.



4.4 Laboratory Testing

Representative soil samples of the project site were tested in the laboratory to aid in the soils classification and to evaluate the relevant engineering properties of the soils. These tests included the following:

- *In-situ* moisture contents and dry densities (ASTM D2216 and ASTM D2937)
- Sand Equivalent (ASTM D2419)
- Soil Corrosivity (California Tests 643, 422, and 417)
- Fines Content/Passing No. 200 Sieve (ASTM D1140)
- Grain Size Distribution (ASTM D6913)
- Maximum dry density and optimum-moisture content (ASTM D1557)
- Direct Shear (ASTM D3080)
- Consolidation (ASTM Standard D2435)

For *in-situ* moisture and dry density data, see the Logs of Borings in Appendix A, *Field Exploration*. For a description of the laboratory test methods and test results, see Appendix B, *Laboratory Testing Program*.

4.5 Analysis and Report Preparation

Data obtained from the field exploration and laboratory testing program was compiled and evaluated. Geotechnical analyses of the compiled data were performed, and this report was prepared to present our findings, conclusions, and recommendations for the project.

5.0 LABORATORY TEST RESULTS

Results of physical and chemical tests performed for this project are presented below.

5.1 Physical Testing

Results of the various laboratory tests are presented in Appendix B, *Laboratory Testing Program*, except for the results of *in-situ* moisture and dry density tests which are presented on the Logs of Borings in Appendix A, *Field Exploration*. The results are also discussed below.

In-situ Moisture and Dry Density

In-situ dry densities and moisture contents of the site soils were determined in accordance with ASTM Standard D2216 and D2937. Dry densities of alluvium soils ranged from 96 to 121 pounds per cubic foot (pcf) with moisture content of 4 to 22 percent.

Sand Equivalent (SE)

One representative sample was tested to evaluate the expansion potential in accordance with ASTM Standard D2419. The test result showed an SE of 24.



Grain Size Analysis

Two representative samples were tested to determine the relative grain size distribution in accordance with the ASTM Standard D6913. The test results are graphically presented in Drawing No. B-1, *Grain Size Distribution Results*.

Maximum Dry Density and Optimum Moisture Content

Typical moisture-density relationship test was performed on a representative sample in accordance with ASTM D1557. The results are presented in Drawing No. B-2, *Moisture-Density Relationship Results*, in Appendix B, *Laboratory Testing Program*. The laboratory maximum dry density was 122.5 pcf and the optimum moisture content of 8 percent.

Consolidation Test

One representative sample was tested to determine the settlement characteristics of the foundation soils under load in accordance with the ASTM Standard D2435. The test results are graphically presented in Drawing No. B-3, *Consolidation Test Results*.

Direct Shear

Two direct shear tests were performed on undisturbed representative ring samples under soaked moisture condition in accordance with ASTM Standard D3080. The results are presented in Drawing Nos. B-4a and B-4b, *Direct Shear Test Results* in Appendix B, *Laboratory Testing Program*.

5.2 Chemical Testing - Corrosivity Evaluation

One representative soil sample was tested to determine minimum electrical resistivity, pH, and chemical content, including soluble sulfate and chloride concentrations. The purposes of these tests were to determine the corrosion potential of site soils when placed in contact with common pipe materials. These tests were performed by AP Engineers. (Pomona, CA) in accordance with California Tests 643, 422, and 417. The test results are presented in Appendix B, *Laboratory Testing Program and summarized below*.

- The pH measurement of the tested sample was 8.1
- The sulfate content of the tested sample was 26 ppm (0.026 percent by weight).
- The chloride concentration of the tested sample was 21 ppm.
- The minimum electrical resistivity when saturated was 12,225 ohm-cm.

6.0 SITE CONDITIONS

A general description of the subsurface conditions and various materials encountered during our field exploration are presented in this section.



6.1 Surface Conditions

The ground surface area and the surfaces at the drill sites were not paved with asphalt or concrete. The project site area was undeveloped and used for storage of cars, trucks and recreational vehicles. The ground surface was relatively flat and ranged in elevation from 20 feet to 22 feet above mean seal level.

6.2 Subsurface Profile

The project site area is located on the central California coast on a relative flat coastal plain landform in Grover Beach approximately 0.45 miles from Pacific Ocean. The project site is in a coastal marine environment due to its close proximity to the Pacific Ocean. The project site is underlain by existing fill soils placed during previous site grading. The fill soils ranged in depth from 4 to 5 feet below existing ground surface and consisted of silty sands and sands. The fill soils are underlain by marine and non-marine alluvial sediments that have gradually filled the coastal margin over time to form a broad coastal plain as shown on Figure No. 3, *Regional Geologic Map*.

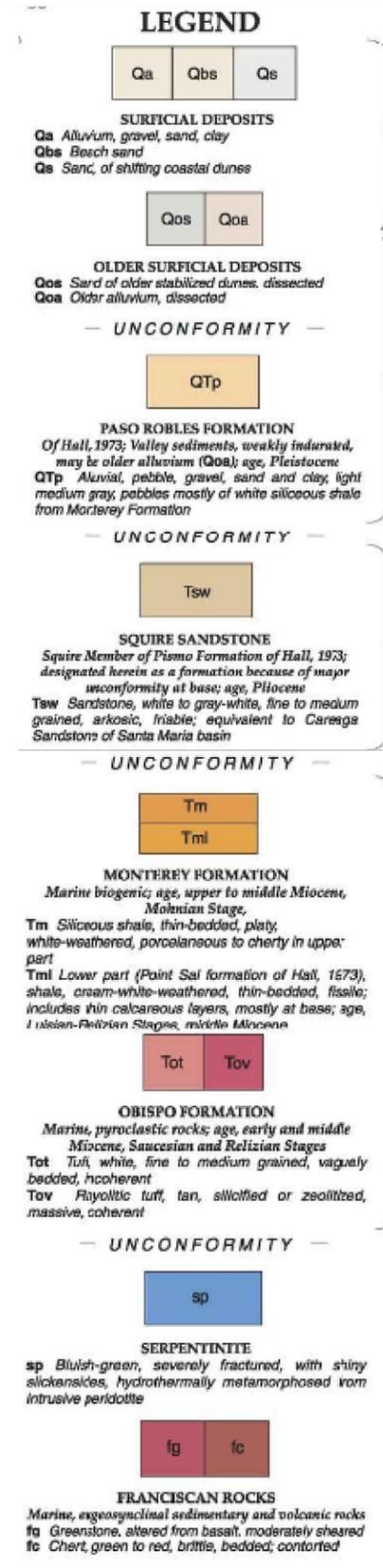
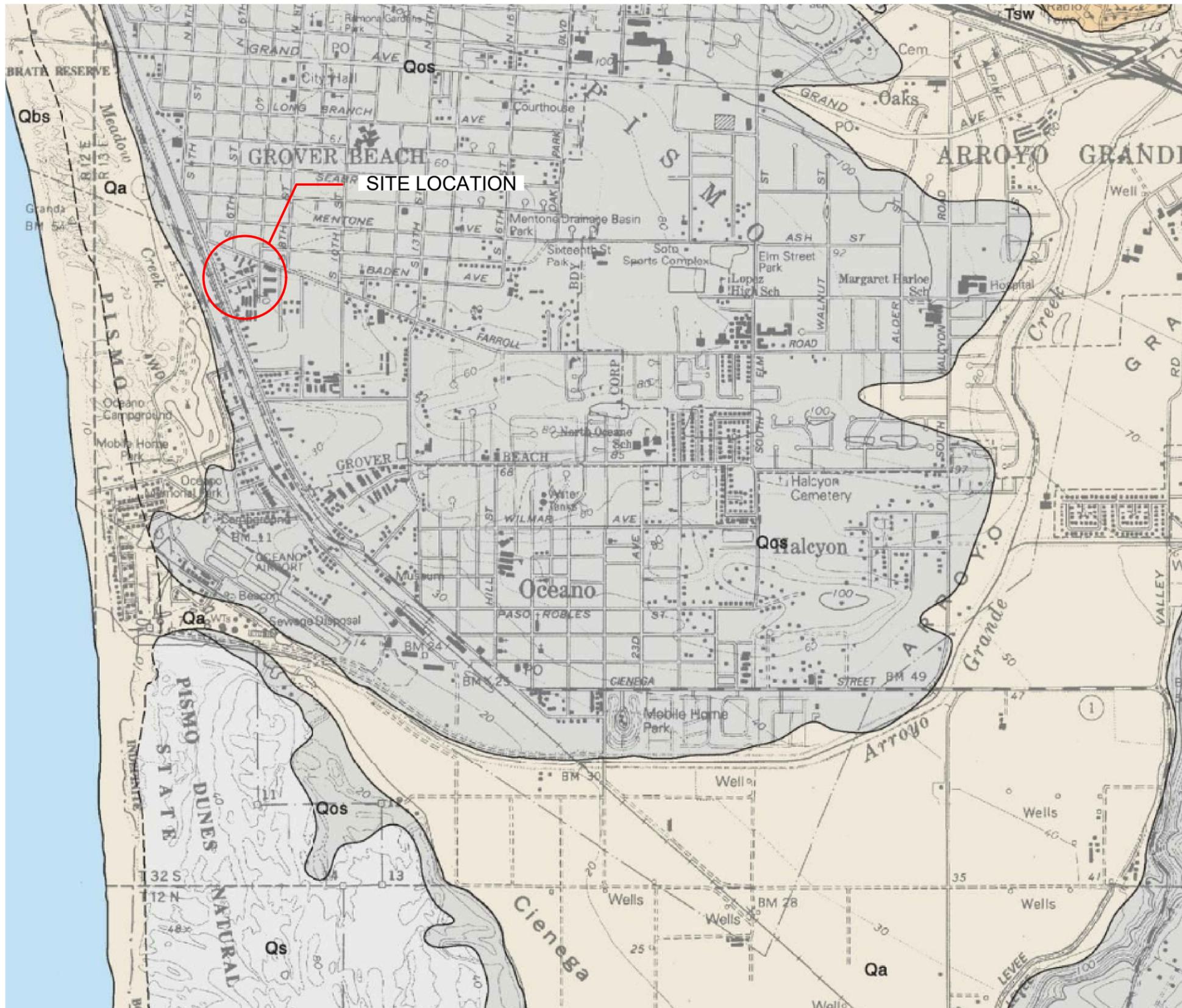
The native alluvial sediments consisted of silty sands, sandy clays, and poorly graded sands with variable amounts of silt. The alluvial sediments were deposited along the coastal margin as flood plain sediments from Arroyo Grande Creek, beach sand deposits and wind-blown sand deposits. The alluvial sediments consisted of medium stiff to very stiff sandy clays and dense to very dense silty sands and sands to the maximum explored depth of 51.5 feet below ground surface (bgs). Some layers and lenses of gravels and small cobbles were encountered in the alluvial sediments.

6.3 Groundwater

Groundwater was encountered at shallow depths during drilling in three (3) of the deeper exploratory borings to a maximum depth of 51.5 feet. Groundwater was encountered in Boring No. 1 at 11 feet, in Boring No. 2 at 13 feet, and in Boring No. 3 at 13.8 feet below existing ground surface. Groundwater was not encountered in Boring Nos. 4 and 5 drilled to a depths of 11.5 feet below existing ground surface. Historically highest groundwater level was interpreted to be approximately 5 feet below ground surface. Groundwater is expected to be encountered during deeper construction of pump wet wells for the project.

In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present within the near-surface deposits due to local conditions or during rainy seasons. Groundwater conditions below any given site vary depending on numerous factors including seasonal rainfall, local irrigation, stream channel flows, estuary flows, sea level, stormwater recharge, groundwater recharge and pumping, among other factors. The regional groundwater table can be expected to be encountered during deeper aspects of the planned construction.





REFERENCE: OCEANO, CA 2017



NOT TO SCALE

I:\ACADDRAWINGS\21131\323\NO.3 GEOLOGICAL MAP.DWG

REGIONAL GEOLOGIC MAP



Converse Consultants

Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-01

Project No. Figure No.

21-31-323-01

3

6.4 Excavatability

The surface and subsurface soil materials at the site are expected to be excavatable by conventional heavy-duty earth moving and trenching equipment.

The phrase “conventional heavy duty excavation equipment” is intended to include commonly used equipment such as excavators, scrapers, and trenching machines. It does not include hydraulic hammers (breakers), jackhammers, blasting, or other specialized equipment and techniques used to excavate hard earth material. Selection of an appropriate excavation equipment models should be done by an experienced earthwork contractor.

6.5 Subsurface Variations

Based on the results of the subsurface exploration and our experience, some variations in the continuity and nature of subsurface conditions within the project site should be anticipated. Because of the uncertainties involved in the nature and depositional characteristics of the earth material at the site, care should be exercised in interpolating or extrapolating subsurface conditions between or beyond the boring locations.

7.0 ENGINEERING GEOLOGY

The regional and local geology within the proposed project area is discussed below.

7.1 Regional Geology

The project site is located within the southern portion of the Coast Ranges Geomorphic Province of California. The Coast Ranges Geomorphic Province extends approximately 600 miles from the Oregon border to the Santa Ynez River and fall into two sub-provinces that include the ranges north of San Francisco and those from the San Francisco Bay area south to Santa Barbara County.

The province is dominated by elongate valleys, diverse lithologic rock types and structural features that parallel the San Andreas fault system. The province is a seismically active region. The most prominent of the nearby fault zones include the Suez Fault, West Huasna Fault, Rinconda Fault, Nacimiento Fault, San Marcos Fault, Huer Huero-Cuyama Fault and San Andreas Fault zones.

7.2 Local Geology

Review of geologic mapping indicates that the project site is underlain locally by alluvial sediments derived by active marine and non-marine sedimentation processes occurring along the Pacific Ocean that have gradually filled the coastal basin over time to form a broad coastal plain. These sedimentary deposits consist of unconsolidated alluvium,



stream channel deposits and flood deposits from the Arroyo Grande Creek, beach sand deposits and wind-blown sand deposits.

8.0 FAULTING AND SEISMICITY

The project site lies along the central California coastline in southern San Luis Obispo County within the Coast Ranges Geomorphic Province of California. The Coast Ranges province is characterized by northwest trending valleys and mountain ranges which have formed in response to regional tectonic forces along the boundary between the Pacific and North American tectonic plates. The geologic structure is dominated by northwest trending, right-lateral faults, most notably the San Andreas fault system. The Coast Ranges Geomorphic province extends southward from the Oregon border to the Santa Ynez River valley in Santa Barbara County.

The project site is not located within a currently designated State of California Earthquake Fault Zone for surface fault rupture. No surface faults are known to project through or towards the site. The closest known faults to the project site with mapped surface traces is the San Luis Range and Los Osos thrust faults.

As is the case for most areas of Southern California, strong ground shaking resulting from earthquakes associated with nearby and more distant faults may occur at the project site. During the life of the project, seismic activity associated with active faults can be expected to generate moderate to strong ground shaking at the site.

The project site is situated on a broad alluvial coastal plain along the edge of the Pacific Ocean. This coastal plain has been gradually filled with marine and non-marine sediments. The Arroyo Grande Creek has deposited stream and flood sediments across the coastal plain during Holocene time (0-11,000 years) to form a relatively flat and broad river flood plain where it meets the ocean. Most of the river and stream channel flows are now controlled by Lopez Dam and flood control channels and storm drains which ultimately drain to the Pacific Ocean. Dune sands and beach sands have been deposited as wind-blow deposits near the beaches of the Pacific Ocean.

8.1 Seismic Characteristics of Nearby Faults

The proposed project site is situated in a seismically active region. As is the case for most areas of Southern California, ground-shaking resulting from earthquakes associated with nearby and more distant faults may occur at the project site. During the life of the project, seismic activity associated with active faults can be expected to generate moderate to strong ground shaking at the site. Review of recent seismological and geophysical publications indicates that the seismic hazard for the project site is high. Table No. 1, *Summary of Regional Faults*, summarizes selected data of known faults capable of seismic activity within 100 kilometers of the site. The approximate locations of these local and regional faults with respect to the project are shown on Figure No. 4,



Southern California Regional Fault Map. The historic epicenters of recent Southern California earthquakes are shown in Figure No. 5, *Epicenter Map of Southern California Earthquakes (1800-1999)*.

Table No. 1, Summary of Regional Faults

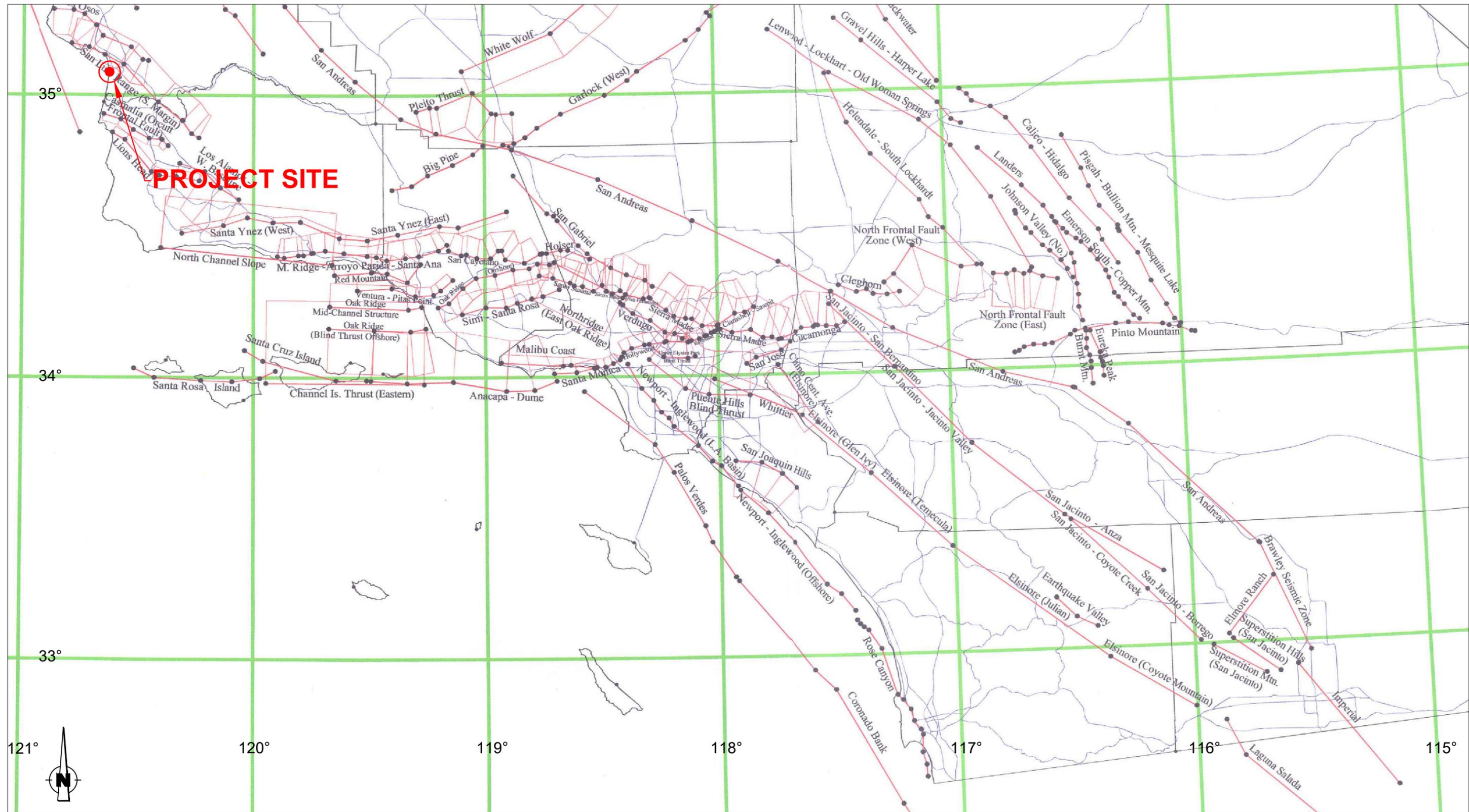
Fault Name and Section	Closest Distance (mile)	Slip Sense	Length (km)	Slip Rate (mm/year)	Maximum Magnitude
San Luis Range (So Margin)	1.33	thrust	64	0.2	7.0
Los Osos	5.64	thrust	44	0.5	7.8
Casmalia (Orcutt Frontal)	12.34	reverse	29	0.3	6.5
Hosgri	12.8	strike slip	171	2.5	7.2
Rinconada	15.04	strike slip	191	1	7.4
Lions Head	16.75	reverse	41	0.02	6.6
Los Alamos-West Baseline	29.75	thrust	28	0.7	6.7
San Juan	31.14	strike slip	68	1	7.0
S. San Andreas;PK+CH+CC+BB+NM+SM+N SB	41.82	strike slip	377	n/a	7.9
S. San Andreas;PK+CH+CC+BB+NM+SM	41.82	strike slip	342	n/a	7.9
S. San Andreas;PK+CH+CC+BB+NM	41.82	strike slip	245	n/a	7.7
S. San Andreas;PK+CH+CC+BB	41.82	strike slip	208	n/a	7.5
S. San Andreas;PK+CH+CC	41.82	strike slip	158	n/a	7.4
S. San Andreas;PK+CH	41.82	strike slip	99	n/a	7.0
S. San Andreas;CH+CC+BB+NM	41.82	strike slip	208	n/a	7.7
S. San Andreas;PK+CH+CC+BB+NM+SM+N SB+SSB+BG+CO	41.82	strike slip	548	n/a	6.2
S. San Andreas;PK+CH+CC+BB+NM+SM+N SB+SSB+BG	41.82	strike slip	479	n/a	8.1
S. San Andreas;CH+CC	41.82	strike slip	122	n/a	7.3
S. San Andreas;CH+CC+BB+NM+SM	41.82	strike slip	306	n/a	7.9
S. San Andreas;CH	41.82	strike slip	63	34	6.9

(Source: https://earthquake.usgs.gov/cfusion/hazfaults_2008_search/)

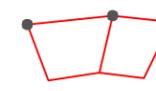
8.2 CBC Seismic Design Parameters

Seismic design mapped parameters based on the 2019 California Building Code (CBSC, 2019) are provided in the following table. These parameters were determined using the generalized coordinates (35.1108N, 120.6229W) and the Seismic Design Maps ATC online tool.





REFERENCE: PORTION OF CGS 2002 CALIFORNIA FAULT MODEL MODIFIED FOR USE WITH FRISKSP AND EQFAULT BY THOMAS F. BLAKE, AUGUST 2004

-  FAULT SOURCES
-  BLIND THRUST FAULT, POLYGONS INDICATE RUPTURE PLANES AND DIP DIRECTION

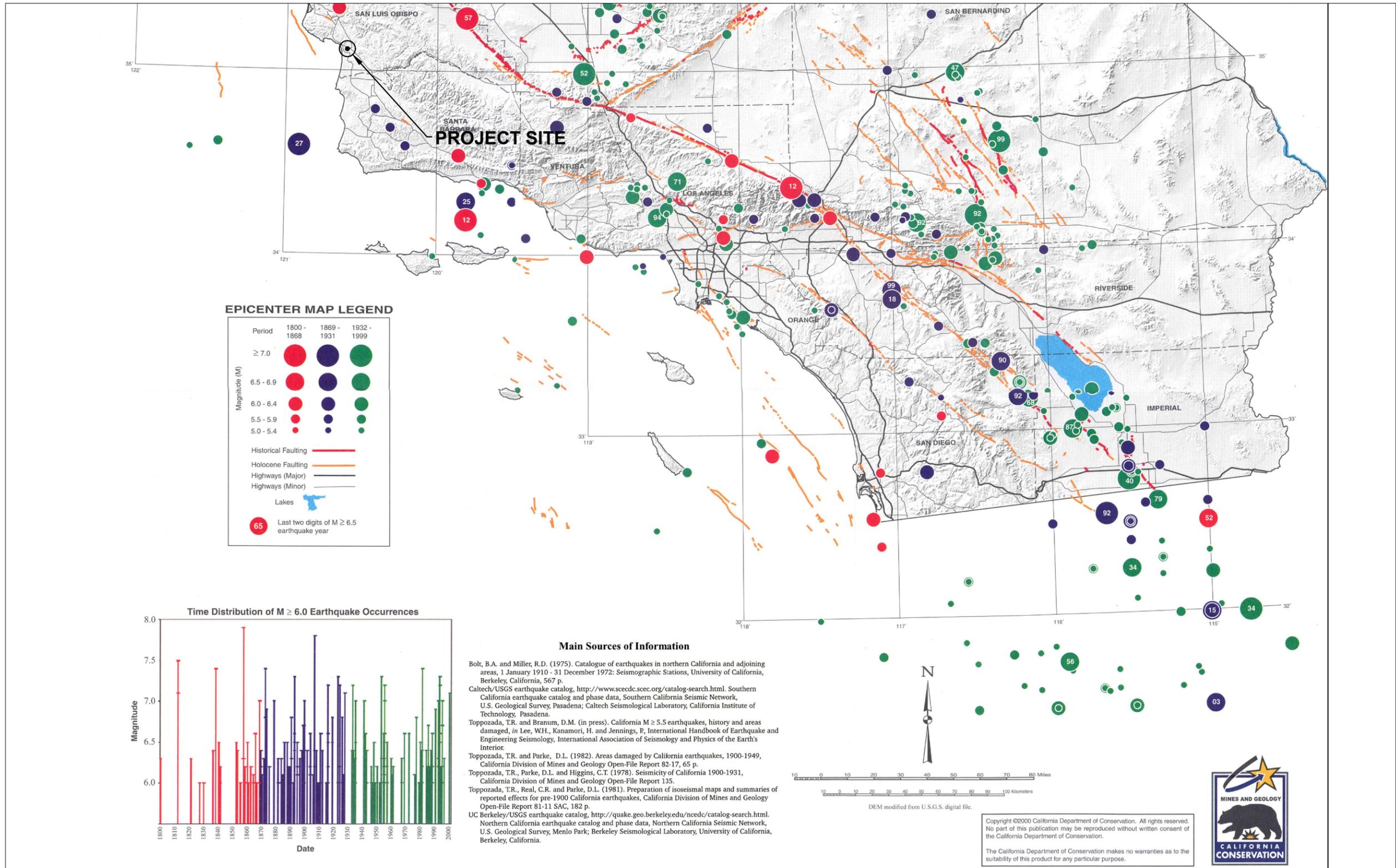
SOUTHERN CALIFORNIA REGIONAL FAULT MAP



Converse Consultants

Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-01

Project No. 21-31-323-01
 Figure No. 4
 Date MAY 19, 2022



REFERENCE: PORTION OF EPICENTERS AND AREAS DAMAGED BY M≥5 CALIFORNIA EARTHQUAKES, 1800-1999 CALIFORNIA DEPARTMENT OF CONSERVATION, MAP SHEET 49 DATED 2000.

EPICENTER MAP OF SOUTHERN CALIFORNIA EARTHQUAKES (1800-1999)



Table No. 2, 2019 CBC Seismic Design Mapped Parameters

Seismic Parameters	
Site Coordinates	35.1108N, 120.6229W
Site Class	D
Mapped Short period (0.2-sec) Spectral Response Acceleration, S_s	1.018g
Mapped 1-second Spectral Response Acceleration, S_1	0.372g
Site Coefficient (from Table 11.4-1), F_a	1.113
Site Coefficient (from Table 11.4-2), F_v	1.7
MCE 0.2-sec period Spectral Response Acceleration, S_{MS}	1.113g
MCE 1-second period Spectral Response Acceleration, S_{M1}	0.632g
Design Spectral Response Acceleration for short period S_{DS}	0.742g
Design Spectral Response Acceleration for 1-second period, S_{D1}	0.422g
Site Modified Maximum Peak Ground Acceleration, PGA_M	0.515g

8.2.1 Site-Specific Response Spectra

A site-specific response spectrum was developed for the project for a Maximum Considered Earthquake (MCE), defined as a horizontal peak ground acceleration that has a 2 percent probability of being exceeded in 50 years (return period of approximately 2,475 years).

In accordance with ASCE 7-16, Section 21.2 the site-specific response spectra can be taken as the lesser of the probabilistic maximum rotated component of MCE ground motion and the 84th percentile of deterministic maximum rotated component of MCE ground motion response spectra. The design response spectra can be taken as 2/3 of site-specific MCE response spectra but should not be lower than 80 percent of CBC general response spectra. The risk coefficient C_R has been incorporated at each spectral response period for which the acceleration was computed in accordance with ASCE 7-16, Section 21.2.1.1.

The 2019 CBC mapped acceleration parameters are provided in the following table. These parameters were determined using the *ATC hazard by location Seismic Design Maps* website application, and in accordance with ASCE 7-16 Sections 11.4, 11.6, 11.8, 21.2, and 21.3.

Table No. 3, 2019 CBC Mapped Acceleration Parameters

Site Class	D	Seismic Design Category	D
S_s	1.018	C_{RS}	0.903
S_1	0.372	C_{R1}	0.907
F_a	1	$0.08 F_v/F_a$	0.200
F_v	2.5	$0.4 F_v/F_a$	1.000
S_{MS}	1.018	T_0	0.183



Site Class	D	Seismic Design Category	D
S_{M1}	0.930	T_s	0.914
S_{DS}	0.679	T_L	8
S_{D1}	0.620		

A site-specific response analysis, using faults within 200 kilometers of the sites, was developed using the computer program EZ-FRISK Version 8.07 (Fugro, 2021).

The weighted mean maximum-rotated horizontal spectral acceleration values were computed by multiplying the weighted mean geometric spectral values derived from four next-generation attenuation (NGA) West 2 ground motion attenuation models by Abrahamson et al. (2014), Boore et al. (2014) and Campbell and Bozorgnia (2014) with the scale factors provided in ASCE 7-16 Section 21.2. An average shear wave velocity at upper 30 meters of soil profile (V_{s30}) of 270 meters per second, depth to bedrock of with a shear wave velocity 1,000 meters per second at 150 meters below grade, and depth of bedrock where the shear wave velocity is 2,500 meters per second at 2,500 meters below grade were selected for EZ-Frisk Analysis.

The probabilistic response spectrum results and peak ground acceleration for each attenuation relationship are presented in the following table.

Table No. 4, Probabilistic Response Spectrum Data

Attenuation Relationship	Probabilistic Mean	Abrahamson et al. (2014)	Campbell-Bozorgnia (2014)	Boore et al. (2014)
Peak Ground Acceleration (g)	0.563	0.573	0.492	0.613

Spectral Period (sec)	2% in 50yr Probabilistic Spectral Acceleration (g)			
0.050	0.648	0.587	0.620	0.733
0.100	0.946	0.825	0.869	1.122
0.200	1.226	1.329	1.011	1.303
0.300	1.322	1.514	1.129	1.284
0.400	1.304	1.499	1.186	1.191
0.500	1.219	1.338	1.163	1.133
0.750	0.964	0.980	1.043	0.866
1.000	0.740	0.744	0.818	0.657
2.000	0.353	0.349	0.429	0.276
3.000	0.212	0.204	0.262	0.164
4.000	0.141	0.137	0.169	0.117

Deterministic response spectra parameters were determined using PEER spread sheet and presented in Table No. 4. Following fault parameters were used to calculate the spectrum. $M_w=7$, $R_{RUP}=2.0$ km, $R_{JB}=2.0$ km, $R_x=2.0$ km and dip angle is 45 degrees. The



mapped trace of the San Luis Range Fault is located approximately less than 2.0 km from of the project site. Applicable response spectra data are presented in the table below and on Figure No. 6, *Site-Specific Design Response Spectrum*. These curves correspond to response values obtained from above attenuation relations for horizontal elastic single-degree-of-freedom systems with equivalent viscous damping of 5 percent of critical damping.

Table No. 5, Probabilistic MCE_R Spectral Acceleration (g)

Period (sec)	2% in 50yr Probabilistic Spectral Acceleration (g) Geometric Mean	Risk Coefficient C _R	Scale Factors for MCE _R	Probabilistic MCE _R Spectral Acceleration (g)
0.01	0.563	0.903	1.100	0.559
0.05	0.648	0.903	1.100	0.644
0.1	0.946	0.903	1.100	0.940
0.2	1.226	0.903	1.100	1.218
0.3	1.322	0.904	1.125	1.344
0.4	1.304	0.904	1.150	1.356
0.5	1.219	0.905	1.175	1.296
0.75	0.964	0.906	1.238	1.080
1	0.740	0.907	1.300	0.872
2	0.353	0.907	1.350	0.432
3	0.212	0.907	1.400	0.269
4	0.141	0.907	1.450	0.186

Table No 6, Site-Specific Response Spectrum Data

Period (sec)	84th Percentile Deterministic MCE Response Spectrum, (g)	Site Specific MCE _R Spectral Acceleration (g)	80% CBC Design Response Spectrum	Site Specific Design Spectral Acceleration (g)
0.01	0.887	0.559	0.235	0.37
0.05	0.986	0.644	0.306	0.43
0.1	1.329	0.940	0.395	0.63
0.2	1.792	1.218	0.543	0.81
0.3	2.172	1.344	0.543	0.90
0.4	2.308	1.356	0.543	0.90
0.5	2.283	1.296	0.543	0.86
0.75	2.006	1.080	0.543	0.72
1	1.720	0.872	0.496	0.58
2	0.831	0.432	0.248	0.29
3	0.515	0.269	0.165	0.18
4	0.336	0.186	0.124	0.12



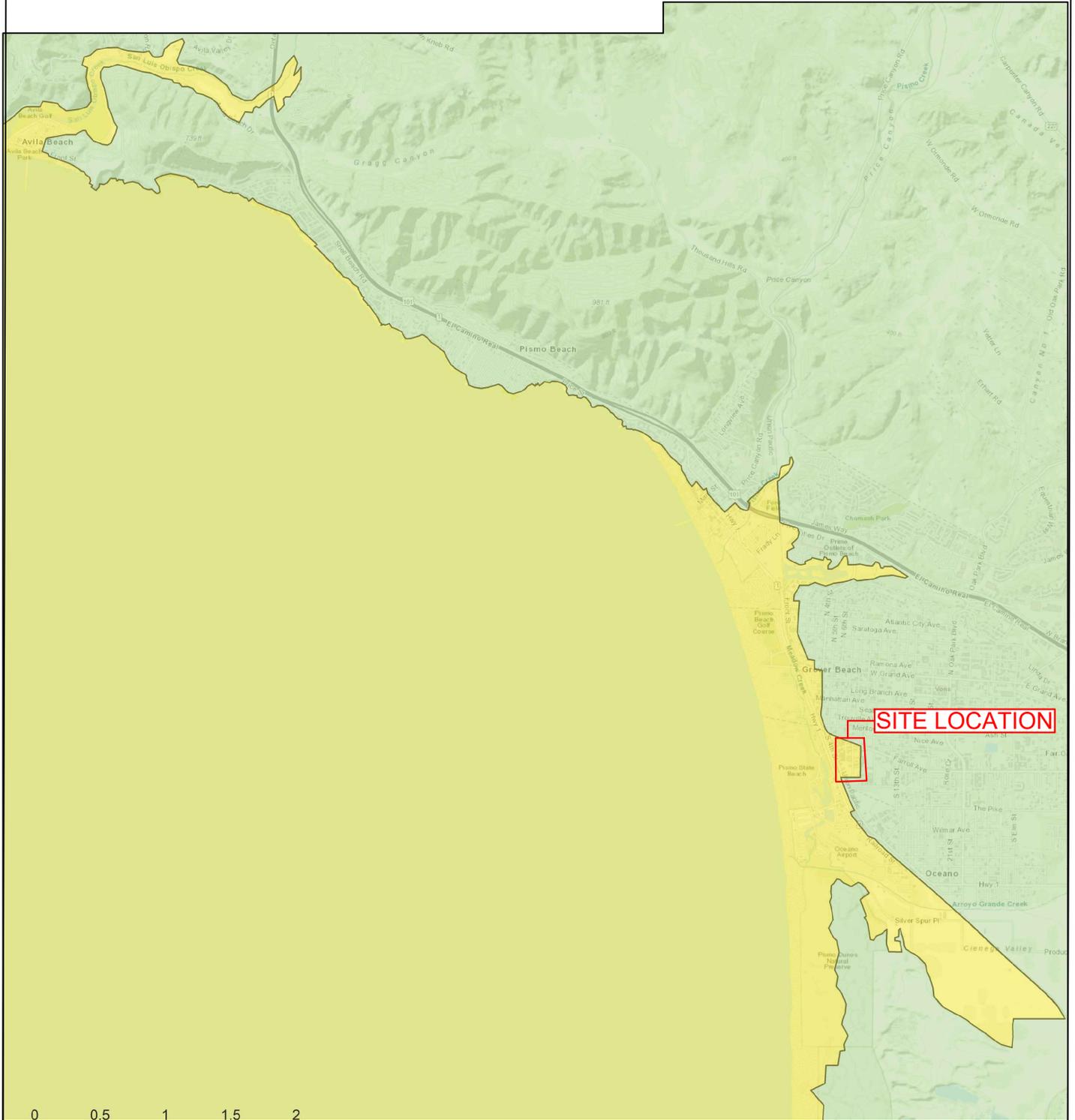
PURPOSE OF THIS MAP

This Tsunami Hazard Area Map was prepared to assist cities and counties in identifying their tsunami hazard or tsunami response planning. It is intended for local jurisdictional coastal tsunami hazard planning uses only. This map, and the information presented herein, is not a legal document and does not meet disclosure requirements for real estate transactions nor for any other regulatory purpose.

The Tsunami Hazard Area Map was compiled with the best currently available scientific information and represents an area that could be exposed to tsunami hazards during a tsunami event. It is primarily based on inundation limits corresponding to a 975-year average return period tsunami event model. These limits have been extended to reflect potential local tsunami sources not considered in probabilistic analysis and are also modified to reflect the practical need to define limits that coincide with geographic features or city streets.

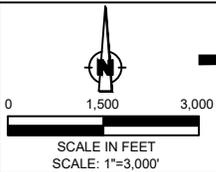
MAP EXPLANATION

-  Tsunami Hazard Area
-  Outside Hazard Area



REFERENCE: SAN LUIS OBISPO QUADRANGLE 2021

Tsunami Hazard Map



Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-01

Project No.
 21-31-295-01

Figures No.
 7

The site-specific design response parameters are provided in the following table. These parameters were determined from Design Response Spectra presented in table above and following guidelines of ASCE Section 21.4.

Table No. 7, Site-Specific Seismic Design Parameters

Parameter	Value (5% Damping)	Lower Limit, 80% of CBC Design Spectra
Site-Specific 0.2-second period Spectral Response Acceleration, S_{MS}	1.220	0.814
Site-Specific 1-second period Spectral Response Acceleration, S_{M1}	0.872	0.744
Site-Specific Design Spectral Response Acceleration for short period S_{DS}	0.813	0.543
Site-Specific Design Spectral Response Acceleration for 1-second period, S_{D1}	0.582	0.496

8.3 Secondary Effects of Seismic Activity

In general, secondary effects of seismic activity on the project site include surface fault rupture, landslides, soil liquefaction, lateral spreading, seismically induced slope instability, earthquake-induced flooding and tsunami and seiches due to seismic shaking. The site-specific potential for each of these seismic hazards is discussed in the following sections.

Surface Fault Rupture

The project site is not located within a currently designated State of California Earthquake Fault Zone (formerly Alquist-Priolo Special Studies Zones) for surface fault rupture. The Alquist Priolo Earthquake Fault Zoning Act requires the California Geologic Survey to zone “active faults” within the State of California. An “active fault” has exhibited surface displacement within Holocene time (within the last 11,700 years) hence constituting a potential hazard to structures that may be located across it. Essential service structures are required to be set-back at least 50 feet from an active fault. The active fault set-back distance is measured perpendicular from the dip of the fault plane. Based on review of existing geologic information, no known active faults project through or toward the site. The nearest mapped active fault is the San Luis Range (south margin) located east of the project site. The potential for surface rupture resulting from the movement of nearby major faults, or currently unknown faults, is not known with certainty but is considered low.

Landslides

The project site is relatively flat and not located near any hillside terrain. The potential for seismically induced landslides to affect the proposed site is considered to be very low.

Liquefaction

Liquefaction is the sudden decrease in the strength of cohesionless soils



due to dynamic or cyclic shaking. Saturated soils behave temporarily as a viscous fluid (liquefaction) and, consequently, lose their capacity to support the structures founded on them. The potential for liquefaction decreases with increasing clay and gravel content but increases as the ground acceleration and duration of shaking increase. Liquefaction potential has been found to be the greatest where the groundwater level and loose sands occur within 50 feet of the ground surface. Soil liquefaction generally occurs in submerged sandy soils and non-plastic silts during or after strong ground shaking. There are several general requirements for liquefaction to occur. They are as follows.

- Soils must be submerged
- Soils must be primarily sandy
- Soils must be loose to medium-dense
- Ground motion must be intense
- Duration of shaking must be sufficient for the soils to lose shear resistance

The site is not located within a currently mapped potential liquefaction zone mapped by the California Geologic Survey (CGS). The Oceano Quadrangle has not been mapped by the California Geologic Survey for geologic hazards and liquefaction potential. Based on our liquefaction analyses of Boring No. 2, liquefaction settlement is 0.6 inches for the subject site. Dry sand settlement is negligible. If the proposed development will be constructed 20 feet below ground level, then liquefaction settlement can be negligible.

Lateral Spreading

Seismically induced lateral spreading involves primarily lateral movement of earth materials due to ground shaking. It differs from the slope failure in that complete ground failure involving large movement does not occur due to the relatively smaller gradient of the initial ground surface. Lateral spreading is demonstrated by near-vertical cracks with predominantly horizontal movement of the soil mass involved. The topography at the project site and in the immediate vicinity of the site is relatively flat, with no significant nearby slopes or embankments. Under these circumstances, the potential for lateral spreading at the subject site is considered low.

Seismically Induced Slope Instability

Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. The project site topography has relatively flat ground conditions. In the absence of significant ground slopes, the potential for seismically induced landslides to affect the proposed site is considered to be very low.

Earthquake-Induced Flooding

Review of National Flood Hazard Layer FIRMette prepared by FEMA, Map Number 06079C1601H, dated May 16, 2017 2008 from the FEMA Map Service Center Viewer, indicates that the site is in an area designated as Zone X, "area of minimal flood hazard". The project site is located approximately 9.5 miles downstream of the Lopez Dam which has a 51,000 acre-foot capacity. The dam is under the jurisdiction of the State of California



Division of Safety of Dams. Lopez dam is slated for seismic improvements and is being maintained at approximately 83 percent of capacity until the seismic retrofit is completed. Due to the distance of the subject site from large bodies of water and regional flood control structures, the potential for flooding at the subject site is considered low. The potential of earthquake induced flooding of the subject site is considered to be low.

Tsunami and Seiches

Tsunamis are seismic sea waves generated by fault displacement or major ground movement. Based on the location of the site from the Pacific Ocean (approximately 0.45 miles) and review of the San Luis Obispo County Tsunami Hazard Areas Map for emergency planning, dated 2021, the project site is located in a mapped tsunami hazard area as shown on Figure No. 7, *Tsunami Hazard Map*. Tsunamis do pose a potential hazard and should be considered in project design. Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Based on site locations away from lakes, reservoirs, seiches pose a very low hazard.

9.0 EARTHWORK RECOMMENDATIONS

Earthwork recommendations for the project are presented in the following sections.

9.1 General

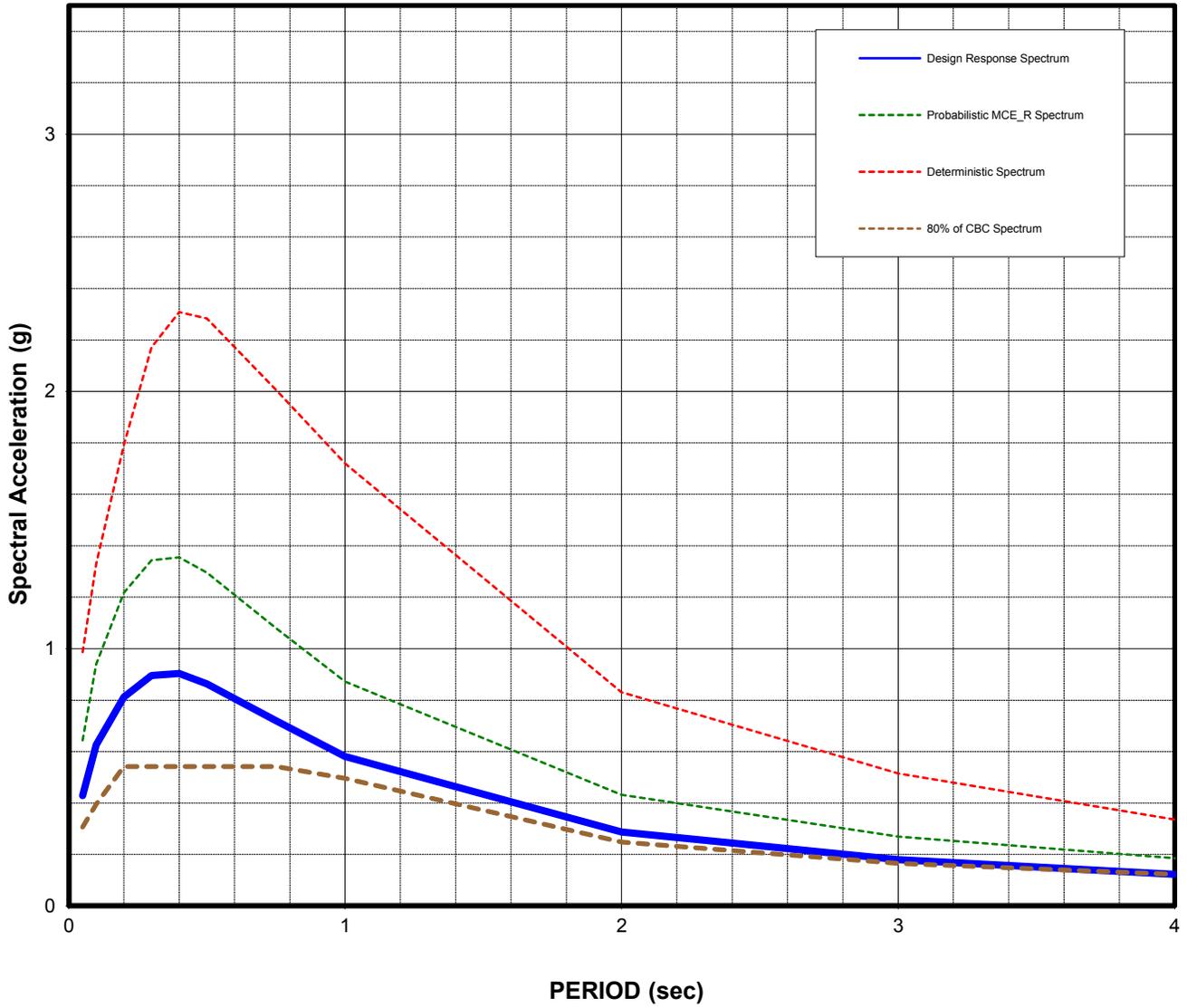
This section contains our general recommendations regarding earthwork, grading and trench backfill for the project. These recommendations are based on the results of our field exploration, laboratory tests, our experience with similar projects, and data evaluation as presented in the preceding sections. These recommendations may require modification by the geotechnical consultant based on observation of the actual field conditions during grading.

Prior to the start of construction, all existing underground utilities and appurtenances should be located at the project site. Such utilities should either be protected in-place or removed and replaced during construction as required by the project specifications. All excavations should be conducted in such a manner as not to cause loss of bearing and/or lateral support of existing utilities and structure (if any).

All debris, deleterious material, artificial fill and demolished materials should be removed from the site. All cars, trucks and RV vehicles should be removed and cleared from the project site prior to the start of grading. Potentially contaminated soils from fuel and oil leaks should be cleaned and removed from the project site.

The final bottom surfaces of all excavations should be observed and approved by the project geotechnical consultant prior to placing any fill. Based on these observations, localized areas may require remedial grading deeper than indicated herein. Therefore,





Note: Calculated using EZFRISK program Risk Engineering, version 8.07

SITE SPECIFIC DESIGN RESPONSE SPECTRUM per ASCE 7-16 and 2019 CBC

Central Coast Advanced Treatment Project

Project Number:

Grover Beach

21-31-323-01

For : Carollo



Converse Consultants

Figure No.

6

some variations in the depth and lateral extent of excavation recommended in this report should be anticipated.

Observations and field tests should be performed by the project soils consultant to confirm that the required degree of compaction has been obtained. Where compaction is less than that specified, additional compactive effort should be made with adjustment of the moisture content as necessary, until the specified compaction is obtained.

It should be the responsibility of the contractor to maintain safe working conditions during all phases of construction.

9.2 Remedial Grading

Concrete pad should be uniformly supported by compacted fill. In order to provide uniform support, structural areas should be over-excavated, scarified, moisture conditioned, mixed and recompacted as follows.

Table No. 8, Over-excavation Depths

Structure/Pavement	Minimum Excavation Depth
Concrete Pad at ground level	3 feet below pad bottom
Pump Station/ wells (Approximately 24 feet below ground level)	1 foot below foundation bottom or 12 inches scarifying and compaction
Pipelines	Scarify to a depth of 6 inches below bottom of pipeline and compaction

The over-excavation should extend to at least 3 feet beyond the footprint of the concrete pad. The over-excavation bottom should be scarified and compacted as described in Section 9.5, *Compacted Fill Placement*.

If isolated pockets of very soft, loose, eroded, or pumping soil are encountered, the unstable soil should be excavated as needed to expose undisturbed, firm, and unyielding soils. The contractor should determine the best manner to conduct the excavations, such that there are no losses of bearing and/or lateral support to the existing structures or utilities (if any).

9.3 Over-excavation and Re-compaction

Footings founded on native soils (alluvium) should have at-least 3 feet of fill compacted below the bottom of footings and be compacted to at least 90 percent of the laboratory maximum dry density. All over-excavations should extend laterally at least 3 feet or equal to the depth of over-excavation, whichever is greater, outside the entire level portions of the building pad area.



The final bottom surfaces of all excavations should be observed and approved by the project geotechnical consultant prior to placing any fill or structures. However, localized deeper over-excavation could be encountered, based on observations and testing by the geotechnical consultant during grading of the final bottom surfaces of all excavations.

If isolated pockets of very soft, loose, eroded, or pumping soil are encountered, the unstable soil should be excavated as needed to expose undisturbed, firm, and unyielding soils. The contractor should determine the best manner to conduct the excavations, such that there are no losses of bearing and/or lateral support to the existing structures or utilities (if any).

Areas to receive fill and/or other surface improvements should be scarified to a minimum depth of 6-inches, brought to a near-optimum moisture condition, and recompacted to at least 90 percent relative compaction (based on ASTM Test Method D1557).

9.4 Fill Materials

No fill should be placed until excavations and/or natural ground preparation have been observed by the geotechnical consultant. The native soils encountered within the project sites are generally considered suitable for re-use as compacted fill. Excavated soils should be processed, including removal of roots and debris, removal of oversized particles, mixing, and moisture conditioning, before placing as compacted fill. On-site soils used as fill should meet the following criteria.

- No particles larger than 6 inches in largest dimension.
- Rocks larger than 6 inches should be reduced in size or removed from areas to be graded.
- Rocks larger than one inch should not be placed within the upper 12 inches of subgrade soils.
- Free of all organic matter, debris, or other deleterious material.
- Expansion index of 20 or less.
- Sand Equivalent greater than 15 (greater than 30 for pipe bedding).
- Contain less than 30 percent by weight retained in 3/4-inch sieve.
- Contain less than 40 percent fines (passing #200 sieve).

Based on field investigation and laboratory testing results, clean on-site soils may be suitable as fill materials.

Imported materials, if required, should meet the above criteria prior to being used as compacted fill. Any imported fills should be tested and approved by geotechnical representative prior to delivery to the sites.



9.5 Compacted Fill Placement

All surfaces to receive structural fills should be scarified to a depth of at least 6 inches. The soil should be moisture conditioned to within ± 3 percent of optimum moisture content for coarse soils and 0 to 3 percent above optimum moisture content for fine soils. The scarified soils should be mixed and recompacted to at least 90 percent of the laboratory maximum dry density.

Fill soils should be mixed thoroughly, and moisture conditioned to within ± 3 percent of optimum moisture content for coarse soils and 0 to 3 percent above optimum moisture content for fine soils. Fill soils should be evenly spread in horizontal lifts not exceeding 8-inches in uncompacted thickness.

All fill placed at the sites should be compacted to at least 90 percent of the laboratory maximum dry densities as determined by ASTM Standard D1557 test method unless a higher compaction is specified herein.

Fill materials should not be placed, spread or compacted during unfavorable weather conditions. When sites grading is interrupted by heavy rain, filling operations should not resume until the geotechnical consultant approves the moisture and density conditions of the previously placed fill.

9.6 Site Drainage

Adequate positive drainage should be provided away from the site and excavation areas to prevent ponding and to reduce percolation of water into the foundation soils. Surface drainage should be directed to suitable non-erosive devices.

9.7 Utility Trench Backfill

The following sections present earthwork recommendations for utility trench backfill, including subgrade preparation and trench zone backfill.

Open cuts adjacent to existing roadways or structures are not recommended within a 1:1 (horizontal:vertical) plane extending down and away from the roadway or structure perimeter (if any).

Soils from the trench excavation should not be stockpiled more than 6 feet in height or within a horizontal distance from the trench edge equal to the depth of the trench. Soils should not be stockpiled behind the shoring, if any, within a horizontal distance equal to the depth of the trench, unless the shoring has been designed for such loads.



9.7.1 Pipeline Subgrade Preparation

The final subgrade surface should be level, firm, uniform, and free of loose materials and properly graded to provide uniform bearing and support to the entire section of the pipe placed on bedding material. Protruding oversize particles larger than 2 inches in dimension, if any, should be removed from the trench bottom and replaced with compacted on-site materials.

Any loose, soft and/or unsuitable materials encountered at the pipe subgrade should be removed and replaced with an adequate bedding material. During the digging of depressions for proper sealing of the pipe joints, the pipe should rest on a prepared bottom for as near its full length as is practicable.

9.7.2 Pipe Bedding

Bedding is defined as the material supporting and surrounding the pipe to 1 foot above the pipe. Recommendations for pipe bedding are provided below.

To provide uniform and firm support for the pipe, compacted granular materials such as clean sand, gravel or ¾-inch crushed aggregate, or crushed rock may be used as pipe bedding material. Typically, soils with sand equivalent value of 30 or more are used as pipe bedding material. The pipe designer should determine if the soils are suitable as pipe bedding material.

The type and thickness of the granular bedding placed underneath and around the pipe, if any, should be selected by the pipe designer. The load on the rigid pipes and deflection of flexible pipes and, hence, the pipe design, depends on the type and the amount of bedding placed underneath and around the pipe.

Bedding materials should be vibrated in-place to achieve compaction. Care should be taken to densify the bedding material below the springline of the pipe. Prior to placing the pipe bedding material, the pipe subgrade should be uniform and properly graded to provide uniform bearing and support to the entire section of the pipe placed on bedding material. During the digging of depressions for proper sealing of the pipe joints, the pipe should rest on a prepared bottom for as near its full length as is practicable.

Migration of fines from the surrounding native and/or fill soils must be considered in selecting the gradation of any imported bedding material. We recommend that the pipe bedding material should satisfy the following criteria to protect migration of fine materials.



- i. $\frac{D_{15}(F)}{D_{85}(B)} \leq 5$
- ii. $\frac{D_{50}(F)}{D_{50}(B)} < 25$
- iii. Bedding Materials must have less than 5 percent passing No. 200 sieve (0.0074 mm) to avoid internal movement of fines.

Where,

F = Bedding Material

B = Surrounding Native and/or Fill Soils

D₁₅(F) = Particle size through which 15% of bedding material will pass

D₈₅(B) = Particle size through which 85% of surrounding soil will pass

D₅₀(F) = Particle size through which 50% of bedding material will pass

D₅₀(B) = Particle size through which 50% of surrounding soil will pass

If the above criteria do not satisfy, commercially available geofabric used for filtration purposes (such as Mirafi 140N or equivalent) may be wrapped around the bedding material encasing the pipe to separate the bedding material from the surrounding native or fill soils.

9.7.3 Trench Zone Backfill

The trench zone is defined as the portion of the trench above the pipe bedding extending up to the final grade level of the trench surface. Excavated site soil free of oversize particles and deleterious matter may be used to backfill the trench zone. Detailed trench backfill recommendations are provided below.

- Trench excavations to receive backfill should be free of trash, debris or other unsatisfactory materials at the time of backfill placement.
- Trench zone backfill should be compacted to at least 90 percent of the laboratory maximum dry density as per ASTM D1557 test method. At least the upper 1 foot of trench backfill underlying pavement should be compacted to at least 95 percent of the laboratory maximum dry density as per ASTM D1557 test method.
- Particles larger than 1 inch should not be placed within 12 inches of the pavement subgrade. No more than 30 percent of the backfill volume should be larger than ¾-inch in the largest dimension. Gravel should be well mixed with finer soil. Rocks larger than 3 inches in the largest dimension should not be placed as trench backfill.
- Trench backfill should be compacted by mechanical methods, such as sheepsfoot, vibrating or pneumatic rollers or mechanical tampers to achieve the density specified herein. The backfill materials should be brought to within ± 3 percent of optimum moisture content for coarse-grained soil, and between optimum and 2 percent above optimum for fine-grained soil, then placed in horizontal layers. The



thickness of uncompacted layers should not exceed 8 inches. Each layer should be evenly spread, moistened or dried as necessary, and then tamped or rolled until the specified density has been achieved.

- The contractor should select the equipment and processes to be used to achieve the specified density without damage to adjacent ground, structures, utilities and completed work.
- The field density of the compacted soil should be measured by the ASTM D1556 (Sand Cone) or ASTM D6938 (Nuclear Gauge) or equivalent.
- Trench backfill should not be placed, spread or rolled during unfavorable weather conditions. When the work is interrupted by heavy rain, fill operations should not resume until field tests by the project’s geotechnical consultant indicate that the moisture content and density of the fill are in compliance with project specifications.

10.0 DESIGN RECOMMENDATIONS

The various design recommendations provided in this section are based on the assumption that the above earthwork and grading recommendations will be implemented in the project design and construction.

Where pipes are connecting to basins or between underground pipes, we recommend flexible connections should be considered to withstand piping movements during a credible seismic event. Buoyancy force should be considered in the design of the structures below water table.

10.1 Shallow Foundation Design Parameters

The design of the shallow foundations should be based on the recommended parameters presented in the table below.

Table No. 9, Recommended Foundation Parameters

Parameter	Value
Minimum Isolated footing width	24 inches
Minimum continuous footing width	18 inches
Minimum Isolated or continuous footing depth of embedment below lowest adjacent grade	18 inches
Allowable net bearing capacity	2,000 psf

The actual footing dimensions and reinforcement should be based on structural design. The allowable bearing capacity can be increased by 250 pounds per square foot (psf) with each foot of additional embedment and 250 psf with each foot of additional width up to a maximum of 3,000 psf.

The net allowable bearing values indicated above are for the dead loads and frequently applied live loads and are obtained by applying a factor of safety of 3.0 to the net ultimate



bearing capacity. If normal code requirements are applied for design, the above vertical bearing value may be increased by 33 percent for short duration loadings, which will include loadings induced by wind or seismic forces.

10.2 Mat Foundation Design Parameters

The proposed concrete pad may be designed as mat foundation. The modulus of subgrade reaction (k) for design of flexible mat foundation was estimated from the available soil compressibility data and published charts. For design of flexible mat foundation, the following equation may be used.

$$k = k_1 [(B+1)/2B]^2$$

Where,

k = vertical modulus of subgrade reaction for mat foundation, kips per cubic feet
 k_1 = 125 kcf, normalized modulus of subgrade reaction for 1-square-foot footing
 B = foundation width, feet

Other necessary parameters (modulus of elasticity and Poisson's ratio) for mat foundation design are as follows.

$$E = 33 W_c^{1.5} f_c^{0.5} \text{ psi}$$

Where,

W_c = weight of concrete (pcf)
 f_c = compressive strength of concrete at 28 days (psi)
 ν = 0.35, Poisson's Ratio

An allowable net bearing capacity of 3,000 psf may be used for mat foundations founded on compacted native soil. The mat should be reinforced with top and bottom steel, as appropriate, to provide structural continuity and to permit spanning of local irregularities. The mat foundation dimensions, and reinforcement should be based on structural design. For design purposes, the self-weight of the mat foundation can be negligible.

10.3 Lateral Earth Pressures and Resistance to Lateral Loads

In the following subsections, the lateral earth pressures and resistance to lateral loads are estimated by using on-site native soils strength parameters obtained from laboratory testing.



10.3.1 Active Earth Pressures

The active earth pressure behind any buried wall or foundation depends primarily on the allowable wall movement, type of backfill materials, backfill slopes, wall or foundation inclination, surcharges, and any hydrostatic pressures. The lateral earth pressures are presented in the following tables.

Table No. 10, Active and At-Rest Earth Pressures

Loading Conditions	Lateral Earth Pressure (psf)
Active earth conditions (wall is free to deflect at least 0.001 radian)	35
At-rest (wall is restrained)	55

These pressures assume a level ground surface around the structure for a distance greater than the structure height, no surcharge, and no hydrostatic pressure.

If water pressure is allowed to build up behind the walls, the active pressures should be reduced by 50 percent and added to a full hydrostatic pressure to compute the design pressures against the walls. Cantilever retaining walls greater than 6 feet, as measured from the surface, should be designed to resist additional earth pressure caused by seismic ground shaking. A dynamic earth pressure of 26H (psf), based on an inverted triangular distribution, can be used for design of wall.

10.3.2 Passive Earth Pressure

Resistance to lateral loads can be assumed to be provided by a combination of friction acting at the base of foundations and by passive earth pressure. A coefficient of friction of 0.3 between formed concrete and soil may be used with the dead load forces. An allowable passive earth pressure of 200 psf per foot of depth may be used for the sides of the footing poured against recompacted native soils. A factor of safety of 1.5 was applied in calculating passive earth pressure. The maximum value of the passive earth pressure should be limited to 2,000 psf.

Vertical and lateral bearing values indicated above are for the total dead loads and frequently applied live loads. If normal code requirements are applied for design, the above vertical bearing and lateral resistance values may be increased by 33 percent for short duration loading, which will include the effect of wind or seismic forces.

Due to the low overburden stress of the soil at shallow depth, the upper 1 foot of passive resistance should be neglected unless the soil is confined by pavement or slab.



10.4 Settlement

The total settlement of shallow footings from static structural loads and short-term settlement of properly compacted fill is anticipated to be 1 inch or less. The differential settlement resulting from static loads is anticipated to be 0.5 inches or less over a horizontal distance of 30 feet.

Based on our liquefaction analyses, liquefaction settlement is 0.6 inches for the subject site. Dry sand settlement is negligible. The differential settlement resulting from dynamic loads is anticipated to be 0.3 inch or less over a horizontal distance of 30 feet.

If the proposed development will be constructed 20 feet below ground level, then liquefaction settlement can be negligible.

Generally, the static and dynamic settlement does not occur at the same time. For design purposes, the structural engineer should decide whether static and dynamic settlement will be combined or not.

10.5 Soil Parameters for Pipe Design

Structural design requires proper evaluation of all possible loads acting on pipes and structures. The stresses and strains induced on buried pipes and walls depend on many factors, including the type of soil, density, bearing pressure, angle of internal friction, coefficient of passive earth pressure, and coefficient of friction at the interface between the backfill and native soils. The recommended values of the various soil parameters for design are provided in the following table.

Table No. 11, Soil Parameters for Pipe Design

Soil Parameters	Value
Average compacted fill total unit weight, γ (pcf)	120
Angle of internal friction of soils, ϕ	32
Soil cohesion, c (psf)	100
Coefficient of friction between concrete and native soils, fs	0.3
Coefficient of friction between PVC pipe and native soils, fs	0.25
Bearing pressure against native soils (psf)	2,000
Coefficient of passive earth pressure, Kp	3.12
Coefficient of active earth pressure, Ka	0.32
Modulus of Soil Reaction E' (psi)	1,500



10.6 Bearing Pressure for Anchor and Thrust Blocks

An allowable net bearing pressure presented in Table No. 11, *Soil Parameters for Pipe Design* may be used for anchor and thrust block design against alluvial soils. Such thrust blocks should be at least 18 inches wide.

The allowable net bearing capacity is defined as the maximum allowable net bearing pressure on the ground. It is obtained by dividing the net ultimate bearing capacity by a safety factor. The ultimate bearing capacity is the bearing stress at which ground fails by shear or experiences a limiting amount of settlement at the foundation. The net ultimate bearing capacity is obtained by subtracting the total overburden pressure on a horizontal plane at the foundation level from the ultimate bearing capacity.

If normal code requirements are applied for design, the above recommended bearing capacity and passive resistances may be increased by 33 percent for short duration loading such as seismic or wind loading.

10.7 Soil Corrosivity

One representative soil sample was evaluated for corrosivity with respect to common construction materials such as concrete and steel. The test result is presented in Appendix B, *Laboratory Testing Program* and design recommendations pertaining to soil corrosivity are presented below.

The sulfate contents of the sampled soils correspond to American Concrete Institute (ACI) exposure category S0 for these sulfate concentrations (ACI 318-14, Table 19.3.1.1). No concrete type restrictions are specified for exposure category S0 (ACI 318-14, Table 19.3.2.1). A minimum compressive strength of 2,500 psi is recommended.

We anticipate that concrete structures such as footings, slab, and concrete pad will be exposed to moisture from precipitation and irrigation. Based on the site locations and the results of chloride testing of the site soils, we do not anticipate that concrete structures will be exposed to external sources of chlorides, such as deicing chemicals, salt, brackish water, or seawater. ACI specifies exposure category C1 where concrete is exposed to moisture, but not to external sources of chlorides (ACI 318-14, Table 19.3.1.1). ACI provides concrete design recommendations in ACI 318-14, Table 19.3.2.1, including a compressive strength of at least 2,500 psi and a maximum chloride content of 0.3 percent.

According to Romanoff, 1957, the following table provides general guideline of soil corrosion based on electrical resistivity.



Table No. 12, Correlation Between Resistivity and Corrosion

Soil Resistivity (ohm-cm) per Caltrans CT 643	Corrosivity Category
Over 10,000	Mildly corrosive
2,000 – 10,000	Moderately corrosive
1,000 – 2,000	corrosive
Less than 1,000	Severe corrosive

The measured value of the minimum electrical resistivity of the sample when saturated was 12,225 ohm-cm for the site. This indicates that the soil tested is mildly corrosive to ferrous metals in contact with the soil. The site is in a coastal marine environment. Converse does not practice in the area of corrosion consulting. If needed, a qualified corrosion consultant should provide appropriate corrosion mitigation measures for any ferrous metals in contact with the site soils.

10.8 Flexible Pavement

The flexible pavement structural section design recommendations were performed in accordance with the method contained in the *CALTRANS Highway Design Manual*, Chapter 630 without the factor of safety. No specific traffic study was performed to determine the Traffic Index (TI) for the proposed project; therefore, a wide range of TI values were evaluated.

Due to various earth materials encountered at the site, flexible pavement structural section recommendations are prepared for subgrade soils with the design R-value of 50. We recommend that the project structural engineer consider the traffic loading conditions at various locations and select the appropriate pavement sections from the following table:

Table No. 13, Flexible Pavement Structural Sections

Design R-value	Design TI	Asphalt Concrete (AC) Over Aggregate Base (AB) Structural Sections		Full AC Structural Section
		AC (inches)	AB (inches)	AC (inches)
67*	4.0	3.0	3.0	4.0
	5.0	3.0	4.0	4.5
	6.0	4.0	4.0	5.0
	7.0	4.0	4.5	6.5
	8.0	5.0	5.0	7.5
	9.0	6.0	6.0	9.0

*Design recommendations are based on R-Value of 50

Base material shall conform to requirements for Crushed Miscellaneous Base (CMB) or equivalent and should be placed in accordance with the requirements of the Standard



Specifications for Public Works Construction (SSPWC, latest Edition). Asphaltic materials should conform to Section 203-1, "Paving Asphalt," of the Standard Specifications for Public Works Construction (SSPWC, latest Edition) and should be placed in accordance with Section 302-5, "Asphalt Concrete Pavement," of the SSPWC, 2018 edition.

Positive drainage should be provided away from all pavement areas to prevent seepage of surface and/or subsurface water into the pavement base and/or subgrade.

10.9 Rigid Pavement

Rigid pavement design recommendations were provided in accordance with the Portland Cement Association's (PCA) Southwest Region Publication P-14, Portland Cement Concrete Pavement (PCCP) for Light, Medium and Heavy Traffic Rigid Pavement. We recommend that the project structural engineer consider the loading conditions at various locations and select the appropriate pavement sections from the following table:

Table No. 14, Rigid Pavement Structural Sections

Design R-Value	Design Traffic Index (TI)	PCCP Pavement Section (inches)
67*	4.0	6.0
	5.0	6.5
	6.0	6.5
	7.0	7.0
	8.0	7.5
	9.0	8.0

*Design recommendations are based on R-Value of 50

The above pavement section is based on a minimum 28-day Modulus of Rupture (M-R) of 550 psi and a compressive strength of 3,000 psi. The third point method of testing beams should be used to evaluate modulus of rupture. The concrete mix design should contain a minimum cement content of 5.5 sacks per cubic yard. Recommended maximum and minimum values of slump for pavement concrete are three inches to one inch, respectively.

Transverse contraction joints should not be spaced more than 10 feet and should be cut to a depth of 1/4 the thickness of the slab. Longitudinal joints should not be spaced more than 12 feet apart. A longitudinal joint is not necessary in the pavement adjacent to the curb and gutter section.

Prior to placement of concrete, at least the upper 12 inches of subgrade soils below rigid pavement sections should be compacted to at least 95 percent relative compaction as defined by the ASTM D 1557 standard test method.



Positive drainage should be provided away from all pavement areas to prevent seepage of surface and/or subsurface water into pavement base and/or subgrade.

11.0 CONSTRUCTION RECOMMENDATIONS

Dewatering may be needed for wet well construction below water table.

Temporary sloped excavation and shoring design recommendations are presented in the following sections.

11.1 General

Prior to the start of construction, all existing underground utilities should be located at the project site. Such utilities should either be protected in-place or removed and replaced during construction as required by the project specifications.

Vertical braced excavations can be considered for the foundations. Sloped excavations may not be feasible in locations adjacent to existing utilities, pavement, or structures. Recommendations pertaining to temporary excavations are presented in this section.

Excavations near existing structures may require vertical side wall excavation. Where the side of the excavation is a vertical cut, it should be adequately supported by temporary shoring to protect workers and any adjacent structures.

All applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Health Act, and the Construction Safety Act should be met. The soils exposed in cuts should be observed during excavation by the geotechnical consultant and the competent person designated by the contractor. If potentially unstable soil conditions are encountered, modifications of slope ratios for temporary cuts may be required. Design team should consider buoyancy force.

Since ground water encountered approximately 11 feet below ground level and proposed structures may be constructed below 10 feet below ground level, dewatering will be required during construction.

11.2 Temporary Sloped Excavations

Temporary open-cut trenches may be constructed with side slopes as recommended in the following table. Temporary cuts encountering soft and wet fine-grained soils; dry loose, cohesionless soils or loose fill from trench backfill may have to be constructed at a flatter gradient than presented below.



Table No. 15, Slope Ratios for Temporary Excavations

Soil Type	OSHA Soil Type	Depth of Cut (feet)	Recommended Maximum Slope (Horizontal:Vertical)*
Silty Sand (SM)	C	0-10	1.5:1

* Slope ratio assumed to be uniform from top to toe of slope.

For shallow excavations up to 4 feet bgs, excavation can be vertical. For steeper temporary construction slopes or deeper excavations, or unstable soil encountered during the excavation, shoring or trench shields should be provided by the contractor to protect the workers in the excavation.

Surfaces exposed in slope excavations should be kept moist but not saturated to retard raveling and sloughing during construction. Adequate provisions should be made to protect the slopes from erosion during periods of rainfall. Surcharge loads, including construction materials, should not be placed within 5 feet of the unsupported slope edge. Stockpiled soils with a height higher than 6 feet will require greater distance from trench edges.

11.3 Slot Cut Recommendations

Temporary excavations during possible improvements should not extend below a 1:1 horizontal:vertical (H:V) plane extending beyond and down from the bottom of the existing foundations, utility lines or structures. The remedial grading excavations should not cause loss of bearing and/or lateral support for adjacent foundations, utilities or structures.

If remedial grading excavations extend below a 1:1 horizontal:vertical (H:V) plane extending beyond and down from the bottom of adjacent off-site utility lines or structure foundations, shoring or slot cutting shall be employed. The ABC slot cutting method for over-excavation could be a possible option as an alternative to shoring for excavation less than 8 feet in width and depth or with cohesive soils. In general, for structures it is not recommended for slot cutting if the height of excavation exceeds more than 8 feet or into sandy soils and with surcharging load. Backfill should be accomplished in the shortest period of time possible and in alternating sections.

11.4 Shoring Design

Temporary shoring will be required for the recommended excavation due to space limitations and property line boundaries and because of nearby existing structures or facilities and traffic loading. Temporary shoring may consist of the use of a trench box (where feasible), or conventional soldier piles and lagging. Shoring should ultimately be designed by a qualified structural engineer considering the recommendations below in their final design and others which are applicable.



Drilled excavations for soldier piles, which are recommended to create the proposed 30-foot-high excavation, may require the use of drilling fluids to prevent caving and to maintain an opened hole for pile installation. Alternatively, soldier piles can be driven to desired depth.

11.4.1 Cantilevered Shoring

Cantilevered shoring systems may include soldier piles with lagging to maintain temporary support of vertical wall excavations. Shoring design must consider the support of adjacent underground utilities and/or structures and should consider the effects of shoring deflection on supported improvements. Due to sandy nature of on-site soils, some caving during the drilling of soldier-pile borings should be anticipated. A soldier pile system will require continuous lagging to control caving and sloughing in the excavation between soldier piles.

Temporary cantilevered shoring should be designed to resist a lateral earth pressure equivalent to a fluid density of 35 pounds per cubic foot (pcf) for non-surcharged condition. This pressure is valid only for shoring retaining level ground. This equivalent fluid pressure is valid only for shoring supporting level ground.

In addition to the lateral earth pressure, surcharge pressures due to miscellaneous loads, such as soil stockpiles, vehicular traffic or construction equipment located adjacent to the shoring, should be included in the design of the shoring. A uniform lateral pressure of 100 psf should be included in the upper 10 feet of the shoring to account for normal vehicular and construction traffic within 10 feet of the trench excavation. Surcharge pressures from the existing structures should be added to the above earth pressures for surcharges within a horizontal distance less than or equal to the wall height. Surcharge coefficients of 50% of any uniform vertical surcharge should be added as a horizontal earth pressure for shoring design. All shoring should be designed and installed in accordance with state and federal safety regulations.

The minimum embedment depth for piles is ten (10) feet from the lowest adjacent grade into firm alluvium, below the bottom of the excavation. Vertical skin friction against soldier piles for may be taken as 200 psf. Fixity may be assumed at two (2) feet below the excavation into firm native alluvium or bedrock. For the design of soldier piles spaced at least 3.0 diameters on-center, the passive resistance of the soils adjacent to the piles may be assumed to be 200 psf per foot of embedment depth. Soldier pile members placed in drilled holes should be properly backfilled with a sand/cement slurry or lean concrete in order to develop the required passive resistance.

Caving soils should be anticipated between the piles. To limit local sloughing, caving soils can be supported by continuous lagging or guniting. The lagging between the soldier piles may consist of pressure-treated wood members or solid steel sheets. In our opinion, steel sheeting is expected to be more expedient than wood lagging to install. Although



soldier piles and any bracing used should be designed for the full-anticipated earth pressures and surcharge pressures, the pressures on the lagging are less because of the effect of arching between the soldier piles. Accordingly, the lagging between the piles may be designed for a nominal pressure of up to a maximum of 350 psf. All lumber to be left in the ground should be treated in accordance with Section 204-2 of the "Standard Specifications for Public Works Construction" (Latest Edition).

11.4.2 Tie-Back Shoring

A tie-back soldier-pile shoring system may be used to maintain temporary support of deep vertical walled excavations. Braced or tied-back shoring, retaining a level ground surface, should be designed for a uniform pressure of $20H$ psf, where H is the height of the retained cut in feet.

Surcharge pressures should be added to this earth pressure for surcharges within a distance from the top of the shoring less than or equal to the shoring height. A surcharge coefficient of 50 percent of any uniform vertical surcharge should be added as a horizontal shoring pressure for braced shoring. A uniform lateral pressure of 100 psf should be included in the upper 10 feet of the shoring to account for normal vehicular and construction traffic within 10 feet of the trench excavation.

11.4.3 Tie-Backs

For design of tie-back shoring, it should be assumed that the potential wedge of failure is determined by a plane at 30 degrees from the vertical, through the bottom of the excavation. Tie-back anchors may be installed at angles of 15 to 40 degrees below a horizontal plane. Soil friction values, for estimating the allowable capacity of drilled friction anchors, may be computed using the following equation:

$$q = 40H ; \quad q \leq 500 \text{ pounds-per-square-foot (psf)}$$

where:

H = average depth of anchor below ground surface, shown on
 q = anchor surface area resistance, in psf (excluding tip),

Only the frictional resistance developed beyond the assumed failure plane should be included in the tie-back design for resisting lateral loads. After shoring/tie-back is no longer needed to support the excavation, stress should be carefully released and shoring system including tieback may be able to be left in place.

All shoring and tie-back should be designed by experienced California licensed Civil Engineer and installed by experienced contractors. Shoring/tie-back design should also



be reviewed by a geotechnical consultant to verify the soil parameters used in the design are in conformance with geotechnical report.

All applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Health Act of 1987 and current amendments, and the Construction Safety Act should be met. The soils exposed in cuts should be observed during excavation by a competent person employed by the contractor. If potentially unstable soil conditions are encountered, modifications of slope ratios for temporary cuts may be required.

It is recommended that Converse review plans and specifications for proposed shoring and that a Converse representative observes the installation of shoring. A licensed surveyor should be retained to establish monuments on shoring and the surrounding ground prior to excavation. Such monuments should be monitored for horizontal and vertical movement during construction. Results of the monitoring program should be provided immediately to the project Structural (shoring) Engineer and Converse for review and evaluation. Adjacent building elements should be photo-documented prior to construction.

12.0 GEOTECHNICAL SERVICES DURING CONSTRUCTION

The project geotechnical consultant should review plans and specifications as the project design progresses. Such review is necessary to identify design elements, assumptions, or new conditions which require revisions or additions to our geotechnical recommendations.

The project geotechnical consultant should be present to observe conditions during construction. Geotechnical observation and testing should be performed as needed to verify compliance with project specifications. Additional geotechnical recommendations may be required based on subsurface conditions encountered during construction.

13.0 CLOSURE

This report is prepared for the project described herein and is intended for use solely by Carollo engineers and their design team to assist in the design and construction of the proposed project. Our findings and recommendations were obtained in accordance with generally accepted professional principles practiced in geotechnical engineering. We make no other warranty, either expressed or implied.

Converse Consultants is not responsible or liable for any claims or damages associated with interpretation of available information provided to others. Field exploration identifies actual soil conditions only at those points where samples are taken, when they are taken. Data derived through sampling and laboratory testing is extrapolated by Converse employees who render an opinion about the overall soil conditions. Actual conditions in



areas not sampled may differ. In the event that changes to the project occur, or additional, relevant information about the project is brought to our attention, the recommendations contained in this report may not be valid unless these changes and additional relevant information are reviewed and the recommendations of this report are modified or verified in writing. In addition, the recommendations can only be finalized by observing actual subsurface conditions revealed during construction. Converse cannot be held responsible for misinterpretation or changes to our recommendations made by others during construction.

As the project evolves, continued consultation and construction monitoring by a qualified geotechnical consultant should be considered an extension of geotechnical investigation services performed to date. The geotechnical consultant should review plans and specifications to verify that the recommendations presented herein have been appropriately interpreted, and that the design assumptions used in this report are valid. Where significant design changes occur, Converse may be required to augment or modify the recommendations presented herein. Subsurface conditions may differ in some locations from those encountered in the explorations, and may require additional analyses and, possibly, modified recommendations.

Design recommendations given in this report are based on the assumption that it will be implemented. Additional consultation may be prudent to interpret Converse's findings for contractors, or to possibly refine these recommendations based upon the review of the actual site conditions encountered during construction. If the scope of the project changes, if project completion is to be delayed, or if the report is to be used for another purpose, this office should be consulted.



14.0 REFERENCES

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Appendix A

Field Exploration



APPENDIX A: FIELD EXPLORATION

Our field investigation included site reconnaissance and a subsurface exploration program consisting of drilling soil borings. During the site reconnaissance, the surface conditions were noted, and the borings were marked within the footprint of the project area. The approximate boring locations were established in the field with reference to existing facilities in the streets, and other visible features. The locations should be considered accurate only to the degree implied by the method used.

Five exploratory borings (BH-1 to BH-5) were drilled on May 13, 2022, to investigate the subsurface conditions at the site. The borings were drilled to a maximum depth of 51.5 feet below existing ground surface (bgs). Additional borings were drilled at the subject project site and percolation tests were performed utilizing four borings PT-1, PT-2, PT-3 and PT-4, on July 6, 2022. Percolation test results are presented in Appendix D.

The borings were advanced using a truck-mounted drill rig equipped with 8-inch diameter hollow-stem augers for soils sampling. Encountered materials were continuously logged by a Converse engineer and classified in the field by visual classification in accordance with the Unified Soil Classification System. Where appropriate, the field descriptions and classifications have been modified to reflect laboratory test results.

Relatively undisturbed samples were obtained using California Modified Samplers (2.4 inches inside diameter and 3.0 inches outside diameter) lined with thin sample rings. The steel ring sampler was driven into the bottom of the borehole with successive drops of a 140-pound driving weight falling 30 inches. Blow counts at each sample interval are presented on the boring logs. Samples were retained in brass rings (2.4 inches inside diameter and 1.0 inch in height) and carefully sealed in waterproof plastic containers for shipment to the Converse laboratory. Bulk samples of typical soil types were also obtained.

The exact depths at which material changes occur cannot always be established accurately. Unless a more precise depth can be established by other means, changes in material conditions that occur between drive samples are indicated on the logs at the top of the next drive sample.

Following the completion of logging and sampling, the borings were backfilled with cement grout and compacted by pushing down with augers using the drill rig weight.

For a key to soil symbols and terminology used in the boring logs, refer to Drawing Nos. A-1a through A-1b, *Unified Soil Classification and Key to Boring Log Symbols*. For logs of borings, see Drawing Nos. A-2 and A-6, *Logs of Borings*.



SOIL CLASSIFICATION CHART

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

FIELD AND LABORATORY TESTS	
C	Consolidation (ASTM D 2435)
CL	Collapse Potential (ASTM D 4546)
CP	Compaction Curve (ASTM D 1557)
CR	Corrosion, Sulfates, Chlorides (CTM 643-99; 417; 422)
CU	Consolidated Undrained Triaxial (ASTM D 4767)
DS	Direct Shear (ASTM D 3080)
EI	Expansion Index (ASTM D 4829)
M	Moisture Content (ASTM D 2216)
OC	Organic Content (ASTM D 2974)
P	Permeability (ASTM D 2434)
PA	Particle Size Analysis (ASTM D 6913 [2002])
PI	Liquid Limit, Plastic Limit, Plasticity Index (ASTM D 4318)
PL	Point Load Index (ASTM D 5731)
PM	Pressure Meter
PP	Pocket Penetrometer
R	R-Value (CTM 301)
SE	Sand Equivalent (ASTM D 2419)
SG	Specific Gravity (ASTM D 854)
SW	Swell Potential (ASTM D 4546)
TV	Pocket Torvane
UC	Unconfined Compression - Soil (ASTM D 2166)
	Unconfined Compression - Rock (ASTM D 7012)
UU	Unconsolidated Undrained Triaxial (ASTM D 2850)
UW	Unit Weight (ASTM D 2937)

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

BORING LOG SYMBOLS

DRILLING METHOD SYMBOLS			
	Auger Drilling		Mud Rotary Drilling
	Dynamic Cone or Hand Driven		Diamond Core

SAMPLE TYPE

- STANDARD PENETRATION TEST
Split barrel sampler in accordance with ASTM D-1586-84 Standard Test Method
- DRIVE SAMPLE 2.42" I.D. sampler (CMS).
- DRIVE SAMPLE No recovery
- BULK SAMPLE
- GROUNDWATER WHILE DRILLING
- GROUNDWATER AFTER DRILLING

SOIL CLASSIFICATION AND KEY TO BORING LOG SYMBOLS



Converse Consultants

Project ID: 206.GPJ; Template: LOG

Project Name:
Central Coast Blue Advanced
Water Treatment,
Grover Beach, California
For: Carollo

Project No.
21-31-323-01

Drawing No.
A-1a

CONSISTENCY OF COHESIVE SOILS

Descriptor	Unconfined Compressive Strength (tsf)	SPT Blow Counts	Pocket Penetrometer (tsf)	CA Sampler	Torvane (tsf)	Field Approximation
Very Soft	<0.25	< 2	<0.25	<3	<0.12	Easily penetrated several inches by fist
Soft	0.25 - 0.50	2 - 4	0.25 - 0.50	3 - 6	0.12 - 0.25	Easily penetrated several inches by thumb
Medium Stiff	0.50 - 1.0	5 - 8	0.50 - 1.0	7 - 12	0.25 - 0.50	Can be penetrated several inches by thumb with moderate effort
Stiff	1.0 - 2.0	9 - 15	1.0 - 2.0	13 - 25	0.50 - 1.0	Readily indented by thumb but penetrated only with great effort
Very Stiff	2.0 - 4.0	16 - 30	2.0 - 4.0	26 - 50	1.0 - 2.0	Readily indented by thumbnail
Hard	>4.0	>30	>4.0	>50	>2.0	Indented by thumbnail with difficulty

APPARENT DENSITY OF COHESIONLESS SOILS

Descriptor	SPT N ₆₀ Value (blows / foot)	CA Sampler
Very Loose	<4	<5
Loose	4- 10	5 - 12
Medium Dense	11 - 30	13 - 35
Dense	31 - 50	36 - 60
Very Dense	>50	>60

MOISTURE

Descriptor	Criteria
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

PERCENT OF PROPORTION OF SOILS

Descriptor	Criteria
Trace (fine)/ Scattered (coarse)	Particles are present but estimated to be less than 5%
Few	5 to 10%
Little	15 to 25%
Some	30 to 45%
Mostly	50 to 100%

SOIL PARTICLE SIZE

Descriptor	Size	
Boulder	> 12 inches	
Cobble	3 to 12 inches	
Gravel	Coarse	3/4 inch to 3 inches
	Fine	No. 4 Sieve to 3/4 inch
Sand	Coarse	No. 10 Sieve to No. 4 Sieve
	Medium	No. 40 Sieve to No. 10 Sieve
	Fine	No. 200 Sieve to No. No. 40 Sieve
Silt and Clay	Passing No. 200 Sieve	

PLASTICITY OF FINE-GRAINED SOILS

Descriptor	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled, and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll, and not much time is required to reach the plastic limit; it cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.

CEMENTATION/ Induration

Descriptor	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

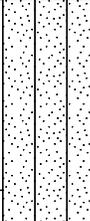
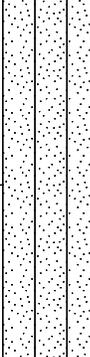
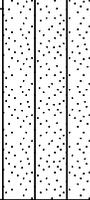
NOTE: This legend sheet provides descriptions and associated criteria for required soil description components only. Refer to Caltrans Soil and Rock Logging, Classification, and Presentation Manual (2010), Section 2, for tables of additional soil description components and discussion of soil description and identification.

SOIL CLASSIFICATION AND KEY TO BORING LOG SYMBOLS



Log of Boring No. BH-01

Dates Drilled: 5/13/2022 Logged by: P.Ariram Checked By: Sivathanan
 Equipment: 8" HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in
 Ground Surface Elevation (ft): 22 Depth to Water (ft): 11

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS / 6"	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		FILL (Af): SILTY SAND (SM): fine to medium-grained, moist, reddish-brown.			3/3/4	7	96	DS
10		ALLUVIUM (Qal): CLAYEY SAND (SC): alluvial deposits, dense, moist, light brown to dark brown.  - Groundwater encountered at 11 feet during drilling			16/17/40	10	102	
15		SILTY SAND (SM): fine to medium-grained, trace clay, dense, wet, light brown to reddish brown.			14/20/30	18	108	
20		- very dense, brown			8/17/28			
25		- very dense, brown			13/50@5"	20	114	
30		End of boring at 30 feet below ground level. Groundwater encountered at 11 feet below ground level. Boring was backfilled with soil cuttings and compacted on 5/13/2022.						



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Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No. Drawing No.
 21-31-323-01 A-2

Log of Boring No. BH-02

Dates Drilled: 5/13/2022 Logged by: P.Ariram Checked By: Sivathanan
 Equipment: 8" HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in
 Ground Surface Elevation (ft): 22 Depth to Water (ft): 13

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS / 6"	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		FILL (Af): SILTY SAND (SM): fine to coarse-grained, moist, reddish brown.			6/8/11	4	101	PA
10		ALLUVIUM (Qal): SILTY SAND (SM): fine to coarse-grained, medium dense, moist, reddish brown to brown.			11/8/11	6	100	
15		- Groundwater encountered at 13 feet during drilling dense, wet, brown			14/21/25	17	110	
20					10/11/12			WA(fc=35%)
25		trace clay,			14/15/16	22	106	DS
30		very dense, brown to light brown			12/33/50@6"			WA(fc=26%)



Converse Consultants

Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No. Drawing No.
 21-31-323-01 A-3a

Log of Boring No. BH-02

Dates Drilled: 5/13/2022 Logged by: P.Ariram Checked By: Sivathanan
 Equipment: 8" HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in
 Ground Surface Elevation (ft): 22 Depth to Water (ft): 13

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS / 6"	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
40	[Dotted pattern]	ALLUVIUM (Qal): SILTY SAND (SM): fine to coarse-grained, dense, wet, brown.	X		12/18/21			No Recovery
45	[Dotted pattern]		X		8/12/12			WA(fc=27%)
50	[Dotted pattern]		X		19/12/20			
			■		19/25/50@6"	18	121	WA(fc=28%)
		End of boring at 51.5 feet below ground level. Groundwater encountered at 13 feet. Boring was backfilled with soil cuttings and compacted on 05/13/2022.						



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Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No. Drawing No.
 21-31-323-01 A-3b

Log of Boring No. BH-03

Dates Drilled: 5/13/2022 Logged by: P.Ariram Checked By: Sivathanan
 Equipment: 8" HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in
 Ground Surface Elevation (ft): 22 Depth to Water (ft): 13.8

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS / 6"	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		FILL (Af): SILTY SAND (SM): fine to coarse-grained, moist, reddish brown.			10/7/10	5	100	CR
10		ALLUVIUM (Qal): SILTY SAND (SM): fine to coarse-grained, rocks and cobbles, maximum dimension up to 2 inches, moist, reddish brown to light brown.			6/9/9			C
15		- Groundwater encountered at 13.8 feet during drilling			6/9/12	12	107	
20		wet, dark brown			6/14/19			
		End of boring at 21.5 feet below ground level. Groundwater encountered at 13.8 feet below ground level. Boring backfilled with soil cuttings and compacted on 05/13/22.						



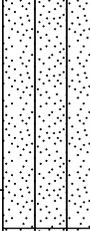
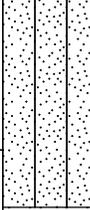
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Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No. Drawing No.
 21-31-323-01 A-4

Log of Boring No. BH-04

Dates Drilled: 5/13/2022 Logged by: P.Ariram Checked By: Sivathanan
 Equipment: 8" HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in
 Ground Surface Elevation (ft): 20 Depth to Water (ft): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS / 6"	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		<p><u>FILL (Af):</u> SILTY SAND (SM): fine to coarse-grained, moist, reddish-brown.</p>			9/9/11	4	101	
10		<p><u>ALLUVIUM (Qal):</u> SILTY SAND (SM): fine to coarse-grained, moist, brown.</p>			5/10/17			SE
		<p>End of boring at 11.5 feet below ground level. No ground water encountered. Boring backfilled with soil cuttings and compacted on 05/13/2022.</p>						



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Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No. Drawing No.
 21-31-323-01 A-5

Log of Boring No. BH-05

Dates Drilled: 5/13/2022 Logged by: P.Ariram Checked By: Sivathanan
 Equipment: 8" HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in
 Ground Surface Elevation (ft): 20 Depth to Water (ft): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS / 6"	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		FILL (Af): SILTY SAND (SM): fine to coarse-grained, moist, reddish-brown.			9/11/7	8	116	CP
10		ALLUVIUM (Qal): SILTY SAND (SM): fine to medium-grained, moist, brown.			4/2/2			
		End of boring at 11.5 feet below ground level. No groundwater encountered. Boring backfilled with soil cuttings on 5/13/22.						



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Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No. Drawing No.
 21-31-323-01 A-6

Appendix B

Laboratory Testing Program



APPENDIX B: LABORATORY TESTING PROGRAM

Tests were conducted in our laboratory on representative soil samples for the purpose of classification and evaluation of their physical properties and engineering characteristics. The amount and selection of tests were based on the geotechnical parameters required for this project. Test results are presented herein and on the Logs of Borings, in Appendix A, *Field Exploration*. The following is a summary of the various laboratory tests conducted for this project.

***In-Situ* Moisture Content and Dry Density**

In-situ dry density and moisture content tests were performed on relatively undisturbed ring samples, in accordance with ASTM Standard D2216 and D2937 to aid soils classification and to provide qualitative information on strength and compressibility characteristics of the site soils. For test results, see the Logs of Borings in Appendix A, *Field Exploration*.

Sand Equivalent

One representative bulk sample was tested to evaluate the expansion potential in accordance with ASTM Standard D2419. The test results are presented in the following table.

Table No. B-1, Summary of Sand Equivalent Test Results

Boring No.	Depth (feet)	Soil Description	Sand Equivalent
BH-4	10.0 – 11.5	Silty Sand (SM)	24

Soil Corrosivity

One representative soil sample was tested to determine minimum electrical resistivity, pH, and chemical content, including soluble sulfate and chloride concentrations. The purpose of these tests was to determine the corrosion potential of site soils when placed in contact with common construction materials. The test was performed by AP Engineers. (Pomona, CA) in accordance with Caltrans Test Methods 643, 422 and 417. Test result was presented in the following table.

Table No. B-2, Summary of Soil Corrosivity Test Results

Boring No.	Depth (feet)	pH	Soluble Sulfates (CA 417) (ppm)	Soluble Chlorides (CA 422) (ppm)	Min. Resistivity (CA 643) (Ohm-cm)
BH-3	1-5	8.1	26	21	12,225



R-Value

One representative bulk soil sample was tested for resistance value (R-value) in accordance with California Test Method CT301. This test is designed to provide a relative measure of soil strength for use in pavement design. The test result is presented in the table below.

Table No. B-3, Summary of R-Value Test Result

Boring No.	Depth (feet)	Soil Classification	Measured R-Value
PT-1	0-4	Silty Sand (SM)	67

Percent Finer Than Sieve No. 200

The percent finer than sieve No. 200 tests were performed on four (4) selected soil samples to aid in the classification of the on-site soils and to estimate other engineering parameters. Testing was performed in general accordance with the ASTM Standard D1140 test method. The test results are presented in the boring logs.

Table No. B-4, Summary of Percent Passing Sieve #200 Test Results

Boring No.	Depth (feet)	Soil Classification	Percent Passing Sieve No. 200
BH-2	20	Silty Sand (SM)	35
BH-2	30	Silty Sand (SM)	26
BH-2	40	Silty Sand (SM)	27
BH-2	50	Silty Sand (SM)	28

Grain-Size Analyses

To assist in classification of soils, mechanical grain-size analysis was performed on one selected samples in accordance with the ASTM Standard D6913 test method. Grain-size curves are shown in Drawing No. B-1, *Grain Size Distribution Results* and results are presented in the below table.

Table No. B-5, Summary of Grain Size Distribution Test Results

Boring No.	Depth (feet)	Soil Classification	% Gravel	% Sand	%Silt	%Clay
BH-2	0-5	Silty Sand (SM)	6.0	67.0	27.0	

Maximum Density and Optimum Moisture Content

Laboratory maximum dry density-optimum moisture content relationship test was performed on one representative bulk sample. The test was conducted in accordance with the ASTM Standard D1557 test method. The test results are presented in Drawing



No. B-2, *Moisture-Density Relationship Results*, and are summarized in the following table.

Table No. B-6, Summary of Moisture-Density Relationship Results

Boring No.	Depth (feet)	Soil Description	Optimum Moisture (%)	Maximum Density (lb/cft)
BH-5	0-5	Silty Sand (SM)	8.0	122.5

Consolidation Test

Consolidation test was performed on one (1) selected sample as per ASTM Standard D2435. Data obtained from this test performed on relatively undisturbed soil sample was used to evaluate the settlement characteristics of the foundation soils under load. Preparation for this test involved trimming the sample and placing the one-inch high brass ring into the test apparatus, which contained porous stones, both top and bottom, to accommodate drainage during testing. Normal axial loads were applied to one end of the sample through the porous stones, and the resulting deflections were recorded at various time periods. The load was increased after the sample reached a reasonable state of equilibrium. Normal loads were applied at a constant load-increment ratio, successive loads being generally twice the preceding load. The sample was tested at field and submerged conditions. The test results, including sample density and moisture content, are presented in Drawing No. B-3, *Consolidation Test Results*.

Direct Shear

Two direct shear tests were performed on relatively undisturbed representative ring samples under soaked moisture condition in accordance with the ASTM D3080 procedure. For each test, three samples contained in brass sampler rings were placed, one at a time, directly into the test apparatus and subjected to a range of normal loads appropriate for the anticipated conditions. The samples were then sheared at a constant strain rate of 0.02 inch/minute. Shear deformation was recorded until a maximum of about 0.25-inch shear displacement was achieved. Ultimate strength was selected from the shear-stress deformation data and plotted to determine the shear strength parameters. For test data, including sample density and moisture content, see Drawings Nos. B-4a and B-4b, *Direct Shear Test Results*, and the following table.

Table No. B-7, Summary of Direct Shear Test Results

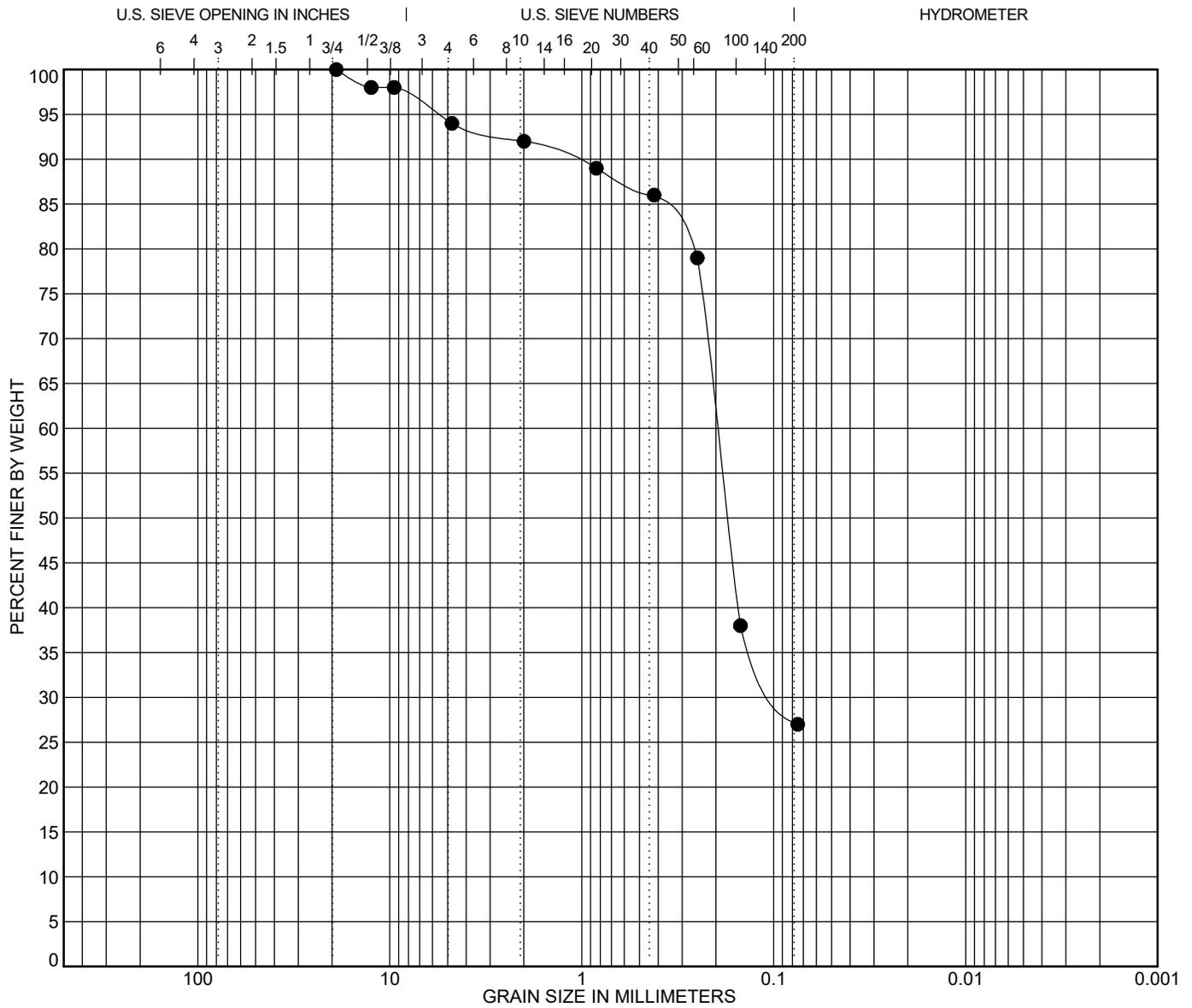
Boring No.	Depth (feet)	Soil Description	Ultimate Strength Parameters	
			Friction Angle (degrees)	Cohesion (psf)
BH-1	5.0-6.5	Silty Sand (SM)	32	100
BH-2	25.0-26.5	Silty Sand (SM)	30	50



Sample Storage

Soil samples presently stored in our laboratory will be discarded 30 days after the date of this report, unless this office receives a specific request to retain the samples for a longer period.





COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Boring No.	Depth (ft)	Description					LL	PL	PI	Cc	Cu
● BH-2	0-5	Silty Sand (SM)									
Boring No.	Depth (ft)	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
● BH-2	0-5	19	0.197	0.09		6.0	67.0	27.0			

GRAIN SIZE DISTRIBUTION RESULTS

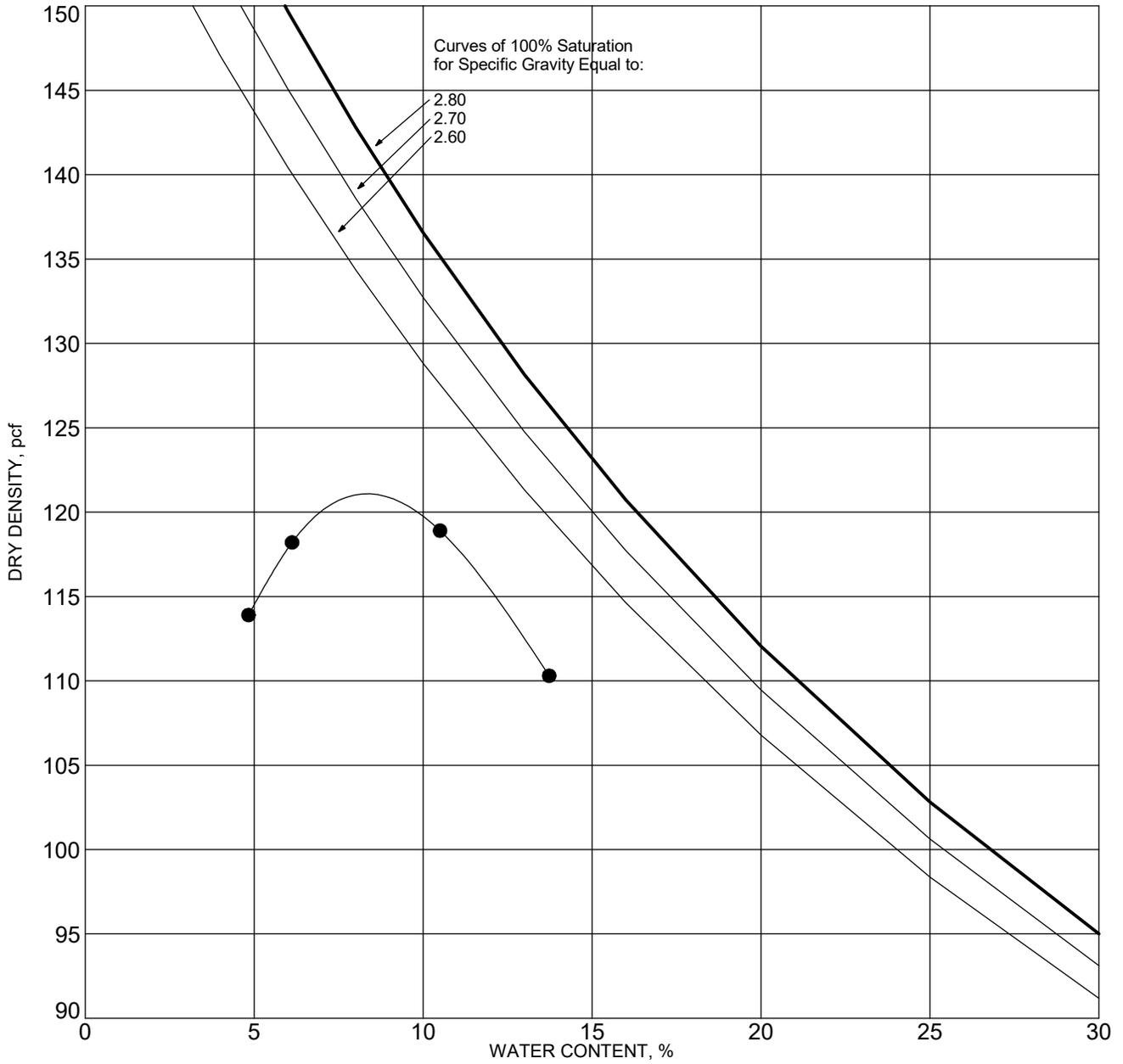


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Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No.
 21-31-323-01

Drawing No.
 B-1



SYMBOL	BORING NO.	DEPTH (ft)	DESCRIPTION	ASTM TEST METHOD	OPTIMUM WATER, %	MAXIMUM DRY DENSITY, pcf
●	BH -05	11.5	SILTY SAND (SM)	D1557 Method D	8	122.5

MOISTURE-DENSITY RELATIONSHIP RESULTS

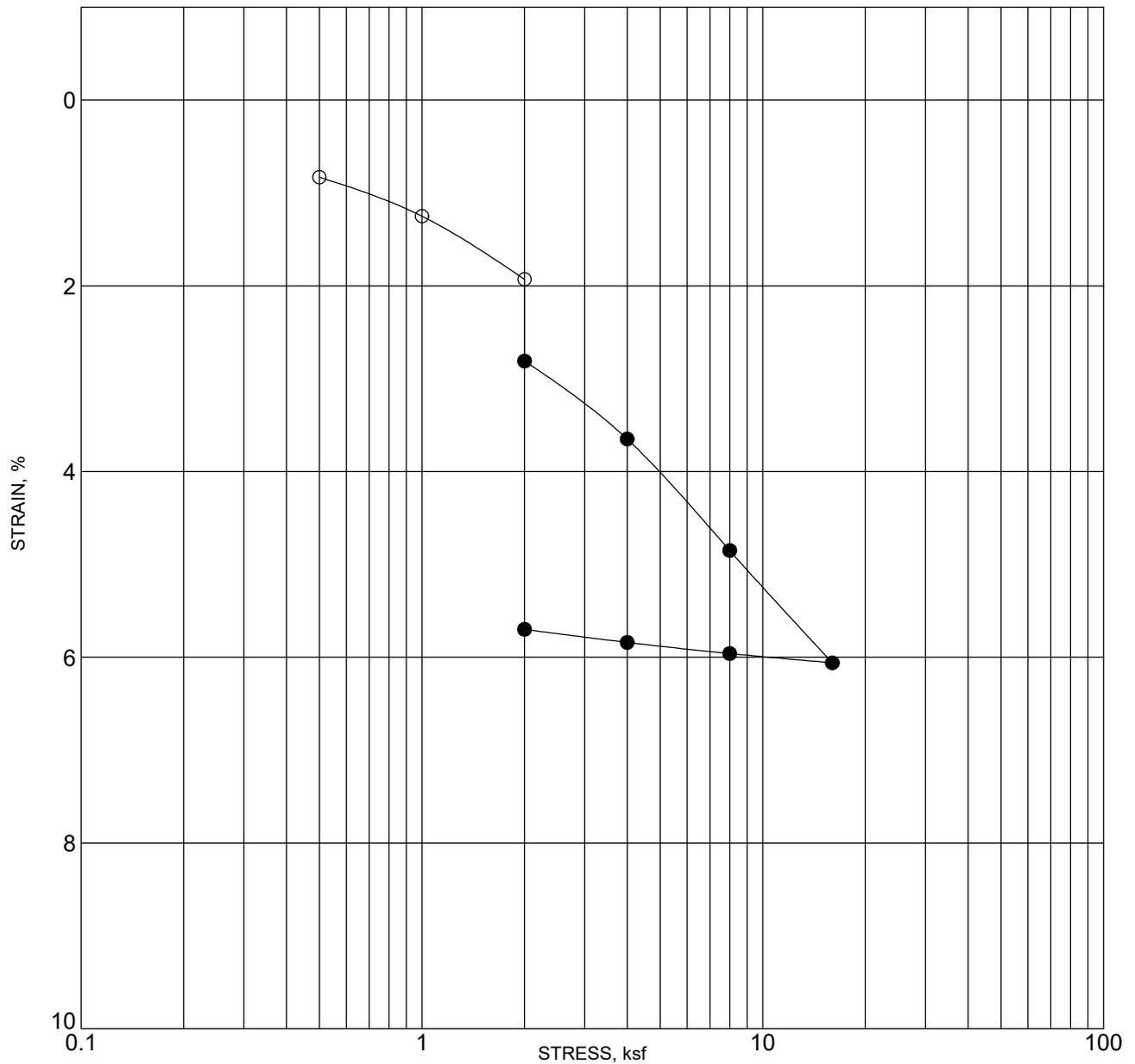


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Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No.
 21-31-323-01

Drawing No.
 B-2



BORING NO. :		BH-3		DEPTH (ft) :		5	
DESCRIPTION :		Silty Sand (SM)					
MOISTURE CONTENT (%)		DRY DENSITY (pcf)		PERCENT SATURATION		VOID RATIO	
INITIAL	5	100	20			0.636	
FINAL	17	112	100			0.460	

NOTE: SOLID CIRCLES INDICATE READINGS AFTER ADDITION OF WATER

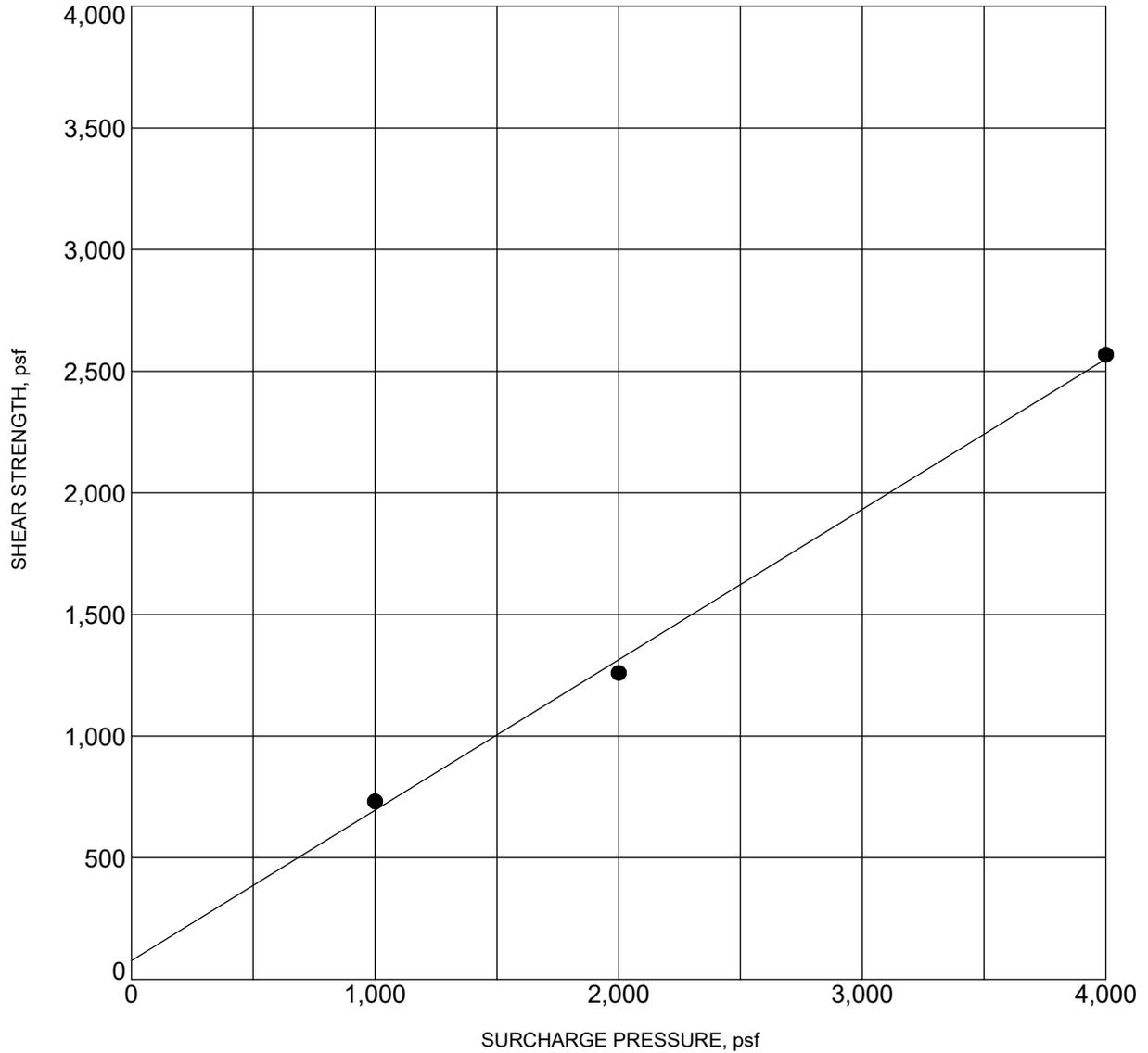
CONSOLIDATION TEST RESULTS



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Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No. Drawing No.
21-31-323-01 B-3



BORING NO. :	BH-1	DEPTH (ft) :	5-6.5
DESCRIPTION :	Clayey Sand (SC)		
COHESION (psf) :	100	FRICTION ANGLE (degrees):	32
MOISTURE CONTENT (%) :	7.0	DRY DENSITY (pcf) :	96.0

NOTE: Ultimate Strength.

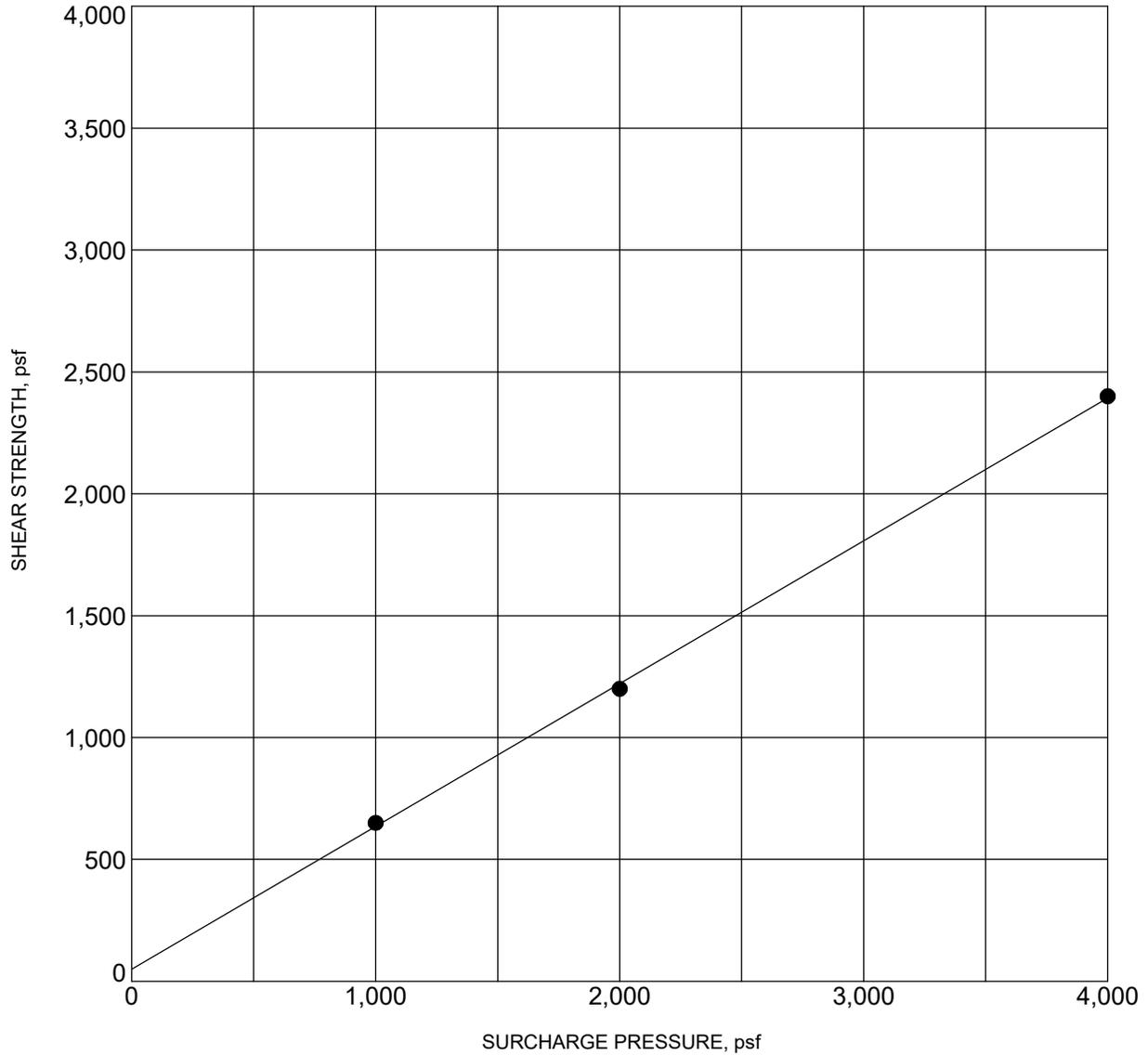
DIRECT SHEAR TEST RESULTS



Converse Consultants

Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No. Drawing No.
 21-31-323-01 B-4a



BORING NO. :	BH-2	DEPTH (ft) :	25-26.5
DESCRIPTION :	Silty Sand (SM)		
COHESION (psf) :	50	FRICTION ANGLE (degrees):	30
MOISTURE CONTENT (%) :	22.0	DRY DENSITY (pcf) :	106.0

NOTE: Ultimate Strength.

DIRECT SHEAR TEST RESULTS



Converse Consultants

Project Name
 Central Coast Blue Advanced Water Treatment
 972 Huber Street, Grover Beach, California
 Converse Project No. 21-31-323-00 (01)
 For: - Carollo

Project No. Drawing No.
21-31-323-01 B-4b

Appendix C

Liquefaction and Settlement Analysis



APPENDIX C: LIQUEFACTION AND SETTLEMENT ANALYSIS

The subsurface data obtained from the borings BH-2 was used to evaluate the liquefaction potential and associated dry seismic settlement when subjected to ground shaking during earthquakes.

A simplified liquefaction hazard analysis was performed using the program SPTLIQ (InfraGEO Software, 2021) using the liquefaction triggering analysis method by Boulanger and Idriss (2014). A modal earthquake magnitude of M 6.7 was selected based on the results of seismic deaggregation analysis using the USGS interactive online tool (<https://earthquake.usgs.gov/hazards/interactive/>).

A peak ground acceleration (PGA_{GM}) of 0.515 g for the MCE design event, where g is the acceleration due to gravity, was selected for this analysis. The result of our analysis is presented on Plate No. C-1 and summarized in the following table.

Table No. C-1, Estimated Dynamic Settlements

Location	Groundwater Conditions	Groundwater Depth (feet bgs)	Dry Seismic Settlement (inches)	Liquefaction Induced Settlement (inches)
BH-2	Historical	~ 5	0	0.6

Based on our liquefaction analyses, liquefaction settlement is 0.6 inches for the subject site. Dry sand settlement is negligible. The differential settlement resulting from dynamic loads is anticipated to be 0.3 inch or less over a horizontal distance of 30 feet.

If the proposed development will be constructed 20 feet below ground level, then liquefaction settlement can be negligible.



SIMPLIFIED LIQUEFACTION HAZARDS ASSESSMENT USING STANDARD PENETRATION TEST (SPT) DATA

(Copyright © 2015, 2020, SPTLIQ. All Rights Reserved; By: InfraGEO Software)

PROJECT INFORMATION	
Project Name	Water Treatment Project
Project No.	21-31-323-01
Project Location	Grover Beach
Analyzed By	P. Ariram
Reviewed By	Sivathasan

SUMMARY OF RESULTS					
Severity of Liquefaction:					
Total Thickness of Liquefiable Soils:	10.00 feet (cumulative total thickness in the upper 65 feet)				
Liquefaction Potential Index (LPI):	6.51 *** (High risk, with moderate liquefaction effects)				
Seismic Ground Settlements:					
Seismic Compression Settlement:	Pradel (1998)	0.00 inches	0.00 inches	0.00 inches	(Dry/Unsaturated Soils)
Liquefaction-Induced Settlement:	Ishihara and Yoshimine (1992)	0.59 inches	0.59 inches	0.59 inches	(Saturated Soils)
Total Seismic Settlement:		0.59 inches	0.59 inches	0.59 inches	
Seismic Lateral Displacements:					
Cyclic Lateral Displacement:	Tokimatsu and Asaka (1998)	0.52 inches	0.58 inches	0.58 inches	(During Ground Shaking)
Lateral Spreading Displacement:	Zhang et al. (2004)	0.00 inches	0.00 inches	0.00 inches	(After Ground Shaking)

SEISMIC DESIGN PARAMETERS	
Earthquake Moment Magnitude, M_w	6.70
Peak Ground Acceleration, A_{max}	0.52 g
Factor of Safety Against Liquefaction, FS	1.30

BORING DATA AND SITE CONDITIONS	
Boring No.	BH-2
Ground Surface Elevation	20.00 feet
Proposed Grade Elevation	20.00 feet
GWL Depth Measured During Test	11.00 feet
GWL Depth Used in Design	5.00 feet
Borehole Diameter	8.00 inches
Hammer Weight	140.00 pounds
Hammer Drop	30.00 inches
Hammer Energy Efficiency Ratio, ER	80.00 %
Hammer Distance to Ground Surface	5.00 feet
Topographic Site Condition:	TSC1 (Level Ground with No Nearby Free Face)
- Ground Slope, S	0.00 %
- Free Face (L/H) Ratio	N/A H = 0 feet
Average Total Unit Weight of New Fill	120.00 pcf (assumed)

NOTES AND REFERENCES	
+ This method of analysis is based on observed seismic performance of level ground sites using correlation with normalized and fines-corrected SPT blow count, $(N_{60cs}) = f(N_{60}, FC)$ where $(N_{60}) = N_{field} C_N C_E C_R C_S$	
++ Liquefaction susceptibility screening is performed to identify soil layers assessed to be non-liquefiable based on laboratory test results using the criteria proposed by Cetin and Seed (2003), Bray and Sancio (2006), or Idriss and Boulanger (2008).	
* FS _{liq} = Factor of Safety against liquefaction = (CRR/CSR), where CRR = $CRR_{7.5} MSF K_u$, MSF = Magnitude Scaling Factor, $K_u = f(N_{60}, \sigma'_{vo})$, $K_u = 1.0$, (level ground), CSR = Cyclic Stress Ratio = $0.65 A_{max}(\sigma'_{vo}/\sigma'_{v0}) r_d$, and CRR _{7.5} = Cyclic Resistance Ratio is a function of (N_{60cs}) and corrected for an earthquake magnitude M_w of 7.5.	
** Residual strength values of liquefied soils are based on correlation with post-earthquake, normalized and fines-corrected SPT blow count derived by Idriss and Boulanger (2008).	
*** Based on Iwasaki et al. (1978) and Toprak and Holzer (2003)	
+ Reference: Boulanger, R.W. and Idriss, I.M. (2014), "CPT and SPT Based Liquefaction Triggering Procedures," University of California Davis, Center for Geotechnical Modeling Report No. UCD/CGM-14/01, 1-134.	

INPUT SOIL PROFILE DATA								LIQUEFACTION TRIGGERING ANALYSIS BASED ON R.W. BOULANGER AND I.M. IDRIS (2014) METHOD +														Residual Shear Strength	Seismic Porewater Pressure Ratio	Cumulative Seismic Settlement	Cumulative Cyclic Lateral Displacement	Cumulative Lateral Spreading Displacement			
Depth to Top of Soil Layer	Depth to Bottom of Soil Layer	Material Type	Liquefaction Susceptibility Screening ++ Susceptible Soil? (Y/N)	Total Soil Unit Weight γ_t (pcf)	Type of Soil Sampler	Field SPT Blow Count	Fines Content FC (%)	Total Vert. Stress (Design) σ_{vo} (psf)	Effective Vert. Stress (Design) σ'_{vo} (psf)	SPT Corr. for Vert. Stress C_N	SPT Corr. for Hammer Energy C_E	SPT Corr. for Borehole Size C_B	SPT Corr. for Rod Length C_R	SPT Corr. for Sampling Method C_S	Corrected SPT Blow Count N_{60}	Normalized SPT Blow Count $(N_1)_{60}$	Fines Corrected SPT Blow Count $(N_1)_{60cs}$	Shear Stress Reduction Coefficient r_d	Correction for High Overburden Stress K_σ	Cyclic Stress Ratio CSR	Cyclic Resistance Ratio CRR	Factor of Safety FS_{liq}	Liquefaction Analysis Results	S_r (psf)	r_u (%)	(inches)	(inches)	(inches)	
0.00	5.00	SM	Y	105.00	MCal	50.00	40.00	262.50	262.50	1.516	1.333	1.150	0.750	0.650	37.4	56.7	62.3	0.999	1.100	0.338				Unsaturated Soil			0.59	0.58	0.00
5.00	10.00	SM	Y	106.00	MCal	19.00	45.00	790.00	634.00	1.478	1.333	1.150	0.800	0.650	15.1	22.4	28.0	0.980	1.100	0.413	0.531	1.29		LIQUEFY	203.81	46.85	0.59	0.58	0.00
10.00	15.00	SM	Y	130.00	MCal	19.00	40.00	1,380.00	912.00	1.229	1.333	1.150	0.850	0.650	16.1	19.8	25.4	0.957	1.062	0.490	0.386	0.79		LIQUEFY	202.76	100.00	0.49	0.42	0.00
15.00	20.00	SM	Y	115.00	MCal	46.00	40.00	1,992.50	1,212.50	1.062	1.333	1.150	0.950	0.650	43.6	46.3	51.8	0.932	1.069	0.518				Dense Soil			0.00	0.19	0.00
20.00	25.00	SM	Y	120.00	SPT1	23.00	35.00	2,580.00	1,488.00	1.024	1.333	1.150	0.950	1.000	33.5	34.3	39.8	0.905	1.018	0.530				Dense Soil			0.00	0.19	0.00
25.00	30.00	SM	Y	120.00	MCal	31.00	30.00	3,180.00	1,776.00	0.973	1.333	1.150	0.950	0.650	29.4	28.6	33.9	0.875	0.986	0.530				Dense Soil			0.00	0.17	0.00
30.00	35.00	SM	Y	120.00	SPT1	50.00	26.00	3,780.00	2,064.00	0.977	1.333	1.150	1.000	1.000	76.7	74.9	80.0	0.845	0.941	0.523				Dense Soil			0.00	0.06	0.00
35.00	40.00	SM	Y	120.00	SPT1	39.00	27.00	4,380.00	2,352.00	0.937	1.333	1.150	1.000	1.000	59.8	56.0	61.3	0.814	0.907	0.512				Dense Soil			0.00	0.06	0.00
40.00	45.00	SM	Y	120.00	SPT1	24.00	28.00	4,980.00	2,640.00	0.866	1.333	1.150	1.000	1.000	36.8	31.9	37.1	0.783	0.909	0.499				Dense Soil			0.00	0.06	0.00
45.00	50.00	SM	Y	120.00	SPT1	50.00	28.00	5,580.00	2,928.00	0.935	1.333	1.150	1.000	1.000	76.7	71.7	77.0	0.753	0.850	0.485				Dense Soil			0.00	0.00	0.00

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SIMPLIFIED LIQUEFACTION HAZARDS ASSESSMENT USING STANDARD PENETRATION TEST (SPT) DATA

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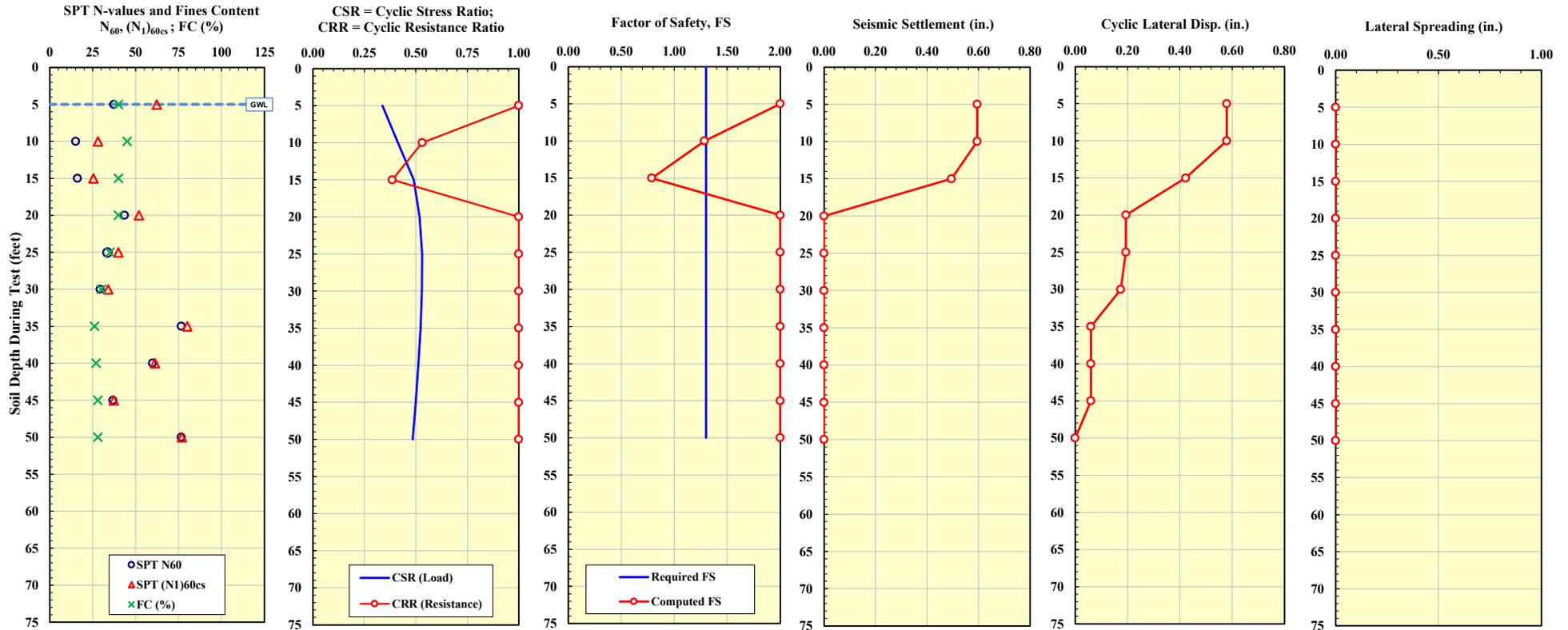
PROJECT INFORMATION	
Project Name	Water Treatment Project
Project No.	21-31-323-01
Project Location	Grover Beach
Analyzed By	P.Ariram
Reviewed By	Sivathanan

TOPOGRAPHIC CONDITIONS	
Ground Slope, S	0.00 %
Free Face (L/H) Ratio	N/A H = 0.00 feet

GROUNDWATER DATA	
GWL Depth Measured During Test	11.00 feet
GWL Depth Used in Design	5.00 feet

BORING DATA	
Boring No.	BH-2
Ground Surface Elevation	20.00 feet
Proposed Grade Elevation	20.00 feet
Borehole Diameter	8.00 inches
Hammer Weight	140.00 pounds
Hammer Drop	30.00 inches
Hammer Energy Efficiency Ratio, ER	80.00 %
Hammer Distance to Ground Surface	5.00 feet

SEISMIC DESIGN PARAMETERS	
Earthquake Moment Magnitude, M_w	6.70
Peak Ground Acceleration, A_{max}	0.52 g
Factor of Safety Against Liquefaction, FS	1.30



Analysis Methods Used ==>>

Liquefaction Triggering:
Boulanger-Idriss (2014)

Seismic Settlements:
Above GWL: Pradel (1998)
Below GWL: Ishihara and Yoshimine (1992)

Cyclic Lateral Displacements:
Above GWL: Pradel (1998)
Below GWL: Tokimatsu and Asaka (1998)

Lateral Spreading:
Zhang et al. (2004)

Appendix D

Percolation Testing



APPENDIX D: PERCOLATION TESTING

Percolation tests were performed utilizing four borings PT-1, PT-2, PT-3 and PT-4, on July 6, 2022. The borings were pre-soaked prior to performing four (4) falling-head percolation tests to determine infiltration rates of the fill and native soils encountered between different depths below the ground surface at the Borings in accordance with LA County Low Impact Development, Best Management Practices Guidelines. The test borings were prepared by placing a perforated 2-inch diameter PVC pipe surrounded by pea gravel after drilling and sampling. Water was filled to the ground surface to pre-soak prior to testing.

Water was added to the bore holes until the water level was as near the ground surface as could be achieved and allowed to pre-soak for at least 1. After pre-soak water was added, until the water levels were as near required testing depth as could be achieved. The water levels were measured to the nearest 1/20-foot and recorded every 10 minutes for borings. The results of the percolation tests are tabulated below.

Table No. D-1, Percolation Test Results

Boring No.	Depth of Boring* (feet)	Predominant Soil Types (USCS)	Average Percolation Rate (inches/hour)	Design Percolation Rate (inches/hour)
PT-1	0-4	Silty Sand (SM)	8.53	8.44
PT-2	0-6	Silty Sand (SM)	13.61	13.27
PT-3	0-4	Silty Sand (SM)	10.78	10.78
PT-4	0-6	Silty Sand (SM)	11.36	11.20

*Approximate Depth

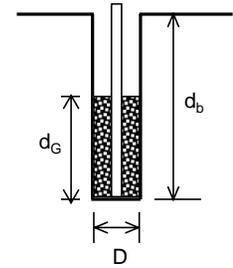
In accordance with County of Los Angeles requirements, the minimum percolation rate for design of infiltration system for storm water management is 0.30 inch per hour. Percolation rates of borings PT-1, PT-2, PT-3 and PT-4 meet the minimum percolation rate. The project Civil Engineer should review the raw data of percolation test presented herein to determine specific soil layers and percolation rates for design of the proposed infiltration system. Such systems should be constructed a minimum distance of 10 feet laterally from any existing or future planned building or subsurface structure as not to disturb or undermine foundations. The proposed infiltration system should be constructed 10 feet above seasonal ground water table. The percolation rates were determined in general accordance with Los Angeles County guidelines. The detailed percolation test results are shown on the following data sheet.



Percolation Testing

Job Name: Central Coast Blue Advanced Water Treatment Project
 Job No.: 21-323-02
 Location: 972 Huber Street, Grover Beach, California
 Test Date: July 6, 2022

Test Boring No PT-1
 Depth of Boring (d_b): 4.0 feet
 Diameter of Boring (D): 0.33 feet
 Test Performer: Daniel Arteaga



Ground water was not encountered. Percolation test was performed between 0.0 feet and 4.0 feet below ground level.

Time of Testing			Water Level Measurement		Water Level Calculations				Percolation Rate Calculations		
Initial Time	Final Time	Time Interval	Initial depth to water	Final depth to water	Initial Height of water column	Final Height of water column	Drop in Height	Average height of water column	Pre-adjusted Percolation Rate	Reduction Factor	Adjusted Percolation Rate
T_i	T_f	ΔT	d_1	d_2	d_i	d_f	$\Delta d = d_i - d_f$	L_{ave}	$k_i = \Delta d / \Delta T$	R_f	$k = k_i / R_f$
(min)	(min)	(hr)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(inch/hr)		(inch/hr)
Presoak	7/6/2022	1									
Percolation Test											
0.00	10.00	0.17	0.00	2.25	4.00	1.75	2.25	2.88	162.00	18.4	8.79
10.00	20.00	0.17	0.00	2.25	4.00	1.75	2.25	2.88	162.00	18.4	8.79
20.00	30.00	0.17	0.00	2.15	4.00	1.85	2.15	2.93	154.80	18.7	8.27
30.00	40.00	0.17	0.00	2.15	4.00	1.85	2.15	2.93	154.80	18.7	8.27

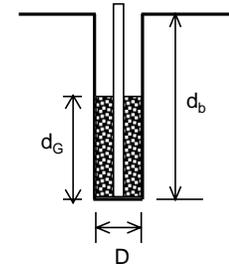
Note: Reduction Factor, $R_f = (2*d_i - \Delta d)/D + 1$

Lowest Percolaton Rate = 8.27 inch/hr
Average Percolation Rate = 8.53 inch/hr
Design Percolation Rate = 8.44 inch/hr

Percolation Testing

Job Name: Central Coast Blue Advanced Water Treatment Project
 Job No.: 21-323-02
 Location: 972 Huber Street, Grover Beach, California
 Test Date: July 6, 2022

Test Boring No PT-2
 Depth of Boring (d_b): 6.0 feet
 Diameter of Boring (D): 0.33 feet
 Test Performer: Daniel Arteaga



Ground water was not encountered. Percolation test was performed between 0.0 feet and 6.0 feet below ground level.

Time of Testing			Water Level Measurement		Water Level Calculations				Percolation Rate Calculations		
Initial Time	Final Time	Time Interval	Initial depth to water	Final depth to water	Initial Height of water column	Final Height of water column	Drop in Height	Average height of water column	Pre-adjusted Percolation Rate	Reduction Factor	Adjusted Percolation Rate
T_i	T_f	ΔT	d_1	d_2	d_i	d_f	$\Delta d = d_i - d_f$	L_{ave}	$k_i = \Delta d / \Delta T$	R_f	$k = k_i / R_f$
(min)	(min)	(hr)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(inch/hr)		(inch/hr)
Presoak	7/6/2022	1									
Percolation Test											
0.00	10.00	0.17	0.00	4.70	6.00	1.30	4.70	3.65	338.40	23.1	14.64
10.00	20.00	0.17	0.00	4.60	6.00	1.40	4.60	3.70	331.20	23.4	14.14
20.00	30.00	0.17	0.00	4.35	6.00	1.65	4.35	3.83	313.20	24.2	12.95
30.00	40.00	0.17	0.00	4.30	6.00	1.70	4.30	3.85	309.60	24.3	12.72

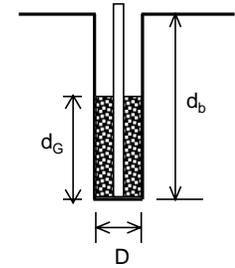
Note: Reduction Factor, $R_f = (2*d_i - \Delta d)/D + 1$

Lowest Percolaton Rate = 12.72 inch/hr
Average Percolation Rate = 13.61 inch/hr
Design Percolation Rate = 13.27 inch/hr

Percolation Testing

Job Name: Central Coast Blue Advanced Water Treatment Project
 Job No.: 21-323-02
 Location: 972 Huber Street, Grover Beach, California
 Test Date: July 6, 2022

Test Boring No PT-3
 Depth of Boring (d_b): 4.0 feet
 Diameter of Boring (D): 0.33 feet
 Test Performer: Daniel Arteaga



Ground water was not encountered. Percolation test was performed between 0.0 feet and 4.0 feet below ground level.

Time of Testing			Water Level Measurement		Water Level Calculations				Percolation Rate Calculations		
Initial Time	Final Time	Time Interval	Initial depth to water	Final depth to water	Initial Height of water column	Final Height of water column	Drop in Height	Average height of water column	Pre-adjusted Percolation Rate	Reduction Factor	Adjusted Percolation Rate
T_i	T_f	ΔT	d_1	d_2	d_i	d_f	$\Delta d = d_i - d_f$	L_{ave}	$k_i = \Delta d / \Delta T$	R_f	$k = k_i / R_f$
(min)	(min)	(hr)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(inch/hr)		(inch/hr)
Presoak	7/6/2022	1									
Percolation Test											
0.00	10.00	0.17	0.00	2.60	4.00	1.40	2.60	2.70	187.20	17.4	10.78
10.00	20.00	0.17	0.00	2.60	4.00	1.40	2.60	2.70	187.20	17.4	10.78
20.00	30.00	0.17	0.00	2.60	4.00	1.40	2.60	2.70	187.20	17.4	10.78
30.00	40.00	0.17	0.00	2.60	4.00	1.40	2.60	2.70	187.20	17.4	10.78

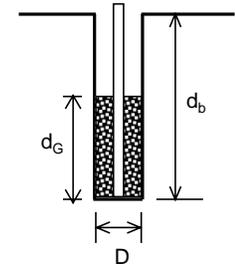
Note: Reduction Factor, $R_f = (2*d_i - \Delta d)/D + 1$

Lowest Percolaton Rate = 10.78 inch/hr
Average Percolation Rate = 10.78 inch/hr
Design Percolation Rate = 10.78 inch/hr

Percolation Testing

Job Name: Central Coast Blue Advanced Water Treatment Project
 Job No.: 21-323-02
 Location: 972 Huber Street, Grover Beach, California
 Test Date: July 6, 2022

Test Boring No PT-4
 Depth of Boring (d_b): 6.0 feet
 Diameter of Boring (D): 0.33 feet
 Test Performer: Daniel Arteaga



Ground water was not encountered. Percolation test was performed between 0.0 feet and 6.0 feet below ground level.

Time of Testing			Water Level Measurement		Water Level Calculations				Percolation Rate Calculations		
Initial Time	Final Time	Time Interval	Initial depth to water	Final depth to water	Initial Height of water column	Final Height of water column	Drop in Height	Average height of water column	Pre-adjusted Percolation Rate	Reduction Factor	Adjusted Percolation Rate
T_i	T_f	ΔT	d_1	d_2	d_i	d_f	$\Delta d = d_i - d_f$	L_{ave}	$k_i = \Delta d / \Delta T$	R_f	$k = k_i / R_f$
(min)	(min)	(hr)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(inch/hr)		(inch/hr)
Presoak	7/6/2022	1									
Percolation Test											
0.00	10.00	0.17	0.00	4.10	6.00	1.90	4.10	3.95	295.20	24.9	11.84
10.00	20.00	0.17	0.00	4.00	6.00	2.00	4.00	4.00	288.00	25.2	11.41
20.00	30.00	0.17	0.00	3.95	6.00	2.05	3.95	4.03	284.40	25.4	11.20
30.00	40.00	0.17	0.00	3.90	6.00	2.10	3.90	4.05	280.80	25.5	10.99

Note: Reduction Factor, $R_f = (2*d_i - \Delta d)/D + 1$

Lowest Percolaton Rate = 10.99 inch/hr
Average Percolation Rate = 11.36 inch/hr
Design Percolation Rate = 11.20 inch/hr

DRAFT GEOTECHNICAL REPORT

Central Coast Blue – Conveyance Pipeline

Various Locations

Grover Beach and Oceano, California

Yeh Project No.: 221-539

July 17, 2023



Prepared for:

Water Systems Consulting
805 Aerovista Lane, Suite 201
San Luis Obispo, California 93401
Attn: Justin Pickard, PE

Prepared by:

Yeh and Associates, Inc.
391 Front Street, Suite D
Grover Beach, California 93433
Phone: 805-481-9590

July 17, 2023

Project No. 221-539

Water Systems Consulting
805 Aerovista Lane, Suite 201
San Luis Obispo, California 93401

Attn: Mr. Justin Pickard, PE

Subject: DRAFT Geotechnical Report, Central Coast Blue – Conveyance Pipeline, Various Locations, Grover Beach and Oceano, California

Dear Mr. Pickard:

Yeh and Associates, Inc. is pleased to submit this report to provide geotechnical services for the design of the conveyance pipeline system for the Central Coast Blue project in Grover Beach, California. This report was prepared in accordance with our agreement for professional services dated July 26, 2022. Graphics showing the locations of the field explorations, an interpreted subsurface profile for key project components, and recommendations for the design of the conveyance pipeline, earthwork, and pavement rehabilitation are included with this report.

We appreciate the opportunity to be of service. Please contact Judd King at 805-481-9590 x285 or jking@yeh-eng.com if you have questions or require additional information.

Sincerely,
YEH AND ASSOCIATES, INC.

DRAFT

Reed J. Hooke, EIT
Senior Staff Engineer

DRAFT

Jamie L. Ross, PE
Project Engineer

Reviewed by:

DRAFT

Judd J. King, PE, GE
Senior Geotechnical Engineer

Table of Contents

1. PURPOSE AND SCOPE OF STUDY	1
2. PROJECT UNDERSTANDING.....	1
2.1 PROPOSED PROJECT	1
2.2 EXISTING SITE DESCRIPTION	2
2.3 HISTORICAL LIQUEFACTION-RELATED DEFORMATION	3
3. SUBSURFACE EXPLORATION	3
3.1 EXPLORATORY DRILLING	3
3.2 LABORATORY TESTING	4
3.3 PREVIOUS STUDIES	4
4. SITE CONDITIONS	5
4.1 GEOLOGIC SETTING	5
4.2 SUBSURFACE CONDITIONS	6
4.3 GROUNDWATER	8
5. CONCLUSIONS AND RECOMMENDATIONS	8
5.1 EARTHWORK – GENERAL	8
5.1.1 SUGGESTED MATERIAL SPECIFICATIONS.....	8
5.1.2 CLEARING AND GRUBBING	10
5.1.3 COMPACTION AND GRADING.....	10
5.1.4 FILL PLACEMENT.....	10
5.1.5 REUSE OF EXCAVATED ONSITE MATERIAL	11
5.2 LIQUEFACTION.....	11
5.3 CORROSION CONSIDERATIONS.....	12
5.4 PIPELINE DESIGN.....	12
5.4.1 FOUNDATION SUPPORT	13
5.4.2 PIPE BEDDING	14
5.4.3 PIPE ZONE MATERIAL	14
5.4.4 TRENCH BACKFILL	15
5.4.5 TRENCH PATCH.....	15
5.4.6 PIPE LOADS.....	15
5.5 TRENCHLESS INSTALLATION	15
5.5.1 SUBSURFACE CONDITIONS AND CONSIDERATIONS.....	16
5.5.2 JACKING RESISTANCE	17



5.5.3	MONITORING.....	17
5.5.4	CONTACT GROUTING.....	18
6.	CONSTRUCTION CONSIDERATIONS.....	18
6.1	EXCAVATIONS.....	18
6.2	DEWATERING.....	19
6.3	ADJACENT FACILITIES.....	20
6.4	EXCAVATION STABILITY.....	21
6.5	SUBGRADE EVALUATION.....	21
6.6	GRADING OBSERVATION.....	21
7.	LIMITATIONS.....	21
8.	REFERENCES.....	22

List of Figures

FIGURE 1:	VICINITY MAP.....	1
FIGURE 2:	DAMAGE TO HOUSE IN OCEANO, CALIFORNIA FROM LATERAL SPREADING DURING 2003 SAN SIMEON EARTHQUAKE (USGS 2004A).....	2
FIGURE 3:	GEOLOGIC MAP (HOLLAND 2013).....	5
FIGURE 4:	TRENCH DETAIL.....	13

List of Tables

TABLE 1:	GEOTECHNICAL PROPERTIES.....	7
TABLE 2:	GROUNDWATER DATA.....	8
TABLE 3:	COMPACTION REQUIREMENTS.....	10
TABLE 4:	SUMMARY OF ANTICIPATED EXCAVATION CONDITIONS.....	18

List of Plates

Plate 1a –	Northern Field Exploration Plan.....	1
Plate 1b –	Southern Field Exploration Plan.....	2
Plate 1c –	Cross Section A-A’ Map.....	3
Plate 2 –	Subsurface Profile A-A’: Trenchless Crossing.....	4

List of Appendices

Appendix A –	Boring Logs	
	Boring Log Legend.....	A-1



Boring Logs 23B-01 to 14.....	A-2 to A-16
Appendix B – Results of Laboratory Testing	
Summary of Laboratory Test Results	B-1 to 2
Sieve.....	B-3
Soluble Sulfates and Soluble Chlorides.....	B-4
Modified Proctor.....	B-5
Direct Shear.....	B-6 to 8
Hydraulic Conductivity.....	B-9 to 12
Appendix C – Groundwater Monitoring Data	
Borings 23B-09 and 23B-10 (April to July 2023)	C-1 to C-2
Appendix D – Previous Studies	
Cooper, Clark, & Associates (1979) Borings	D-1
United States Geological Survey (2004a) San Simeon Earthquake Cross Sections and CPTs	D-2 to 27
Yeh and Associates (2019) SSLO CSD Redundancy Project Borings and CPTs	D-28 to 37
Yeh and Associates (2020) Grover Beach CDBG 2020 Waterline Borings	D-38



1. PURPOSE AND SCOPE OF STUDY

Yeh and Associates was retained by Water Systems Consultants (WSC) to provide geotechnical recommendations for the design of the new conveyance pipeline system for the Central Coast Blue Project in Grover Beach and Oceano, California. The approximate location and extents of the proposed improvements are shown on Figure 1.

The geotechnical evaluation consisted of a program of project coordination, field exploration, laboratory testing, and engineering analyses to develop the recommendations

in this report. This report discusses the subsurface conditions encountered, provides recommendations for design and construction of the conveyance pipeline, and presents general grading and seismic considerations relevant to the project.

2. PROJECT UNDERSTANDING

The purpose of this project is the design of a network of conveyance pipelines through Grover Beach and Oceano, California to deliver secondary effluent from the Pismo Beach Outfall line to an Advanced Water Treatment (AWT) plant planned on Barca Street in Grover Beach, California. Discharge pipelines will also be designed to convey brine from the AWT facility back to the Pismo Beach Outfall for disposal.

2.1 PROPOSED PROJECT

Plates 1a and 1b – the Field Exploration Maps present a plan of the project area and proposed improvements. The project includes the design of approximately 2 miles of pipeline to intercept



Figure 1: Vicinity Map

the Pismo Beach Outfall line on Highway 1 to convey secondary effluent to the proposed AWT plant on Barca Street. Once the water is treated, it will be injected back into the ground at designated injection sites in the area. This injected water will be used to supplement the region’s groundwater aquifers and reduce the impact of seawater intrusion into the existing production wells for the local Five Cities area (Pismo Beach, Grover Beach, Oceano, Arroyo Grande, and Shell Beach). Discharge brine from the AWT will be sent back to the Pismo Beach Outfall for eventual disposal into the Pacific Ocean. The pipeline will generally follow existing streets in Grover Beach, Oceano, and along Highway 1.

New pipeline materials are anticipated to be Fuseable PVC or HDPE pipe. Most of the new pipeline will be installed using conventional open trench methods with depths up to 5 feet below the existing ground surface. An approximately 120-foot-long trenchless crossing is proposed the Union Pacific Railroad (UPRR) tracks near the proposed AWT plant. Two casings, one for the secondary effluent pipeline, the other for the brine discharge line will be designed for the crossing. The proposed crossing is anticipated to be up to 15 feet below the ground surface and installed using jack and bore methods.

2.2 EXISTING SITE DESCRIPTION

The conveyance pipeline will generally follow existing streets in Grover Beach, Oceano, and east of Highway 1. The Grover Beach Train Station is located near the northern extents of the proposed pipeline, and the South San Luis Obispo County Sanitation District (SSLOCS D) Wastewater Treatment Facility (WWTF) is located near the southern extents of the project. The proposed pipeline will cross right-of-way for both the Union Pacific Railroad (UPRR) and Highway 1 as well as cross the Oceano Airport property. Land use in the project vicinity is primarily residential, commercial, and industrial. The ground surface along the project is generally flat or gently sloping with elevations between 9 and 40 feet (WSC 2023). Grades along the proposed pipeline alignment vary from approximately 0 to 10 percent (CalTopo 2023). Existing utilities within the roadways consist of gas, sewer, water, storm drains, and the existing

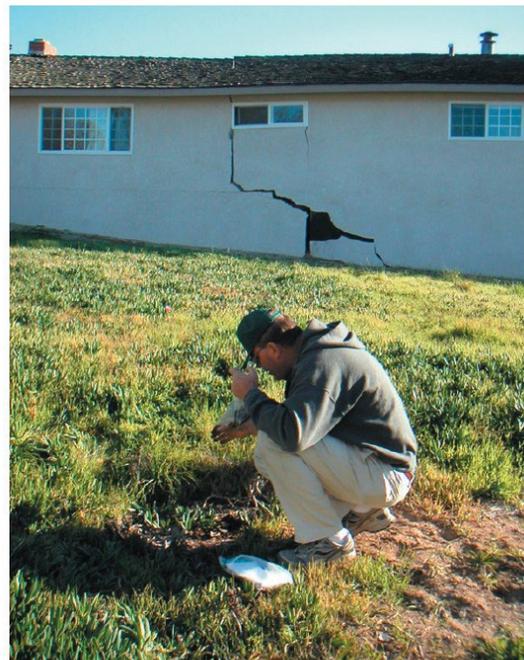


Figure 2: Damage to House in Oceano, California from Lateral Spreading During 2003 San Simeon Earthquake (USGS 2004a)

Pismo Beach Outfall line that the new pipeline will intercept.

2.3 HISTORICAL LIQUEFACTION-RELATED DEFORMATION

The Oceano area was impacted by the 2003 San Simeon Earthquake (USGS 2004a). Damage to houses, roadways, and underground utilities was recorded, associated with lateral spreading in the vicinity (see Figure 2). Sand boils were also observed at various locations near Oceano Lagoon and Arroyo Grande Creek. The approximate locations of the lateral spreading and sand boils are shown on Plate 1b. USGS (2004a) notes that non-engineered fill derived from nearby sand dunes was used in 1927 to infill marshland to convert them into developable land. A discussion of liquefaction potential is discussed in Section 5.3.

3. SUBSURFACE EXPLORATION

3.1 EXPLORATORY DRILLING

Yeh subcontracted 2R Drilling Inc. of Chino, California to perform the drilling for the project. 2R used a CME 75 truck-mounted drill rig equipped with 8-inch diameter hollow stem augers to advance fourteen borings to depths of up to approximately 31 feet below the existing road surface on April 4 to 6, 2023. Plates 1a and 1b show the approximate locations of the borings. The station and elevation of the borings along the project were estimated from the preliminary plans provided by WSC (2023).

Yeh personnel measured existing pavement sections, logged the subsurface conditions encountered during the drilling, and collected soil samples for subsequent laboratory testing. The sample intervals, a description of the subsurface conditions encountered, pocket penetrometer test results, blow counts (N-Values) recorded during drive sampling, and percent recovery are provided on the logs. The logs of the borings are presented in Appendix A.

Sampling within the borings was performed by driving either a modified California or standard penetration test (SPT) split spoon sampler at intervals of 2.5 to 5 feet. The SPT sampler has a 2-inch outside diameter, a 1-3/8-inch inside diameter and is equipped for but was used without liners. The modified California sampler has a 3-inch outside diameter, a 2-3/8-inch inside diameter and was used with 1-inch-high brass liners. Drive samples were collected using a 140-pound automatic trip hammer in accordance with ASTM D-1586 (the Standard Penetration Test) procedures. Bulk samples of the subgrade soil were collected from the augers at the depth intervals noted on the logs.

Upon completion, the borings less than 25 feet were backfilled with a mixture of cement and native material from the auger cuttings, then topped with a concrete patch dyed black. Borings 23B-09 and 23B-10 were instrumented as temporary 2-inch diameter monitoring wells. Details of the monitoring well construction are shown on the logs in Appendix A.

3.2 LABORATORY TESTING

Laboratory testing was performed on selected samples recovered from the borings. Results are presented in Appendix B. Tests for moisture content, unit weight, gradation, compaction, and pH and resistivity were performed at the Yeh office and laboratory in Grover Beach, California. Tests for direct shear and hydraulic conductivity were performed by the California Polytechnic State University Geo-E Laboratory in San Luis Obispo, California. Tests for soluble sulfates and soluble chlorides in the soil were performed by Cooper Testing Labs, Inc. in Palo Alto, California. All testing was performed in accordance with applicable ASTM standards.

3.3 PREVIOUS STUDIES

Previous studies were performed for separate projects and studies near the project vicinity. Data from these studies were used to supplement this report and are summarized below. Logs of pertinent borings and cone penetration tests from the previous studies are provided in Appendix D. Locations of the previous study explorations are presented on Plates 1a and 1b.

- A geotechnical investigation was completed by Cooper, Clark, and Associates (CCA 1979) for the design of improvements for the South San Luis Obispo County Sanitation District Wastewater Treatment Facility. One boring (Boring 2) was located near the proposed pipeline alignment and was used to supplement this report.
- An assessment report was prepared by the United States Geological Survey (USGS 2004a) following the 2003 San Simeon Earthquake. The report included lateral spread and sand boil locations, as well as a link to cone penetration test (CPT) data performed for the study (USGS 2004b). Seventeen CPTs (SOC001 through SOC005, SOC010 through SOC015, SOC017, SOC020, SOC021, SOC027, SOC028, and SOC041) were performed near the proposed pipeline alignment and was used to supplement this report. Four cross sections were compiled for this study that show subsurface conditions encountered as well as liquefaction and lateral spread potential.
- A *Geotechnical Report* was prepared by Yeh and Associates (Yeh 2019) for the South San Luis Obispo County Sanitation District (SSLOCS D) Wastewater Treatment Facility (WWTF) Redundancy project. One boring (16E-03) and two CPTs (CPT-01 and CPT-06) were performed near the proposed pipeline alignment and was used to supplement this report. Liquefaction analyses for the WWTF site were also performed for this project.
- A *Geotechnical Report* was prepared by Yeh and Associates (Yeh 2020) for a waterline project for the City of Grover Beach. One boring (19P-05) from this study was located near the proposed pipeline alignment and was used to supplement this report.

4. SITE CONDITIONS

4.1 GEOLOGIC SETTING

The project site is within the Coast Ranges geologic and geomorphic province, which extends from the Transverse Ranges in southern California to the Klamath Mountains in northern California and into Oregon. The province is characterized by north-northwest trending mountain ranges (locally the Santa Lucia Mountains) composed of sedimentary, volcanic, and metamorphic rock formations. The rock units are predominately Jurassic and Cretaceous age with Tertiary to Quaternary age units commonly overlying the older rock along the flanks and foothills of those ranges. Recent sediments are found within intervening drainages and valleys, and coastal areas.

The surficial geology in the project area as mapped by Holland (2013) is shown on Figure 3. Geology along the proposed pipeline alignment is mapped by Holland (2013) as Holocene age Alluvium Flood-Plain deposits (Qa) and Pleistocene Old Eolian Deposits (Qoe). Geologic

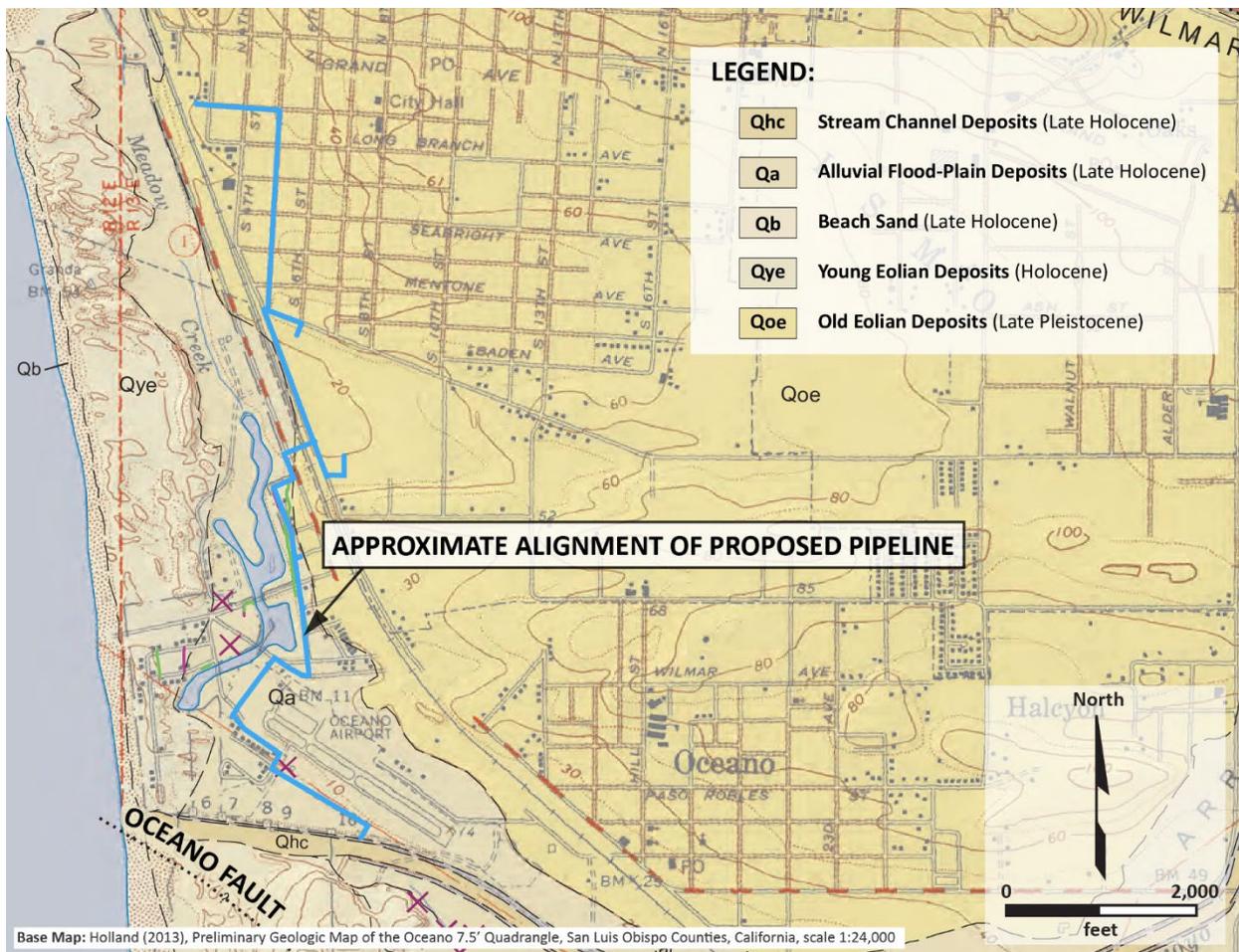


Figure 3: Geologic Map (Holland 2013)

structure within the project vicinity includes the Oceano Fault mapped by Holland (2013) and USGS (2023) approximately 0.3-mile southwest of the southern extents of the proposed pipeline alignment. Other Quaternary age faults mapped by USGS (2023) the project vicinity includes a segment of the San Luis Range Fault System, Wilmar Avenue Fault, and Pecho Fault mapped 0.2-mile northeast, 2.3 miles northeast, and 2.4 miles southwest from the limits of the proposed pipeline alignment.

4.2 SUBSURFACE CONDITIONS

The typical subsurface conditions encountered in the borings performed for the project and explorations from previous studies consisted of roadway materials underlain by artificial fill (Af), alluvial flood-plain deposits (Qa), and old eolian deposits (Qoe). The approximate locations of the borings are shown on Plate 1a through 1c and noted on the boring logs in Appendix A. A description of the soil units encountered is summarized below.

Roadway Materials. Boring 23B-01 through 23B-07, 23B-09, and 23B-11 through 23B-14 were drilled within existing roadways along the proposed pipeline alignment. Pavement sections encountered in these borings consisted of approximately 1 to 7 inches of asphalt concrete over 0 to 9 inches of aggregate base. Artificial fill (Af), alluvial flood-plain deposits (Qa) and old eolian deposits (Qoe) were encountered below the roadway materials.

Artificial Fill (Af). Artificial fill associated with the infill of marshland within the Oceano Lagoon (USGS 2004a) was encountered in borings 23B-011 and 23B-12. The fill was encountered below the roadway materials to a depth of 5 feet below the ground surface in boring 23B-011, and to the maximum depth explored of approximately 11.5 feet below the ground surface in 23B-12. The artificial fill encountered in borings 23B-011 and 23B-12 consisted of very loose to medium dense poorly graded sand (SP) and silty sand (SM). The same fill is also shown interpreted in the USGS (2004a) CPTs along Coolidge Drive to depths of 2 to 6 feet below the ground surface, as shown on the USGS (2004a) cross section C-C' in Appendix D. Artificial fill was also encountered in boring 16E-03 (Yeh 2019) within the SSLOCSD WWTF from the ground surface to a depth of approximately 5 feet below the ground surface. The fill at the SSLOCSD WWTF consisted of loose clayey sand (SC). The fill encountered in borings 23B-11 and 16E-03 (Yeh 2019) was underlain by alluvial flood-plain deposits (Qa).

Alluvial Flood-Plain Deposits (Qa). Alluvial flood-plain deposits were encountered below the road material in borings 23B-13 and 23B-14 along the southern portion of the proposed pipeline alignment to the maximum depths explored of 11.5 feet below the ground surface. The unit was also encountered in borings 23B-09 and 23B-10 at the proposed UPRR crossing



location from the ground surface to approximately 20 to 27 feet below the ground surface. Alluvial flood-plain deposits were also encountered below the artificial fill in borings 23B-11 along Coolidge Drive and 16E-03 (Yeh 2019) at the SSLOCSD WWTF to the maximum depths explored of 11.5 to 81.5 feet below the ground surface, and from the ground surface in Boring 2 (CCA 1979) at the SSLOCSD WWTF to the maximum depth explored of approximately 30 feet below the ground surface. The alluvial flood-plain deposits predominantly consisted of very loose to medium dense poorly graded sand with varying amounts of silt and clay (SP, SC, SM). A layer of peat was encountered in boring 23B-11 from approximately 5 to 10 feet below the ground surface, likely associated with the “1874 Marsh” shown on the USGS (2004a) cross section C-C’ near similar depths (see Appendix D). Old eolian deposits (Qoe) were encountered below the alluvial flood-plain deposits in borings 23B-09 and 23B-10.

Old Eolian Deposits (Qoe). Old Eolian Deposits were encountered in borings 23B-01 to 23B-08 below the road material or below the ground surface to the maximum depths explored of approximately 5.5 to 11.5 feet below the ground surface. The unit was also encountered below the alluvial flood-plain deposits in borings 23B-09 and 23B-10 to the maximum depths explored of approximately 30.8 to 31 feet below the ground surface. The unit predominantly consisted mostly of loose to very dense poorly graded sand with varying amounts of silt (SP, SP-SM, SM).

A summary of the geotechnical properties and laboratory test results is presented in Table 1.

Table 1: Geotechnical Properties¹

Geologic Unit	Locations Encountered	Dry Unit Wt. (pcf)	Moisture Content (%)	Particle Size Analyses (%G, %S, %F)	Other
Artificial Fill (Af)	23B-11, 23B-12	--	--	0 G 78 S 22 F	pH = 6.25 $\rho = 4,269 \Omega\text{-cm}$ $\text{SO}_4^{2-} = 223 \text{ mg/kg}$ $\text{CL}^- = 21 \text{ mg/kg}$
Alluvial Flood-Plain Deposits (Qa)	23B-09 through 23B-11, 23B-13, 23B-14	28 - 120	7 - 176	0 - 53 G 41 - 99 S 1 - 29 F	pH = 5.21 - 7.98 $\rho = 206 - 2,797 \Omega\text{-cm}$ $\text{SO}_4^{2-} = 19 - 7,877 \text{ mg/kg}$ $\text{CL}^- = 7 - 171 \text{ mg/kg}$ $\phi' = 21 - 35.5^\circ$ $c' = 0.24 - 0.74 \text{ ksf}$

¹ Geotechnical properties are noted for dry unit weight (γ_d) in lbs/ft³ (pcf) and moisture content (WC) in percent; particle size as percent gravel (G), sand size (S) and fines content (F); electrical resistivity (ρ) in ohm-centimeters ($\Omega\text{-cm}$), effective friction angle (ϕ') and cohesion (c') in kips per square foot measured from direct shear tests; resistance 'R' values; pocket penetrometer values; maximum dry unit weight ($\gamma_{d,max}$) in lbs/ft³ (pcf) and optimum moisture content (WC_{OPT}) in percent from modified proctor tests; and hydraulic conductivity (k_{avg}).



Geologic Unit	Locations Encountered	Dry Unit Wt. (pcf)	Moisture Content (%)	Particle Size Analyses (%G, %S, %F)	Other
Old Eolian Deposits (Qoe)	23B-01 to 23B-08, 23B-10	89 - 106	4 - 24	0 - 1 G 82 - 95 S 5 - 18 F	pH = 4.11 - 6.82 $\rho = 1,619 - 15,679 \Omega\text{-cm}$ $\text{SO}_4^{2-} = 7 - 77 \text{ mg/kg}$ $\text{CL}^- = 3 - 20 \text{ mg/kg}$ $v_{d,\text{max}} = 108 \text{ pcf}$ $\text{WC}_{\text{OPT}} = 13\%$ $k_{\text{avg}} = 4.0 \times 10^{-4} - 6.3 \times 10^{-3}$

4.3 GROUNDWATER

Table 2 summarizes the approximate groundwater depths, elevations, and dates when encountered in the borings performed for this study as well as borings from previous studies. Yeh installed a Solinst *Level Logger* groundwater level measuring devices in the monitoring wells in borings 23B-09 and 23B-10 to automatically record daily groundwater levels beginning April 2023. A plot of those data through July 6, 2023 is presented in Appendix C. Groundwater and soil moisture conditions will vary seasonally and with changes in storm runoff, irrigation, groundwater pumping, and stream flow.

Table 2: Groundwater Data

Boring No.	Ground Surface Elevation (feet)	Groundwater Depth Below Ground Surface (feet)	Groundwater Elevation (feet)	Date Measured	Notes
23B-09	19.0	6.0	13.0	04/04/2023	Level Logger installed
		6.45	12.55	05/31/2023	
		6.75	12.25	07/06/2023	
23B-10	20.6	8.5	12.1	04/06/2023	Level Logger installed
		8.5	12.1	05/31/2023	
		8.75	11.85	07/06/2023	
23B-11	10.0	5.5	4.5	04/04/2023	--
23B-12	15.0	4.0	11.0	04/04/2023	--
23B-13	11.0	3.3	7.7	04/04/2023	--
23B-14	11.2	5.0	6.2	04/04/2023	--

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 EARTHWORK – GENERAL

5.1.1 SUGGESTED MATERIAL SPECIFICATIONS

Standard Specifications refers to the 2022 edition of the Standard Specifications published by the California Department of Transportation (Caltrans 2018) and *City Specifications* refers to the



City of Grover Beach Standard Specifications (GB 2006). The following specifications are suggested for materials referenced in various sections of this report.

Aggregate Base. Aggregate base shall consist of imported material conforming to Section 26-1.02B of the *Standard Specifications* for Class 2 Aggregate Base.

Asphalt Concrete. Asphalt Concrete shall conform to Section 39-2, “Hot Mix Asphalt,” of the *Standard Specifications*. *City Specifications* indicate the base course shall utilize ¾-inch maximum aggregate and ½-inch maximum aggregate for the surface course. The complete surface shall be sealed with fog seal applied 0.1 gallons per square yard in accordance with *Standard Specifications* Section 37-1. Asphalt binder shall be grade PG 64-10.

Compacted Fill. Compacted general fill material shall consist of imported or on-site material free of organics, oversize rock (greater than 3 inches), trash, debris, corrosive, or other deleterious materials. Fill and borrow sources shall be reviewed by the Geotechnical Professional before being imported to the site. Fill materials shall comply with all specified material requirements for the designated location as placed at the site.

Geotextile for Separation (Filter Fabric). Geotextiles for separation shall conform to Section 96-1.02B of the *Standard Specifications*.

Gravel Bedding. Gravel Bedding placed for trench foundation stabilization (if needed) shall consist of angular crush rock that is free of organics, corrosive material, clay, recycled or reclaimed materials. Or other deleterious substances conforming to Class 1 Permeable Material (Type A) per Section 68-2.02F(2) if the *Standard Specifications* or No. 57 stone (1 inch x No. 4) per ASTM C33. Gravel bedding shall be fully encased in a Geotextile for Separation (Filter Fabric) when in contact with in-situ or subsequent pipe zone or trench backfill material.

Pipe Bedding/Pipe Zone Material. Pipe Zone Material and Pipe Bedding shall consist of imported or onsite material conforming to Section 6.17-H of the *City Specifications*.

Slurry Cement Backfill. Slurry cement backfill used for Pipe Zone Material should conform to Section 19-3.02G of the *Standard Specifications*. Aggregate shall be import material conforming to the gradation and quality requirements of the *Standard Specifications*.

Trench Backfill. Trench Backfill shall consist of imported or onsite material that is free of organics, debris, oversized material (greater than 3 inches), and other deleterious materials. The asphalt debris encountered in potholes shall be removed from trench backfill material prior



to being used. Trench Backfill material shall have at least 85 percent of the material passing the U.S. Standard No. 4 sieve, and/or comply with the applicable requirements for the area where Trench Backfill is being placed (such as the pavement structural section).

5.1.2 CLEARING AND GRUBBING

Clearing and grubbing should be performed to remove existing vegetation and objectionable material from improvement areas that will be graded, receive fill, or serve as borrow sources. Grubbing should include removing stumps, roots, and buried vegetation. Care should be taken not to injure trees, plants, existing improvements, or existing outfalls outside of the clearing limits. Soil containing pavement, debris, organics, unsuitable, loose, or disturbed material should be removed prior to placing fill. Demolition areas should be cleared of old foundations, existing fill, pavement, abandoned utilities, and soil disturbed during clearing and grubbing. Depressions left from the removal or demolition of materials should be replaced with compacted fill.

5.1.3 COMPACTION AND GRADING

Fill placement and grading operations should be performed according to the recommendations of this report. Table 3 provides a summary of the minimum levels of compaction recommended for areas where fill could be placed. Relative compaction should be assessed according to the latest approved edition of ASTM Standard Test Method D1557.

Table 3: Compaction Requirements

Location of Fill Placement	Recommended Minimum Relative Compaction
General	90% U.O.N. ²
Utility trench bedding and pipe zone fill	90%
Fill or backfill placed within 3 feet of pavement areas	95%
Asphalt concrete, aggregate base, or subbase	95%

5.1.4 FILL PLACEMENT

Jetting or ponding should not be permitted for placement or compaction of fill materials. Fill materials should be moisture conditioned and spread in lifts that are suitable for compaction with the equipment being used. Control of compaction layer thickness will be necessary to achieve compaction throughout the material being placed. Fill should typically be spread in

² U.O.N. – unless otherwise noted



loose lifts of approximately 8 inches or less, and within 2 percent of the optimum moisture content, to achieve the recommended compaction.

The moisture content of the material should be such that the specified compaction can be achieved in a firm and stable condition. Each layer should be spread evenly, bladed, and mixed to provide relative uniformity of material within each layer, and be moisture conditioned by adding water or drying the material to provide a moisture content suitable for compaction. Soft or yielding materials should be removed and replaced with properly compacted fill material prior to placing the next layer of fill. Fill and backfill materials may need to be placed in thinner lifts to achieve the recommended compaction with the equipment being used.

Particles greater than half the compacted lift thickness can limit compactive effort. The fill should not contain rocks, gravel, or other solid particles larger than 3 inches in the greatest dimension. Deleterious materials, such as soft rock particles, concrete or pavement rubble, metal, glass, or sharp objects should not be placed within the fill material being placed. Recycled or reused materials should only be used and placed within the fill when specifically permitted by the project specifications. Rocks should not be nested, and voids should be filled with compacted fill material.

5.1.5 REUSE OF EXCAVATED ONSITE MATERIAL

Select fill materials needed for open trench excavations for the sewer line include Pipe Bedding, Pipe Zone Material, and Trench Backfill. The pipeline construction will likely encounter alluvial flood-plain deposits and old eolian deposits. Based upon sand equivalent and particle size gradation results from current and previous studies, excavated material consisting of poorly graded sand (SP, SP-SM) and silty sand (SM) are considered suitable for reuse as Pipe Bedding, Pipe Zone Material provided material greater than 1 inch is removed. Excavated material can be reused as Trench Backfill provided cobbles and boulders greater than 3 inches are removed. The contractor should segregate this material, remove any material greater than 1 inch and provide periodic quality control laboratory testing showing the material meets project specifications.

5.2 LIQUEFACTION

Liquefaction typically occurs in young, loose to medium dense granular sand or sensitive clay and silt below the groundwater table in response to earthquake ground motions. Sand boils, seismic settlement, fissures, slope instability, and lateral spreading can occur in response to liquefaction. The consequences and severity of liquefaction vary depending on the magnitude, duration, and location of the earthquake. Liquefaction could be manifested as additional



buoyancy loads on pipelines, loss of thrust resistance along pipe or thrust blocks, lateral displacement due to shaking or lateral spreading, loss of bearing resistance, and settlement. The Oceano area has prior history of liquefaction-related deformation and damage (see Section 2.3).

The soil encountered in the borings for the conveyance pipeline predominantly consisted of very loose to medium dense sand with varying amounts of silt, clay, and gravel (SP, SP-SM, SM, SC). The loose to medium dense sandy soil encountered below the groundwater table in the trenchless crossing and the portion of the pipeline within the Oceano area is considered potentially liquefiable. USGS (2004a) noted that “the surficial geology and shallow water table at Oceano suggests a significant liquefaction hazard is present,”. USGS (2004a) identified liquefiable layers predominantly within the upper 10 feet below the ground surface in the Oceano area, as shown on the cross sections in Appendix D. Yeh (2019) also performed analyses for liquefaction potential at the SSLOCSD WWTF and identified liquefiable layers predominantly within the upper 14 to 25 feet of the site (see the CPT plots in Appendix D).

Stabilization of pipelines to address liquefaction are typically considered cost prohibitive. Management and soft fixes are a common way to address the potential for liquefaction to affect the pipeline. The design could address this by implementing inspection procedures following a seismic event and budgeting the replacement of sections that have settled or been damaged due to liquefaction.

5.3 CORROSION CONSIDERATIONS

Selected samples from the field exploration programs were tested for pH, resistivity, soluble sulfates, and soluble chlorides in accordance with the relevant ASTM test methods. Results are presented in Table 1 and Appendix B. Guidance from the AWWA (2014) *External Corrosion Control manual* was used evaluate the severity of corrosion potential of the encountered soil. Measured resistivity values of 206 to 15, 679 Ohm-cm indicate bad to excellent soils (groups I to IV) based on AWWA (2014) Table 3-2 for steel and should be considered corrosive. Measured pH values (4.11-7.98) are considered acidic to neutral. The designer should refer to AWWA guidelines or appropriate design standards and consider installing sacrificial anodes on the pipeline or other corrosion protection measures depending on the chosen pipe material type and connectors.

5.4 PIPELINE DESIGN

Figure 4 is the recommended typical trench detail consistent with the City of Grover Beach (2006) *Standards and Specifications* showing the recommended cross-sectional limits of the



bedding, initial backfill, and subsequent backfill material for trench backfill. Material recommendations for bedding, pipe zone, and trench backfill material are described in Section 5.1.1 of this report. The pavement area shown in Figure 4 is applicable to the majority of the project where the pipeline will be installed using open cut trench methods below the existing road.

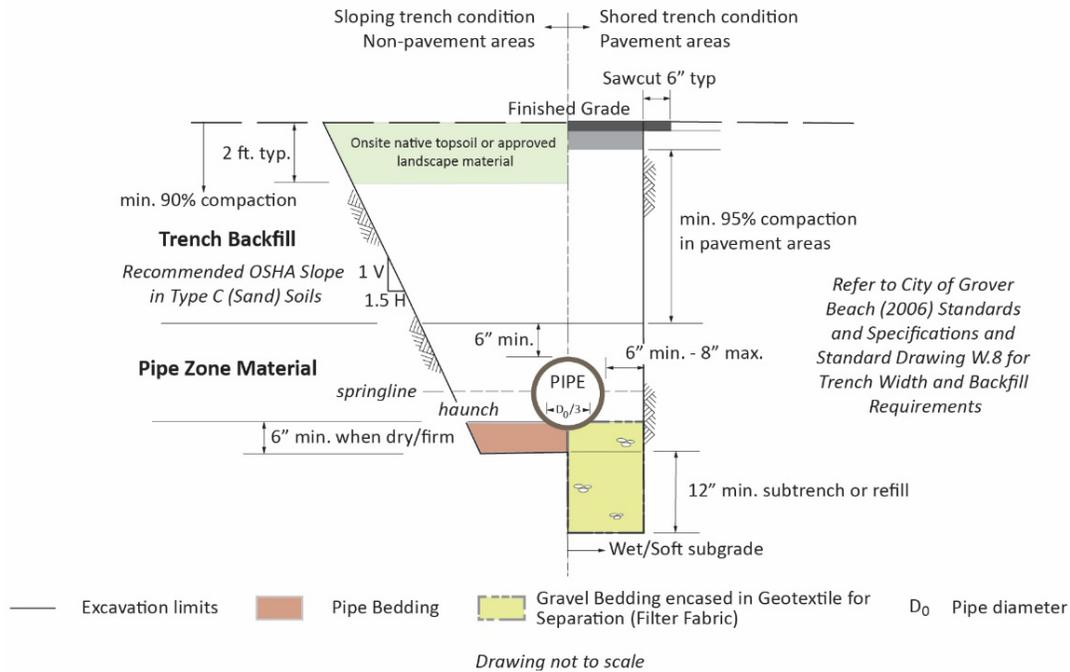


Figure 4: Trench Detail

5.4.1 FOUNDATION SUPPORT

Prior to placing pipe bedding material, the foundation support soil exposed at the trench subgrade should be reviewed by the geotechnical professional. The subgrade conditions encountered near the anticipated trench depths in the borings within the Grover Beach area predominantly consisted of loose to medium dense sand above the groundwater table. Subgrade conditions encountered near the anticipated trench depths in the borings within the Oceano area predominantly consisted of very loose to medium dense sand below the groundwater table. Unless stable subgrade conditions can be obtained with dewatering or other means, stabilization of the subgrade should be provided prior to placing the pipe. It is anticipated that trench subgrade will need to be stabilized throughout the pipeline route in Oceano. Subgrade stabilization should consist of removing the trench subgrade to 12 inches below the bottom of trench elevation and replacing the material with Gravel Bedding wrapped in a Geotextile for Separation (Filter Fabric) conforming to the suggested material specifications of this report.

Trench stabilization may be omitted if the bottom of the trench is firm and stable. In such conditions, prior to placing Pipe Bedding, the trench bottom should be scarified to a depth of 9 inches, moisture conditioned, and compacted in place to at least 90 percent relative compaction.

5.4.2 PIPE BEDDING

Pipe Bedding is the initial backfill placed between the trench subgrade and the bottom of the pipe. At least 6 inches of Pipe Bedding (or more if specified by engineer) should be placed on trench subgrade that is firm and dry, unless stabilization of the trench foundation is needed as discussed in Section 5.4.1. The pipe should be placed on the bedding such that the middle third of the pipe ($D_0/3$ on Figure 4) is in contact with the bedding prior to placing initial backfill within the pipe zone. The bedding may be loosened along the invert of the pipe if necessary to help form the cradle. Pipe Bedding should be compacted to at least 90 percent relative compaction.

5.4.3 PIPE ZONE MATERIAL

Pipe Zone Material is material placed in the pipe zone from the top of the bedding material to at least 6 inches above the crown of the pipe. The Pipe Zone Material should be compacted to at least 90 percent relative compaction prior to placing subsequent trench backfill. Compaction within the pipe zone should be performed such that the pipe is fully supported during compaction and that excessive deformation or damage to the pipe does not occur and the pipe is not moved off its alignment. Pipe Zone Material should be placed simultaneously on either side of the pipe to help support the pipe during placement and compaction. Pipe Zone Material should not be placed above the springline until the pipe zone material below the springline has been placed and compacted properly to support the haunches.

Slurry Cement Backfill can be used for initial backfill in lieu of granular Pipe Zone Material when approved or recommended by the engineer and permitted by the pipe manufacturer. The Slurry Cement Backfill will likely not provide additional support or limit deflection of the pipe, unless the slurry is allowed to cure prior to placing subsequent Trench Backfill. The Slurry Cement Backfill should be placed over the crown of the pipe to allow for the slurry to flow into the trench on either side of the pipe simultaneously. The slurry should be vibrated during placement to help consolidate the material and assist in filling below the haunches of the pipe. The pipe should be ballasted and secured to reduce the potential for the pipe to be displaced or float during placement. Slurry should not be placed above the springline of the pipe until the slurry below springline has adequately set or is specifically permitted by the engineer and pipe manufacturer. Subsequent Pipe Zone Material and Trench Backfill can be placed once the

cement slurry has set such that foot traffic does not leave an imprint in the slurry of more than ¼-inch. Longer curing times, (perhaps 7 days or more) and/or special mix designs to reduce cure times, would be needed to provide springline support that is superior to soil backfill.

5.4.4 TRENCH BACKFILL

Trench Backfill is material placed in the trench from the top of the pipe zone to finished grade and includes the pavement structural section, where applicable. Subsequent backfill should consist of Slurry Cement Backfill or Trench Backfill material conforming to the recommendations described in Section 5.1.1 of this report. Trench Backfill placed within the upper 3 feet of the trench in pavement areas should be compacted to at least 95 percent relative compaction. In non-pavement areas, the upper 2 feet of the backfill should consist of onsite native soil or appropriate landscape soil to help reduce the potential for surface water to infiltrate the trench.

5.4.5 TRENCH PATCH

The existing pavement should be sawcut 6 inches beyond the edge of the trench. The width of the trench should comply with the minimum dimensions shown in Figure 4 and provided in the City of Grover Beach (2006) *Standards and Specifications* for segments of the pipeline within the Grover Beach city limits. Any broken or loosened asphalt that results from the cutting operation or instability of sidewalls during excavation should also be removed to a neat saw-cut edge. The trench patch should as a minimum match the thickness of the existing asphalt concrete plus an additional 1-inch. The pavement thickness encountered at the boring locations are presented in Section 4.2 of this report and listed on the logs in Appendix A. Class 2 Aggregate Base provided below the asphalt layer should have a thickness that will match the bottom of the existing structural section or a minimum of 6 inches, whichever is thicker.

5.4.6 PIPE LOADS

Pipelines should be designed to resist vertical loads resulting from the backfill. The load on the pipe can be estimated as the prism load. The prism load is the total weight of the soil acting above the pipe and applied over a width equal to the outside diameter of the pipe. A soil unit weight of 120 pounds per cubic foot can be used to estimate the prism load on the pipe.

5.5 TRENCHLESS INSTALLATION

A portion of the new pipeline will be installed using trenchless technology. Jack and bore is planned for the portion of the pipeline below the Union Pacific Railroad (UPRR) from South 4th Street in Grover Beach to the Coastal Dunes RV Park in Oceano. Subsurface conditions should be considered to estimate jacking resistance and identify potential impacts to existing



structures and utilities due to settling or heaving of the ground that could be associated with the trenchless installation. The proposed jack and bore method includes jacking and receiving pits that are excavated on either end of the crossing. The boring equipment and casing are installed from within the jacking pit and the casing terminates in the receiving pit. The drilling equipment uses large diameter augers that are mounted to a horizontal drive shaft. Casing is pushed or jacked into the ground as the auger drills and removes the spoils. Additional pieces of casing are welded onto the exposed casing as the bore path advances. This method is typically well suited for soil conditions that can allow temporary stable open faces in dense sand with some clay and/or silt that are above the groundwater table. Design considerations that could impact the proposed trenchless installation are:

- The jack and bore will cross beneath the UPRR right-of-way which is vulnerable to ground movement. UPRR may have specific requirements for utility crossing crossings below their facilities with respect to vertical clearance, casing, and monitoring. It is our understanding that WSC has obtained permits from UPRR for the proposed crossing (WSC 2023b,2023c);
- Existing utilities are present within the 4th Street right-of-way, UPRR right-of-way, and within the Coastal Dunes RV park property. These utilities are also considered vulnerable to ground movement and present a potential obstruction that should be avoided by trenchless installation; and
- Buried structures, tree roots, or other obstructions can significantly impact trenchless operations leading to damage and construction delays caused by obstructions. As-built plans for existing facilities should be reviewed during design.

5.5.1 SUBSURFACE CONDITIONS AND CONSIDERATIONS

The jack and bore crossing below the UPRR will likely be within alluvial flood-plain deposits consisting of very loose to medium dense sand with varying amounts of silt (SP, SM) with trace interbedded layers of medium dense well-graded gravel with sand (GW) and very stiff fat clay (CH). Groundwater was encountered within the borings at 6 to 8.8 feet below the ground surface. The groundwater level in the borings is being periodically monitored as discussed in Section 4.3. Geotechnical consideration for the jack and bore below the UPRR right-of-way include:

- The bore may encounter variable heading within the alluvial flood-plain deposits. Layers of gravel and clay were encountered within the borings performed near the proposed jacking and receiving pit locations and may be encountered in the bore operation.
- The heading of the bore operation should be properly supported for sandy ground conditions. Augering equipment should not be advanced beyond the end of the casing to avoid loss of ground within the unsupported sandy overburden soil There is a

potential for the overlying material at the heading to cave or collapse if it is not supported during boring operations.

- Excavation spoils will likely consist of a mixture of fine- and coarse-grained soil of varying consistency and moisture content. Clayey soil may have a tendency to sit on augers or excavation equipment and be difficult to remove (i.e., clogging potential) making advancement of the drive relatively slow.
- The heading pressure should be monitored and limited during advancement of the bore to reduce the potential for heaving of the relatively shallow overburden above the new pipe, UPRR, or adjacent utilities. Jack pressure should be such that earth pressure can be balanced at the heading during the advancement of the pipe and simultaneous excavation of the soil.
- The locations of the existing utilities, and tolerable ground movements for the railroad tracks and utilities should be established before construction so that an appropriate monitoring program can be prepared for the trenchless installation.

5.5.2 JACKING RESISTANCE

The local resistance of the soil to provide resistance for jacking of casings at the crossings will depend upon the condition of the soil at the jacking location as well as the contractor's methods and equipment. The frictional resistance on the sides of the casing can be reduced by overcutting the heading to a diameter slightly larger than the casing (typically less than 1-inch in diameter larger than the casing), and by applying or introducing lubricants to the outside of the casing, such as slurries or drilling muds.

The reaction force for the jacking equipment will be provided by passive earth pressure from a plate or shoring bearing on the sidewalls of the jacking pit. Soil encountered near the proposed depths of the pipe at the proposed jack and bore location generally consists of very loose to medium dense sand with varying amounts of silt (SP, SM). Soil strength laboratory test results are provided in Appendix B for estimating passive and active values for design of shoring and the jacking apparatus. Any jacking apparatus should be located at least 2 feet below the ground surface. Design should consider groundwater and other soil conditions that are or will be present.

5.5.3 MONITORING

Monitoring for ground surface movements should be provided to assess whether settlement or heaving is impacting the railroad, utilities, and existing improvements as a result of the pipe installation. The project specifications should require the contractor to submit a detailed work plan for the tunneling, casing and pipe installation, and a monitoring program. Project specifications should identify the need for a pre-condition survey with photographs and minimum parameters for monitoring.



A tolerance for vertical movement above the casing should be established for the tunneling operation (typically no more than ½ inch up or down). The contractor should be responsible for repairing cracks, excessive heave or subsidence, and damage resulting from the tunneling.

5.5.4 CONTACT GROUTING

The overcut annular space and any voids caused by inadvertent over excavation around the outside face of the casing should be filled by grouting upon completion of the jacking operations. Contact grouting is performed within the casing. Grouting equipment and material should be on site before jacking operations begin and should be initiated within 24 hours of completing the casing installation.

6. CONSTRUCTION CONSIDERATIONS

6.1 EXCAVATIONS

Excavations and dewatering for the project are key geotechnical considerations for design and construction. Coordination of excavation and dewatering should be performed by the contractor. Excavations along the pipeline alignment are anticipated to vary from 5 to 13 feet below the ground surface. Excavations for the jack and bore portion of the alignment will be approximately 11 to 13 feet. Maintaining access to local businesses, keeping portions of the roadway open, and safe excavations are key considerations for the design and construction. A summary of anticipated excavation conditions by segment is summarized in Table 4. This data should be used for planning purposes and does not relieve the contractor from performing additional investigations upon which to base their approach to construction.

Table 4: Summary of Anticipated Excavation Conditions

Project Component	Approximate Station (WSC 2023)	Anticipated Depth of Excavation (feet BGS)	Anticipated Excavation Conditions/Considerations
Grover Beach	10+00 to 57+37	5 to 10	Loose to medium dense sand with varying amounts of fines. Groundwater was not encountered in the borings drilled along the pipeline alignment and is not expected to be encountered for this segment.
Jack and Bore Section of Pipeline	57+37 to 59+24	10 to 13	Very loose to medium dense sand with varying amounts of fines. Groundwater was encountered in the borings at depths of 6 to 8.8 feet below the ground surface and is being periodically monitored (see Section 4.3). Unstable excavations and significant groundwater are anticipated.
Oceano	59+24 to 116+39	5 to 10	Very loose to medium dense sand with varying amounts of fines. Groundwater was encountered in the borings at depths of 3.3 to 5 feet below the ground surface. Unstable excavations and significant groundwater are anticipated.

Temporary slopes should be braced or sloped according to the requirements of (Cal) OSHA. We expect the soil within the pipeline alignment will generally consist of very loose to medium dense sands with varying amounts of silt, clay, and gravel which can be classified as Type C soil. Type C soil can be sloped to 1.5h:1v (horizontal to vertical) for slope heights of up to 20 feet. The slope inclination used for the construction of temporary slopes should be determined by the contractor's competent person per OSHA guidelines and the subsurface conditions encountered at the time of construction. Dewatering in advance of the excavation is needed to provide stable conditions at the crossing location and within the segment of the pipeline in Oceano. If dewatering is not performed, the excavation should be shored. Slopes should not be considered stable when excavated below the groundwater table or if there is seepage daylighting on the slopes.

Shoring systems to support temporary slopes typically consist of trench shields, sheet pilings, or braced excavations designed to support the anticipated soil and groundwater conditions and depth of excavation. "Dragging a shield" is a common method of providing worker safety during trenching and construction. However, unless specific provisions exist to place the shield tight against the sidewalls, a shield provides no support for the trench sidewalls and should not be considered an appropriate shoring system for portions of the project where shallow groundwater is present due to the potential for shallow subsurface water and trench collapse.

Shoring systems, such as sheet piling, slurry walls, speed shores with sheeting, jet grouting, or some other form of shoring that actively supports the excavation, should be embedded adequately below the base of the excavation to limit or cutoff groundwater seepage to help maintain a stable excavation base. Embedding the shoring into less permeable layers below the proposed excavations could aid in cutting off the excavations from the surrounding soil and limit the dewatering to within the confines of the shoring system. The contractor should provide a competent person to review excavations and shoring requirements based on the conditions encountered in accordance with OSHA requirements.

6.2 DEWATERING

Groundwater conditions were discussed in Section 4.3 of this report. Groundwater was encountered in borings 23B-09 through 23B-14 at the trenchless crossing and along the Oceano segment of the pipeline at depths of 3.3 to 8.8 feet below the ground surface. Portions of the pipeline in Oceano are adjacent to the Oceano Lagoon and the Pacific Ocean. Dewatering will be needed to lower or control groundwater during construction for the trenchless crossing and along the Oceano segment of the pipeline. Groundwater was not encountered in the borings

located within Grover Beach and dewatering is not anticipated in this portion of the pipeline construction. If present, surface water should be directed away from the trench and be removed where water enters the trench. The Contractor should be prepared to maintain a dry and stable excavation through the duration of construction.

Dewatering systems should be designed by a qualified engineer or hydrogeologist registered with the State of California. Dewatering should be performed in a controlled manner that includes the use of wells, well-points, gravel trenches, or other means of dewatering to lower the water surface elevation within the limits of the planned excavation as needed to provide a stable subgrade for construction. Sumps, well screens, and dewatering pits should be properly filtered such that fines and the surrounding soils are not removed or disturbed by dewatering. Extracted groundwater should be disposed of in a manner consistent with City, County, and/or State standards.

Dewatering facilities should be installed prior to beginning excavation, with time allowed for lowering of the groundwater table before beginning excavation. Project specifications should indicate that dewatering should be concentrated to lower the groundwater elevation within the footprint of the excavation and only to the depth needed to facilitate construction. Dewatering systems should consider the impact of dewatering on existing improvements and adjacent structures. Secondary dewatering using sumps placed in the bottom of excavations and stabilization of the subgrade may be needed in addition to the initial dewatering. Observation monitoring wells or points should be provided to check that the groundwater has been lowered to a depth of at least 2 feet below the planned depth of excavation prior to beginning excavation. Design and permitting of dewatering systems should also be considered in developing project specifications.

6.3 ADJACENT FACILITIES

The proposed pipeline is being constructed along existing streets bordering homes, local businesses, Oceano Park, and the South San Luis Obispo County Wastewater Treatment Facility, as well as within the Coastal Dunes RV Park. Multiples utilities are present along various segments of the pipeline. Construction along the project may need to consider restricted working hours, additional traffic control and detours, coordination with the County Parks Service and Wastewater Treatment Facility staff, existing adjacent utilities and foundations, or other accommodations.



6.4 EXCAVATION STABILITY

The sidewalls of the trenches could be prone to sloughing and caving during construction or loss of support for adjacent utilities. We recommend that contract documents communicate this potential to the contractors and that bid items include provisions for additional trench backfill and patch paving quantities to account for sloughing and widening of trenches due to the sandy material or the need to support existing utilities during construction.

6.5 SUBGRADE EVALUATION

The geotechnical professional should observe the bottom of excavations to evaluate if the exposed subgrade is suitable for fill placement. The project specifications should provide for review of the subgrade by the geotechnical professional, and for variations in the depth of excavation, if needed, to remove additional loose soil, undocumented fill or debris, or unsuitable material.

6.6 GRADING OBSERVATION

The geotechnical professional should observe grading operations during construction on behalf of the owner to have reasonable certainty that excavation and compaction is being performed according to the recommendations of this report. Field density testing should be performed to help evaluate the compaction and moisture content of the materials being placed.

Fill and aggregates delivered to the site and excavated onsite soil that will be reused as fill or backfill should be sampled and tested for conformance with gradation and quality requirements for the project or submittals reviewed for conformance. The frequency and locations of the tests should be at the discretion of the geotechnical professional. The project specifications should include provisions for the contractor to allow for testing and to provide any shoring, ingress-egress, or traffic control needed to safely perform the testing at the locations and depths needed.

7. LIMITATIONS

This study has been conducted in general accordance with currently accepted geotechnical practices in this area for use by the client for design purposes. The conclusions and recommendations submitted in this report are based upon the data obtained from field reconnaissance, drilling and sampling, and our understanding of the proposed project and type of construction described in this report. If there are any changes in the project or site conditions, Yeh should review those changes and provide additional recommendations if needed. Any modifications to the recommendations of this report or approval of changes made to the project should not be considered valid unless they are made in writing. The report

and drawings contained in this report are intended for design-input and are not intended to act as construction drawings or specifications.

Site conditions will vary between points of observation or sampling, seasonally, and with time. The nature and extent of subsurface variations across the site may not become evident until excavation is performed. If during construction, fill, soil, or water conditions appear to be different from those described herein, Yeh should be advised and provided the opportunity to evaluate those conditions and provide additional recommendations, if necessary. The geotechnical professional should observe portions of the construction and site conditions, such as excavations, exposed subgrades, and earthwork, to evaluate whether or not the conditions encountered are consistent with those assumed for design, and to provide additional recommendations during construction, if needed.

8. REFERENCES

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Yeh and Associates (Yeh 2019), *Geotechnical Report, South San Luis Obispo County Sanitation District Wastewater Treatment Plant Redundancy Project, 1600 Aloha Avenue, Oceano, California*, Yeh Project No.: 216-193, dated January 15, 2019.





LEGEND:

-  No. Boring Location (Current Study)
-  No. Boring Location (Yeh 2020)
-  No. Cone Penetration Test Location (USGS 2004)
-  Proposed Pipeline

All locations and alignments are approximate.

North



0 500
feet

Base Map: Google Earth Pro (February 2023)

 Yeh and Associates, Inc. Geotechnical • Geological • Construction Services		SUBSURFACE EXPLORATION MAP - NORTH	
		PROJECT NAME: Central Coast Blue Conveyance Pipeline Grover Beach, Oceano, CA	PLATE 1a
PROJECT NUMBER: 221-593		REVISION DATE: 07/11/2023	



LEGEND:

-  No. Boring Location (Current Study)
-  No. Boring Location (Yeh 2019)
-  No. Cone Penetration Test Location (Yeh 2019)
-  No. Cone Penetration Test Location (USGS 2004)
-  No. Boring Location (Cooper, Clark, & Associates 1979)
-  Sand Boil Location During 2003 San Simeon Earthquake (USGS 2004)
-  Lateral Spread Zone of Extension During 2003 San Simeon Earthquake (USGS 2004)
-  Lateral Spread Zone of Compression During 2003 San Simeon Earthquake (USGS 2004)
-  Proposed Pipeline

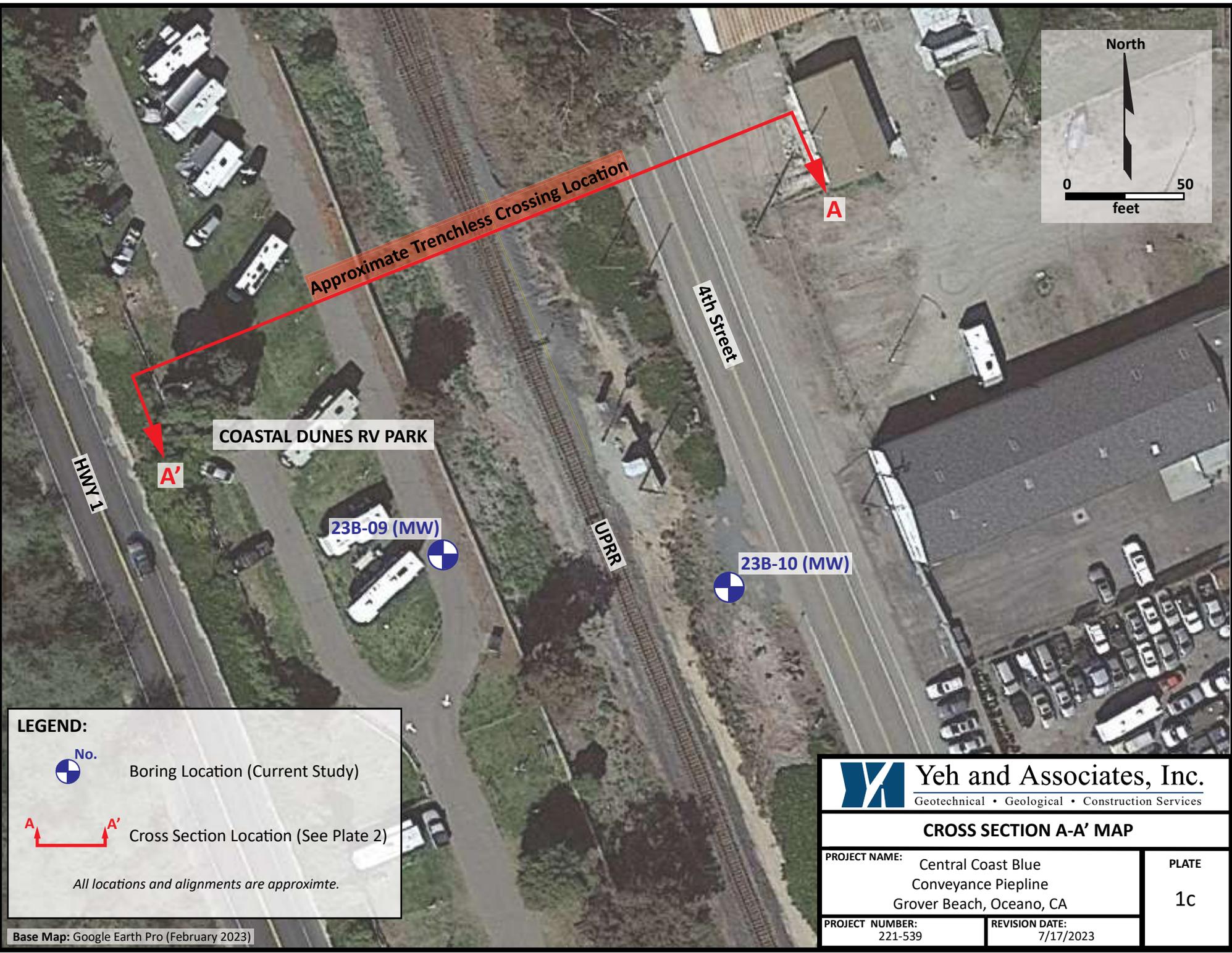
All locations and alignments are approximate.



**SOUTH SAN
LUIS OBISPO COUNTY
SANITATION DISTRICT
WASTEWATER
TREATMENT FACILITY**

 Yeh and Associates, Inc. Geotechnical • Geological • Construction Services	
SUBSURFACE EXPLORATION MAP - SOUTH	
PROJECT NAME: Central Coast Blue Conveyance Pipeline Grover Beach, Oceano, CA	PLATE 1b
PROJECT NUMBER: 221-593	REVISION DATE: 07/11/2023

Base Map:



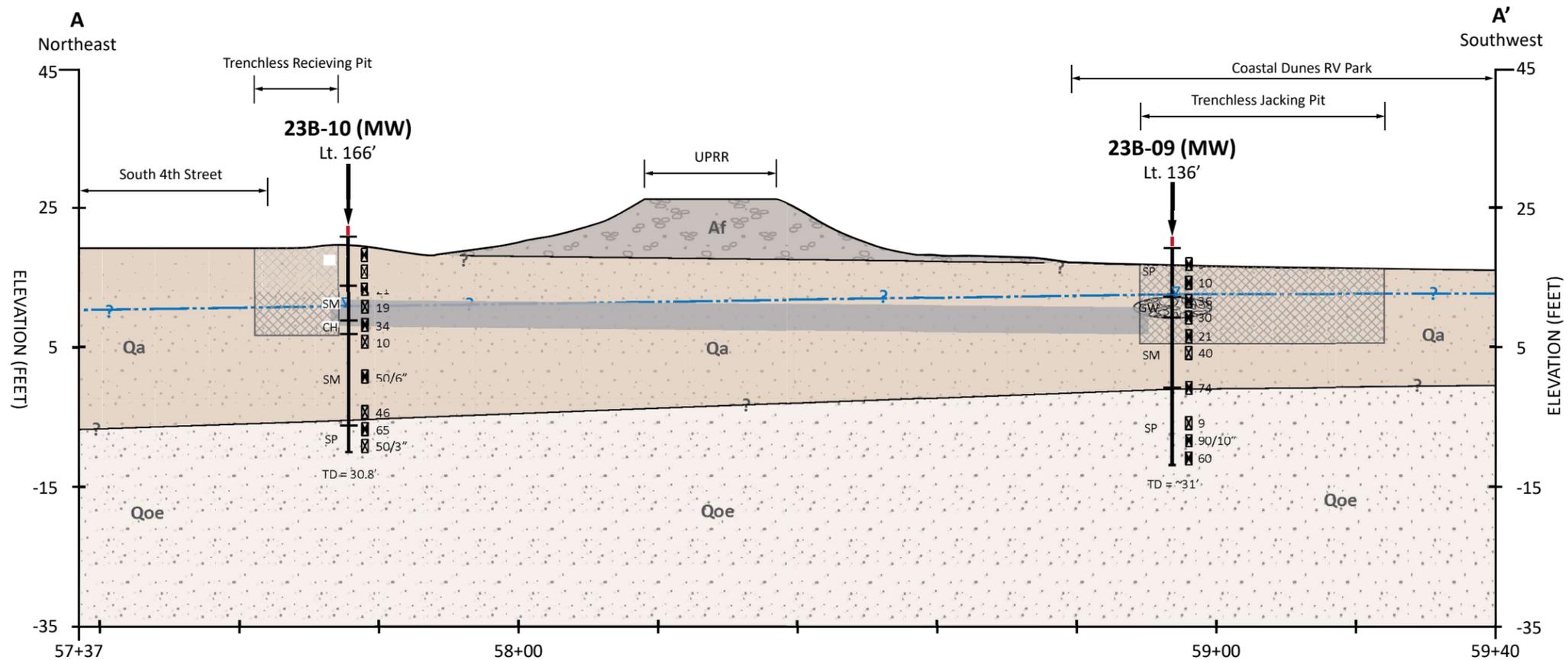
LEGEND:

 No. Boring Location (Current Study)

 Cross Section Location (See Plate 2)

All locations and alignments are approximate.

 Yeh and Associates, Inc. Geotechnical • Geological • Construction Services	
CROSS SECTION A-A' MAP	
PROJECT NAME: Central Coast Blue Conveyance Pipeline Grover Beach, Oceano, CA	PLATE 1c
PROJECT NUMBER: 221-539	REVISION DATE: 7/17/2023



LEGEND:

- Af** Artificial Fill
- Qa** **Alluvial Flood Plain Deposits:**
Predominantly very loose to medium dense SAND with varying amounts of SILT (SP, SM) with trace layers of medium dense well-graded GRAVEL with SAND and very stiff fat CLAY (CH)
- Qoe** **Old Eolian Deposits:**
Loose to very dense poorly graded SAND (SP)
- ? — Geologic contact, queried where uncertain
- ? - - - — Interpreted groundwater surface during drilling, queried where uncertain
- ▽ Groundwater level encountered during drilling
- Gravel layer encountered during drilling

- 17B-01** — BORING NUMBER
- RT. 20' — OFFSET FROM SECTION LINE
- — EXISTING GROUND SURFACE
- — FIELD N-VALUE IN BLOWS PER FOOT
- ▽ — 2.5" OD MODIFIED CALIFORNIA SAMPLER
- — LITHOLOGIC CONTACT
- — 2" OD SPT SAMPLER
- — USCS SOIL CLASSIFICATION
- — SHELBY TUBE SAMPLER
- — TOTAL DEPTH EXPLORED

BORING DIAGRAM

See text and logs of exploration for description of subsurface conditions. All boundaries and locations are approximate.

PROFILE

1 in. = 20 ft. vertical
1 in. = 20 ft. horizontal

<p>Yeh and Associates, Inc. Geotechnical • Geological • Construction Services</p>	
SUBSURFACE PROFILE A-A': TRENCHLESS CROSSING	
PROJECT NAME:	Central Coast Blue Conveyance Pipeline Grover Beach, Oceano, CA
PROJECT NUMBER:	221-539
REVISION DATE:	7/17/2023
PLATE	2

APPENDIX A - BORING LOGS

GROUP SYMBOLS AND NAMES

Graphic / Symbol	Group Names	Graphic / Symbol	Group Names
	GW Well-graded GRAVEL Well-graded GRAVEL with SAND		CL Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
	GP Poorly graded GRAVEL Poorly graded GRAVEL with SAND		
	GW-GM Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND		CL-ML SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
	GW-GC Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
	GP-GM Poorly graded GRAVEL with SILT Poorly graded GRAVEL with SILT and SAND		ML SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND
	GP-GC Poorly graded GRAVEL with CLAY (or SILTY CLAY) Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
	GM SILTY GRAVEL SILTY GRAVEL with SAND		OL ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
	GC CLAYEY GRAVEL CLAYEY GRAVEL with SAND		
	GC-GM SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND		OL ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND
	SW Well-graded SAND Well-graded SAND with GRAVEL		
	SP Poorly graded SAND Poorly graded SAND with GRAVEL		CH Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
	SW-SM Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL		
	SW-SC Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		MH Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
	SP-SM Poorly graded SAND with SILT Poorly graded SAND with SILT and GRAVEL		
	SP-SC Poorly graded SAND with CLAY (or SILTY CLAY) Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
	SM SILTY SAND SILTY SAND with GRAVEL		
	SC CLAYEY SAND CLAYEY SAND with GRAVEL		OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY elastic ELASTIC SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	SC-SM SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL		
	PT PEAT		OL/OH ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND
	COBBLES COBBLES and BOULDERS BOULDERS		

FIELD AND LABORATORY TESTS

C	Consolidation (ASTM D2435)
CL	Collapse Potential (ASTM D5333)
CP	Compaction Curve (ASTM D1557)
CR	Corrosion, Sulfates, Chlorides (CTM 643; ASTM D4972, ASTM G187, ASTM D4327)
CU	Consolidated Undrained Triaxial (ASTM D4767)
DS	Direct Shear (ASTM D3080)
EI	Expansion Index (ASTM D4829)
M	Moisture Content (ASTM D2216)
OC	Organic Content (ASTM D2974)
P	Permeability (ASTM 5084)
PA	Particle Size Analysis (ASTM D422-63 [2007])
PI	Liquid Limit, Plastic Limit, Plasticity Index (ASTM D4318)
PL	Point Load Index (ASTM D5731)
PM	Pressure Meter
PP	Pocket Penetrometer
R	R-Value (CTM 301)
RS	Torsional Ring Shear (ASTM D6467)
SE	Sand Equivalent (CTM 217)
SG	Specific Gravity (AASHTO T 100)
SL	Shrinkage Limit (ASTM D427)
SW	Swell Potential (ASTM D4546)
TV	Pocket Torvane
UC	Unconfined Compression - Soil (ASTM D2166) Unconfined Compression - Rock (ASTM D7012)
UU	Unconsolidated Undrained Triaxial (ASTM D2850)
UW	Unit Weight (ASTM D4767, ASTM D7263)
VS	Vane Shear (AASHTO T 223-96 [2004])
-200	200 Wash (ASTM D1140)

SAMPLER GRAPHIC SYMBOLS

	Standard Penetration Test (SPT) (2" O.D.)
	Standard California Sampler (2.5" O.D.)
	Modified California Sampler (3" O.D.)
	Shelby Tube
	Piston Sampler
	Rock Core
	Grab Sample
	Bulk Sample
	Other (see remarks)

DRILLING METHOD SYMBOLS

	Auger Drilling		Rotary Drilling		Dynamic Cone or Hand Driven		Diamond Core
--	----------------	--	-----------------	--	-----------------------------	--	--------------

WATER LEVEL SYMBOLS

	First Water Level Reading (during drilling)
	Static Water Level Reading (short-term)
	Static Water Level Reading (long-term)



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REPORT TITLE	
LEGEND FOR SOIL CLASSIFICATION	
PROJECT NAME	
Central Coast Blue - Conveyance Pipelines	
DATE	SHEET
7/7/2023	1 of 1

LOGGED BY R. Hooke	BEGIN DATE 4-5-23	COMPLETION DATE 4-5-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-01
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 23.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) 8.00' Lt. Sta. 11+68, "IW" Line			WEATHER NOTES Sunny, cool
DRILLER 2R Drilling	LOCATION DESCRIPTION Rockaway Ave, at entrance to parking lot behind train station			BACKFILLED WITH Native/cement mix; AC patch with rapid set concrete dyed black
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING Not Encountered	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		4" ASPHALT CONCRETE.												
	1		9" AGGREGATE BASE.												
21	2		Poorly graded SAND (SP); medium dense; brown; moist; with mica; (OLD EOLIAN DEPOSITS).												
19	3			X	20	5 8 9	17	100		6	94				
17	4														
15	5		Light brown; with subrounded GRAVEL.	X	21	5 8 8	16	100		6	106				CR (pH = 4.70, r = 13,445 ohm-cm, SO ₄ ²⁻ = 67 mg/kg, Cl ⁻ = 20 mg/kg)
13	6														
11	7														
11	8		Loose; no gravel.	X	22	6 6 6	12	100							
11	10		Bottom of borehole at 11.5 ft bgs												
11	12														
11	13														
9	14		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
9	15														
7	16														
7	17														
5	18														
5	19														
3	20														
3	21														
1	22														
1	23														
-1	24														
-1	25														

5 BR - STANDARD 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/10/23



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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 1 of 1
PROJECT NUMBER 221-539	
BORING NUMBER 23B-01	
REVISION DATE 7/7/2023	

LOGGED BY R. Hooke	BEGIN DATE 4-5-23	COMPLETION DATE 4-5-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-02
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 38.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) 9.00' Lt. Sta. 21+30, "IW" Line			WEATHER NOTES Sunny, cool
DRILLER 2R Drilling	LOCATION DESCRIPTION Corner of Rockaway Ave and South 5th St			BACKFILLED WITH Native; AC patched with rapid concrete dyed black
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING Not Encountered	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		2" ASPHALT CONCRETE.		B										CR (pH = 5.18, r = 14,722 ohm-cm, SO ₄ ²⁻ = 27 mg/kg, Cl ⁻ = 3 mg/kg) CP (γ _{D, MAX} = 108 pcf, w _{OPT} = 13%)
1	1		5" AGGREGATE BASE.												
36	2		Poorly graded SAND (SP); medium dense; reddish brown; moist; (OLD EOLIAN DEPOSITS).												
34	3		Light brown.		23	5 8 9	17	100		7	93				
32	4				24	5 7 10	17	100		7	94				
28	5				25	8 13 13	26	100							
26	6		Bottom of borehole at 11.5 ft bgs												
24	7		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
22	8														
20	9														
18	10														
16	11														
14	12														
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	25														

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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 1 of 1
PROJECT NUMBER 221-539	
BORING NUMBER 23B-02	
REVISION DATE 7/7/2023	

LOGGED BY R. Hooke	BEGIN DATE 4-5-23	COMPLETION DATE 4-5-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-03
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 31.2 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) --			WEATHER NOTES Sunny, breezy
DRILLER 2R Drilling	LOCATION DESCRIPTION On 4th St, just south of Longbranch Ave			BACKFILLED WITH Native/cement mix; AC patch with rapid set concrete dyed black
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING Not Encountered	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		7" ASPHALT CONCRETE.												
	1		Poorly graded SAND with SILT (SP-SM); loose; dark brown; moist; (OLD EOLIAN DEPOSITS).												
29	2														
	3				32	3 6 7	13	100		5	94				
27	4														
	5				33	5 9 13	22	100							
25	6		Medium dense; brown; trace angular GRAVEL.												
	7														
23	8														
	9														
21	10				34	5 6 7	13	100							
	11														
19	12		Bottom of borehole at 11.5 ft bgs												
	13														
17	14		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
	15														
15	16														
	17														
13	18														
	19														
11	20														
	21														
9	22														
	23														
7	24														
	25														

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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 1 of 1
PROJECT NUMBER 221-539	
BORING NUMBER 23B-03	
REVISION DATE 7/7/2023	

LOGGED BY R. Hooke	BEGIN DATE 4-5-23	COMPLETION DATE 4-5-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-04
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 27.6 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) 6.00' Lt. Sta. 30+10, "IW" Line			WEATHER NOTES Sunny, cool
DRILLER 2R Drilling	LOCATION DESCRIPTION Between Seabright Ave and Manhattan Ave			BACKFILLED WITH Native/cement mix; AC patch with rapid set concrete dyed black
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING Not Encountered	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		1" ASPHALT CONCRETE.												
	1		Poorly graded SAND (SP); loose; dark brown; moist; (OLD EOLIAN DEPOSITS).												
26	2														
	3				26	4	8	100		6	94				
24	4					4									
	5					4									
	5		SILTY SAND (SM); loose; brown; moist.		27	3	9	100							-200 (0% G, 87% S, 13% F)
22	6					4									
	7					5									
20	8														
	9														
18	10				28	3	9	100							CR (pH = 6.01, r = 3,828 ohm-cm, SO ₄ ²⁻ = 7 mg/kg, Cl = 5 mg/kg)
	11					4									
	11					5									
16	12		Bottom of borehole at 11.5 ft bgs												
	13														
	14														
	14		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
	15														
	16														
	17														
	18														
10	19														
	20														
	21														
	22														
6	23														
	24														
4	25														

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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 1 of 1
PROJECT NUMBER 221-539	
BORING NUMBER 23B-04	
REVISION DATE 7/7/2023	

LOGGED BY R. Hooke	BEGIN DATE 4-5-23	COMPLETION DATE 4-5-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-05
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 30.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) --			WEATHER NOTES Sunny, breezy
DRILLER 2R Drilling	LOCATION DESCRIPTION On 4th St, just north of Trouville Ave			BACKFILLED WITH Native/cement mix; AC patch with rapid set concrete dyed black
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING Not Encountered	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		3" ASPHALT CONCRETE.												
1	1		6" AGGREGATE BASE.												
28	2		Poorly graded SAND (SP); loose; brown; moist; (OLD EOLIAN DEPOSITS).												
26	3			29	4	12	100			6	92				
	4				6										
	5				6										
24	6		Medium dense; light brown.	30	8	20	100			5	90				CR (pH = 4.52, r = 6,625 ohm-cm, SO ₄ ²⁻ = 77 mg/kg, Cl ⁻ = 5 mg/kg)
	7				12										
22	8														
	9														
20	10			31	6	17	100								
	11				9										
18	12		Bottom of borehole at 11.5 ft bgs												
13	13														
16	14		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
14	15														
	16														
	17														
12	18														
	19														
10	20														
	21														
8	22														
	23														
6	24														
	25														

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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 1 of 1
PROJECT NUMBER 221-539	
BORING NUMBER 23B-05	
REVISION DATE 7/7/2023	

LOGGED BY R. Hooke	BEGIN DATE 4-5-23	COMPLETION DATE 4-5-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-06
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 39.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) --			WEATHER NOTES Sunny, breezy
DRILLER 2R Drilling	LOCATION DESCRIPTION 29' east of empty lot on Farroll Road			BACKFILLED WITH Native/cement mix; AC patch with rapid set concrete dyed black
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING Not Encountered	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		6" ASPHALT CONCRETE.		C										
	1		Poorly graded SAND (SP); loose; brown; moist; (OLD EOLIAN DEPOSITS).												
37	2														
	3				35	3	11			4	89				CR (pH = 4.11, r = 1,619 ohm-cm, SO ₄ ²⁻ = 12 mg/kg, Cl ⁻ = 14 mg/kg)
35	4					5									
	5					6									
	5		Poorly graded SAND with SILT (SP-SM); loose; brown; moist.		36	3	14	100		4	96				-200 (0% G, 95% S, 5% F)
33	6					5									
	7					9									
31	8														
	9		Medium dense; light brown.												
29	10				37	6	16	100							
	11					8									
	11					8									
27	12		Bottom of borehole at 11.5 ft bgs												
	13														
	13														
25	14		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
	15														
	15														
23	16														
	17														
21	18														
	19														
19	20														
	21														
17	22														
	23														
15	24														
	25														

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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 1 of 1
PROJECT NUMBER 221-539	
BORING NUMBER 23B-06	
REVISION DATE 7/7/2023	

LOGGED BY R. Hooke	BEGIN DATE 4-5-23	COMPLETION DATE 4-5-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-07
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 18.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) 0.00' Rt. Sta. 50+43, "IW" Line			WEATHER NOTES Cool, breezy
DRILLER 2R Drilling	LOCATION DESCRIPTION Just south of intersection of Leoni Dr and South 4th St, in shoulder on 4th St			BACKFILLED WITH Native
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING Not Encountered	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 5.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		4" ASPHALT CONCRETE.												
1	1		7" AGGREGATE BASE.												
16	2		Poorly graded SAND (SP); loose; brown; wet; fine to medium, subrounded to subangular GRAVEL; backfill; (OLD EOLIAN DEPOSITS).												
14	3			41		3	12	100		17	104				GRAVEL in shoe/bottom ring
14	4					4									
12	5					8									
12	6		Bottom of borehole at 5.5 ft bgs												Suspected drilling in utility trench. Boring terminated to avoid utilities.
10	8		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												

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PROJECT NAME Central Coast Blue - Conveyance Pipelines	
PROJECT NUMBER 221-539	
BORING NUMBER 23B-07	
REVISION DATE 7/7/2023	SHEET 1 of 1

LOGGED BY R. Hooke	BEGIN DATE 4-5-23	COMPLETION DATE 4-5-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-08
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 25.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) --			WEATHER NOTES Sunny, cool
DRILLER 2R Drilling	LOCATION DESCRIPTION On intersection of Barca St and Leoni Dr, in pullout			BACKFILLED WITH Native
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING Not Encountered	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		Poorly graded SAND (SP); loose; dark brown; moist; (OLD EOLIAN DEPOSITS).												
23	2														
	3				38	4	11	100		6	102				
	4					5									
21	5					6									
	6		SILTY SAND (SM); loose; brown; moist.												
	7														
	8														
	9														
	10														
15	11		Well-graded SAND (SW); medium dense; brown; moist to wet.												
	12														
	13		Bottom of borehole at 11.5 ft bgs												
	13														
	14														
11	15		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
	16														
	17														
	18														
	19														
5	20														
	21														
	22														
3	23														
	24														
1	25														

5 BR - STANDARD 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/10/23



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PROJECT NAME Central Coast Blue - Conveyance Pipelines	
PROJECT NUMBER 221-539	
BORING NUMBER 23B-08	
REVISION DATE 7/7/2023	SHEET 1 of 1

LOGGED BY R. Hooke	BEGIN DATE 4/4/23	COMPLETION DATE 4/4/23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-09
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 19.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) 136.00' Lt. Sta. 58+87, "IW" Line			WEATHER NOTES Sunny, chilly
DRILLER 2R Drilling	LOCATION DESCRIPTION In Coastal Dunes RV Park, behind site 20			BACKFILLED WITH Monitoring Well
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING 6.0 ft	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 31.0 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample or Location	Sample or Run Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Well Diagram	Well Description	Remarks
0	0		3" ASPHALT CONCRETE.												2" Solid Pipe, Grout	
1	1		Poorly graded SAND (SP); loose; brown; moist; (ALLUVIAL FLOOD-PLAIN DEPOSITS).													
17	2				1	3	9	100		10	100					
	3					4										
15	4					5										
	5															No recovery
13	6				-	4	10	0								
	7					5										
	8		Well-graded GRAVEL with SAND (GW); medium dense; brown; wet.		2	13	36	100		10	120				0.02" Slotted Pipe	PA (53% G, 41% S, 1% F)
11	9					18									Bentonite Plug	
	10					18										
9	11		SILTY SAND (SM); medium dense; light brown; moist; clay seam, rootlets.		3	3	30	100		20	104				DS	
	12					13										
	13					17									#3 Sand	
7	14															
	15															
5	16		Some GRAVEL.		4	16	40	100								PA (2% G, 76% S, 20% F) CR (pH = 6.70, r = 2,797 ohm-cm, SO ₄ ²⁻ = 19 mg/kg, Cl = 7 mg/kg)
	17					18										
3	18					22										
	19															
1	20															
	21		Poorly graded SAND (SP); dense; light brown; moist; dense to very dense; (OLD EOLIAN DEPOSITS).		5	20	74	100		22	104				P	
	22					24										
	23					50/6"										
	24															
	25															

(continued)

5 BR - STANDARD WITH MONITORING WELL 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/12/23



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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 1 of 2
PROJECT NUMBER 221-539	
BORING NUMBER 23B-09	
REVISION DATE 7/7/2023	

5 BR - STANDARD WITH MONITORING WELL 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/12/23

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample or Run Location	Sample or Run Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Well Diagram	Well Description	Remarks
-7	25		Loose. Poorly graded SAND (SP) (continued).	X	6	3	9	100							Bottom of Well #3 Sand	
					4											
					5											
-9	28		Very dense.	X	7	28	90/10"	83		23	101					
								40								
	29					50/4"										
-11	30		Dense.	X	8	6	60	100		7	113					
								17								
	31		Bottom of borehole at 31.0 ft bgs			43										
-13	32	This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.														
	33															
-15	34															
	35															
-17	36															
	37															
-19	38															
	39															
-21	40															
	41															
-23	42															
	43															
-25	44															
	45															
-27	46															
	47															
-29	48															
	49															
-31	50															
	51															
-33	52															
	53															
-35	54															
	55															



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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 2 of 2
PROJECT NUMBER 221-539	
BORING NUMBER 23B-09	
REVISION DATE 7/7/2023	

5 BR - STANDARD WITH MONITORING WELL 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/12/23

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample or Run Location	Sample or Run Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Well Diagram	Well Description	Remarks
-5	25		Dense; no GRAVEL. SILTY SAND (SM) (continued).	X	48	11 20 26	46	100						Bottom of Well #3 Sand	P	CR (pH = 6.79, r = 898 ohm-cm, SO ₄ ⁻² = 22 mg/kg, Cl ⁻ = 10 mg/kg)
-7	27		Poorly graded SAND (SP); dense; brown; wet; (OLD EOLIAN DEPOSITS).	▲	49	17 25 40	65	100		24	101					
-9	29		Very dense.	X	50	23	50/3"	100								
	30					50/3"										
	31		Bottom of borehole at 30.8 ft bgs													
	32		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.													
	33															
	34															
	35															
	36															
	37															
	38															
	39															
	40															
	41															
	42															
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	53															
	54															
	55															



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PROJECT NAME Central Coast Blue - Conveyance Pipelines	
PROJECT NUMBER 221-539	
BORING NUMBER 23B-10	
REVISION DATE 7/7/2023	SHEET 2 of 2

LOGGED BY R. Hooke	BEGIN DATE 4-4-23	COMPLETION DATE 4-4-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-11
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 10.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) 10.00' Rt. Sta. 66+22, "IW" Line			WEATHER NOTES Sunny, breezy
DRILLER 2R Drilling	LOCATION DESCRIPTION Corner of Coolidge Dr and Norswing Dr			BACKFILLED WITH Native; AC patched with rapid concrete dyed black
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING Not Encountered	AFTER DRILLING (DATE) 5.5 ft on 4-4-23	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		5" ASPHALT CONCRETE.												
1	1		Poorly graded SAND (SP); medium dense; dark brown; moist; with mica; (ARTIFICIAL FILL).												
8	2														
3	3				-	4	20	0							No recovery
6	4					8									
5	5					12									
4	5		PEAT (PT); very loose; gray; very moist; (ALLUVIAL FLOOD-PLAIN DEPOSITS).		9	2	5	100		176	28				CR (pH = 5.21, r = 206 ohm-cm, SO ₄ ²⁻ = 7,877 mg/kg, Cl = 171 mg/kg) ▼
6	6					3									
7	7					2									
2	8														
9	9														
0	10		Poorly graded SAND (SP); medium dense; gray; wet; with rootlets.		10	3	13	100							
11	11					4									
-2	12					9									
	12		Bottom of borehole at 11.5 ft bgs												
13	13														
-4	14														
	14		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
15	15														
-6	16														
	16														
17	17														
-8	18														
	18														
19	19														
-10	20														
	20														
21	21														
-12	22														
	22														
23	23														
-14	24														
	24														
25	25														

5 BR - STANDARD 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/11/23



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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 1 of 1
PROJECT NUMBER 221-539	
BORING NUMBER 23B-11	
REVISION DATE 7/7/2023	

LOGGED BY R. Hooke	BEGIN DATE 4-4-23	COMPLETION DATE 4-4-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-12
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 15.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) 0.00' Rt. Sta. 74+00, "IW" Line			WEATHER NOTES Sunny, breezy
DRILLER 2R Drilling	LOCATION DESCRIPTION Corner of Monroe Dr and Coolidge Dr			BACKFILLED WITH Native; AC patched with rapid concrete dyed black
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING 4.0 ft	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		2" ASPHALT CONCRETE.		A										CR (pH = 6.25, r = 4,269 ohm-cm, SO ₄ ²⁻ = 223 mg/kg, Cl = 21 mg/kg) CP (γ _{D,MAX} = 107 pcf, w _{OPT} = 13%) No recovery -200 (0% G, 78% S, 22% F)
1	1		8" AGGREGATE BASE.												
13	2		Poorly graded SAND (SP); loose; brown; moist; with rootlets; (ARTIFICIAL FILL).		11	4	9	8							
11	3					4									
	4					5									
	5														
9	6														
	7														
7	8														
	9														
5	10		SILTY SAND (SM); very loose; dark brown; wet; some organics.		12	2	4	100							
	11					2									
	12					1									
3	12		Bottom of borehole at 11.5 ft bgs												
13	13														
1	14		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	25														

5 BR - STANDARD 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/11/23



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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 1 of 1
PROJECT NUMBER 221-539	
BORING NUMBER 23B-12	
REVISION DATE 7/7/2023	

LOGGED BY R. Hooke	BEGIN DATE 4-4-23	COMPLETION DATE 4-4-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-13
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 11.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) 8.00' Lt. Sta. 85+31, "IW" Line			WEATHER NOTES Sunny, windy
DRILLER 2R Drilling	LOCATION DESCRIPTION East bound lane of Mendel Dr, 5' from south curb, 27' west from corner of Norswing Dr			BACKFILLED WITH Native; AC patched with rapid concrete dyed black
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING 3.3 ft	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		6" ASPHALT CONCRETE.												
1	1		Poorly graded SAND (SP); loose; dark brown/gray; moist; trace fine GRAVEL; trace rootlets; (ALLUVIAL FLOOD-PLAIN DEPOSITS).												
9	2														
7	3				14	1 5 5	10	100							
5	4		Brown; wet.												
5	5				15	3 4 5	9	100							-200 (0% G, 99% S, 1% F) CR (pH = 7.98, r = 1,914 ohm-cm)
3	6														
1	7														
1	8														
1	9														
1	10		Very loose.		16	1 2 1	3	100							
1	11														
-1	12		Bottom of borehole at 11.5 ft bgs												
-1	13														
-3	14														
-3	15														
-5	16														
-5	17														
-7	18														
-7	19														
-9	20														
-9	21														
-11	22														
-11	23														
-13	24														
-13	25														

5 BR - STANDARD 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/10/23



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PROJECT NAME Central Coast Blue - Conveyance Pipelines	SHEET 1 of 1
PROJECT NUMBER 221-539	
BORING NUMBER 23B-13	
REVISION DATE 7/7/2023	

LOGGED BY R. Hooke	BEGIN DATE 4-4-23	COMPLETION DATE 4-4-23	HAMMER TYPE 140-lb Autotrip	BORING NUMBER 23B-14
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 11.2 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) 0.00' Rt. Sta. 102+00, "IW" Line			WEATHER NOTES Sunny, windy
DRILLER 2R Drilling	LOCATION DESCRIPTION Corner of Lakeside Ave and Aloha Pl			BACKFILLED WITH Native/cement mix and #3 sand; AC patched with rapid set concrete dyed black
DRILL RIG CME 75	GROUNDWATER READINGS	DURING DRILLING 5.0 ft	AFTER DRILLING (DATE)	TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		5" ASPHALT CONCRETE.												
1	1		5" AGGREGATE BASE.												
9	2		CLAYEY SAND (SC); loose; dark gray; moist; trace fine GRAVEL; (ALLUVIAL FLOOD-PLAIN DEPOSITS).												
7	3			17	3	5	100								
5	4				3										
5	5		Wet.		2	5	100								-200 (5% G, 75% S, 20% F) 
5	6			18	2										
7	7				2										
3	8				2										
1	9				3										
1	10		Very loose; fine GRAVEL.	19	2	2	100								CR (pH = 7.48, r = 2,503 ohm-cm, SO ₄ ²⁻ = 422 mg/kg, Cl = 26 mg/kg)
11	11				1										
11	11				1										
-1	12		Bottom of borehole at 11.5 ft bgs												
-3	13														
-3	14		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
-5	15														
-5	16														
-7	17														
-7	18														
-9	19														
-9	20														
-11	21														
-11	22														
-13	23														
-13	24														
	25														

5 BR - STANDARD 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/11/23



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PROJECT NAME Central Coast Blue - Conveyance Pipelines	
PROJECT NUMBER 221-539	
BORING NUMBER 23B-14	
REVISION DATE 7/7/2023	SHEET 1 of 1

APPENDIX B - RESULTS OF LABORATORY TESTING

SUMMARY OF LABORATORY TEST RESULTS

Sample Information				Total Unit Weight, γ_v (pcf)	Dry Unit Weight, γ_d (pcf)	Moisture Content (%)	Gradation			Atterberg		Corrosion			Compaction		R-Value	Expansion Index	Additional Testing	Soil/Rock Classification
Boring No.	Sample No.	Depth (ft)	Sample Type				Gravel (%)	Sand (%)	Fines (%)	Plasticity Index (PI)	Liquid Limit (LL)	pH	Resistivity (Ω - cm)	SO ₄ ²⁻ (mg/kg)	Cl ⁻ (mg/kg)	Max. Dry Unit Weight, $\gamma_{d, MAX}$ (pcf)				
23B-01	20	2.5	MCAL	100	94	6	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-01	21	5.0	MCAL	112	106	6	--	--	--	--	4.70	13,445	67	20	--	--	--	--	Poorly graded SAND (SP)	
23B-02	B	0.0	BULK	--	--	--	--	--	--	--	5.18	14,722	27	3	108	13	--	--	Poorly graded SAND (SP)	
23B-02	23	2.5	MCAL	100	93	7	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-02	24	5.0	MCAL	101	94	7	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-03	32	2.5	MCAL	98	94	5	1	95	5	--	6.82	15,679	15	3	--	--	--	--	Poorly graded SAND with SILT (SP-SM)	
23B-04	26	2.5	MCAL	100	94	6	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-04	27	5.0	MCAL	--	--	--	0	87	13	--	--	--	--	--	--	--	--	--	SILTY SAND (SM)	
23B-04	28	10.0	SPT	--	--	--	--	--	--	--	6.01	3,828	7	5	--	--	--	--	SILTY SAND (SM)	
23B-05	29	2.5	MCAL	97	92	6	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-05	30	5.0	MCAL	94	90	5	--	--	--	--	4.52	6,625	77	5	--	--	--	--	Poorly graded SAND (SP)	
23B-06	35	2.5	MCAL	92	89	4	--	--	--	--	4.11	1,619	12	14	--	--	--	--	Poorly graded SAND (SP)	
23B-06	36	5.0	MCAL	99	96	4	0	95	5	--	--	--	--	--	--	--	--	--	Poorly graded SAND with SILT (SP-SM)	
23B-07	41	2.5	MCAL	122	104	17	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-08	38	2.5	MCAL	108	102	6	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-08	39	5.0	MCAL	108	99	9	1	82	18	--	--	--	--	--	--	--	--	--	SILTY SAND (SM)	
23B-09	1	2.5	MCAL	109	100	10	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-09	2	7.5	MCAL	131	120	10	53	41	1	--	--	--	--	--	--	--	--	--	WELL-GRADED GRAVEL with SAND (GW)	
23B-09	3	10.0	MCAL	125	104	20	--	--	--	--	--	--	--	--	--	--	--	--	DS SILTY SAND (SM)	
23B-09	4	15.0	SPT	--	--	--	2	76	20	--	6.70	2,797	19	7	--	--	--	--	SILTY SAND (SM)	



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PROJECT NAME Central Coast Blue - Conveyance Pipelines	
PROJECT NO. 221-539	REVISION DATE 7-7-23
PROJECT MANAGER J. King	PREPARED BY L. Van Kirk
CHECKED BY R. Hooke	SHEET 1 of 2

YEH SUMMARY OF TEST RESULTS 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/7/23

SUMMARY OF LABORATORY TEST RESULTS

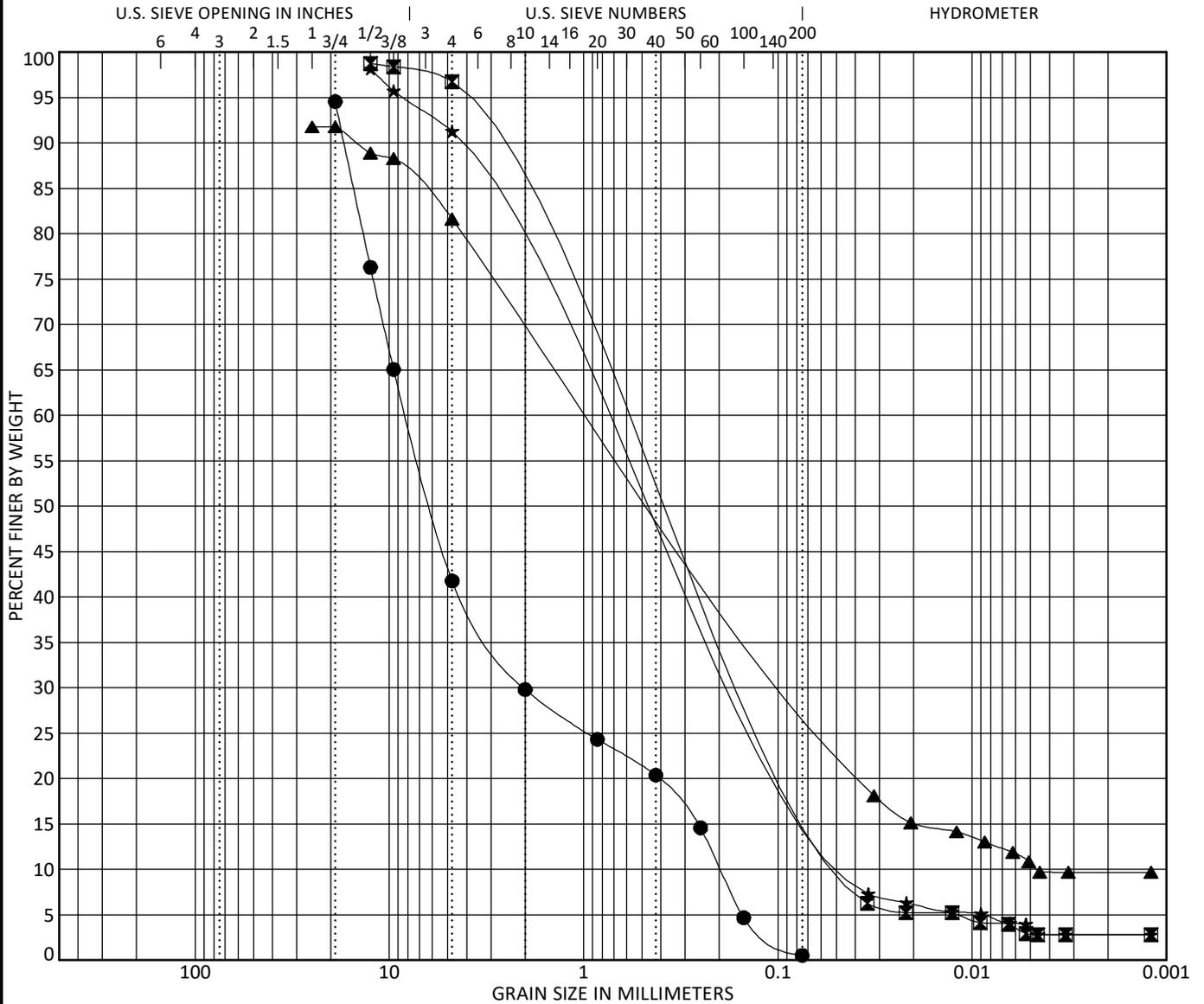
Sample Information				Total Unit Weight, γ_v (pcf)	Dry Unit Weight, γ_d (pcf)	Moisture Content (%)	Gradation			Atterberg		Corrosion				Compaction		R-Value	Expansion Index	Additional Testing	Soil/Rock Classification
Boring No.	Sample No.	Depth (ft)	Sample Type				Gravel (%)	Sand (%)	Fines (%)	Plasticity Index (PI)	Liquid Limit (LL)	pH	Resistivity (Ω - cm)	SO ₄ ²⁻ (mg/kg)	Cl ⁻ (mg/kg)	Max. Dry Unit Weight, $\gamma_{d, MAX}$ (pcf)	Optimum Moisture Content (%)				
23B-09	5	20.0	MCAL	127	104	22	--	--	--	--	--	--	--	--	--	--	--	--	P	Poorly graded SAND (SP)	
23B-09	7	27.5	MCAL	124	101	23	--	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-09	8	30.0	MCAL	121	113	7	--	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-10	42	2.5	MCAL	107	100	7	--	--	--	--	--	--	--	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-10	43	5.0	SPT	--	--	--	--	--	--	--	5.29	898	83	28	--	--	--	--	--	Poorly graded SAND (SP)	
23B-10	44	7.5	MCAL	124	107	17	--	--	--	--	--	--	--	--	--	--	--	--	DS	SILTY SAND (SM)	
23B-10	45	10.0	SPT	--	--	--	10	53	29	--	--	--	--	--	--	--	--	--	--	SILTY SAND (SM)	
23B-10	46	12.5	MCAL	118	92	29	--	--	--	--	--	--	--	--	--	--	--	--	DS	Fat CLAY (CH)	
23B-10	47	15.0	SPT	--	--	--	7	71	21	--	--	--	--	--	--	--	--	--	--	SILTY SAND (SM)	
23B-10	48	25.0	SPT	--	--	--	--	--	--	--	6.79	898	22	10	--	--	--	--	--	SILTY SAND (SM)	
23B-10	49	27.5	MCAL	125	101	24	--	--	--	--	--	--	--	--	--	--	--	--	P	Poorly graded SAND (SP)	
23B-11	9	5.0	MCAL	79	28	176	--	--	--	--	5.21	206	7,877	171	--	--	--	--	--	PEAT (PT)	
23B-12	A	0.0	BULK	--	--	--	--	--	--	--	6.25	4,269	223	21	107	13	--	--	--	Poorly graded SAND (SP)	
23B-12	13	10.0	SPT	--	--	--	0	78	22	--	--	--	--	--	--	--	--	--	--	SILTY SAND (SM)	
23B-13	15	5.0	SPT	--	--	--	0	99	1	--	--	7.98	1,914	--	--	--	--	--	--	Poorly graded SAND (SP)	
23B-14	18	5.0	SPT	--	--	--	5	75	20	--	--	--	--	150	58	--	--	--	--	CLAYEY SAND (SC)	
23B-14	19	10.0	SPT	--	--	--	--	--	--	--	7.48	2,503	422	26	--	--	--	--	--	CLAYEY SAND (SC)	

YEH SUMMARY OF TEST RESULTS 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 7/7/23



PROJECT NAME Central Coast Blue - Conveyance Pipelines	
PROJECT NO. 221-539	REVISION DATE 7-7-23
PROJECT MANAGER J. King	PREPARED BY L. Van Kirk
CHECKED BY R. Hooke	SHEET 2 of 2

COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	



Specimen Identification		Classification	LL	PL	PI	Cc	Cu
●	23B-09 7.5 ft	WELL-GRADED GRAVEL with SAND (GW)	--	--	--	2.55	41.39
☒	23B-09 15.0 ft	SILTY SAND (SM)	--	--	--	--	--
▲	23B-10 10.0 ft	SILTY SAND (SM)	--	--	--	--	--
★	23B-10 15.0 ft	SILTY SAND (SM)	--	--	--	--	--

Specimen Identification		D100	D60	D50	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	23B-09 7.5 ft	19	8.176	6.071	2.031	0.198	52.8	41.2	0.5	
☒	23B-09 15.0 ft	12.5	--	--	--	--	2.0	76.3	17.6	2.9
▲	23B-10 10.0 ft	25	--	--	--	0.005	10.1	52.7	18.3	10.6
★	23B-10 15.0 ft	12.5	--	--	--	--	6.9	70.7	17.1	3.5

GRAIN SIZE DISTRIBUTION



PROJECT NAME Central Coast Blue - Conveyance Pipelines		PROJECT NO. 221-539
REVISION DATE 7-7-23	PROJECT MANAGER J. King	
PREPARED BY L. Van Kirk	CHECKED BY R. Hooke	SHEET 1 of 1

YEH SIEVE 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020). GLB 7/7/23

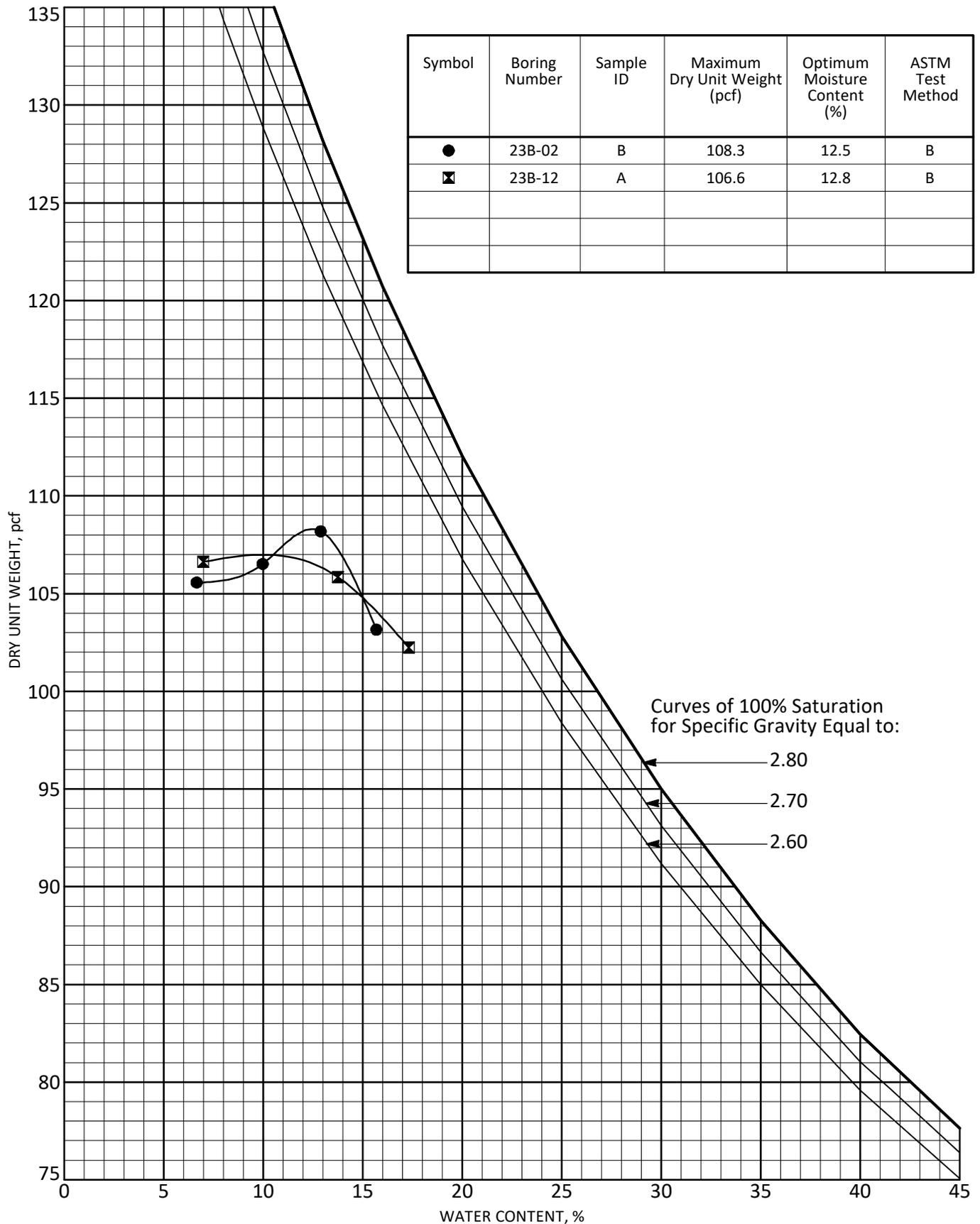


Corrosivity Tests Summary

CTL # 687-193 Date: 5/15/2023 Tested By: PJ Checked: PJ
 Client: Yeh and Associates Project: Central Coast Blue Proj. No: 221-539
 Remarks: _____

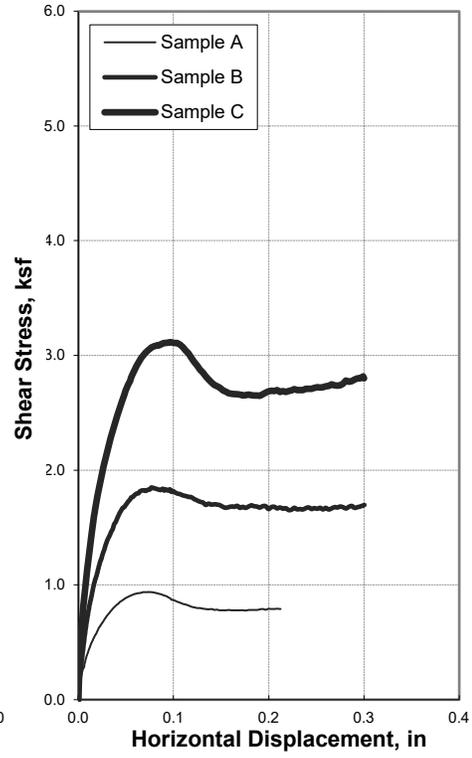
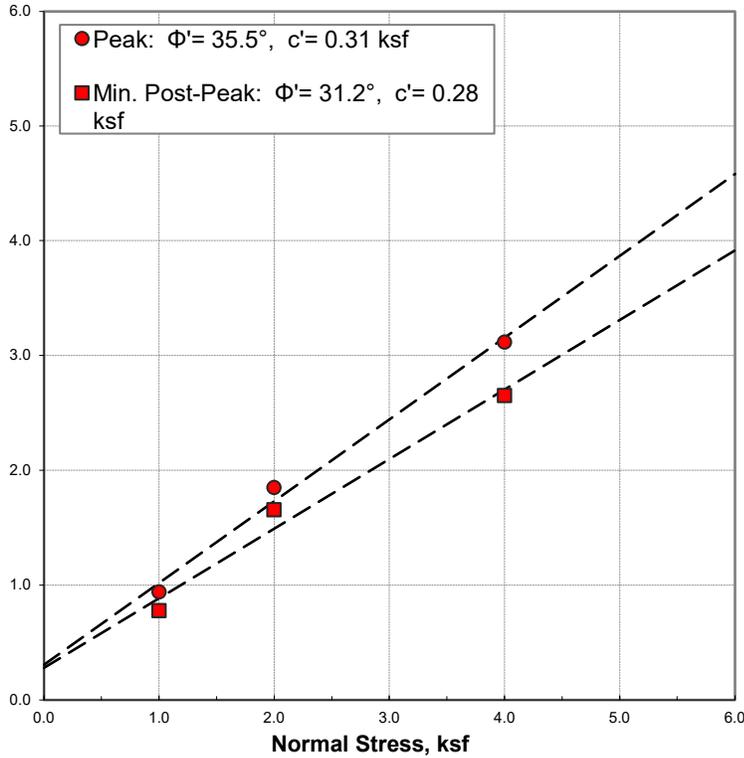
Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride mg/kg Dry Wt.	Sulfate		pH	ORP (Redox)		Sulfide Qualitative by Lead Acetate Paper	Moisture At Test %	Soil Visual Description
			As Rec.	Min	Sat.		mg/kg Dry Wt.	% Dry Wt.		E _H (mV)	At Test Temp °C			
Boring	Sample, No.	Depth, ft.	ASTM G57	Cal 643	ASTM G57	ASTM D4327	ASTM D4327	ASTM D4327	ASTM G51	ASTM G200	Temp °C	ASTM D2216		
23B-01	21	5	-	-	-	20	67	0.0067	-	-	-	-	6.0	Yellowish Red Poorly graded SAND
23B-02	B	0	-	-	-	3	27	0.0027	-	-	-	-	6.7	Brown Poorly graded SAND
23B-03	32	2.5	-	-	-	3	15	0.0015	-	-	-	-	5.0	Brown Poorly graded SAND w/SILT
23B-04	28	10	-	-	-	5	7	0.0007	-	-	-	-	4.7	Light Yellowish Brown Silty SAND
23B-05	30	5	-	-	-	5	77	0.0077	-	-	-	-	5.4	Light Yellowish Brown poorly graded SAND
23B-06	35	2.5	-	-	-	14	12	0.0012	-	-	-	-	4.0	Dark Brown Poorly graded SAND
23B-09	4	15	-	-	-	7	19	0.0019	-	-	-	-	19.3	Yellowish Brown Silty SAND
23B-10	43	5	-	-	-	28	83	0.0083	-	-	-	-	12.1	Dark Brown Poorly graded SAND
23B-10	48	25	-	-	-	10	22	0.0022	-	-	-	-	23.1	Dark Yellowish Brown Silty SAND
23B-11	9	5	-	-	-	171	7,877	0.7877	-	-	-	-	200.2	Dark Gray PEAT
23B-12	A	0	-	-	-	21	223	0.0223	-	-	-	-	13.0	Dark Brown Poorly graded SAND
23B-14	15	5	-	-	-	58	150	0.0150	-	-	-	-	26.4	Brown Poorly graded SAND
23B-14	19	10	-	-	-	26	422	0.0422	-	-	-	-	22.9	Dark Brown Clayey SAND

YEH COMPACTION 5-CURVE 221-539 LOGS AND LAB.GPJ CALIFORNIA YEH LIBRARY (YEH V3 APRIL 2020).GLB 5/25/23

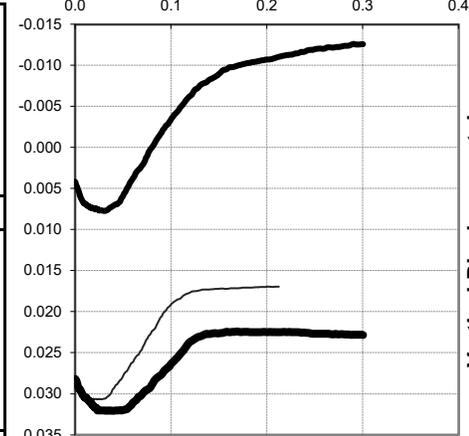


MOISTURE-DENSITY RELATIONSHIP

PROJECT NAME Central Coast Blue - Conveyance Pipelines		PROJECT NO. 221-539
REVISION DATE 5-25-23	PROJECT MANAGER J. King	
PREPARED BY L. Van Kirk	CHECKED BY R. Hooke	SHEET 1 of 1

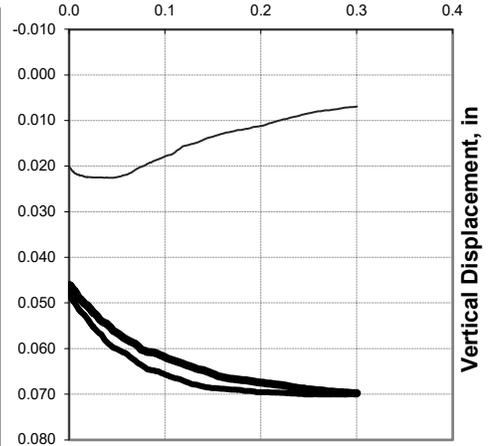
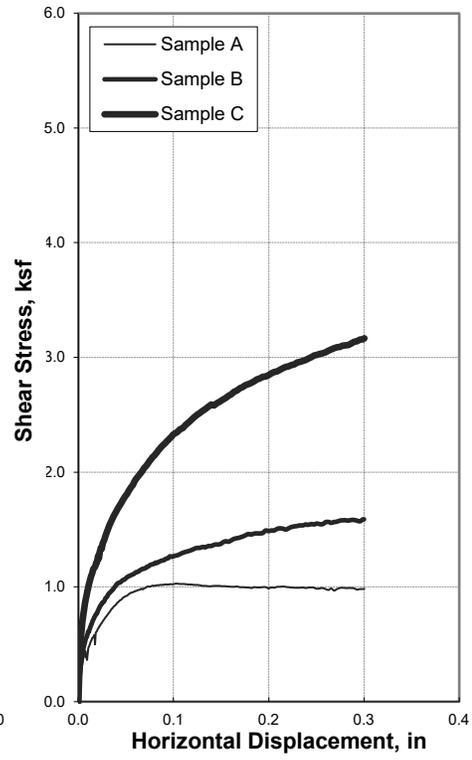
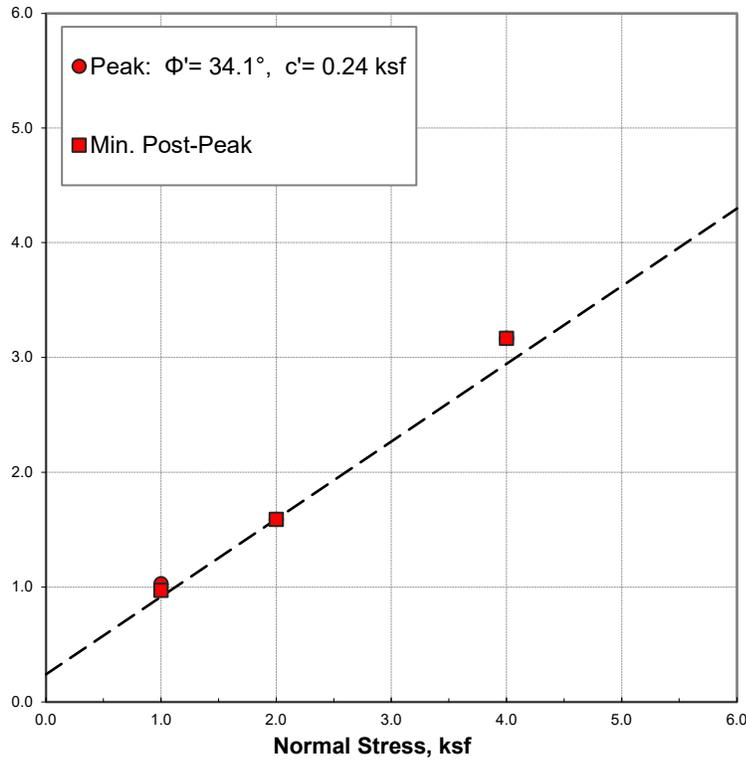


SAMPLE ID	Boring Number:	23B-9			
	Sample Number:	3			
	Sample Depth:	10.0 ft			
	USCS Classification:	Silty SAND (SM): yellowish brown, moist			
INITIAL	Specimen	A	B	C	D
	Water Content, %	19.9%	19.9%	19.9%	
	Dry Unit Weight, pcf	104.2	104.3	104.2	
	Saturation, %	82%	83%	83%	
	Void Ratio	0.68	0.67	0.68	
	Diameter, in	2.42	2.42	2.42	
	Height, in	1.00	1.00	1.00	
FINAL	Water Content, %	21.0%	21.7%	21.1%	
	Dry Unit Weight, pcf	105.5	102.1	106.8	
	Void Ratio	0.66	0.71	0.64	
TEST SUMMARY	Displacement at Peak, in	0.07	0.08	0.10	
	Displacement Rate, in/min	0.00200	0.00200	0.00200	
	Normal Stress, ksf	1.0	2.0	4.0	
	Peak Shear Stress, ksf	0.94	1.85	3.12	
	Min. Post-Peak Stress, ksf	0.78	1.65	2.65	
	Test Method: ASTM D3080				
REMARKS	Project: Central Coast Blue				
	Tested by: N. Derbidge, Cal Poly GEOE Lab				
	Checked by: J. King, Yeh and Associates				



CLASSIFICATION	Sieve Size	% Passing
	3/8-in. (9.5mm)	---
	# 4 (4.75mm)	---
	#16 (1.18mm)	---
	#30 (0.6mm)	---
	#100 (0.150mm)	---
	#200 (0.075mm)	---
Atterberg Limits		
Liquid Limit, %	---	
Plastic Limit, %	---	
Plasticity Index, %	---	
Estimated Gs	2.8	
k_{avg} 20°C, cm/sec	---	

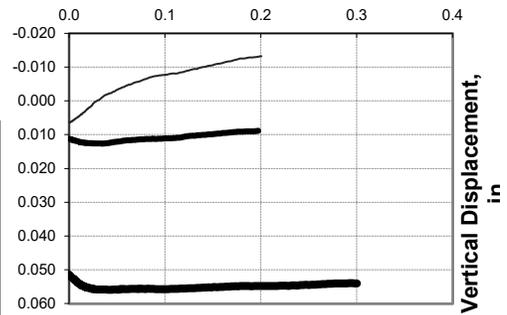
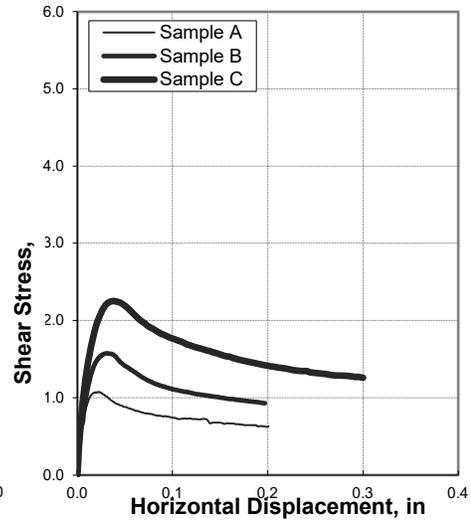
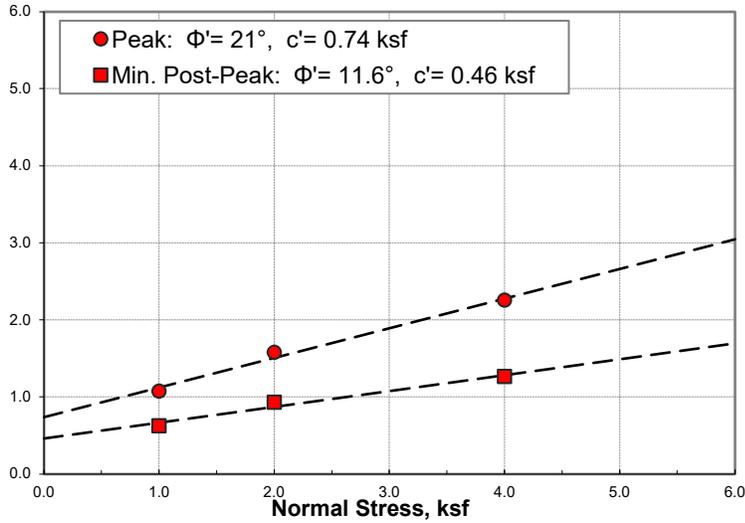
DIRECT SHEAR TEST REPORT



SAMPLE ID	Boring Number:	23B-10			
	Sample Number:	44			
	Sample Depth:	7.5 ft			
	USCS Classification:	Silty SAND (SM): red brown, moist			
INITIAL	Specimen	A	B	C	D
	Water Content, %	16.9%	16.9%	16.9%	
	Dry Unit Weight, pcf	111.9	98.9	108.8	
	Saturation, %	84%	62%	78%	
	Void Ratio	0.56	0.77	0.61	
	Diameter, in	2.42	2.42	2.42	
	Height, in	1.00	1.00	1.00	
FINAL	Water Content, %	19.7%	21.2%	20.4%	
	Dry Unit Weight, pcf	112.7	106.8	114.9	
	Void Ratio	0.55	0.64	0.52	
TEST SUMMARY	Displacement at Peak, in	0.10	0.30	0.30	
	Displacement Rate, in/min	0.00050	0.00050	0.00050	
	Normal Stress, ksf	1.0	2.0	4.0	
	Peak Shear Stress, ksf	1.03	1.59	3.17	
	Min. Post-Peak Stress, ksf	0.97	1.59	3.17	
	Test Method: ASTM D3080				
REMARKS	Project: Central Coast Blue				
	Tested by: N. Derbidge, Cal Poly GEOE Lab				
	Checked: J. King, Yeh and Associates				

CLASSIFICATION	Sieve Size	% Passing
	3/8-in. (9.5mm)	---
	# 4 (4.75mm)	---
	#16 (1.18mm)	---
	#30 (0.6mm)	---
	#100 (0.150mm)	---
	#200 (0.075mm)	---
Atterberg Limits		
Liquid Limit, %	---	
Plastic Limit, %	---	
Plasticity Index, %	---	
Estimated Gs	2.8	
k _{avg} 20°C, cm/sec	---	

DIRECT SHEAR TEST REPORT



SAMPLE ID	Boring Number:	23B-10			
	Sample Number:	46			
	Sample Depth:	12.5 ft			
	USCS Classification:	Fat CLAY (CH): olive and red brown, moist, with silty sand pockets			
INITIAL	Specimen	A	B	C	D
	Water Content, %	29.3%	29.3%	29.3%	
	Dry Unit Weight, pcf	89.8	94.4	90.5	
	Saturation, %	87%	96%	88%	
	Void Ratio	0.95	0.85	0.93	
	Height, in	1.00	1.00	1.00	
FINAL	Water Content, %	37.2%	30.8%	36.6%	
	Dry Unit Weight, pcf	85.0	95.0	91.2	
	Void Ratio	1.05	0.84	0.92	
TEST SUMMARY	Displacement at Peak, in	0.02	0.03	0.04	
	Displacement Rate, in/min	0.00007	0.00007	0.00007	
	Normal Stress, ksf	1.0	2.0	4.0	
	Peak Shear Stress, ksf	1.08	1.58	2.25	
	Min. Post-Peak Stress, ksf	0.63	0.93	1.26	
	Test Method: ASTM D3080				
REMARKS	Project: Central Coast Blue				
	Tested by: N. Derbidge, Cal Poly GEOE Laboratory				
	Checked by: J. King, Yeh and Associates				

CLASSIFICATION	Sieve Size	% Passing
	3/8-in. (9.5mm)	---
	# 4 (4.75mm)	---
	#16 (1.18mm)	---
	#30 (0.6mm)	---
	#100 (0.150mm)	---
	#200 (0.075mm)	---
	Atterberg Limits	
	Liquid Limit, %	---
	Plastic Limit, %	---
Plasticity Index, %	---	
Estimated Gs	2.8	
k _{avg} 20°C, cm/sec	---	

DIRECT SHEAR TEST REPORT

HYDRAULIC CONDUCTIVITY TEST: FALLING HEAD RISING TAILWATER

Test performed in accordance with ASTM D5084 (Method C)

Job No.:	221-539	Job Name:	Central Coast Blue
Lab Job No.:	N/A	Client:	Yeh and Associates

Boring No.:	23B-10	Sample No.:	49	Depth (ft):	27.5
Soil Description:	Poorly-graded SAND (SP): brown, moist to wet				

Moisture & Density	Initial	Final
Mass of Sample (g)	452.18	447.03
Moisture Tare I.D	ST-103	116
Tare Mass (g)	128.44	128.40
Wet Mass + Tare (g)	245.50	575.43
Dry Mass + Tare (g)	223.66	494.22
Diameter (in)	2.420	2.420
Height (in)	3.000	3.000
Moisture _(Post / Trim) (%)	23.6%	22.9%
Area (in ²)	4.600	4.600
Dry Density (pcf)	101.0	101.0
Saturation	95%	90%

Testing Information			
Sample Type	MC	Consol Start Time	--
Perm Cell #	2	Pipette Area, cm ²	0.263
Specified Effect. Stress	20 psi	1 psi = 70.584 cm H ₂ O @ 21.7°C	
Assumed Specific Gravity	2.7		
Permeant	Deaired Tap-Water		

B-Value Assessment (≥.95)				
σ _{3initial}	σ _{3final}	H _{initial}	H _{final}	B-Value

Test Data														
Trial	Date	Δ time (sec)		Temp. (°C)	σ _c (psi)	Pressure Head Readings (psi)		Fluid Head Readings (ml)		Pressure Head (psi)		k _t Prelim. (cm/sec)	k 20°C Final (cm/sec) ⁽²⁾	Tail Fluid Continuity ⁽¹⁾
						Head	Tail	Head	Tail	Initial	Final			
1	5/5/23	12	Start	20.9	90.0	70.0	70.0	1.00	6.00	0.00	0.00	6.4E-03	6.2E-03	0.99
			End	20.9	90.0	70.0	70.0	2.69	4.30	19.01	6.12			
2	5/5/23	12	Start	20.9	90.0	70.0	70.0	1.00	6.00	0.00	0.00	6.4E-03	6.3E-03	1.00
			End	20.9	90.0	70.0	70.0	2.70	4.30	19.01	6.08			
3	5/5/23	12	Start	20.9	90.0	70.0	70.0	1.00	6.00	0.00	0.00	6.4E-03	6.3E-03	1.00
			End	20.9	90.0	70.0	70.0	2.70	4.30	19.01	6.08			
4	5/5/23	12	Start	20.9	90.0	70.0	70.0	2.00	8.00	0.00	0.00	6.5E-03	6.3E-03	0.99
			End	20.9	90.0	70.0	70.0	4.04	5.94	22.81	7.22			
5	5/5/23	12	Start	20.9	90.0	70.0	70.0	2.00	8.00	0.00	0.00	6.5E-03	6.3E-03	0.99
			End	20.9	90.0	70.0	70.0	4.04	5.94	22.81	7.22			
6	5/5/23	12	Start	20.9	90.0	70.0	70.0	2.00	8.00	0.00	0.00	6.5E-03	6.3E-03	0.98
			End	20.9	90.0	70.0	70.0	4.03	5.93	22.81	7.22			

Notes: ⁽¹⁾ 0.75 ≤ Continuity ≤ 1.25

k_{avg} 20°C 6.3E-03

Tested By:	GLF	Checked By:	ND
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⁽²⁾ ±25% k_{avg} for k ≥ 1x10⁸ cm/s; ±50% for k < 1x10⁸ cm/s

HYDRAULIC CONDUCTIVITY Central Coast Blue

SAMPLE ID	Boring Number 23B-10		CLASSIFICATION	Sieve Size	% Passing	Other Parameters			
	Sample Number 49	Sample Depth, ft 27.50		Classification Poorly-graded SAND (SP): brown, moist to wet	3/8-in. (9.5mm)	---	Liquid Limit	---	
SAMPLE PROPERTIES		Initial	Final	#4 (4.75mm)	---	Plastic Limit	---		
	Mass, g	452.18	447.03	#16 (1.18mm)	---	Plasticity Index	---		
	Water Content, %	23.6%	22.2%	#30 (0.6mm)	---	Estimated Gs	2.7		
	Dry Density, pcf	101.0	101.0	#100 (0.150mm)	---				
	Saturation, %	95%	90%	#200 (0.075mm)	---				
	Void Ratio	0.67	0.67						
	Diameter, in	2.42	2.42						
	Height, in	3.00	3.00						
	Area, in ²	4.60	4.60						
	Volume, in ³	13.80	13.80						
TEST SUMMARY				Sample Type	MC				
				Permeant	Deaired Tap-Water				
				Pipette Area, cm ²	0.263				
REMARKS				k _{avg} 20°C, cm/s	6.3E-03				
				Tested By	GLF				
PERMEATION DATA				Test Method: ASTM D5084 (Method C)					
				Tested by: N. Derbidge					
				Reviewed by: R. Hooke					
	Trial	Date	Time, sec	Temp _{AVG} , °C	σ', ksf	μ, ksf	i _o	i _f	k _t , cm/s
	1	5/5/23	12	20.9	2.9	10.1	2.5	0.8	6.4E-03
	2	5/5/23	12	20.9	2.9	10.1	2.5	0.8	6.4E-03
	3	5/5/23	12	20.9	2.9	10.1	2.5	0.8	6.4E-03
	4	5/5/23	12	20.9	2.9	10.1	3.0	0.9	6.5E-03
5	5/5/23	12	20.9	2.9	10.1	3.0	0.9	6.5E-03	
6	5/5/23	12	20.9	2.9	10.1	3.0	0.9	6.5E-03	
SAMPLE IMAGES									

HYDRAULIC CONDUCTIVITY
 Central Coast Blue

HYDRAULIC CONDUCTIVITY TEST: FALLING HEAD RISING TAILWATER

Test performed in accordance with ASTM D5084 (Method C)

Job No.:	221-539	Job Name:	Central Coast Blue
Lab Job No.:	N/A	Client:	Yeh and Associates

Boring No.:	23B-09	Sample No.:	5	Depth (ft):	20.0
Soil Description:	Poorly-graded SAND (SP): light brown, moist, with silty sand partings and gravel on one end of the sample				

Moisture & Density	Initial	Final
Mass of Sample (g)	613.45	611.30
Moisture Tare I.D	ST-118	106
Tare Mass (g)	128.46	128.48
Wet Mass + Tare (g)	262.16	734.48
Dry Mass + Tare (g)	238.01	626.85
Diameter (in)	2.420	2.420
Height (in)	4.000	4.000
Moisture _(Post / Trim) (%)	22.0%	22.0%
Area (in ²)	4.600	4.600
Dry Density (pcf)	104.1	104.1
Saturation	96%	94%

Testing Information			
Sample Type	MC	Consol Start Time	--
Perm Cell #	4	Pipette Area, cm ²	0.263
Specified Effect. Stress	15 psi	1 psi = 70.584 cm H ₂ O @ 21.7°C	
Assumed Specific Gravity	2.7		
Permeant	Deaired Tap-Water		

B-Value Assessment (≥.95)				
σ _{3initial}	σ _{3final}	μ _{initial}	μ _{final}	B-Value

Test Data														
Trial	Date	Δ time (sec)		Temp. (°C)	σ _c (psi)	Pressure Head Readings (psi)		Fluid Head Readings (ml)		Pressure Head (psi)		k _t Prelim. (cm/sec)	k 20°C Final (cm/sec) ⁽²⁾	Tail Fluid Continuity ⁽¹⁾
						Head	Tail	Head	Tail	Fluid Readings (cm)				
										Initial	Final			
1	5/7/23	300	Start	19.9	85.0	70.0	70.0	1.00	6.00	0.00	0.00	4.0E-04	4.0E-04	0.99
			End	19.9	85.0	70.0	70.0	2.82	4.16	19.01	5.10			
2	5/7/23	300	Start	19.9	85.0	70.0	70.0	1.00	6.00	0.00	0.00	4.0E-04	4.0E-04	0.99
			End	19.9	85.0	70.0	70.0	2.83	4.15	19.01	5.02			
3	5/7/23	300	Start	19.9	85.0	70.0	70.0	1.00	6.00	0.00	0.00	4.0E-04	4.1E-04	0.98
			End	19.9	85.0	70.0	70.0	2.83	4.13	19.01	4.94			
4	5/7/23	300	Start	19.9	85.0	70.0	70.0	1.00	6.00	0.00	0.00	4.0E-04	4.0E-04	0.98
			End	19.9	85.0	70.0	70.0	2.83	4.14	19.01	4.98			
5	5/7/23	300	Start	19.9	85.0	70.0	70.0	1.00	6.00	0.00	0.00	4.0E-04	4.1E-04	0.98
			End	19.9	85.0	70.0	70.0	2.83	4.13	19.01	4.94			
6	5/7/23	300	Start	19.9	85.0	70.0	70.0	1.00	6.00	0.00	0.00	4.1E-04	4.1E-04	0.98
			End	19.9	85.0	70.0	70.0	2.84	4.12	19.01	4.87			

Notes: ⁽¹⁾ 0.75 ≤ Continuity ≤ 1.25

k_{avg} 20°C 4.0E-04

Tested By	GLF	Checked By:	ND
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⁽²⁾ ±25% k_{avg} for k ≥ 1x10⁻⁸ cm/s; ±50% for k < 1x10⁻⁸ cm/s

HYDRAULIC CONDUCTIVITY
Central Coast Blue

SAMPLE ID	Boring Number 23B-09			CLASSIFICATION	Sieve Size	% Passing	Other Parameters		
	Sample Number	5			3/8-in. (9.5mm)	---	Liquid Limit	---	
Sample Depth, ft	20.00				#4 (4.75mm)	---	Plastic Limit	---	
Classification	Poorly-graded SAND (SP): light brown, moist, with silty sand partings and gravel on one end of the sample				#16 (1.18mm)	---	Plasticity Index	---	
					#30 (0.6mm)	---	Estimated Gs	2.7	
					#100 (0.150mm)	---			
				#200 (0.075mm)	---				
SAMPLE PROPERTIES		Initial	Final	TEST SUMMARY	Sample Type		MC		
	Mass, g	613.45	611.30		Permeant	Deaired Tap-Water			
	Water Content, %	22.0%	21.6%		Pipette Area, cm ²	0.263			
	Dry Density, pcf	104.1	104.1		k _{avg} 20°C, cm/s	4.0E-04			
	Saturation, %	96%	94%		Tested By	GLF			
	Void Ratio	0.62	0.62	REMARKS	Test Method: ASTM D5084 (Method C)				
	Diameter, in	2.42	2.42		Tested by: N. Derbidge				
	Height, in	4.00	4.00		Reviewed by: R. Hooke				
	Area, in ²	4.60	4.60						
	Volume, in ³	18.40	18.40						
PERMEATION DATA	Trial	Date	Time, sec	Temp _{AVG} , °C	σ', ksf	μ, ksf	i _o	i _f	k _t , cm/s
	1	5/7/23	300	19.9	2.2	10.1	1.9	0.5	4.0E-04
	2	5/7/23	300	19.9	2.2	10.1	1.9	0.5	4.0E-04
	3	5/7/23	300	19.9	2.2	10.1	1.9	0.5	4.0E-04
	4	5/7/23	300	19.9	2.2	10.1	1.9	0.5	4.0E-04
	5	5/7/23	300	19.9	2.2	10.1	1.9	0.5	4.0E-04
	6	5/7/23	300	19.9	2.2	10.1	1.9	0.5	4.1E-04
	SAMPLE IMAGES								

HYDRAULIC CONDUCTIVITY
 Central Coast Blue

APPENDIX C - GROUNDWATER DATA

APPENDIX D - PREVIOUS STUDIES

Revisions:

By BSK Date 2/16/78 Location South San Luis Obispo County, CA
 Checked By BSK Date 2/16/78 Name South San Luis Obispo
 Job Number 2003-A

CLASSIFICATION DATA			STRENGTH DATA			MOISTURE-DENSITY DATA			Blows/Ft.	BORING 1
% FINES (NO. 200)	LIQUID LIMIT	PLASTICITY INDEX	TYPE OF STRENGTH TEST	TEST SURCHARGE PRESSURE, LBS/SQ FT	TEST MOISTURE CONTENT, %	SHEAR STRENGTH, LBS/SQ FT	NATURAL MOISTURE CONTENT, %	DRY DENSITY, LBS/CU FT		
			DS	1500	Natural	2150	11.4	109	19	<p>ELEVATION 11.1 FEET</p> <p>1" asphaltic concrete on 5" sandy base</p> <p>Brown silty sand (SM) (dense) (grading gray)</p> <p>Gray clayey silt (ML) (stiff)</p> <p>Gray silty sand (SM) with rock fragments; trace of wood (medium dense)</p> <p>Gray fine sand (SP) (medium dense) (trace of organic) (some small gravel)</p> <p>(caving soil) (increase in gravel; few broken shells)</p> <p>(grading more dense)</p> <p>(few thin bay mud lenses)</p> <p>(grading more dense)</p>
			DS	600	Natural	550	27.5	97	21	
			DS	2500	Natural	1750	26.4	90	25	
			DS	1200	Natural	900	22.9	97	10	
			DS	3000	Natural	2350	20.8	100	7	
									15	
									12	
									20	
									27	
									25	
									30	
									30	

CLASSIFICATION DATA			STRENGTH DATA			MOISTURE-DENSITY DATA			Blows/Ft.	BORING 2
% FINES (NO. 200)	LIQUID LIMIT	PLASTICITY INDEX	TYPE OF STRENGTH TEST	TEST SURCHARGE PRESSURE, LBS/SQ FT	TEST MOISTURE CONTENT, %	SHEAR STRENGTH, LBS/SQ FT	NATURAL MOISTURE CONTENT, %	DRY DENSITY, LBS/CU FT		
			DS	300	Natural	400	18.9	96	14	<p>Brown silty sand (SM) (dense)</p> <p>Water level 1/24/78</p> <p>Gray clayey silt (ML) (moderately firm)</p> <p>Gray sand (SP) (medium dense)</p> <p>Gray organic clayey silt (OH) (soft bay mud)</p> <p>Brown fine sand (SP) (medium dense)</p> <p>Gray fine sand (SP) (medium dense) (some broken shells and gravel)</p> <p>(soft bay mud lens)</p> <p>(grading dense) (occasional thin gravelly layers)</p> <p>(increase in gravel)</p>
			DS	2500	Natural	1900	23.8	90	11	
	74.7	39.5	DS	600	Natural	240	82.2	50	10	
2.3									11	
			DS	2500	Natural	2200	24.4	97	14	
									15	
									20	
									16	
									26	
									25	
									61	
									30	

FIELD NOTES

- The borings were drilled on January 24 and 25, 1978 with truck-mounted, 5-inch-diameter, rotary-wash equipment.
- The following symbol, □, denotes an undisturbed sample taken in a 2½-inch-diameter, split-tube barrel, driven into the soil by 300-pound slip jars falling 18± inches inside the boring.
- The following symbol, N □, denotes a standard penetration test. The number recorded for N is the penetration resistance: blows required to drive a standard 2-inch-diameter sampler for 12 inches (from 6 to 18 inches below the bottom of the boring) with a 140-pound hammer free-falling 30 inches.
- The following symbol, □, denotes an attempted undisturbed sample with no recovery or with the sample partially disturbed.
- Boring elevations were estimated by interpolation between available spot elevations.

LABORATORY NOTES AND ABBREVIATIONS

The tabulated shear strengths are yield point values.

DS = Strain controlled direct shear test at natural moisture content.

BORING LOGS



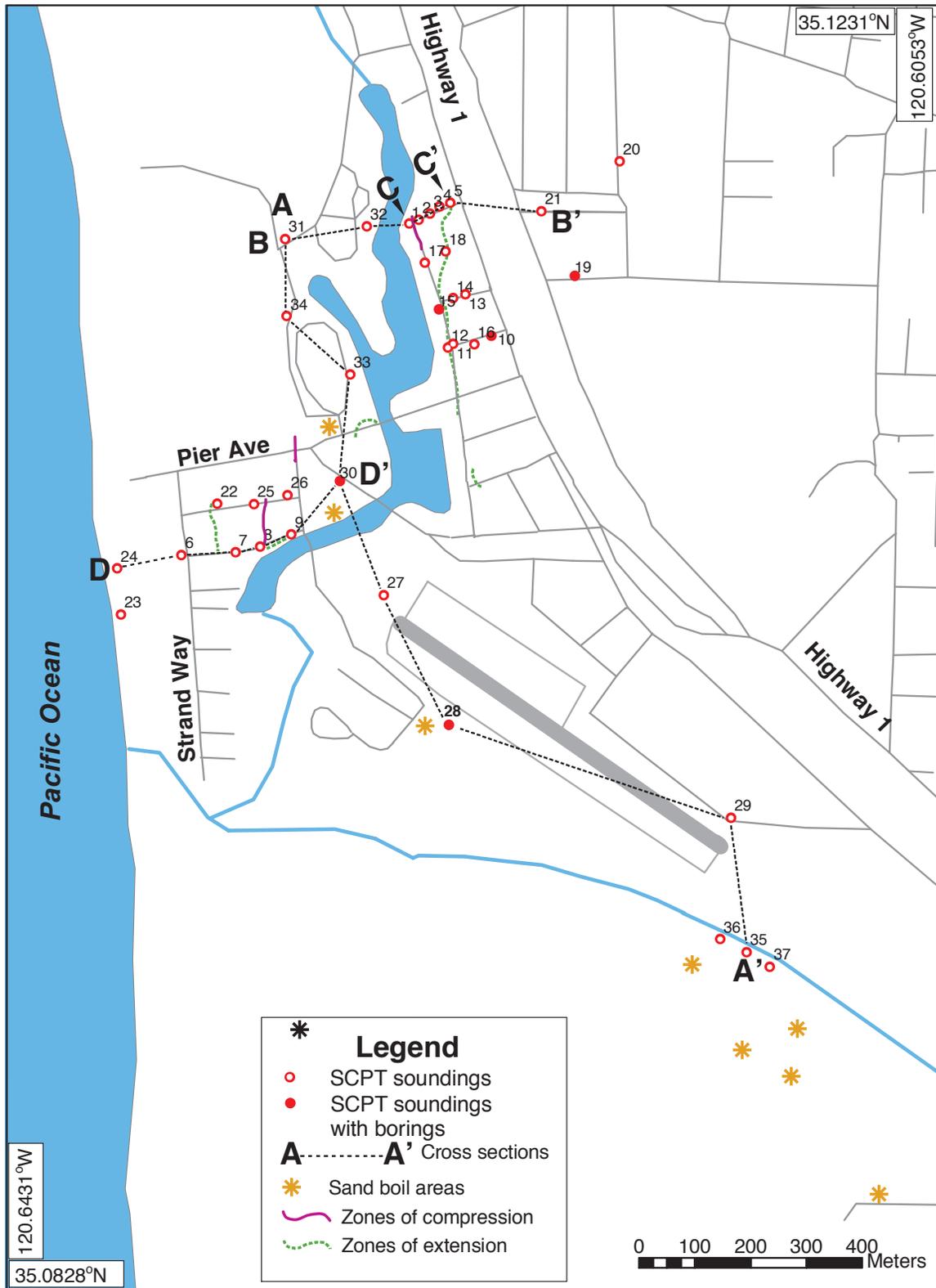


Figure 5. Locations of cross sections, Oceano.

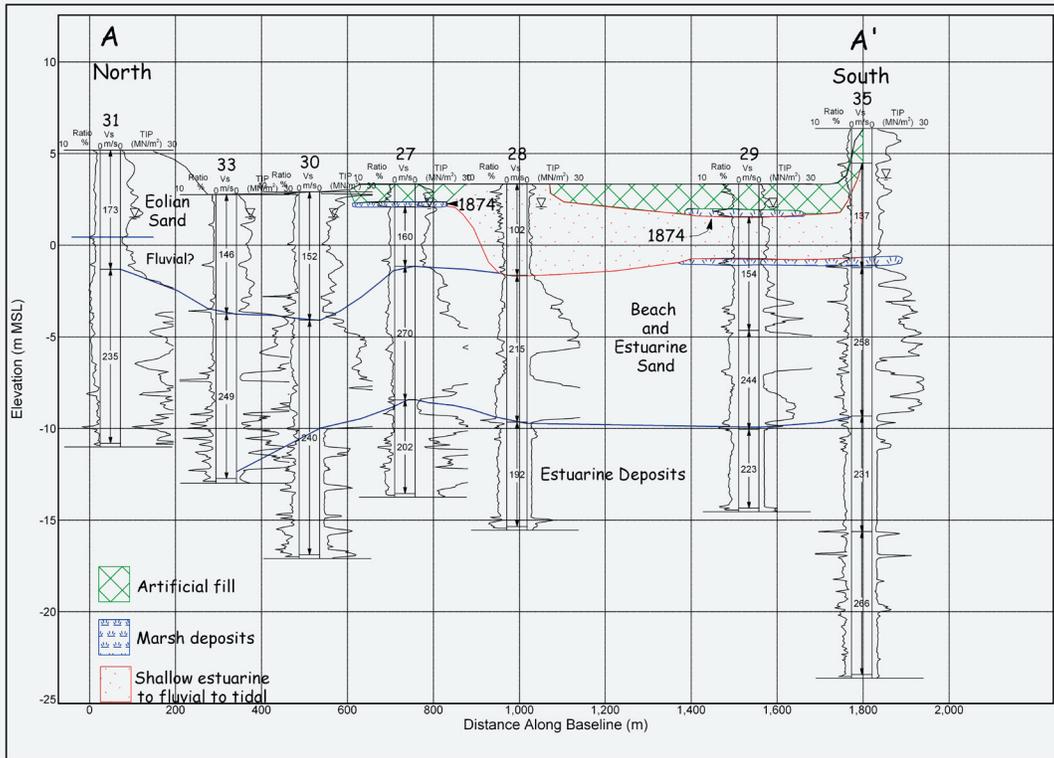


Figure 6a.

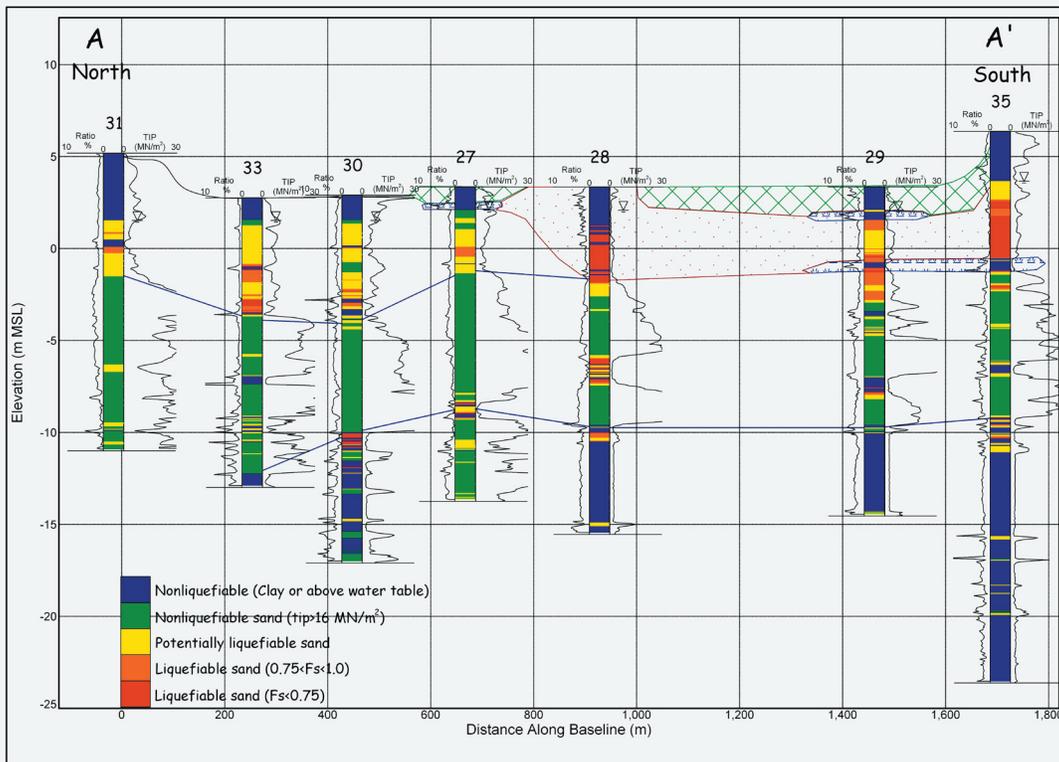


Figure 6b.

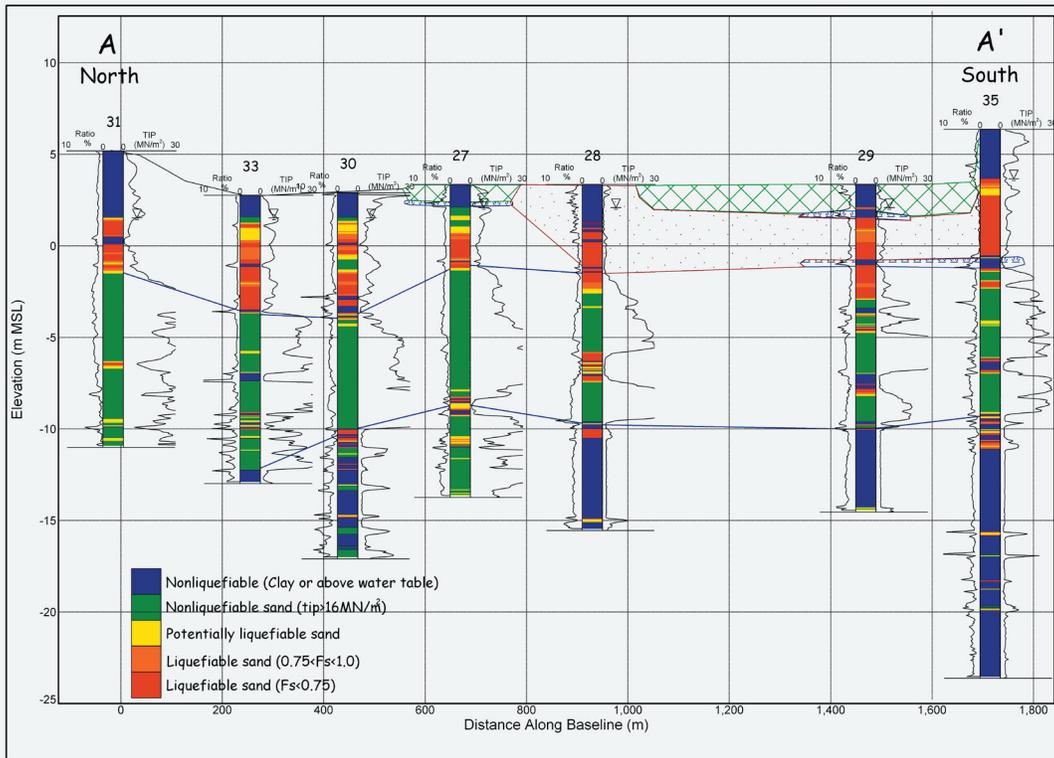


Figure 6c.

Figure 6. North-south cross section (A-A') at Oceano of generalized shallow subsurface conditions based on SCPT soundings. See Figure 5 for location of cross section. Cross section includes profiles of CPT tip and friction ratio, geologic units, and water table with (a) shear-wave velocity (V_s), (b) liquefaction factors of safety for a M6.5 and PGA=0.25 g, and (c) liquefaction factors of safety for a M6.8 and PGA=0.4 g.

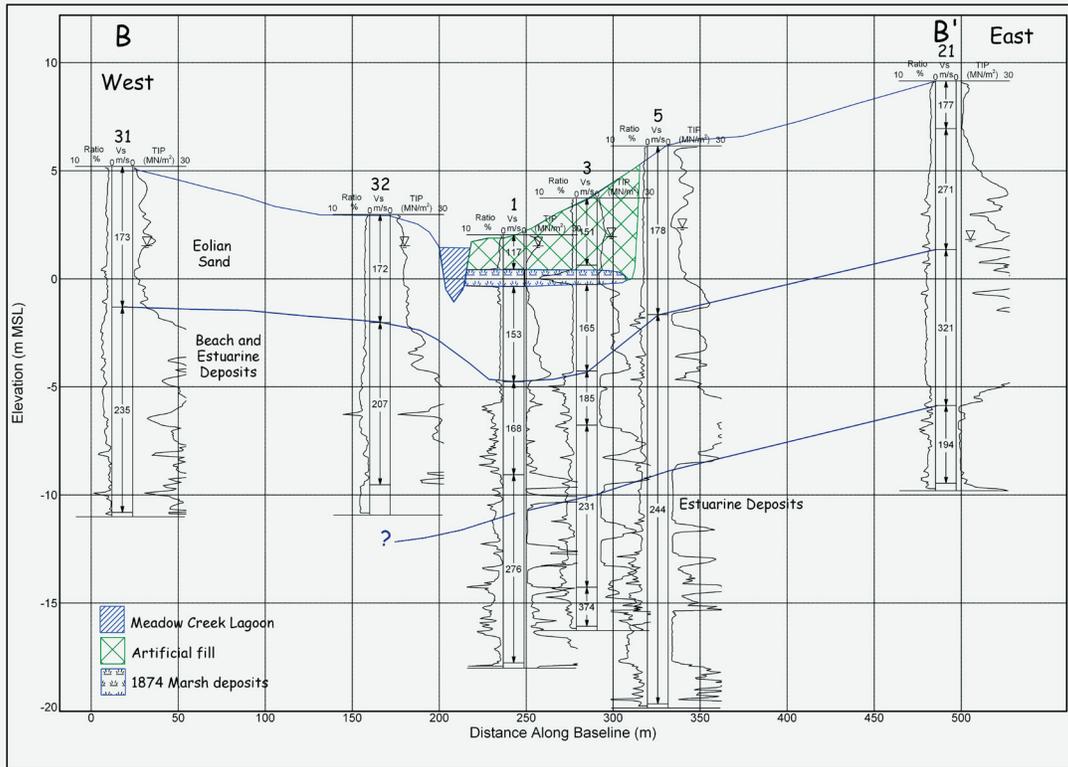


Figure 7a.

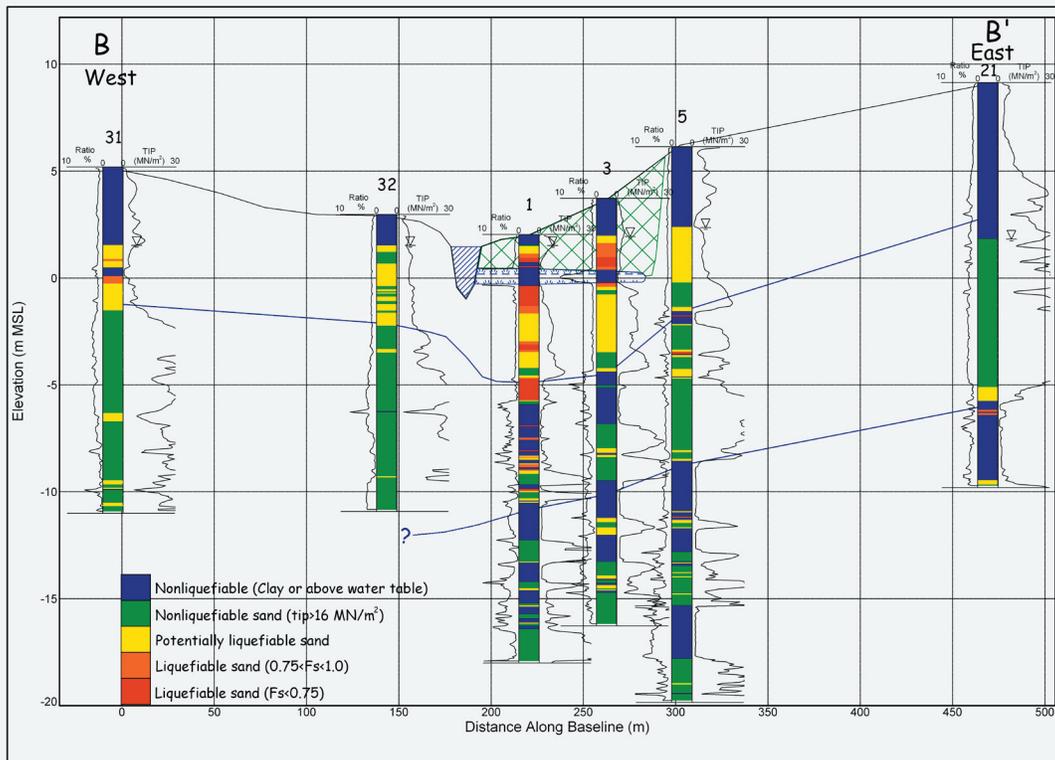


Figure 7b.

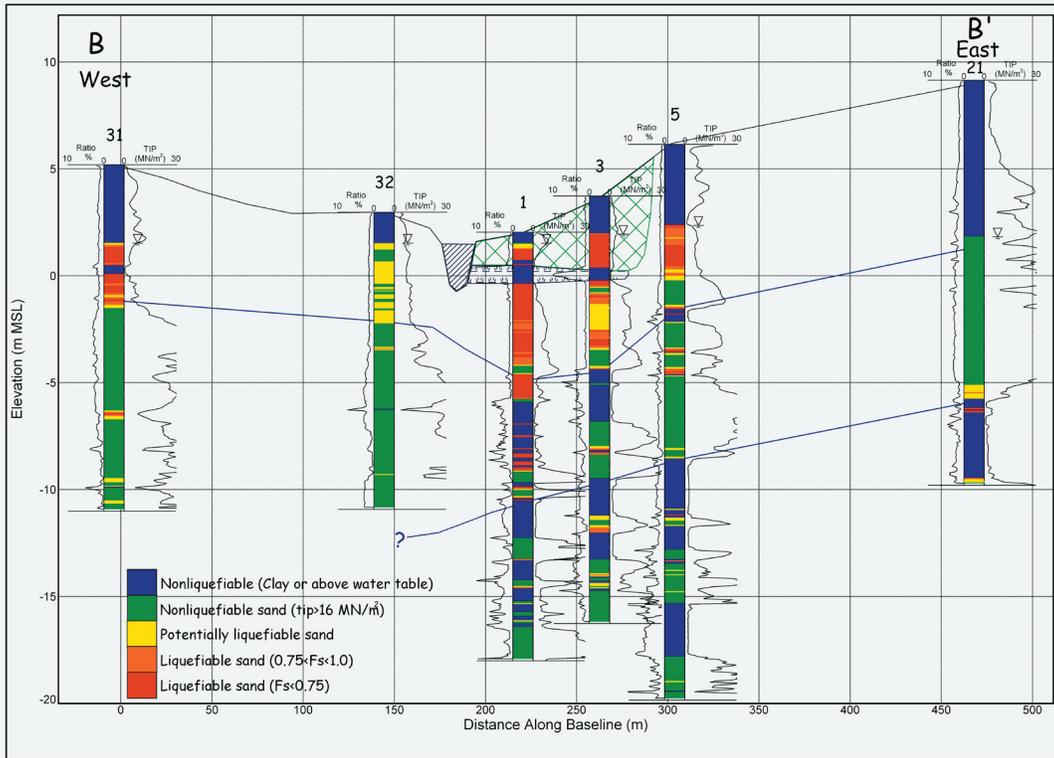


Figure 7c.

Figure 7. East-west cross section (B-B') at Oceano of generalized shallow subsurface conditions based on SCPT soundings. See Figure 5 for location of cross section. Cross section includes profiles of CPT tip and friction ratio, geologic units, and water table with (a) shear-wave velocity (V_s), (b) liquefaction factors of safety for a M6.5 and PGA=0.25 g, and (c) liquefaction factors of safety for a M6.8 and PGA=0.4 g.

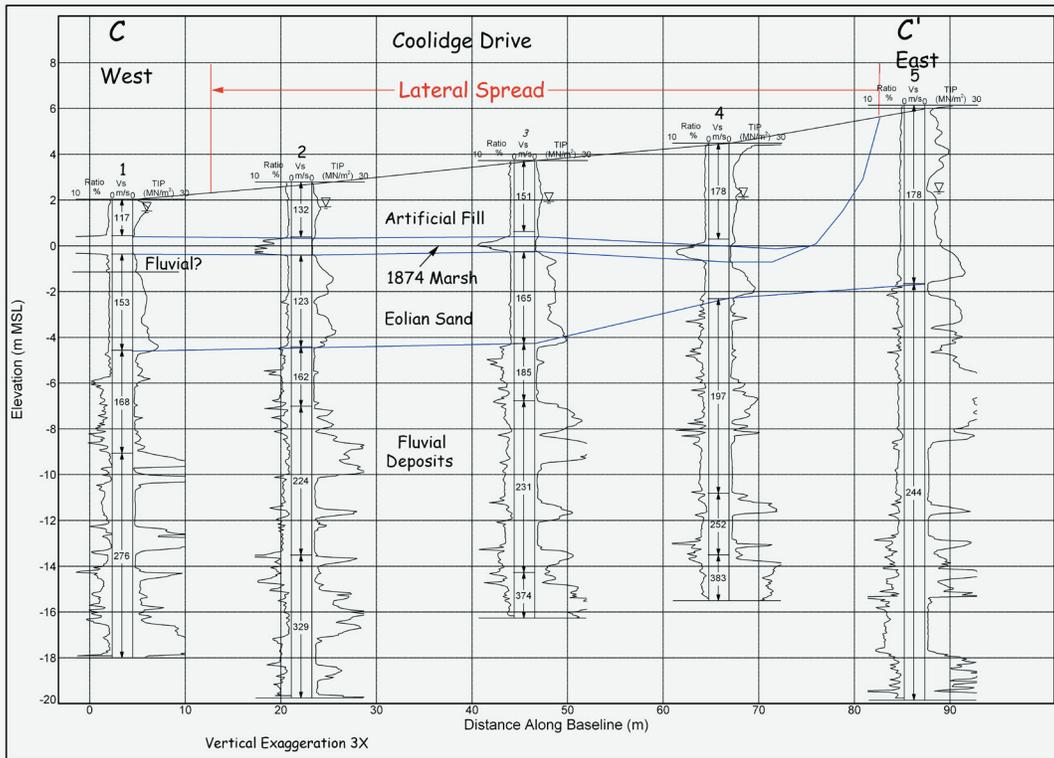


Figure 17a.

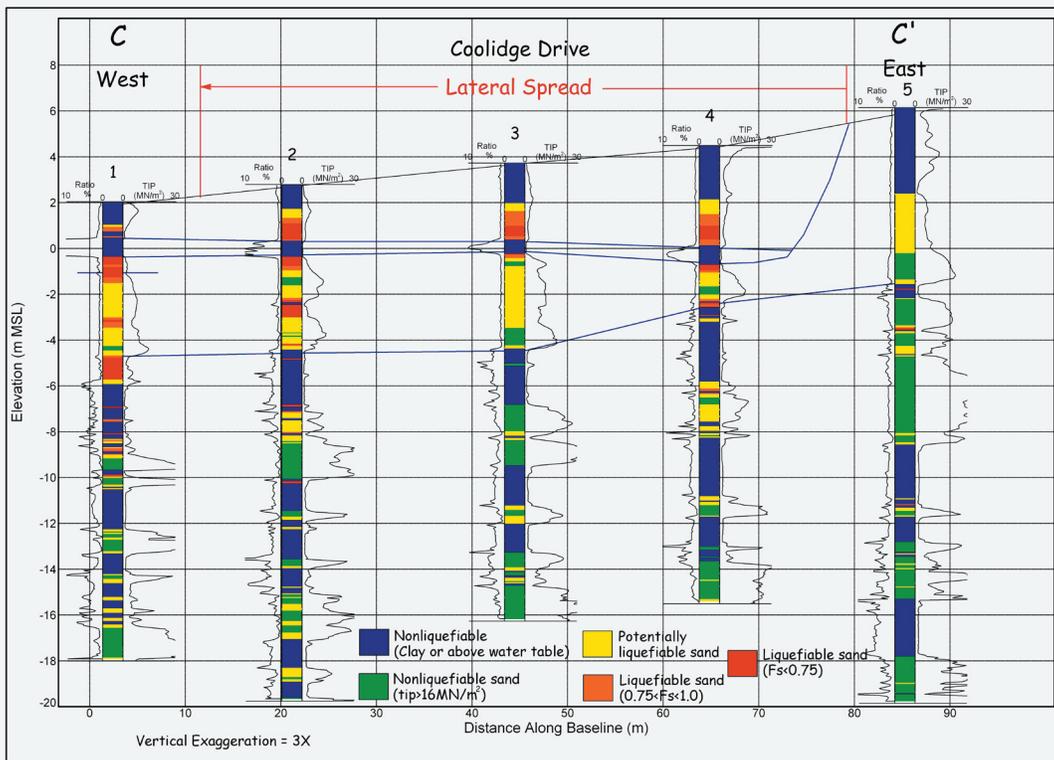


Figure 17b.

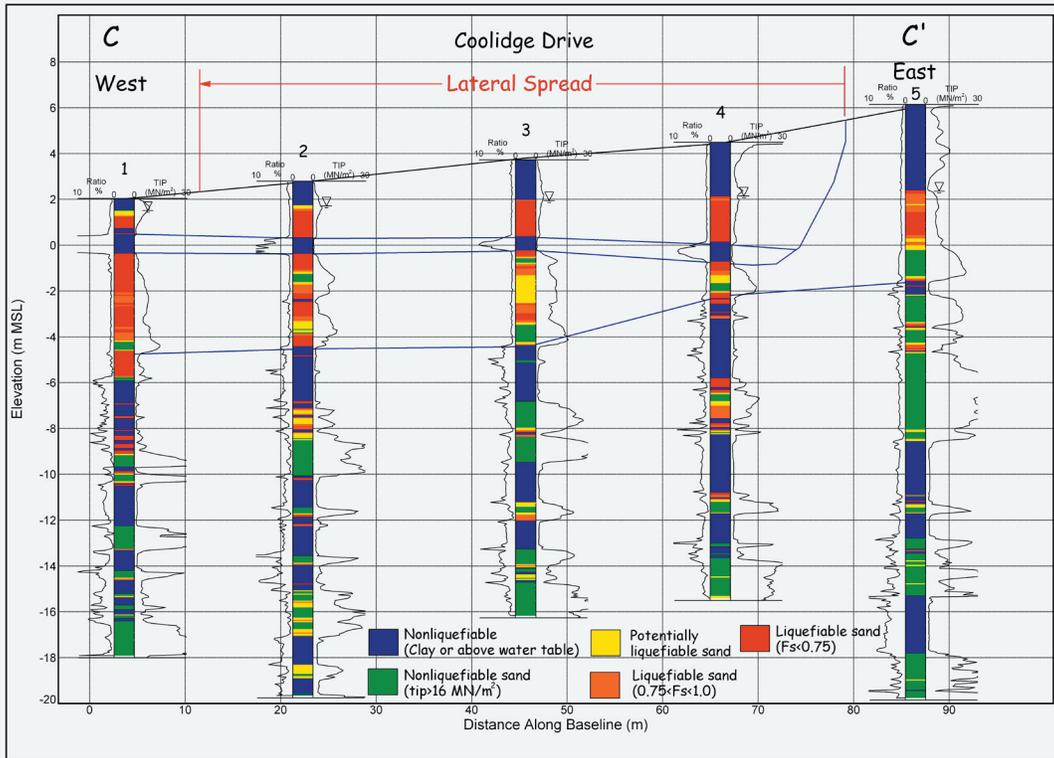


Figure 17c.

Figure 17. Cross section C-C' of Norswing Drive lateral spread along Coolidge Drive. See Figure 5 for location. Cross section includes profiles of CPT tip and friction ratio, geologic units, and water table with (a) shear-wave velocity (V_s), (b) liquefaction factors of safety for a M6.5 and PGA=0.25 g, and (c) liquefaction factors of safety for a M6.8 and PGA=0.4 g.

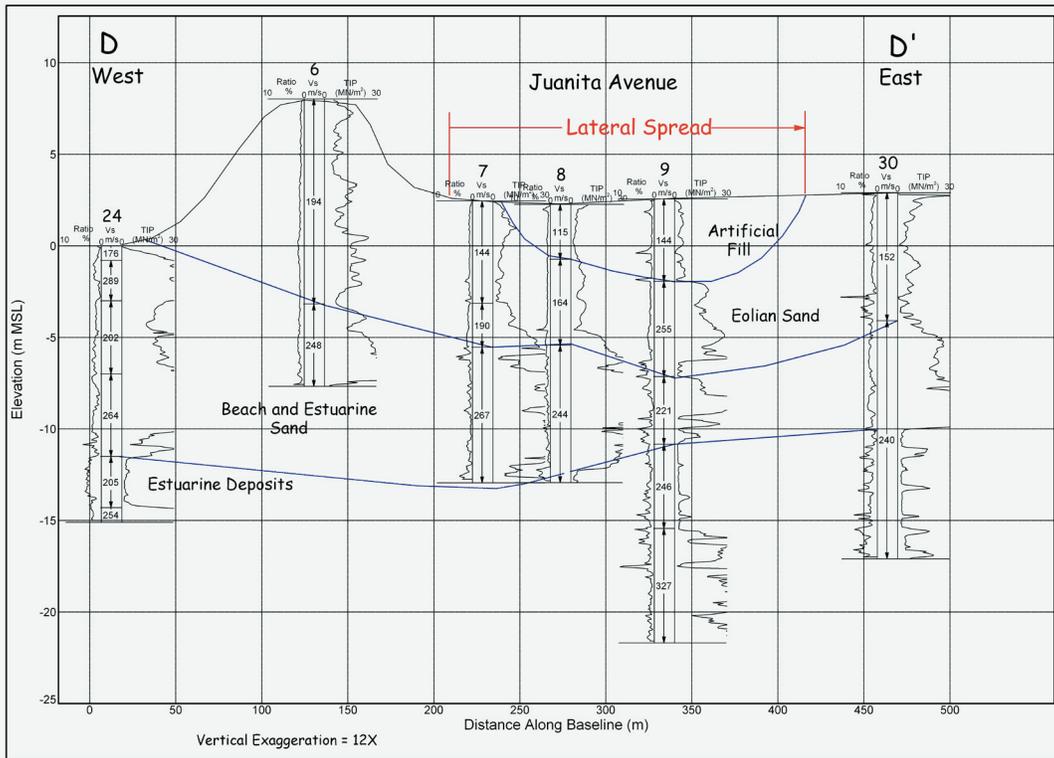


Figure 18a.

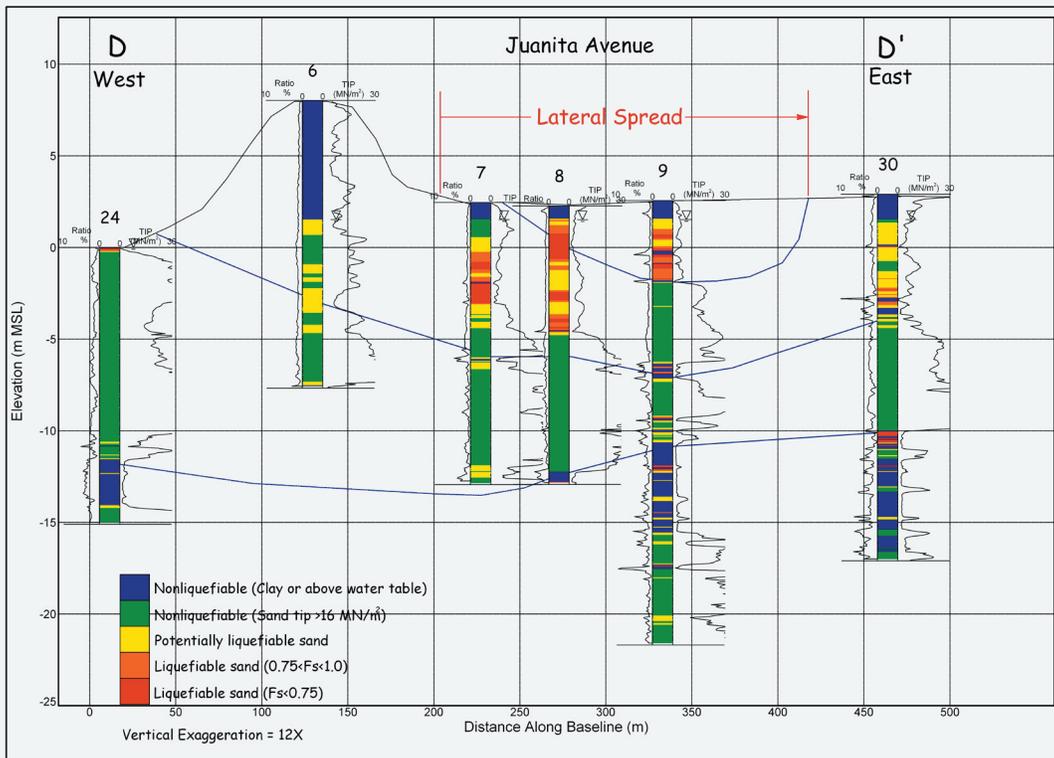


Figure 18b.

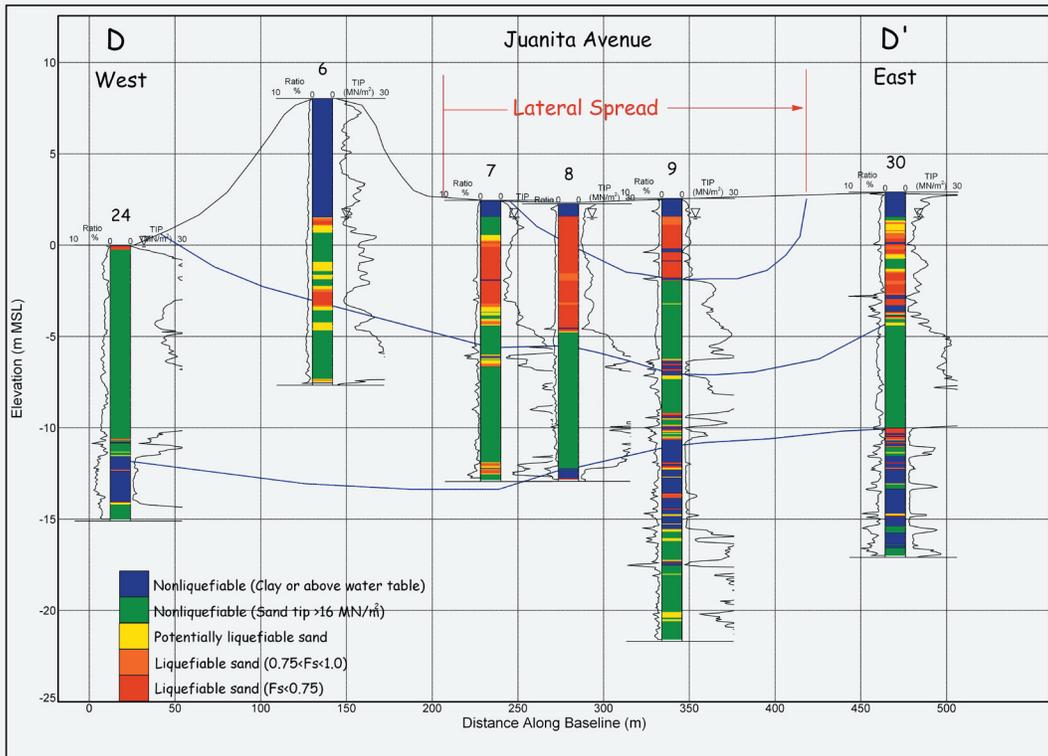
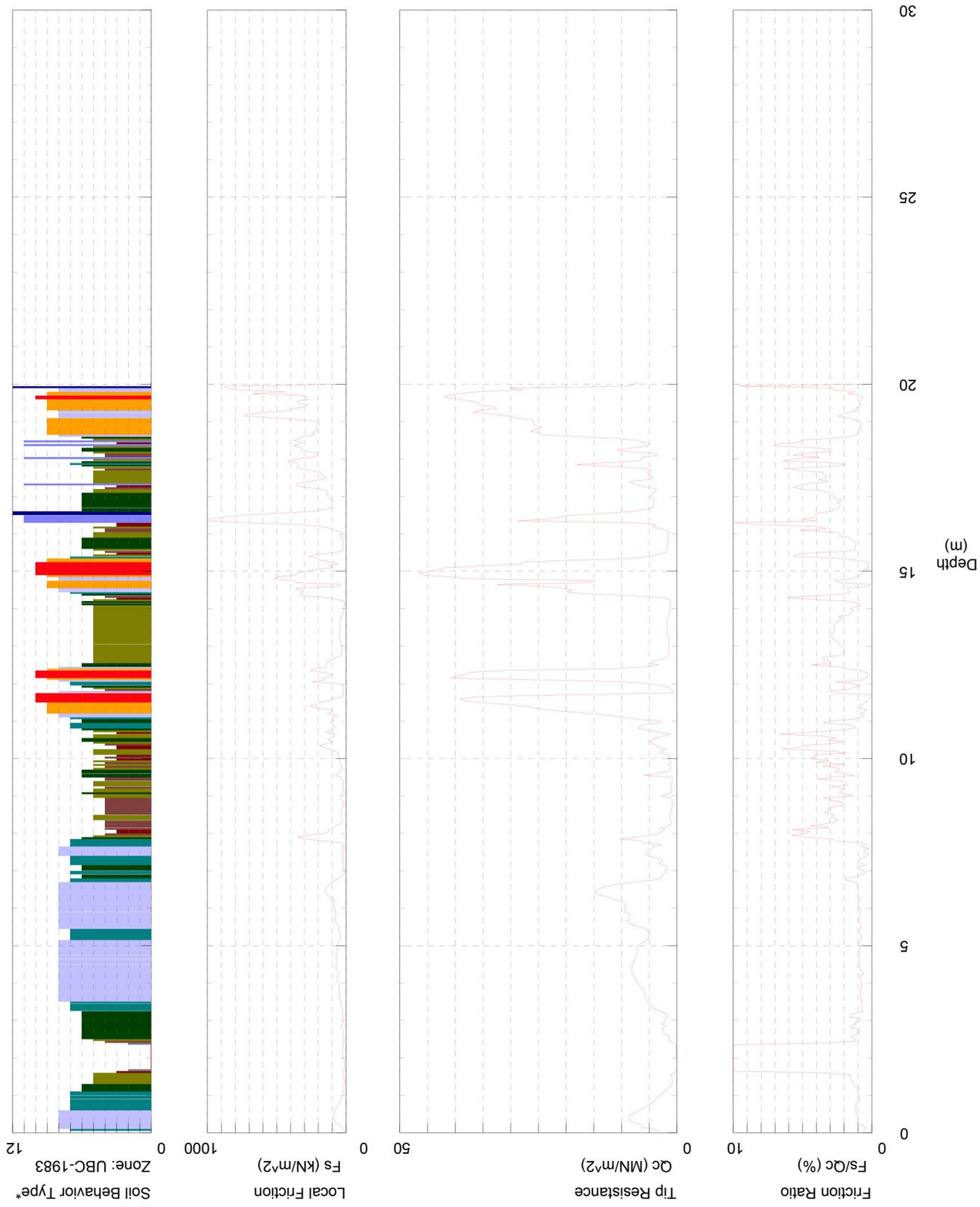


Figure 18c.

Figure 18. Cross section D-D' of Juanita Avenue lateral spread along Juanita Avenue. See Figure 5 for location. Cross section includes profiles of CPT tip and friction ratio, geologic units, and water table with (a) shear-wave velocity (V_s), (b) liquefaction factors of safety for a M6.5 and PGA=0.25 g, and (c) liquefaction factors of safety for a M6.8 and PGA=0.4 g.

US Geological Survey

Operator: Tom Noye
 Sounding: SOCC001
 Cone Used: 766tc
 CPT Date/Time: 02-23-04 13:01
 Location: Coolidge Norwin
 Job Number: Oceano



Maximum Depth = 20.05 meters

Depth Increment = 0.050 meters

- 1 sensitive fine grained
- 2 organic material
- 3 clay

- 4 silty clay to clay
- 5 clayey silt to silty clay
- 6 sandy silt to clayey silt

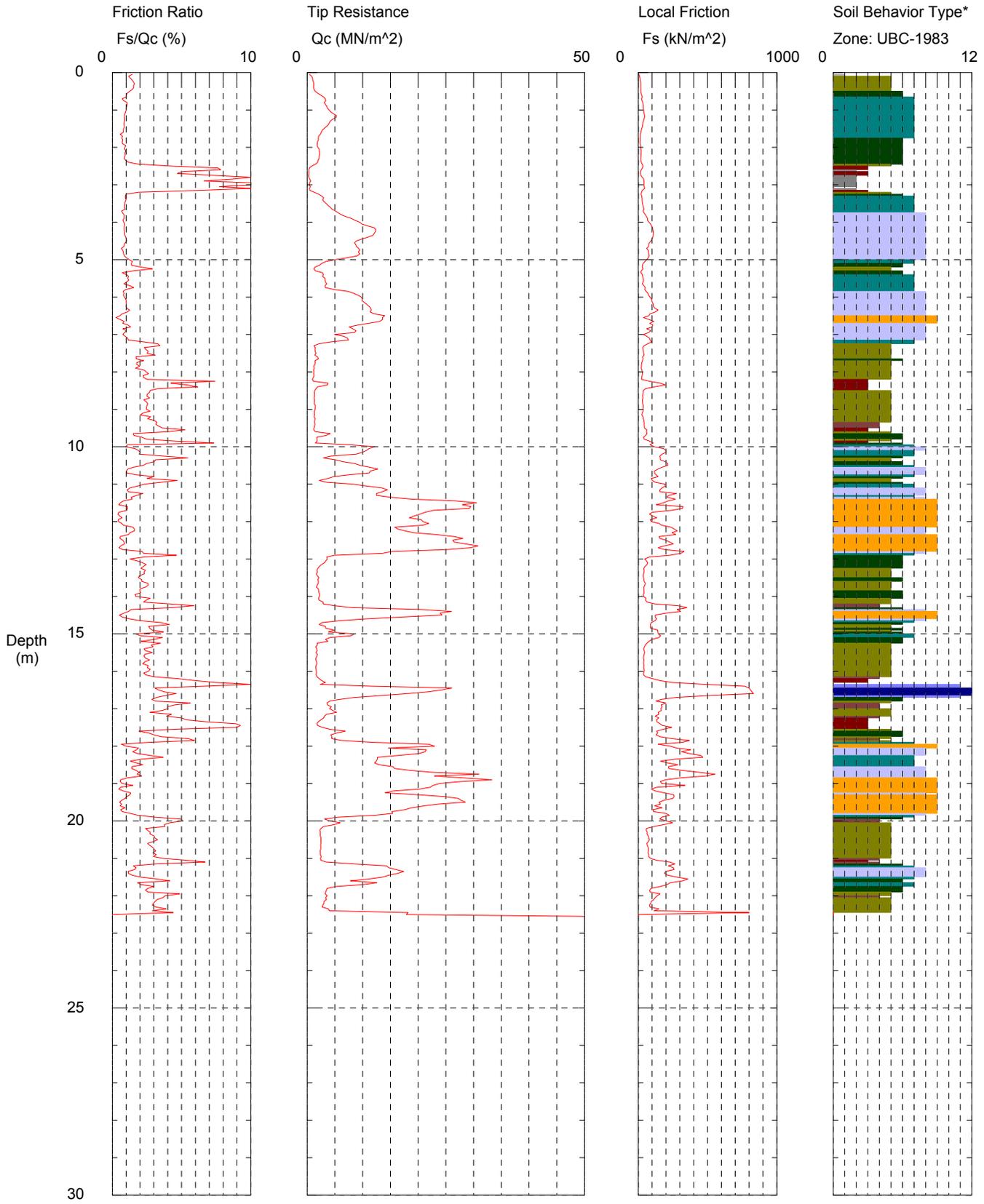
- 7 silty sand to sandy silt
- 8 sand to silty sand
- 9 sand

- 10 gravelly sand to sand
- 11 very stiff fine grained (*)
- 12 sand to clayey sand (*)

US Geological Survey

Operator: Tom Noce
 Sounding: SOC002
 Cone Used: 766tc

CPT Date/Time: 02-23-04 14:57
 Location: 616 Coolidge W
 Job Number: Oceano



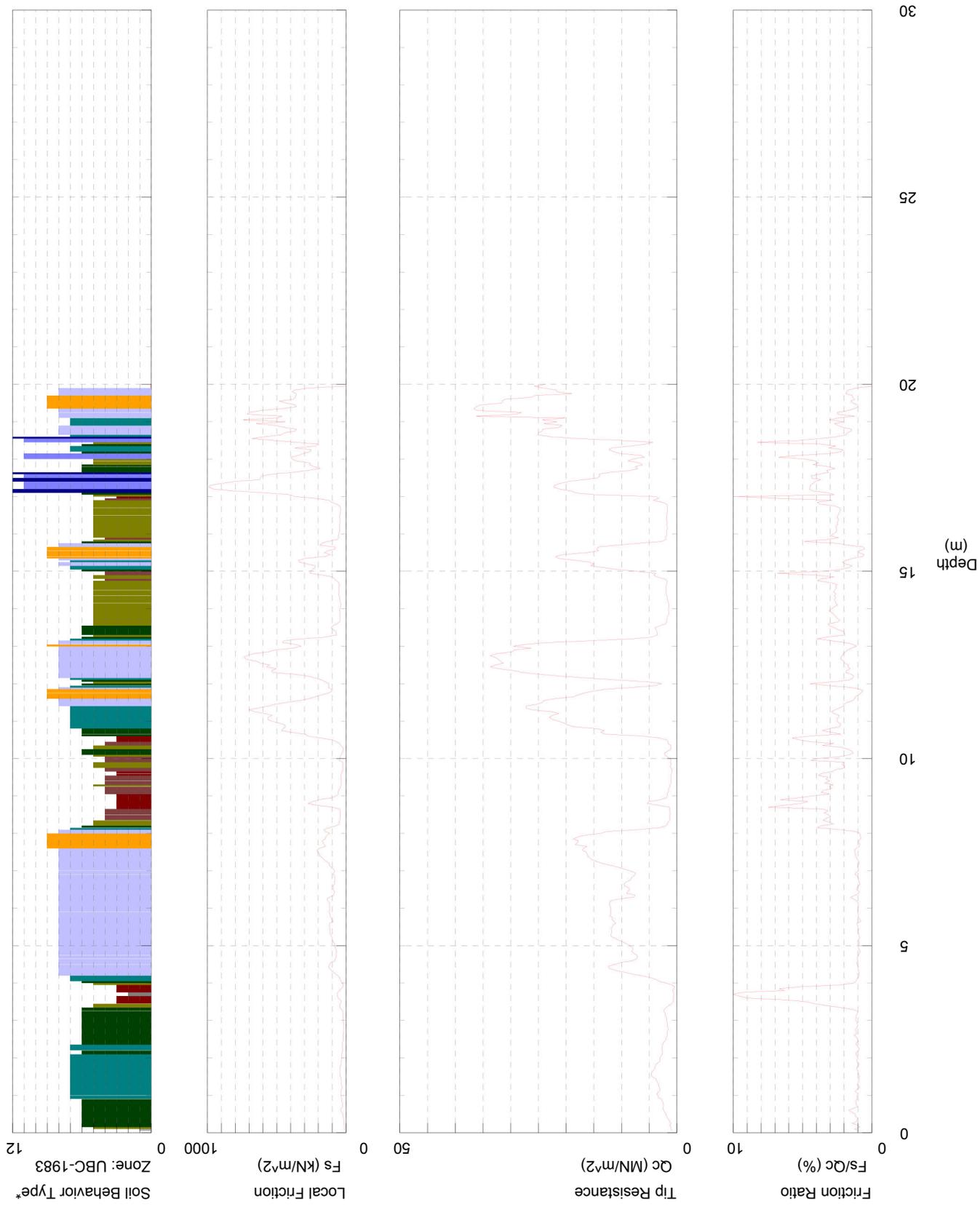
Maximum Depth = 22.55 meters

Depth Increment = 0.050 meters

- | | | | |
|--------------------------|-----------------------------|----------------------------|--------------------------------|
| 1 sensitive fine grained | 4 silty clay to clay | 7 silty sand to sandy silt | 10 gravelly sand to sand |
| 2 organic material | 5 clayey silt to silty clay | 8 sand to silty sand | 11 very stiff fine grained (*) |
| 3 clay | 6 sandy silt to clayey silt | 9 sand | 12 sand to clayey sand (*) |

US Geological Survey

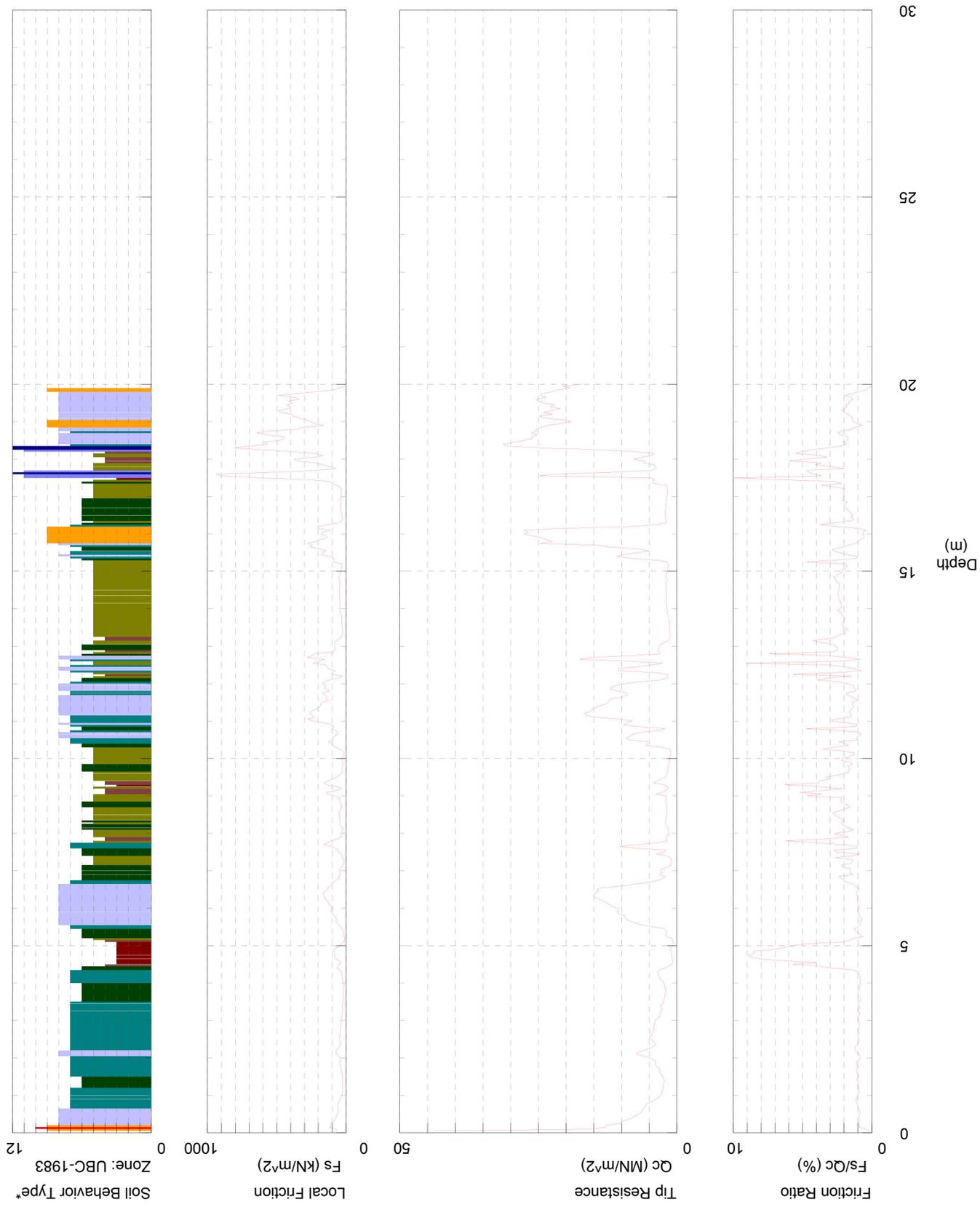
Operator: Tom Noye
 Sounding: SOCC003
 Cone Used: 766tc
 CPT Date/Time: 02-23-04 16:20
 Location: 616 Coolidge E
 Job Number: Oceano



Maximum Depth = 20.00 meters
 Depth Increment = 0.050 meters

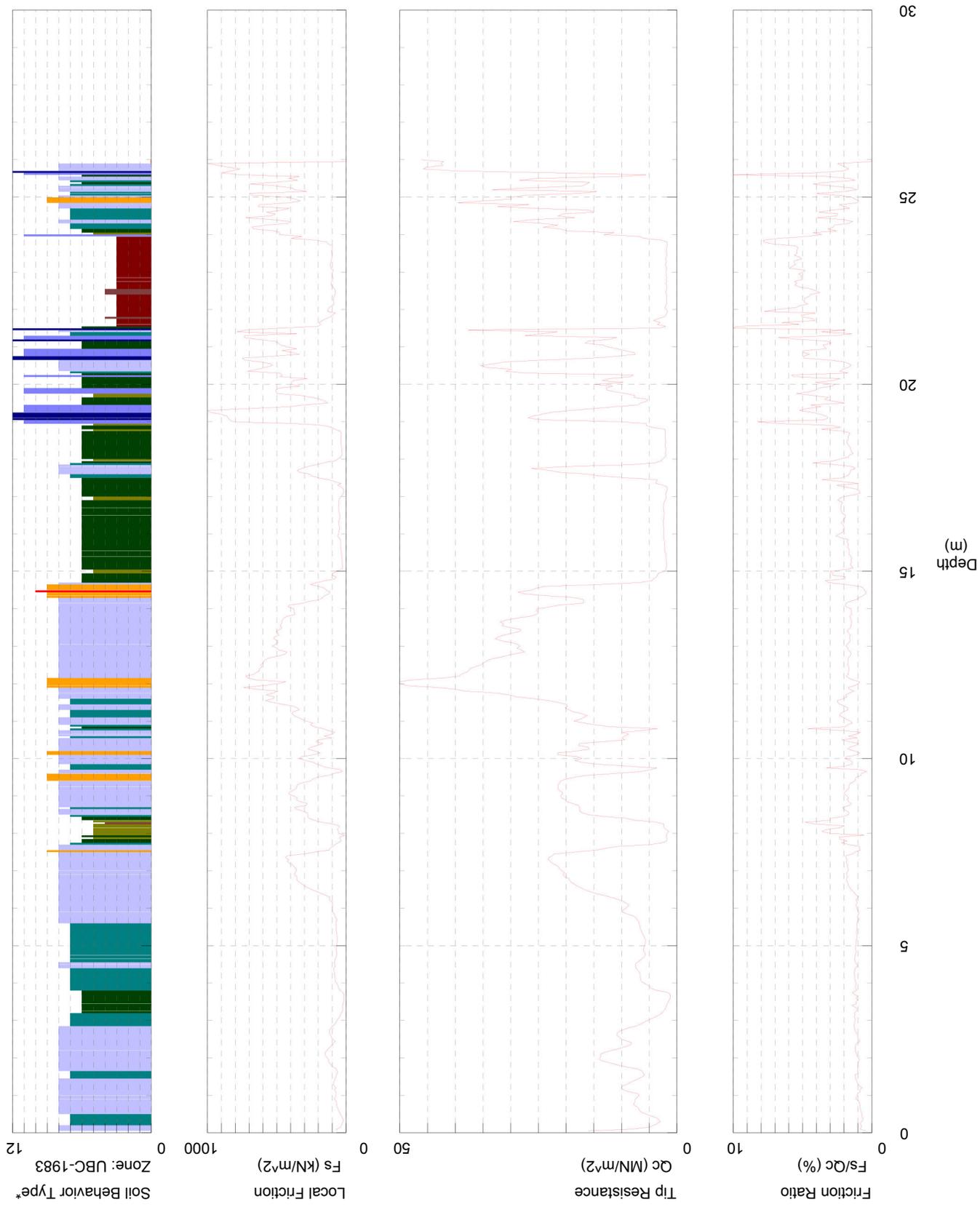
US Geological Survey

Operator: Tom Noyce
 Sounding: SOCC004
 Cone Used: 766tc
 CPT Date/Time: 02-24-04 07:03
 Location: Coolidge & PCH W
 Job Number: Oceano



US Geological Survey

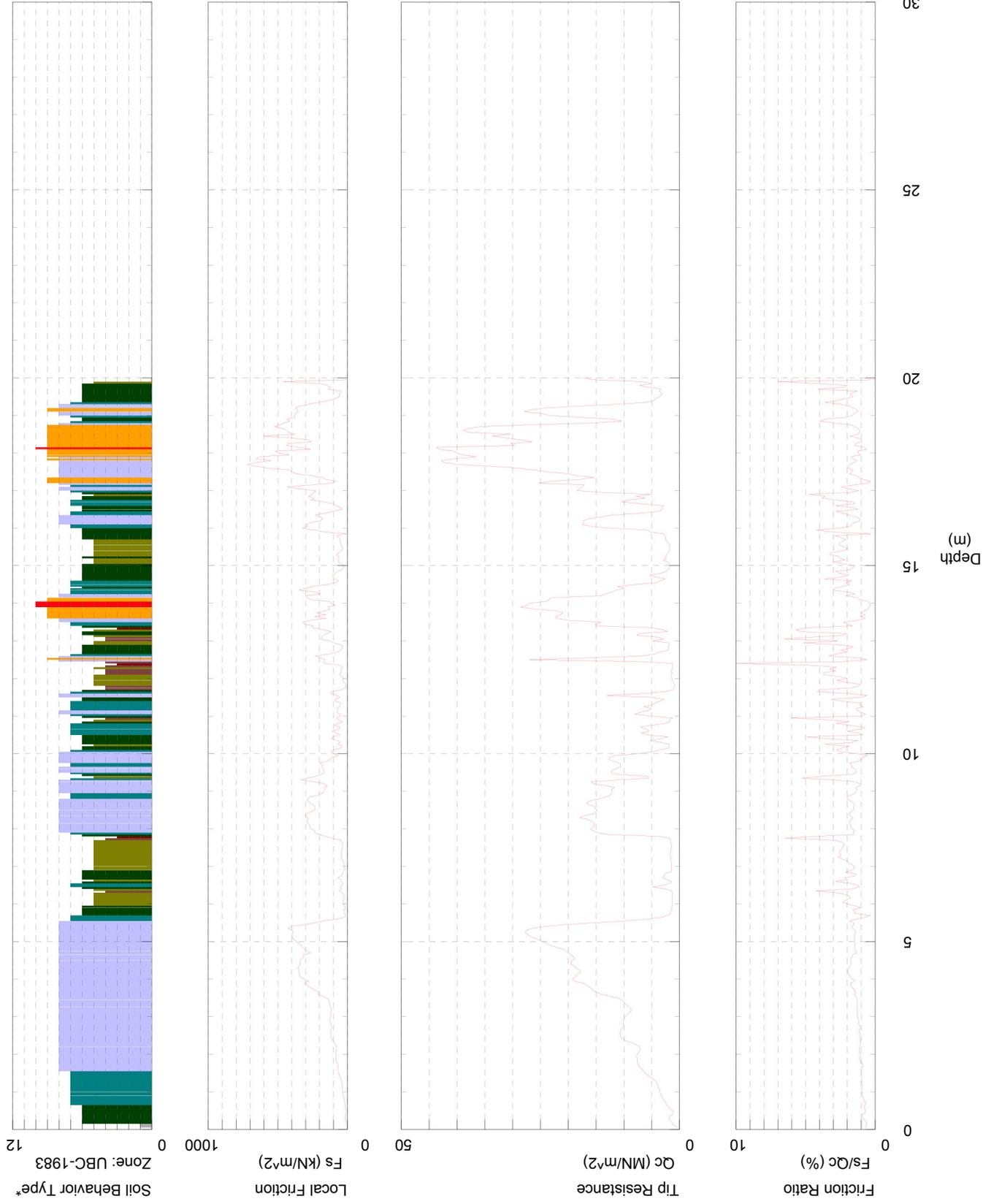
Operator: Tom Noye
 Sounding: SOCC005
 Cone Used: 766tc
 CPT Date/Time: 02-24-04 09:15
 Location: Coolidge & PCH
 Job Number: Oceano



- | | | | | | |
|---|------------------------|---|---------------------------|---|-----------------------------|
| 1 | sensitive fine grained | 1 | silty clay to clay | 1 | gravelly sand to sand |
| 2 | organic material | 2 | clayey silt to silty clay | 2 | very stiff fine grained (*) |
| 3 | clay | 3 | sandy silt to clayey silt | 3 | sand to clayey sand (*) |
| | | 4 | silty sand to sandy silt | 4 | sand |
| | | 5 | sand to silty sand | 5 | |
| | | 6 | | 6 | |
| | | 7 | | 7 | |
| | | 8 | | 8 | |
| | | 9 | | 9 | |

US Geological Survey

Operator: Tom Noye
 Sounding: SOC010
 Cone Used: 766tc
 CPT Date/Time: 02-25-04 09:30
 Location: Monroe & PCH1
 Job Number: Oceano



1 sensitive fine grained
 2 organic material
 3 clay

4 silty clay to clay
 5 clayey silt to silty clay
 6 sandy silt to clayey silt

7 silty sand to sandy silt
 8 sand to silty sand
 9 sand

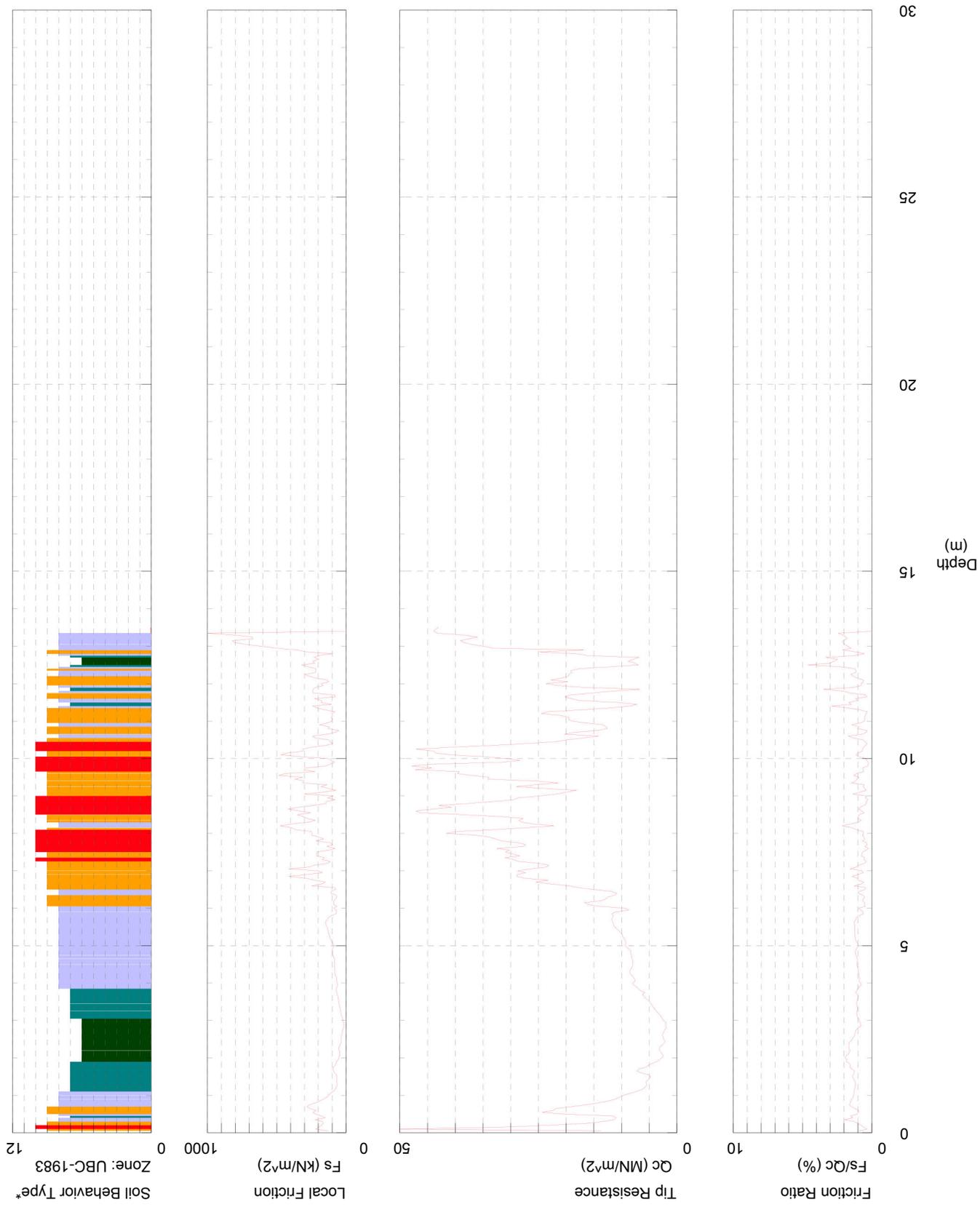
10 gravelly sand to sand
 11 very stiff fine grained (*)
 12 sand to clayey sand (*)

Depth Increment = 0.050 meters

Maximum Depth = 20.00 meters

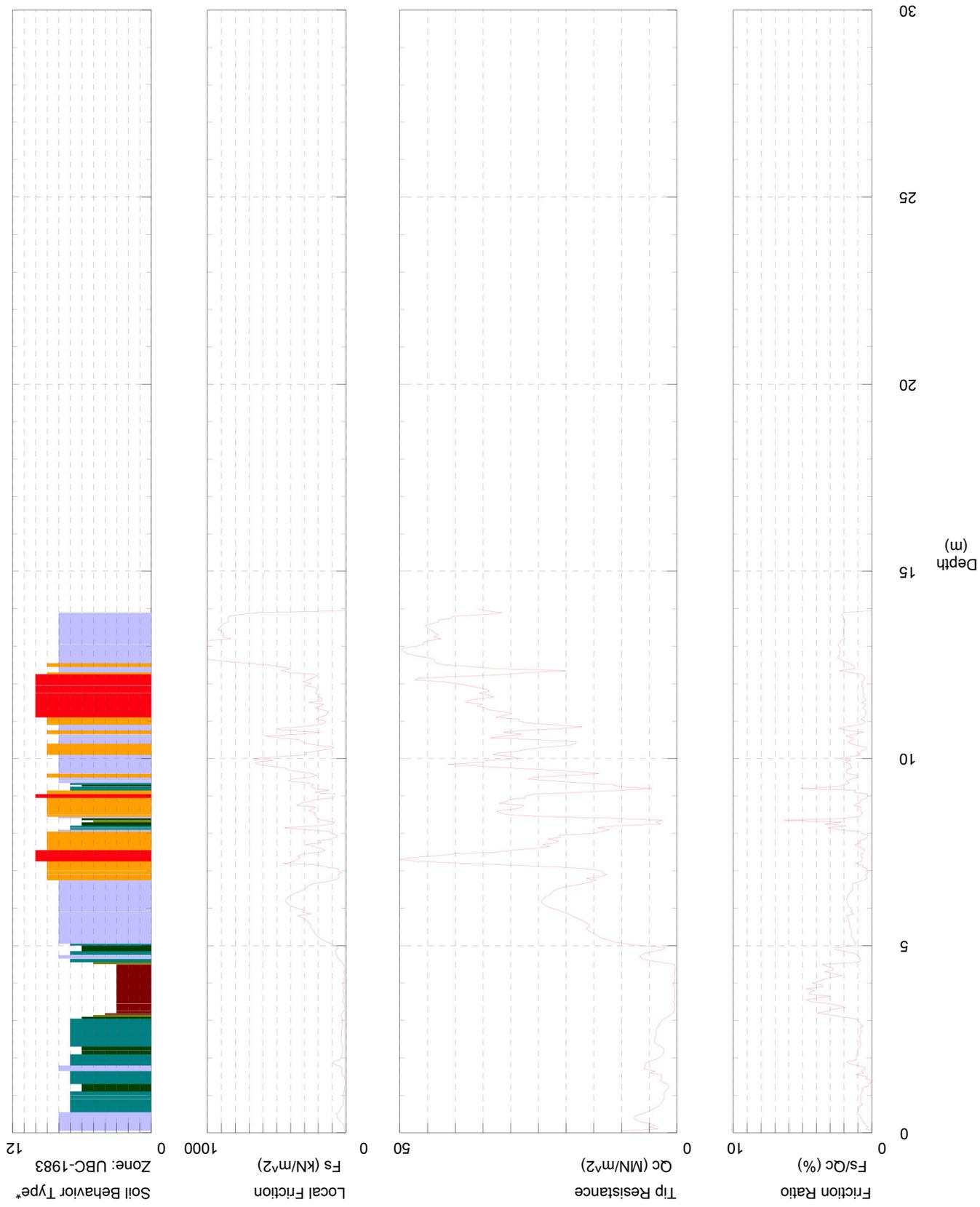
US Geological Survey

Operator: Tom Noye
 Sounding: SOC011
 Cone Used: 766tc
 CPT Date/Time: 02-25-04 12:27
 Location: Monro&NorswingE
 Job Number: Oceano



US Geological Survey

Operator: Tom Noce
 Sounding: SOC012
 Cone Used: 766tc
 CPT Date/Time: 02-25-04 14:09
 Location: Monre&NorswingW
 Job Number: Oceano



- 1 sensitive fine grained
- 2 organic material
- 3 clay

- 4 silty clay to clay
- 5 clayey silt to silty clay
- 6 sandy silt to clayey silt

- 7 silty sand to sandy silt
- 8 sand to silty sand
- 9 sand

- 10 gravelly sand to sand
- 11 very stiff fine grained (*)
- 12 sand to clayey sand (*)

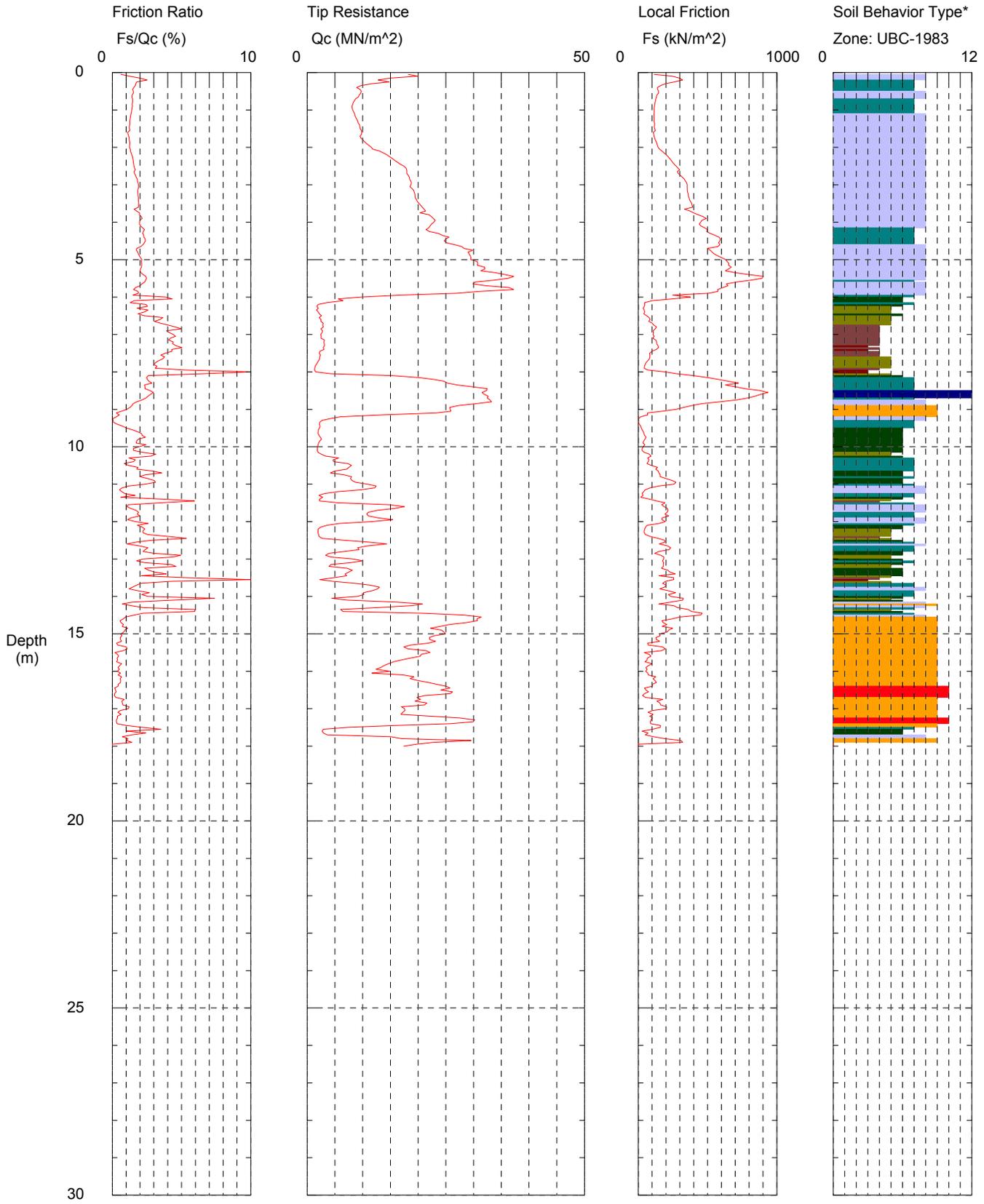
Maximum Depth = 14.00 meters
 Depth Increment = 0.050 meters

Soil Behavior Type*
 Zone: UBC-1983
 12
 0

US Geological Survey

Operator: Tom Noce
 Sounding: SOC013
 Cone Used: 766tc

CPT Date/Time: 02-26-04 07:10
 Location: Harding EofAlley
 Job Number: Oceano



Maximum Depth = 18.00 meters

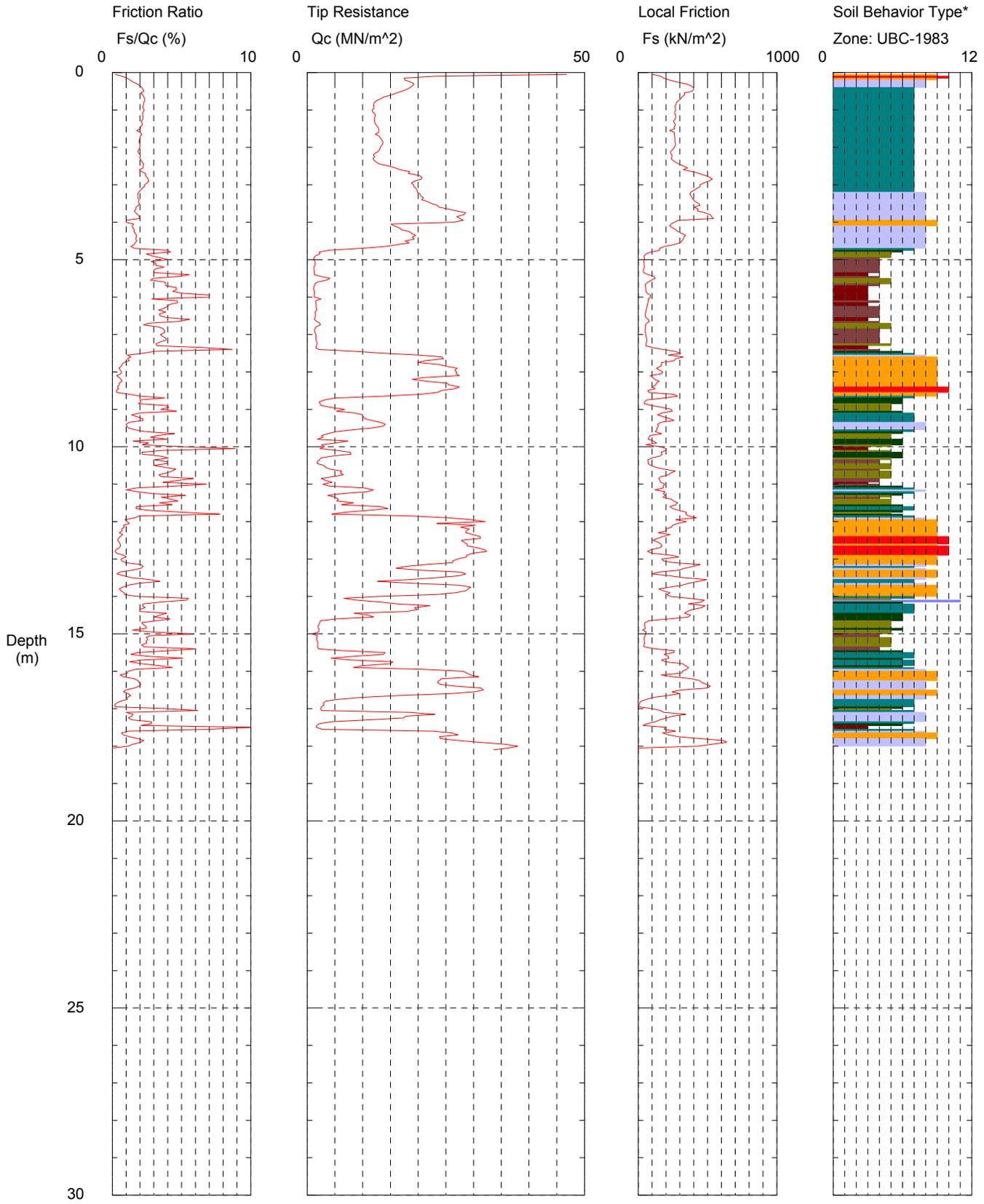
Depth Increment = 0.050 meters

- | | | | |
|--------------------------|-----------------------------|----------------------------|--------------------------------|
| 1 sensitive fine grained | 4 silty clay to clay | 7 silty sand to sandy silt | 10 gravelly sand to sand |
| 2 organic material | 5 clayey silt to silty clay | 8 sand to silty sand | 11 very stiff fine grained (*) |
| 3 clay | 6 sandy silt to clayey silt | 9 sand | 12 sand to clayey sand (*) |

US Geological Survey

Operator: Tom Noce
 Sounding: SOC014
 Cone Used: 766tc

CPT Date/Time: 02-26-04 09:30
 Location: Harding WofAlley
 Job Number: Oceano



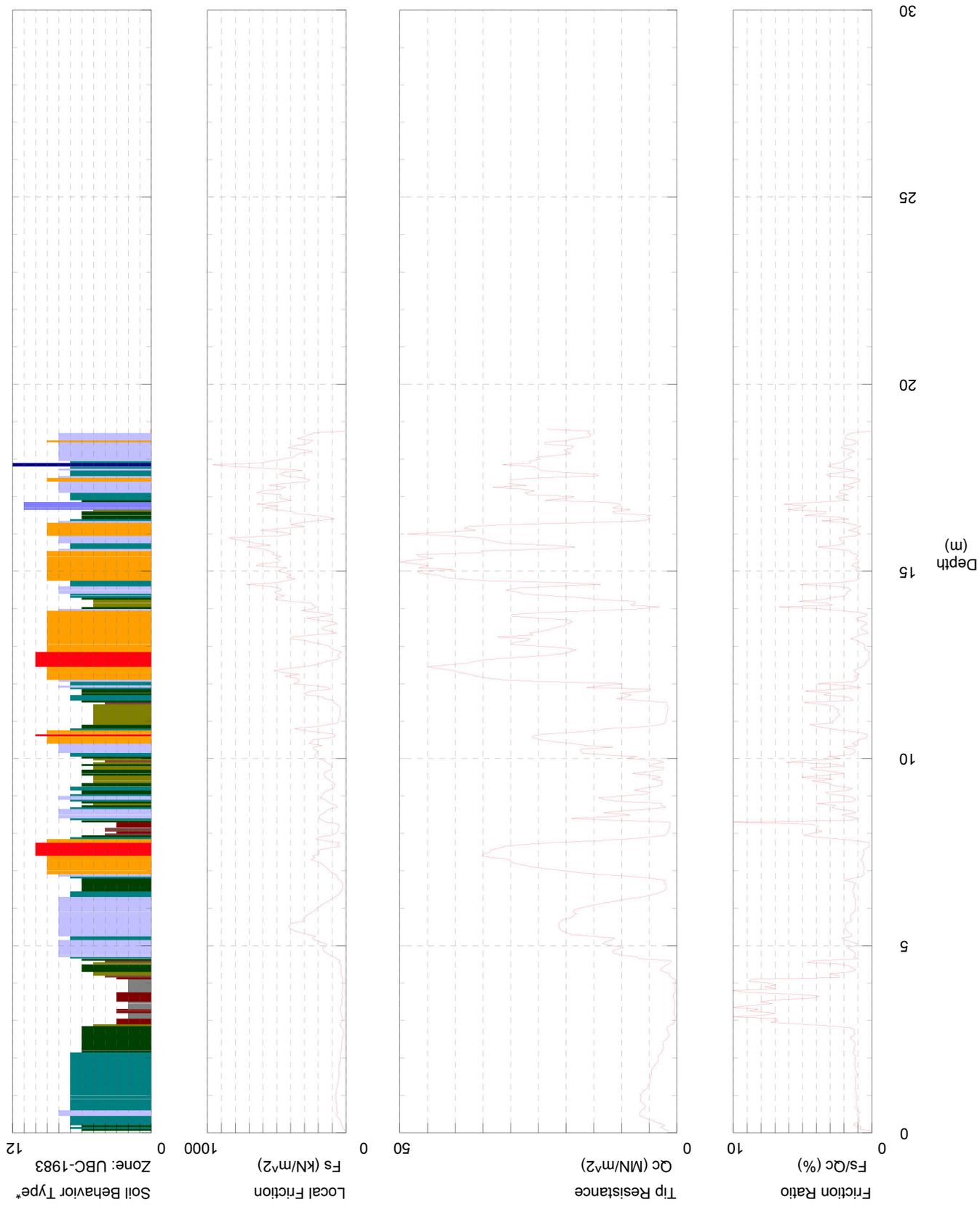
Maximum Depth = 18.10 meters

Depth Increment = 0.050 meters

- | | | | |
|--------------------------|-----------------------------|----------------------------|--------------------------------|
| 1 sensitive fine grained | 4 silty clay to clay | 7 silty sand to sandy silt | 10 gravelly sand to sand |
| 2 organic material | 5 clayey silt to silty clay | 8 sand to silty sand | 11 very stiff fine grained (*) |
| 3 clay | 6 sandy silt to clayey silt | 9 sand | 12 sand to clayey sand (*) |

US Geological Survey

Operator: Tom Noce
 Sounding: SOCC015
 Cone Used: 766tc
 CPT Date/Time: 02-26-04 11:13
 Location: Norswing&Harding
 Job Number: Oceano



- 1 sensitive fine grained
- 2 organic material
- 3 clay

- 4 silty clay to clay
- 5 clayey silt to silty clay
- 6 sandy silt to clayey silt

- 7 silty sand to sandy silt
- 8 sand to silty sand
- 9 sand

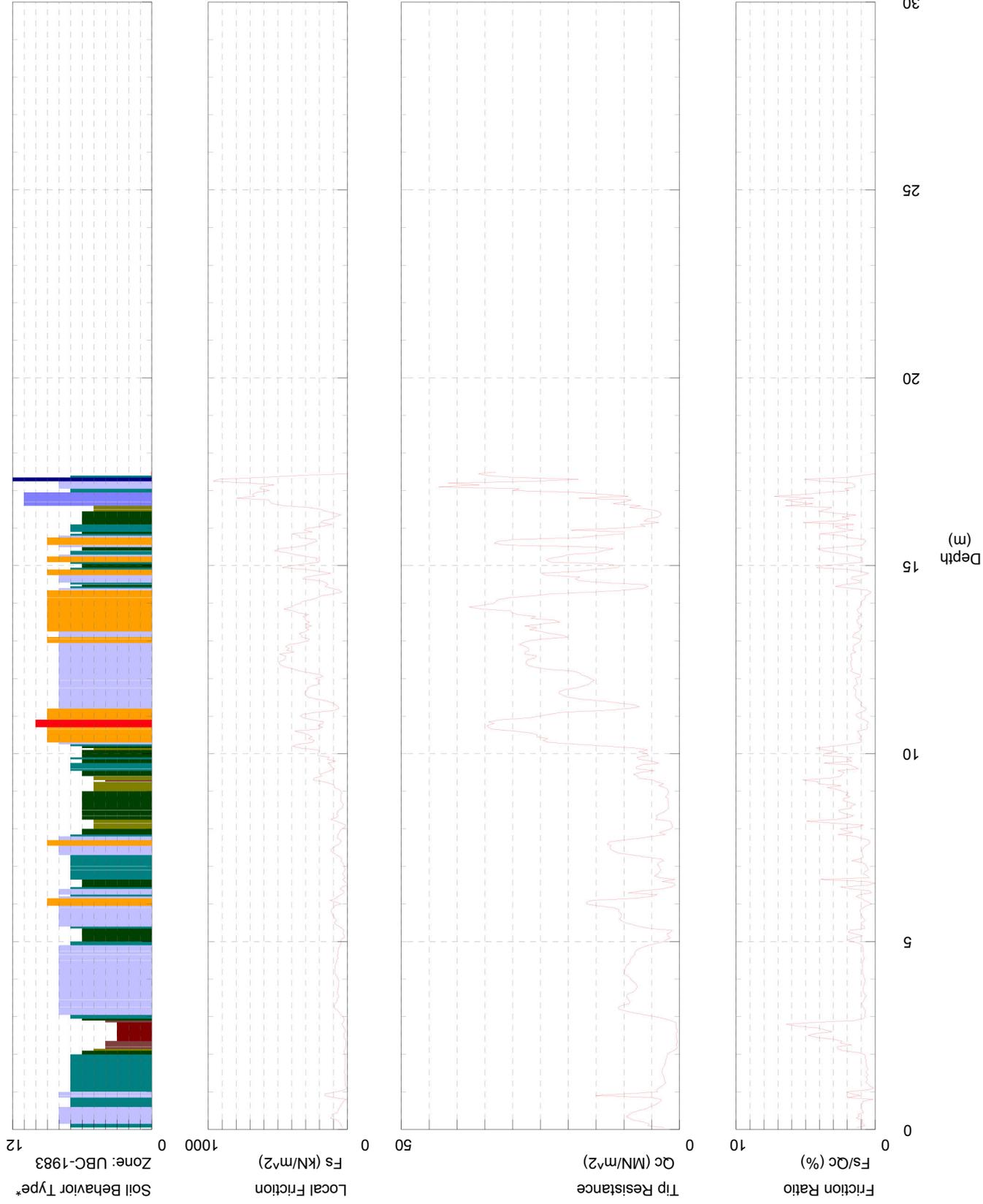
- 10 gravelly sand to sand
- 11 very stiff fine grained (*)
- 12 sand to clayey sand (*)

Maximum Depth = 18.80 meters

Depth Increment = 0.050 meters

US Geological Survey

Operator: Tom Noye
 Sounding: SOC017
 Cone Used: 766tc
 CPT Date/Time: 02-27-04 06:48
 Location: Norwing 1157
 Job Number: Oceano



Maximum Depth = 17.50 meters

Depth Increment = 0.050 meters

- 1 sensitive fine grained
- 2 organic material
- 3 clay

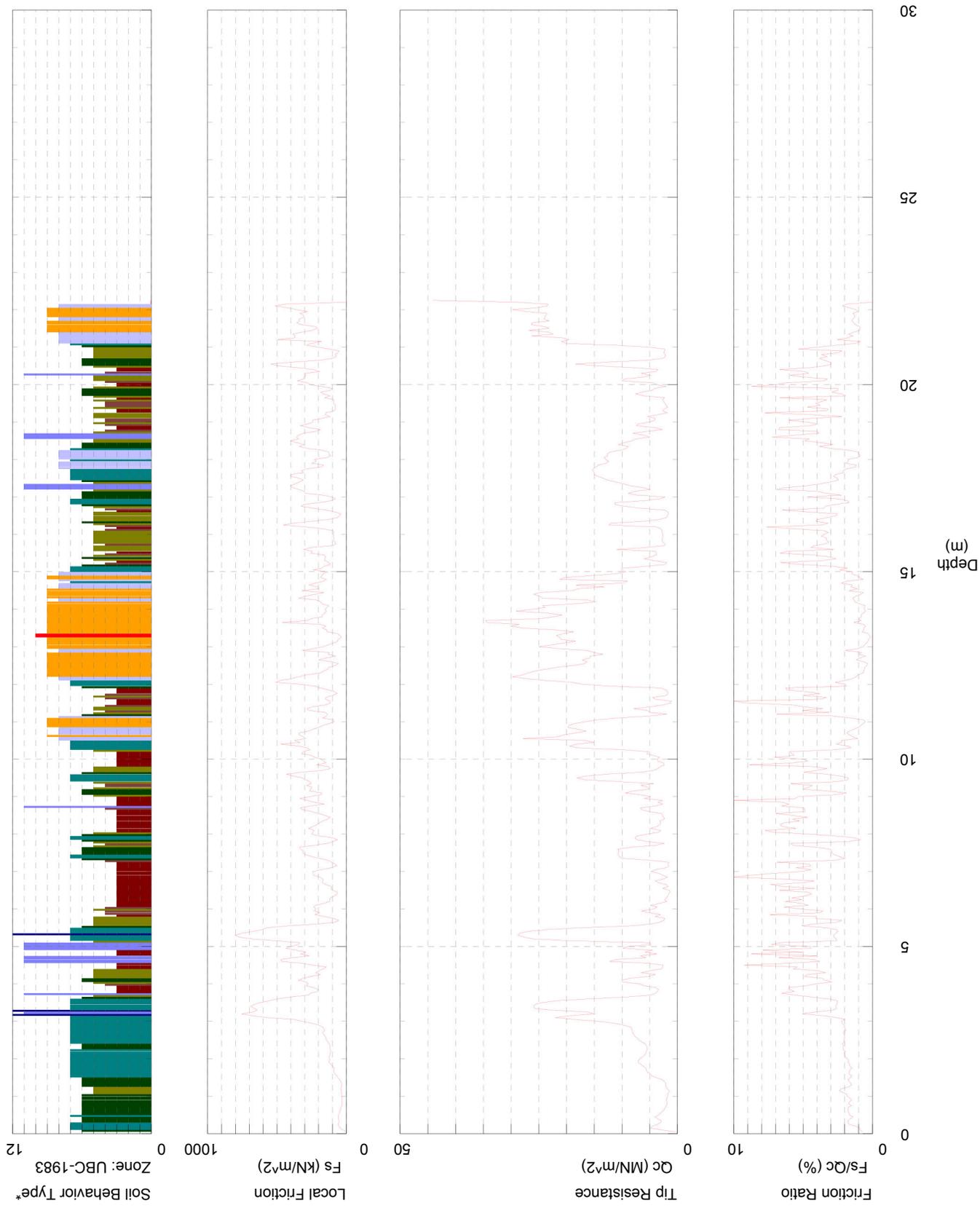
- 4 silty clay to clay
- 5 clayey silt to silty clay
- 6 sandy silt to clayey silt

- 7 silty sand to sandy silt
- 8 sand to silty sand
- 9 sand

- 10 gravelly sand to sand
- 11 very stiff fine grained (*)
- 12 sand to clayey sand (*)

US Geological Survey

Operator: Tom Noce
 Sounding: SOCC020
 Cone Used: 766tc
 CPT Date/Time: 02-27-04 13:32
 Location: Griffin Street
 Job Number: Oceano



Maximum Depth = 22.25 meters

Depth Increment = 0.050 meters

- 1 sensitive fine grained
- 2 organic material
- 3 clay

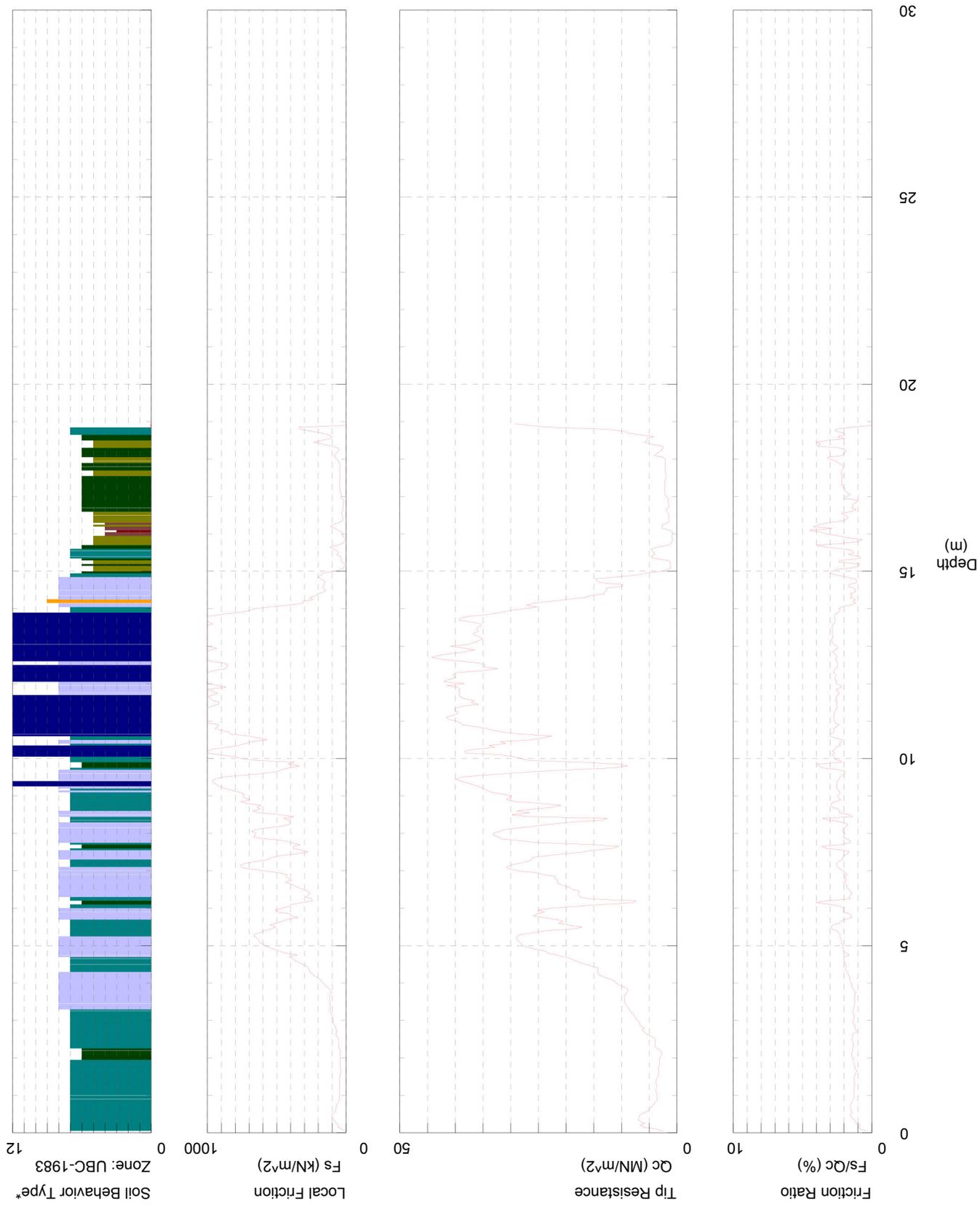
- 4 silty clay to clay
- 5 clayey silt to silty clay
- 6 sandy silt to clayey silt

- 7 silty sand to sandy silt
- 8 sand to silty sand
- 9 sand

- 10 gravelly sand to sand
- 11 very stiff fine grained (*)
- 12 sand to clayey sand (*)

US Geological Survey

Operator: Tom Noye
 Sounding: SOCC021
 Cone Used: 766tc
 CPT Date/Time: 02-27-04 15:33
 Location: 732 Calvin Court
 Job Number: Oceano



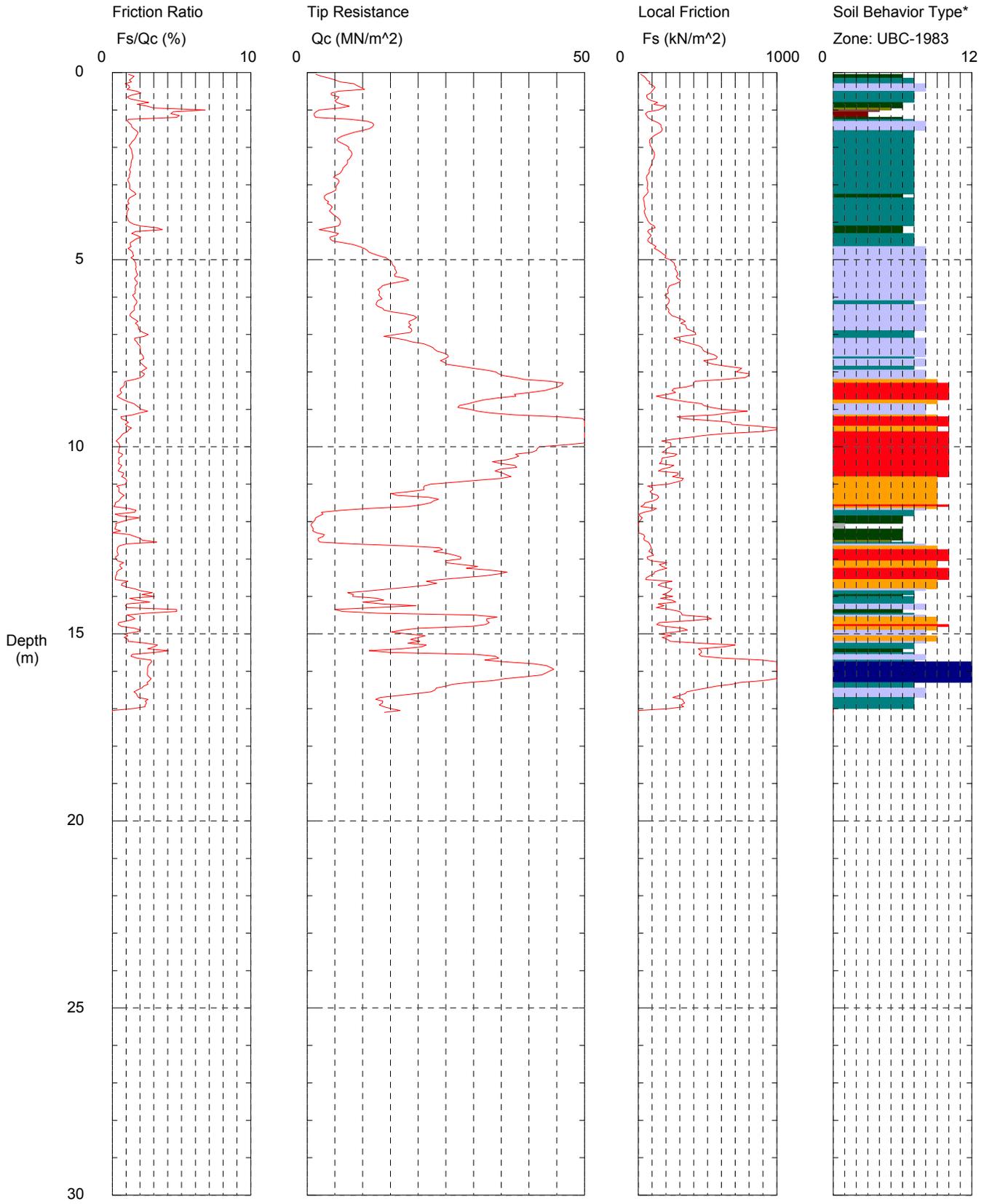
Maximum Depth = 18.95 meters
 Depth Increment = 0.050 meters

- 1 sensitive fine grained
- 2 organic material
- 3 clay
- 4 silty clay to clay
- 5 clayey silt to silty clay
- 6 sandy silt to clayey silt
- 7 silty sand to sandy silt
- 8 sand to silty sand
- 9 sand
- 10 gravelly sand to sand
- 11 very stiff fine grained (*)
- 12 sand to clayey sand (*)

US Geological Survey

Operator: Tom Noce
 Sounding: SOC027
 Cone Used: 766tc

CPT Date/Time: 03-03-04 08:00
 Location: Airport North
 Job Number: Oceano



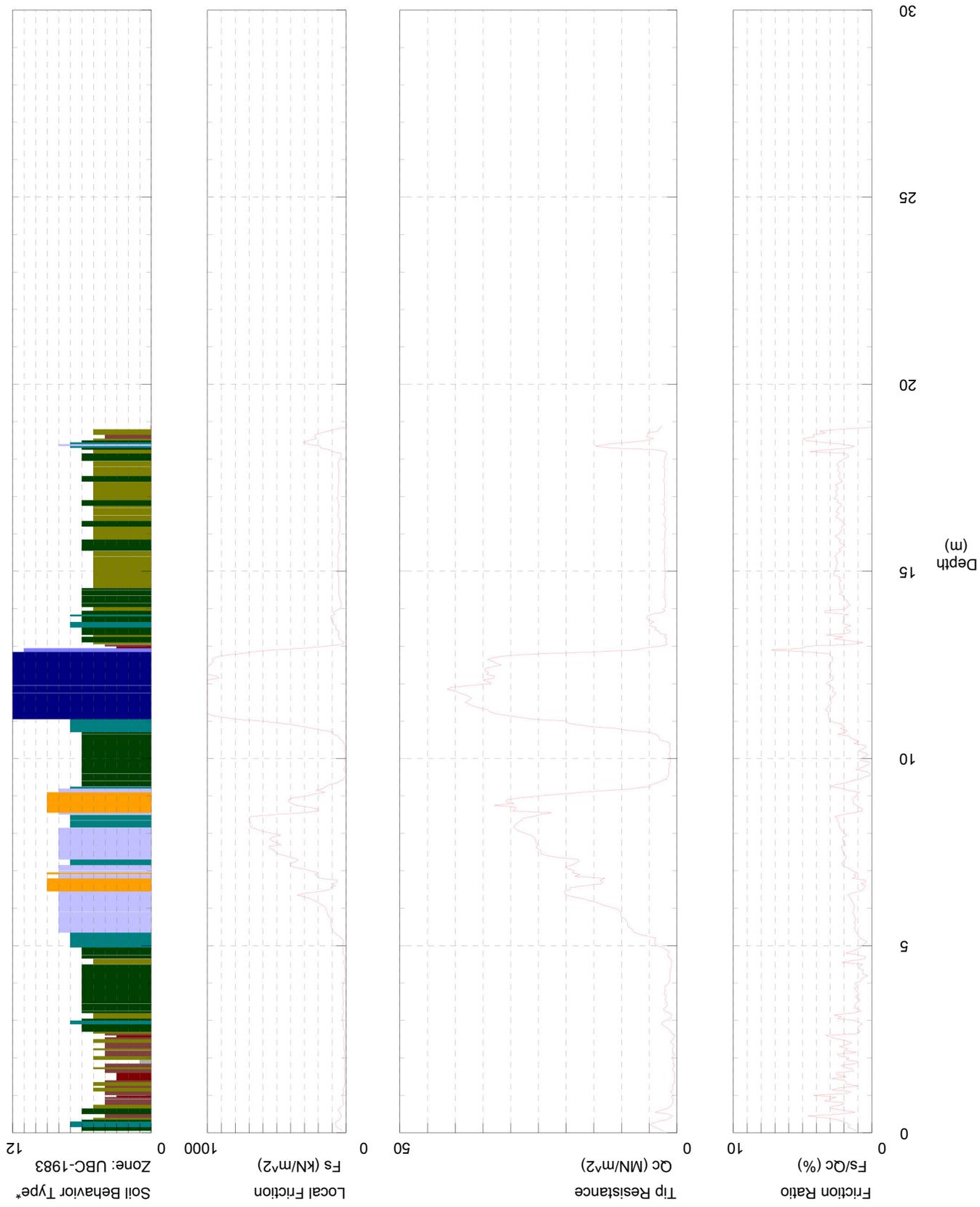
Maximum Depth = 17.10 meters

Depth Increment = 0.050 meters

- | | | | |
|--------------------------|-----------------------------|----------------------------|--------------------------------|
| 1 sensitive fine grained | 4 silty clay to clay | 7 silty sand to sandy silt | 10 gravelly sand to sand |
| 2 organic material | 5 clayey silt to silty clay | 8 sand to silty sand | 11 very stiff fine grained (*) |
| 3 clay | 6 sandy silt to clayey silt | 9 sand | 12 sand to clayey sand (*) |

US Geological Survey

Operator: Tom Noyce
 Sounding: SOCC028
 Cone Used: 766tc
 CPT Date/Time: 03-03-04 10:31
 Location: Pirates Lair Air
 Job Number: Oceano



Maximum Depth = 18.90 meters

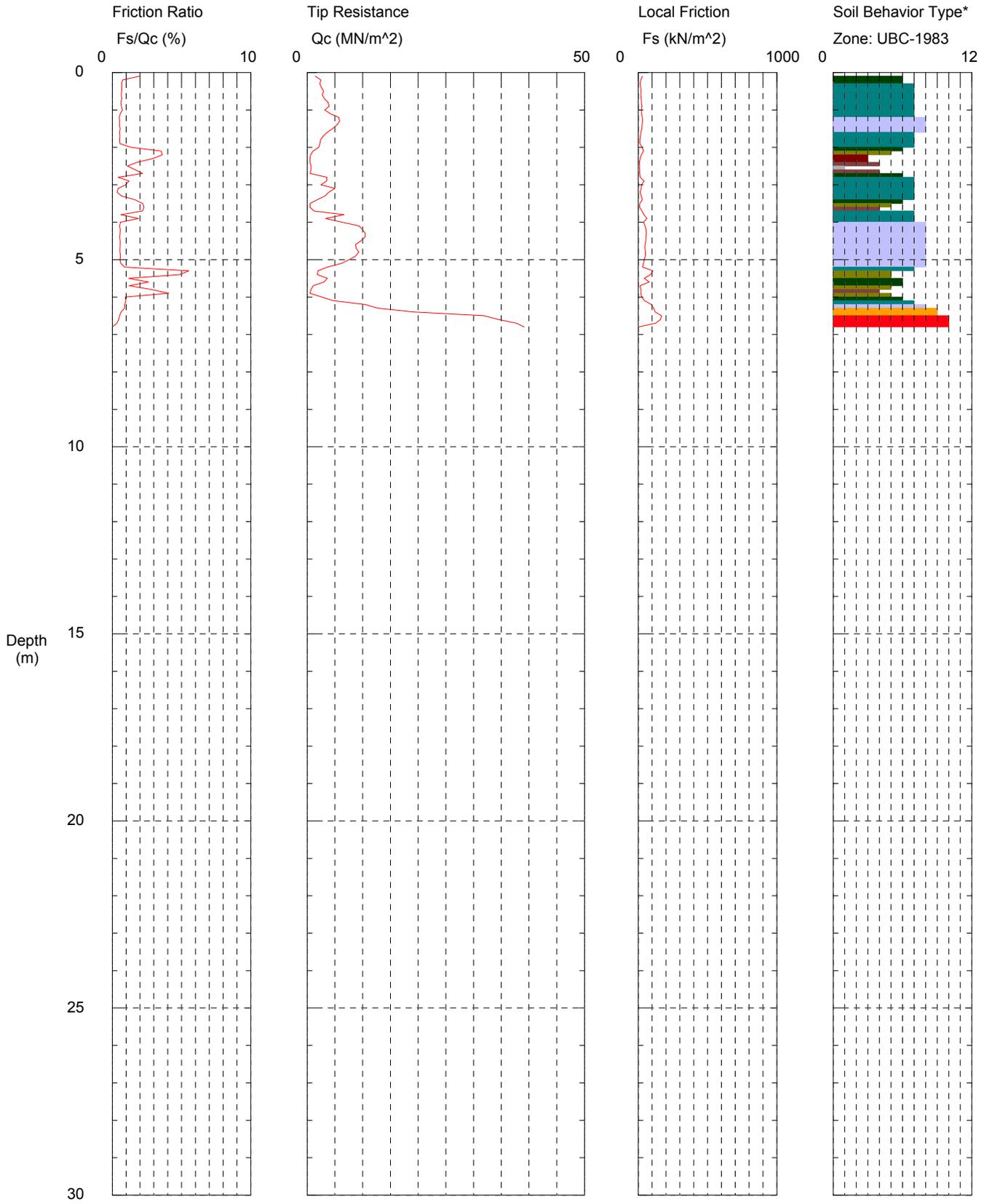
Depth Increment = 0.050 meters

Soil behavior type and SPT based on data from UBC-1983

US Geological Survey

Operator: Mike Bennett
 Sounding: SOC041
 Cone Used: 329

CPT Date/Time: 09-22-05 08:54
 Location: Oceano Park
 Job Number: Fluvial



- | | | | |
|--------------------------|-----------------------------|----------------------------|--------------------------------|
| 1 sensitive fine grained | 4 silty clay to clay | 7 silty sand to sandy silt | 10 gravelly sand to sand |
| 2 organic material | 5 clayey silt to silty clay | 8 sand to silty sand | 11 very stiff fine grained (*) |
| 3 clay | 6 sandy silt to clayey silt | 9 sand | 12 sand to clayey sand (*) |

*Soil behavior type and SPT based on data from UBC-1983

LOGGED BY S. Boone	BEGIN DATE 6-2-16	COMPLETION DATE 6-2-16	HAMMER TYPE 140-lb Automatic Trip	BORING NUMBER 16E-03
FINAL BY J. Cravens	BOREHOLE LOCATION (Lat/Long or North/East and Datum) %		SURFACE ELEVATION 9.0 ft	
DRILLING METHOD 8" Hollow-Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) --			WEATHER NOTES Overcast
DRILLER S/G Drilling Company	LOCATION DESCRIPTION Turf area at N end of proposed aeration basin, 225' N of primary clarifier no. 2			BACKFILLED WITH Bentonite Grout
DRILL RIG CME 75	GROUNDWATER DURING DRILLING AFTER DRILLING (DATE) READINGS 4.0 ft			TOTAL DEPTH OF BORING 81.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
7	1		CLAYEY SAND (SC); loose; gray; moist; trace angular GRAVEL to 1"; (ARTIFICIAL FILL).		30	3	15	89	25	97					PA (4% G, 65% S, 31% F) PI (28 LL, 20 PL, 8 PI) R (51) -200 (4% G, 68 % S, 28% F)
5	2				C	6									
3	3				9										
3	4														
1	5		Poorly graded SAND with CLAY (SP-SC); loose; gray; wet; interbedded CLAY beds to 2" thick; with organics (roots, decomposing vegetation); (ALLUVIUM).		31	2	13	100	29	91					DS
-1	6				7										
-1	7				6										
-3	8														
-5	9				32	0	2	89	36	84					CU
-5	10				1										
-7	11				1										
-9	12		CLAYEY SAND with GRAVEL (SC); very loose; gray; wet.		33			33	25						-200 (16% G, 64% S, 20% F) CR (pH = 8.09, r = 1,507 ohm-cm)
-9	13														
-11	14														
-11	15		Poorly graded SAND with GRAVEL (SP); loose; tan and green with red and black particles; wet; coarse SAND, fine GRAVEL to 1".		34	1	7	33	24						-200 (40% G, 56% S, 4% F)
-13	16				3										
-13	17				4										
-15	18														
-15	19				35	4	18	89							
-17	20		Lean CLAY (CL); medium stiff; gray; wet.		7										
-17	21		CLAYEY SAND (SC); medium dense; dark gray; wet; with shell fragments.		11										
-19	22														
-19	23														
-19	24				36										
-19	25														
-19	26		Poorly graded SAND (SP); medium dense; gray; wet.		37	7	39	78	37	86					
-19	27														
-19	28														
-19	29														
	30														

(continued)



Yeh and Associates, Inc.
Consulting Engineers & Scientists

PROJECT NAME SSLOCSD - Redundancy Project
PROJECT NUMBER 216-193
BORING NUMBER 16E-03
REVISION DATE 9/25/2018
SHEET 1 of 3

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
-23	30		Poorly graded SAND with CLAY and GRAVEL (SP-SC); dense; gray; wet; angular to subangular GRAVEL to 2".	✖	38	8 23 39	62	89		24	107			-200 (17% G, 72% S, 10% F)	
-25	35		Poorly graded SAND (SP); medium dense; grayish brown; wet.	✖	39	7 11 19	30	100							
-29	40		Fine to very fine SAND.	✖	40	9 17 24	41	100		25	100				
-37	46		Lean CLAY (CL); medium stiff; gray; wet.	✖	41					30	90	0.35 tsfTV			
-41	50		Very stiff; trace shell fragments to 0.25".	✖	42	4 9 10	19	89							
-47	56			✖	43	2 4 4	8	100							
-51	60		Lean CLAY with SAND (CL); stiff; dark gray; wet.	✖	44					33	87	0.5 tsfTV			PI (42 LL, 26 PL, 16 PI)
-55	65			✖	45		22	100				0.6 tsfTV			

(continued)



Yeh and Associates, Inc.
Consulting Engineers & Scientists

PROJECT NAME
SSLOCSD - Redundancy Project
PROJECT NUMBER
216-193
BORING NUMBER
16E-03
REVISION DATE
9/25/2018

SHEET
2 of 3

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
86	66		Lean CLAY with SAND (CL) (continued).			6									
	67					9									
	68					13									
	69														
	70		Lean CLAY (CL); medium stiff; dark gray; wet; trace fine SAND.		46	2	11	100							
	71					5									
	72					6									
	73														
	74														
	75														
	76														
	77														
	78														
	79														
	80														
	81		Well-graded SAND (SW); medium dense; gray with green and brown particles; wet; trace shell fragments to 0.125" and trace GRAVEL to 0.5".		48	4	10	100							
	82		Bottom of borehole at 81.5 ft bgs			12									
	83					20									
	84														
	85														
	86														
	87														
	88														
	89														
	90														
	91														
	92														
	93														
	94														
	95														
	96														
	97														
	98														
	99														
	100														
	101														
	102														

This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.



Yeh and Associates, Inc.
 Consulting Engineers & Scientists

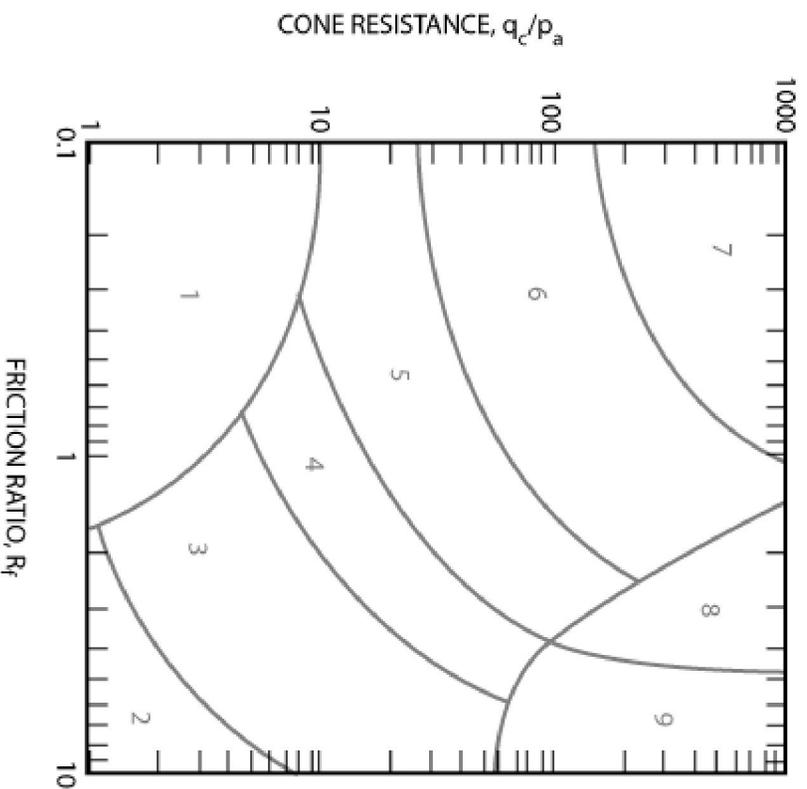
PROJECT NAME
SSLOCSD - Redundancy Project

PROJECT NUMBER
216-193

BORING NUMBER
16E-03

REVISION DATE
9/25/2018

SHEET
3 of 3



Zone	Soil Behavior Type	USCS
1	Sensitive, fine grained	OL-CH
2	Organic soils - clay	OL-OH, CH
3	Clay – silty clay to clay	CL-CH
4	Silt mixtures – clayey silt to silty clay	MH-CL
5	Sand mixtures – silty sand to sandy silt	SM-ML
6	Sands – clean sand to silty sand	SW-SP
7	Gravelly sand to dense sand	SW-GW
8	Very stiff sand to clayey sand*	SC-SM
9	Very stiff fine grained*	CH-CL

* Heavily overconsolidated or cemented

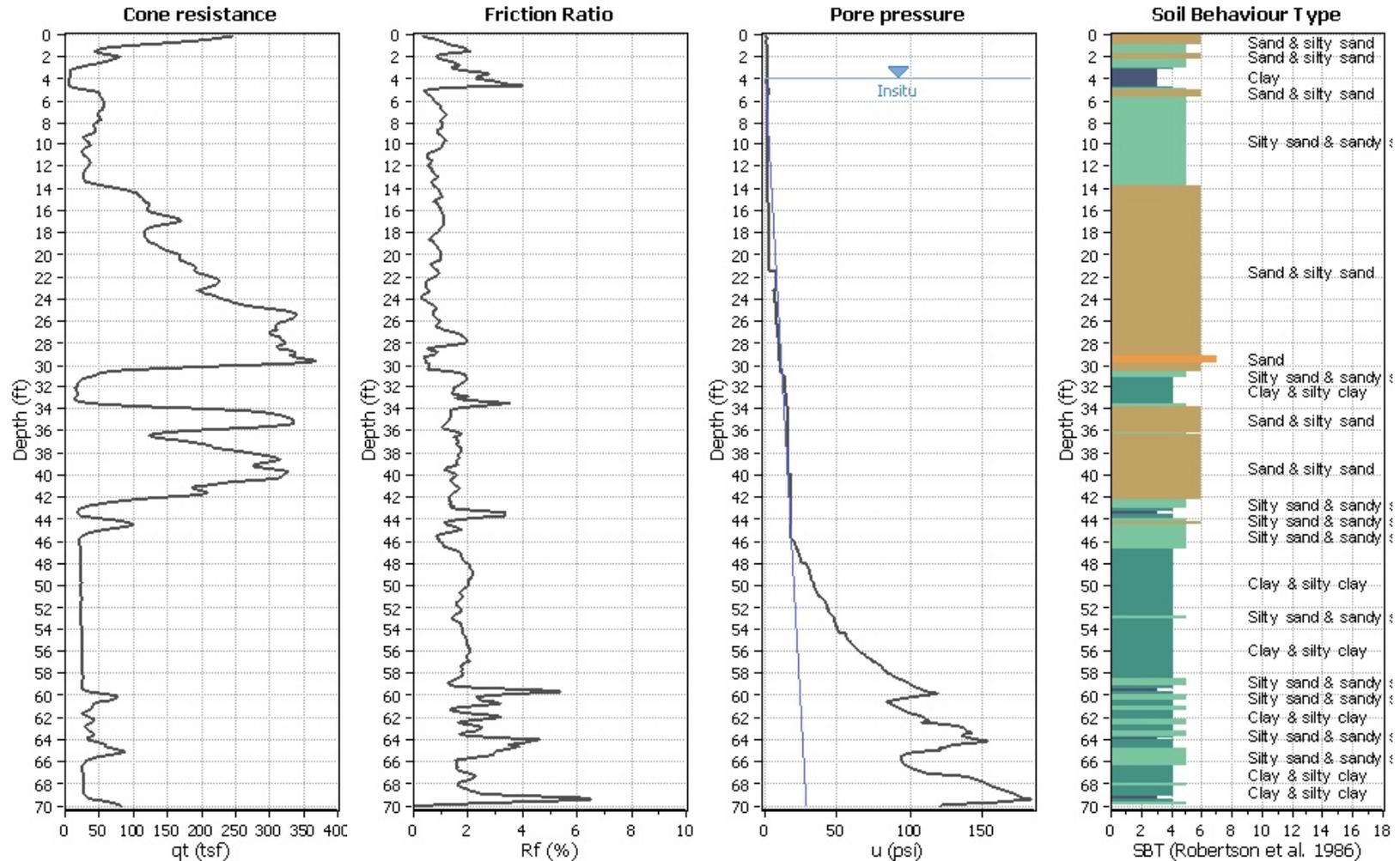
P_a = atmospheric pressure = 100 kPa = 1 tsf

Non-normalized CPT Soil Behavior Type (SBT) chart
 (Robertson et al., 1986, updated by Robertson, 2010).

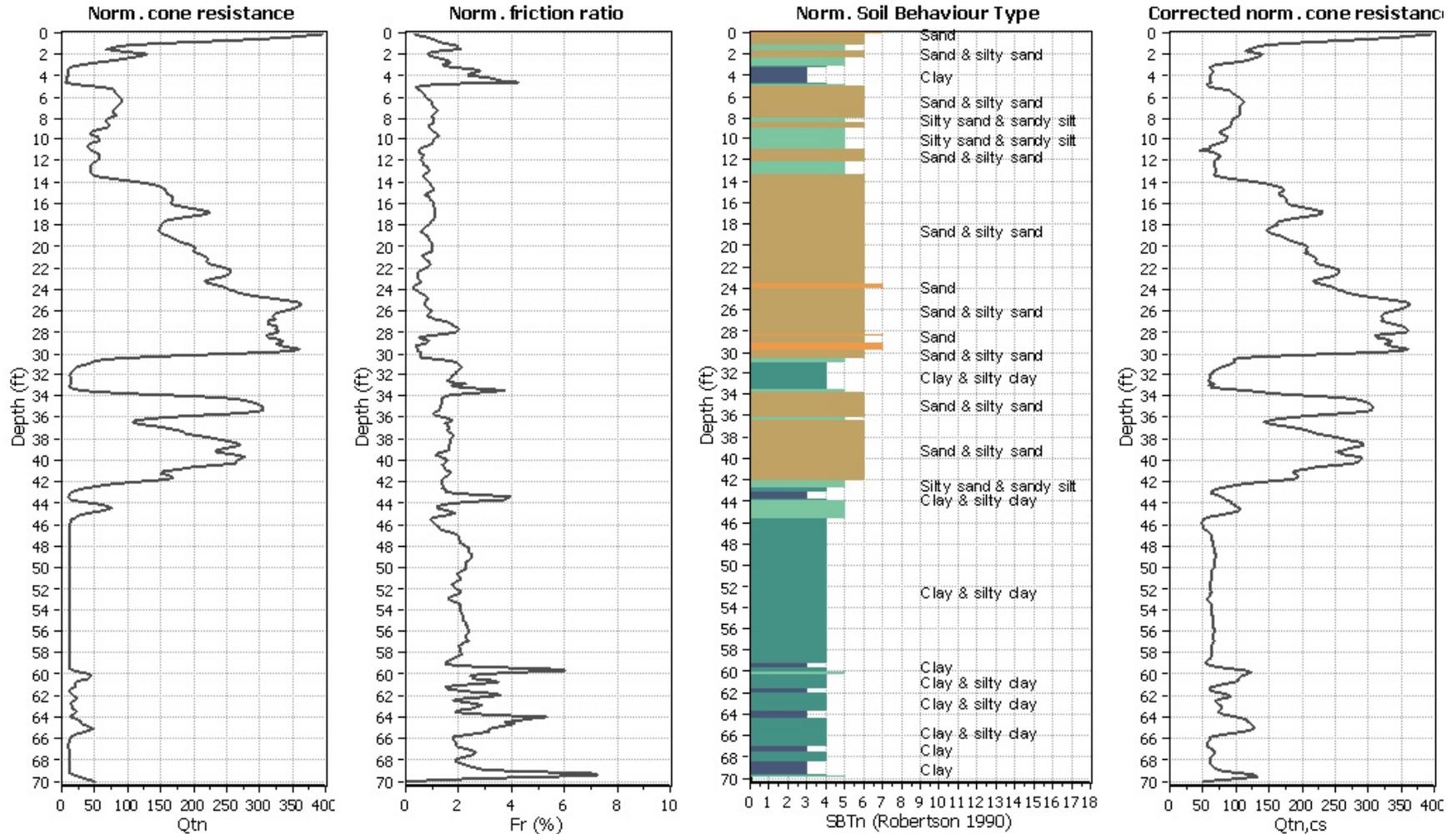
REPORT TITLE	
CPT SOIL BEHAVIOR CHART (SBT) LEGEND	
PROJECT NAME	
SSLOCSD - Redundancy Project	
DATE	SHEET
9/25/2018	1 of 1



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Analysis method:	NCEER (1998)	G.W.T. (in-situ):	4.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	0.00 ft	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w :	6.70	Ic cut-off value:	2.40	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.51	Unit weight calculation:	Based on SBT	K_0 applied:	Yes		



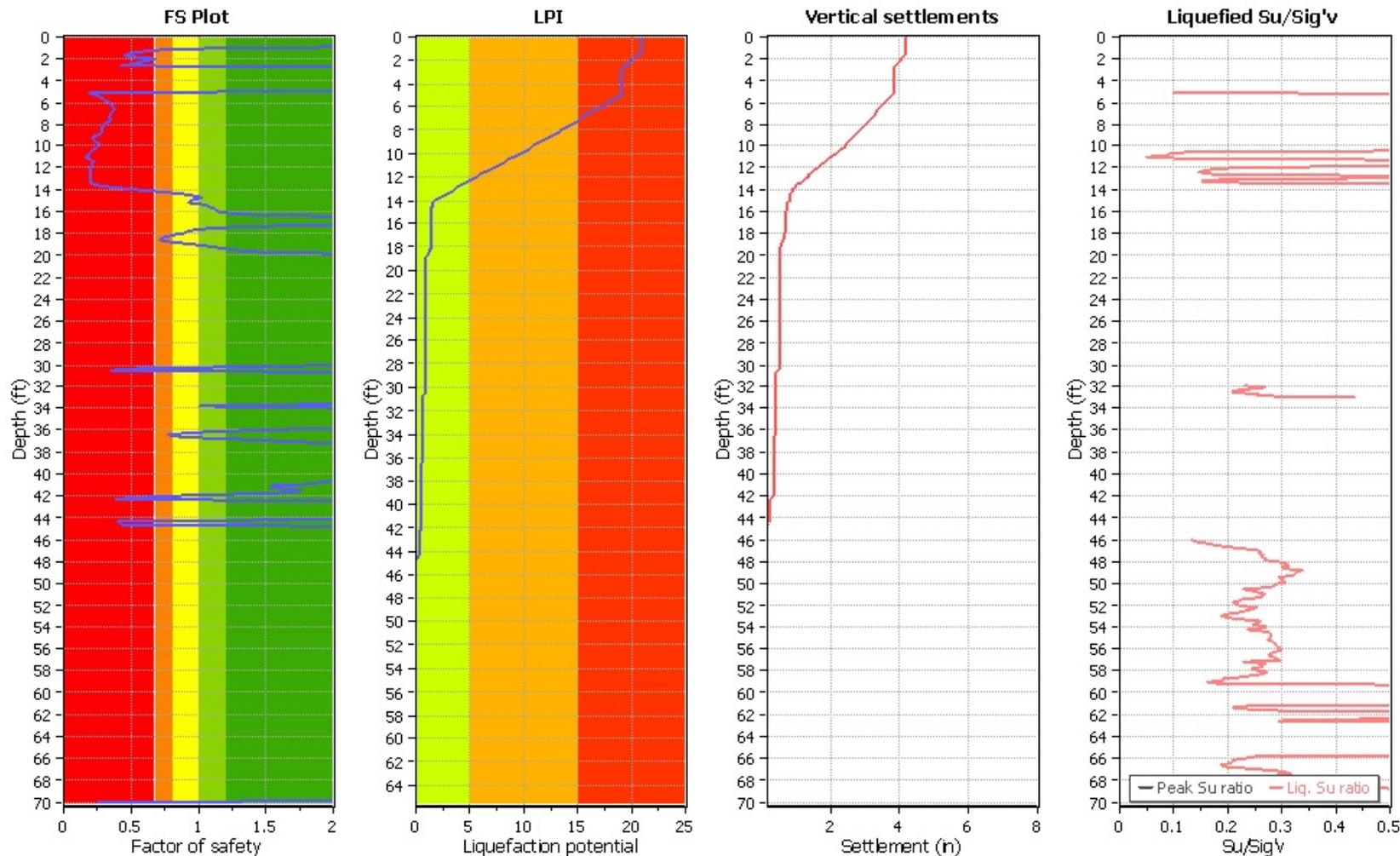
Analysis method:	NCEER (1998)	G.W.T. (in-situ):	4.00 ft	Use fill:	No	Clay like behavior	
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	0.00 ft	Fill height:	N/A	applied:	Sands only
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth applied:	No
Earthquake magnitude M_w :	6.70	Ic cut-off value:	2.40	Trans. detect. applied:	Yes	Limit depth:	N/A
Peak ground acceleration:	0.51	Unit weight calculation:	Based on SBT	K_0 applied:	Yes	MSF method:	Method based

Project: SSLOCSO - WWTP Redundancy Project - As-is Conditions

Location: 1600 Aloha Ave, Oceano, CA

CPT: CPT-01

Total depth: 70.05 ft



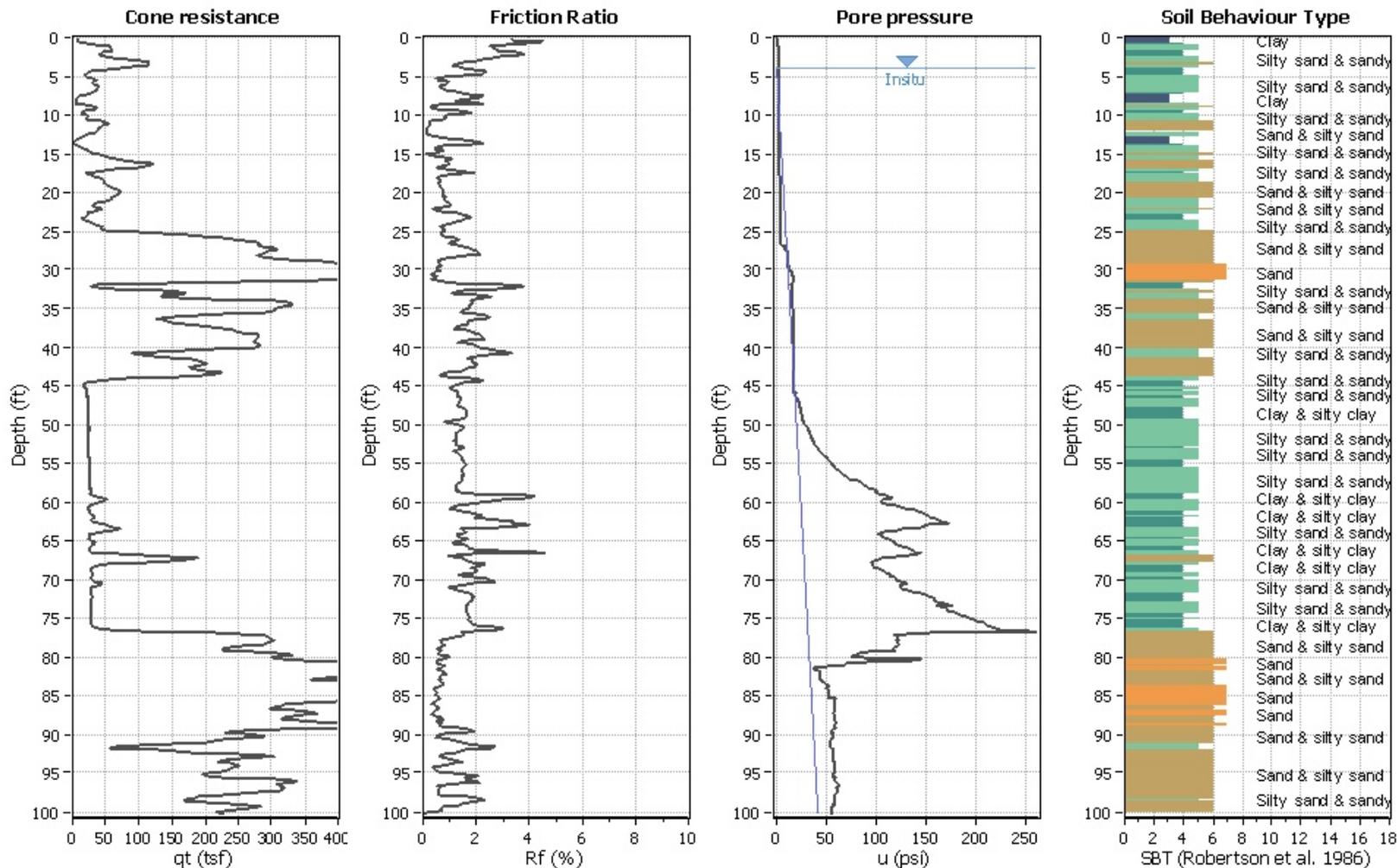
Analysis method:	NCEER (1998)	G.W.T. (in-situ):	4.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	0.00 ft	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w :	6.70	Ic cut-off value:	2.40	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.51	Unit weight calculation:	Based on SBT	K_0 applied:	Yes		

Project: SSLOCS - WWTP Redundancy Project - As-is Conditions

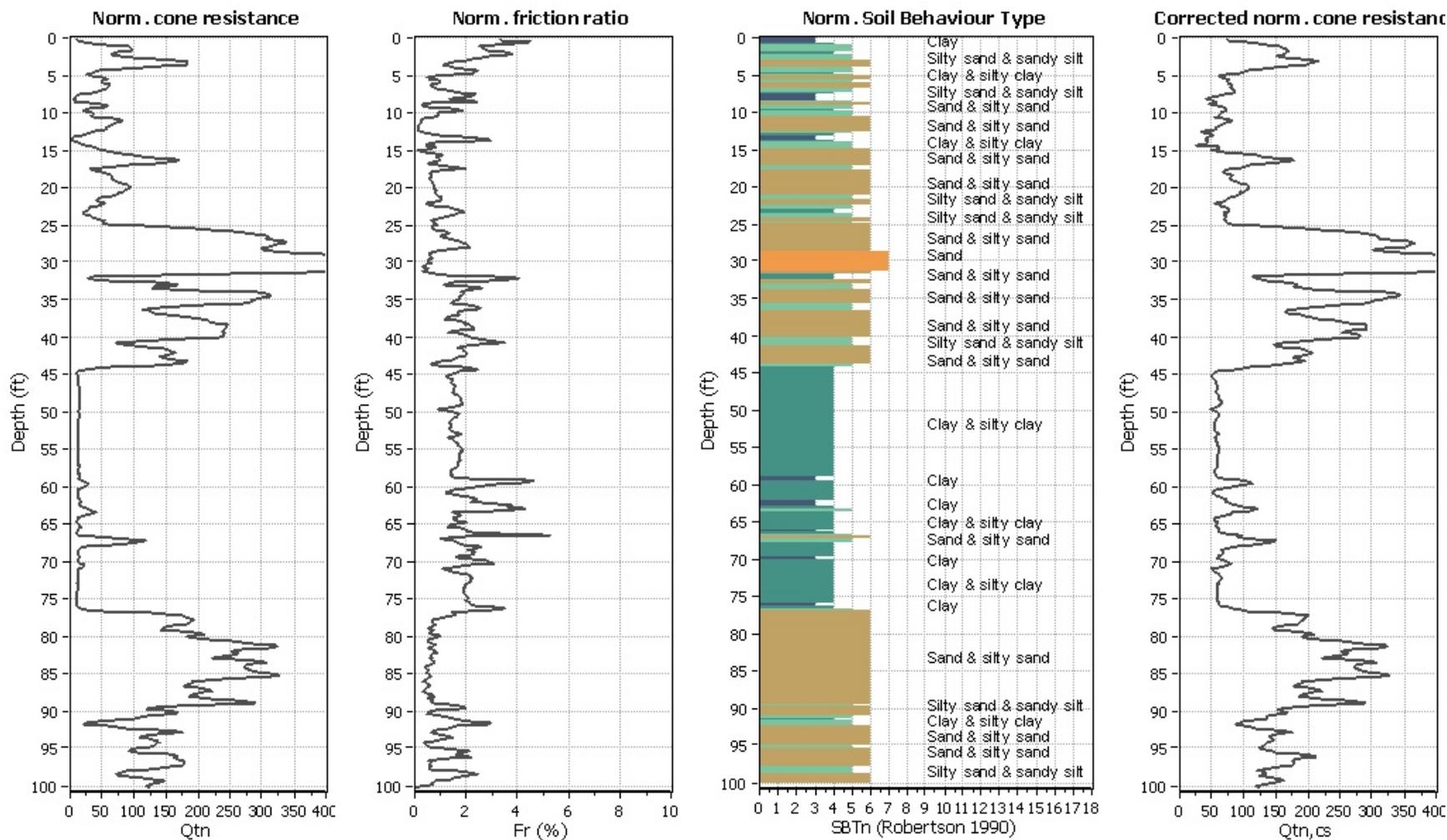
Location: 1600 Aloha Ave, Oceano, CA

CPT: CPT-06

Total depth: 100.23 ft



Analysis method:	NCEER (1998)	G.W.T. (in-situ):	4.00 ft	Use fill:	No	Clay like behavior	
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	0.00 ft	Fill height:	N/A	applied:	Sands only
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth applied:	No
Earthquake magnitude M_w :	6.70	Ic cut-off value:	2.40	Trans. detect. applied:	Yes	Limit depth:	N/A
Peak ground acceleration:	0.51	Unit weight calculation:	Based on SBT	K_0 applied:	Yes	MSF method:	Method based



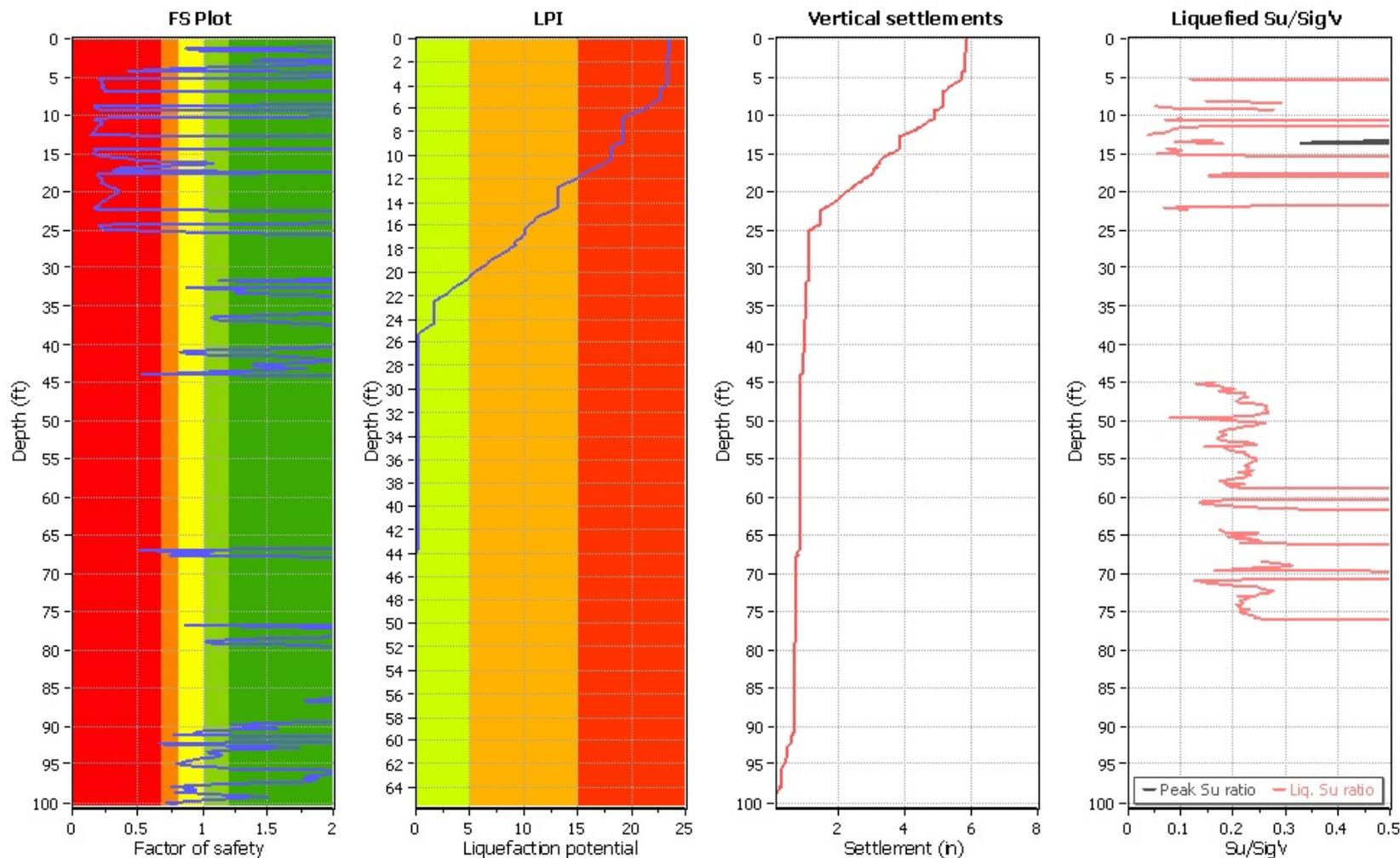
Analysis method:	NCEER (1998)	G.W.T. (in-situ):	4.00 ft	Use fill:	No	Clay like behavior	
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	0.00 ft	Fill height:	N/A	applied:	Sands only
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth applied:	No
Earthquake magnitude M_w :	6.70	Ic cut-off value:	2.40	Trans. detect. applied:	Yes	Limit depth:	N/A
Peak ground acceleration:	0.51	Unit weight calculation:	Based on SBT	K_0 applied:	Yes	MSF method:	Method based

Project: SSLOCS - WWTP Redundancy Project - As-is Conditions

Location: 1600 Aloha Ave, Oceano, CA

CPT: CPT-06

Total depth: 100.23 ft



Analysis method:	NCEER (1998)	G.W.T. (in-situ):	4.00 ft	Use fill:	No	Clay like behavior applied:	No
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	0.00 ft	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w :	6.70	Ic cut-off value:	2.40	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.51	Unit weight calculation:	Based on SBT	K_0 applied:	Yes		

LOGGED BY J. Cravens	BEGIN DATE 11-15-19	COMPLETION DATE 11-15-19	HAMMER TYPE 140-lb Automatic Trip	BORING NUMBER 19P-05
FINAL BY J. King	BOREHOLE LOCATION (Lat/Long or North/East and Datum) --/--			SURFACE ELEVATION 25.0 ft
DRILLING METHOD 8" Hollow Stem Auger	BOREHOLE LOCATION (Offset, Station, Line) --			WEATHER NOTES Partly cloudy, warm, breezy
DRILLER S/G Drilling Co.	LOCATION DESCRIPTION N side of Manhattan Ave between 5th St and 6th St			BACKFILLED WITH Native; AC patch with rapid set concrete dyed black
DRILL RIG CME-85	GROUNDWATER DURING DRILLING AFTER DRILLING (DATE) READINGS Not encountered			TOTAL DEPTH OF BORING 11.5 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	DESCRIPTION	Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method	Casing Depth	Remarks
0	0		2" ASPHALT CONCRETE.												
23	1		Poorly graded SAND with SILT (SP-SM); medium dense; dark brown; moist; fine SAND; (OLDER DUNE SAND DEPOSITS).		13	16 14 9	23	100		6	104				CP ($\gamma_{D, MAX} = 118$ pcf, $w_{OPT} = 10\%$)
21	3														CR (pH = 4.84, r = 4,409 ohm-cm)
19	4		Loose.		14	3 4 5	9	81		6	95				
17	5														
15	6		Poorly graded SAND (SP); medium dense; light yellowish brown; moist; fine SAND.		15	5 5 6	11	92							
13	10		Bottom of borehole at 11.5 ft bgs												
11	12		This Boring Record was developed in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010) except as noted on the Soil or Rock Legend or below.												
9	13														
7	14														
5	15														
3	16														
1	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	25														

5 BR - STANDARD 219-477 BORING LOGS.GPJ CALIFORNIA YEH LIBRARY (YEH V2 APRIL 2019).7.GLB 11/26/19



Yeh and Associates, Inc.
Geotechnical • Geological • Construction Services

PROJECT NAME City of Grover Beach CDBG 2020 Waterlines
PROJECT NUMBER 219-477
BORING NUMBER 19P-05
REVISION DATE 11/25/2019
SHEET 1 of 1

Attachment 3

Phase I and II Environmental Site Assessments



Phase I Environmental Site Assessment

Approximately 1.5 Acre Parcel, Huber Street
Grover Beach, California

prepared for
City of Pismo Beach, Public Works Department

prepared by
Rincon Consultants, Inc.

June 21, 2019



RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com



Rincon Consultants, Inc.

1530 Monterey Street, Suite D
San Luis Obispo, California 93401

805 547 0900 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

June 21, 2019
Project 19-07931

Benjamin Fine, Public Works Director
City of Pismo Beach, Public Works Department
760 Mattie Road
Pismo Beach, CA, 93449
Via email: bfine@PismoBeach.org

**Subject: Phase I Environmental Site Assessment
Approximately 1.5 Acre Parcel, Huber Street
Grover Beach, California**

Dear Mr. Fine:

This report presents the findings of a Phase I Environmental Site Assessment (ESA) completed by Rincon Consultants, Inc. for the approximately 1.5-acre parcel located west of Huber Street and north of Calvin Court in Grover Beach, California. The Phase I ESA was performed in accordance with our proposal and contract dated June 5, 2019.

The accompanying report presents our findings and provides an opinion regarding the presence of recognized environmental conditions. Our work program for this project, as referenced in our contract, is intended to meet the guidelines outlined in the American Society for Testing and Materials (ASTM), Standard Practice for Environmental Site Assessments: *Phase I Environmental Site Assessment Process* (ASTM Standard E-1527-13). Our scope of services, pursuant to ASTM practice, did not include any inquiries with respect to asbestos, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, vapor intrusion or other indoor air quality, mold, or high-voltage power lines.

Thank you for selecting Rincon for this project. If you have any questions, or if we can be of any future assistance, please contact us.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "Sarah A. Larese".

Sarah A. Larese
Senior Environmental Scientist

A handwritten signature in blue ink, appearing to read "Walt Hamann".

Walt Hamann, PG, CEG, CHG
Vice President, Environmental Services

Table of Contents

Executive Summary	1
Introduction	3
Purpose	3
Scope of Services	4
Significant Assumptions, Limitations, Deviations, Exceptions, Special Terms, and Conditions	5
User Reliance	5
Site Description	5
User-Provided Information	7
Records Review	8
Physical Setting Sources	8
Standard Environmental Record Sources	9
Additional Environmental Record Sources	10
Review of State of California Division of Oil, Gas, and Geothermal Resources Records	11
Review of National Pipeline Mapping System Records	12
Known or Suspect Contaminated Release Sites with Potential Vapor Migration	12
Historical Use Information on the Property and the Adjoining Properties	13
Interviews	17
Interview with Owner/Site Manager	17
Interviews with Occupants	17
Interviews with Local Government Officials	17
Interviews with Others	18
Site Reconnaissance	19
Methodology and Limiting Conditions	19
Current Use of the Property and Adjacent Properties	19
Past Use of the Property and Adjacent Properties	19
Current or Past Uses in the Surrounding Areas	20
Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions	20
General Description of Structures	20
Exterior Observations	20
Evaluation	22
Findings	22
Opinions	22
Conclusions	23
Recommendations	23
Deviations	23
References	24
Signatures of Environmental Professionals	26
Qualifications of Environmental Consultants	27



Tables

Table 1	Current Uses of Adjacent Properties	6
Table 2	EDR Listing Summary of Select Sites Within One-Eighth Mile of the Subject Property	10
Table 3	Historical Use of the Subject Property	14

Figures

Figure 1	Vicinity Map
Figure 2	Site Map
Figure 3	Adjacent Land Use Map
Figure 4	Site Photographs
Figure 5	Site Photographs

Appendices

Appendix A	Interview Documentation
Appendix B	Regulatory Records Search
Appendix C	Historical Research Documentation



Executive Summary

This report presents the findings of a Phase I Environmental Site Assessment (ESA) for the approximately 1.5-acre parcel located west of Huber Street and north of Calvin Court in Grover Beach, California. (Figure 1, Vicinity Map). The Phase I ESA was performed for the City of Pismo Beach, Public Works Department by Rincon Consultants, Inc. (Rincon). City of Pismo Beach, Public Works Department has requested this assessment and will use the information for the purposes of purchasing the subject property. The subject property is currently in use as several storage yards which are separated with chain link fencing. The yards are used for the storage of automobiles, trucks, recreational vehicles (RVs), storage containers, boats, trailers and miscellaneous equipment storage. The northwestern portion is occupied by American Roof Removal/ American Roofing Co. The yards are unpaved.

The subject property is located in an area that is primarily composed of industrial, commercial and residential land uses. Properties in the vicinity of the subject property include a water treatment facility, automobile repair shops, a towing company, storage yards and single-family residences. The current adjacent land uses as follows:

- Northern Properties: Central Coast Water Treatment, Inc. - a commercial and industrial water treatment system company (966 Huber Street)
- Eastern Properties: Huber Street followed by storage yards (964 and 978 Griffin Street) and 974 Griffin Street (Topco, Inc.) an American retail food GPO (Group Purchasing Organization).
- Southern Properties: Undeveloped land (Eucalyptus tree grove) followed by Calvin Court and then residential homes
- Western Properties: Toyworx Automotive (983 S. 4th Street), Kautz Towing (985 S. 4th Street) and Harrys Radiator Service (989 S 4th Street)

Rincon performed a reconnaissance of the subject property on June 12, 2019. The purpose of the reconnaissance was to observe existing conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the subject property. The subject property is currently used for the storage of automobiles, trucks, RVs, storage containers, boats, trailers and miscellaneous equipment storage. The subject property is unpaved. Because the interior of the subject property was not accessible, except for from the perimeter, it is unknown if other hazardous substances or petroleum products are present in the areas that were not accessible during the site reconnaissance.

A regulatory database search was conducted for sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The search was conducted for the subject property and included data from surrounding sites within a specified radius of the property. The subject property was not listed in any of the databases searched by EDR. Four adjacent properties were listed in databases searched by EDR. None of the EDR database-listed sites were interpreted to be of potential environmental concern to the subject property.



Historical sources reviewed as part of the Phase I ESA include aerial photographs and topographic maps. The photos and maps reviewed indicate the following historical uses of the subject property have the potential to impact the subject property:

- **Agricultural land:** 1939 to 1976
- **Vehicle, boat, trailer, miscellaneous equipment storage:** 1994 to present day

Based on the findings of this Phase I ESA, it is our opinion that there are three potential recognized environmental conditions (RECs) in connection with the subject property as follows:

Potential Recognized Environmental Conditions

1. Former agricultural use of the subject property.
2. Automobile, truck, RV, boat, trailer and miscellaneous equipment storage on the subject property.
3. Western adjacent automobile repair facilities and towing/vehicle storage yard.

To determine if the above identified potential RECs have impacted soil beneath the subject property, a soil matrix assessment on the subject property is recommended.



Introduction

This report presents the findings of a Phase I ESA conducted for the approximately 1.5 acre-parcel (APN 060-543-016) located on Huber Street in Grover Beach, California (Figure 1, Vicinity Map). The Phase I ESA was performed by Rincon Consultants, Inc. (Rincon) for the City of Pismo Beach, Public Works Department in general conformance with ASTM E 1527-13, our proposal and our contract dated June 5, 2019. The following sections present our findings and provide our opinion as to the presence of recognized environmental conditions on the subject property.

Purpose

The City of Pismo Beach, Public Works Department has requested this assessment and will use the information for the purposes of purchasing the subject property. The purpose of this Phase I ESA was to determine if there are recognized environmental conditions on the subject property, taking into account commonly and reasonably ascertainable information and to qualify for Landowner Liability Protections under the Brownfields Amendments to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

A recognized environmental condition (REC) is defined pursuant to ASTM E 1527-13 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 a release to the environment; 3) under conditions that pose a material threat of a future release to the environment”.

A Controlled REC is defined pursuant to ASTM E 1527-13 as,

“a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report”.

A Historical REC is defined pursuant to ASTM E 1527-13 as,

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



the regulatory criteria). If the EP [Environmental Professional] considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition”.

A *de minimis* condition is defined pursuant to ASTM E 1527-13 as,

“a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* conditions are not recognized environmental conditions nor controlled recognized environmental conditions”.

Scope of Services

The scope of services conducted during this study is outlined below:

- Performed a reconnaissance of the subject property to identify obvious indicators of the existence of hazardous materials.
- Observed adjacent or nearby properties from public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials.
- Obtained and reviewed an environmental records database search to obtain information about the potential for hazardous materials to exist at the subject property or at properties located in the vicinity of the subject property.
- Reviewed files for the subject property and immediately adjacent properties as identified in the database report, as applicable.
- Reviewed the current United States Geological Survey (USGS) topographic map to obtain information about the subject property and regional topography and uses of the subject property and surrounding sites.
- Reviewed additional pertinent record sources (e.g., California Division of Oil, Gas, and Geothermal Resources records, online databases of hazardous substance release sites), as necessary, to identify the presence of RECs at the subject property.
- Reviewed reasonably ascertainable historical resources (e.g., aerial photographs, topographic maps, fire insurance maps, city directories) to assess the historical land use of the subject property and adjacent properties.
- Provided a user interview questionnaire to a representative of the client, the user of the Phase I ESA.
- Provided a property owner interview questionnaire to the property owner or a designated subject property representative identified to Rincon by the client.
- Conducted interviews with other property representatives (e.g., key site manager, occupants), as applicable.
- Reviewed available client-provided information (e.g., previous environmental reports, title documentation).



Significant Assumptions, Limitations, Deviations, Exceptions, Special Terms, and Conditions

This work is intended to adhere to good commercial, customary, and generally accepted environmental investigation practices for similar investigations conducted at this time and in this geographic area. No guarantee or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from a site reconnaissance, review of an environmental database report, specified regulatory records and historical sources, and comments made by interviewees. This report is not intended as a comprehensive site characterization and should not be construed as such. Standard data sources relied upon during the completion of Phase I ESAs may vary with regard to accuracy and completeness. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research.

Rincon has not found evidence that hazardous materials or petroleum products exist at the subject property at levels likely to warrant mitigation. Rincon does not under any circumstances warrant or guarantee that not finding evidence of hazardous materials or petroleum products means that hazardous materials or petroleum products do not exist on the subject property. Additional research, including surface or subsurface sampling and analysis, can reduce Client's risks, but no techniques commonly employed can eliminate these risks altogether.

In addition, pursuant to ASTM E 1527-13 practice, our scope of services did not include any inquiries with respect to asbestos-containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to release of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, wetlands, or high-voltage power lines.

User Reliance

The City of Pismo Beach, Public Works Department has requested this assessment and will use the information for the purposes of purchasing or acquiring the subject property. This Phase I ESA was prepared for use solely and exclusively by the City of Pismo Beach, Public Works Department. No other use or disclosure is intended or authorized by Rincon. Also, this report is issued with the understanding that it is to be used only in its entirety. It is intended for use only by the client, and no other person or entity may rely upon the report without the express written consent of Rincon.

Site Description

Location

The subject property is an approximately 1.5-acre parcel located west of Huber Street and north of Calvin Court in Grover Beach, California (Figure 2, Site Map). The property is identified Assessor's Parcel Number (APN) 060-543-016. During the site reconnaissance, a sign on one of the gates that provides access to the subject property identified the site address as 980 Huber Street.



Subject Property and Vicinity General Characteristics

The subject property is currently in use as a several storage yards which are separated with chain link fencing. The yards are used for the storage of automobiles, trucks, RVs, storage containers, boats, trailers and miscellaneous equipment storage. The northwestern portion of the subject property is occupied by American Roof Removal/ American Roofing Co. The yards are unpaved.

The subject property is located in an area that is primarily composed of industrial, commercial and residential land uses. Properties in the vicinity of the subject property include a water treatment facility, automobile repair shops, a towing company, storage yards and single-family residences. The current adjacent land uses are described in Table 1 and depicted on Figure 3, Adjacent Land Use Map.

Table 1 Current Uses of Adjacent Properties

Area	Use
Northern Properties	Central Coast Water Treatment, Inc. - a commercial and industrial water treatment system company (966 Huber Street)
Eastern Properties	Huber Street followed by storage yards (964 and 978 Griffin Street) and 974 Griffin Street (Topco, Inc.) an American retail food GPO (Group Purchasing Organization).
Southern Properties	Undeveloped land (Eucalyptus tree grove) followed by Calvin Court and then residential homes
Western Properties	Toyworx Automotive (983 S. 4 th Street), Kautz Towing (985 S. 4 th Street) and Harrys Radiator Service (989 S 4 th Street)

Descriptions of Structures, Roads, Other Improvements on the Subject Property

During the site reconnaissance, permanent structures were not observed on the subject property. Numerous vehicles (automobiles, trucks, RVs), boats, storage containers, trailers and miscellaneous equipment were observed on the subject property.

A chain-link fence was noted around the perimeter of the subject property. In addition, the property is separated by fencing into four areas, which appear to be used by different companies.

Access to the subject property is available from several gates on Huber Street and Barca Street.

The following utility providers service the area:

- Electrical Service – Southern California Edison
- Natural Gas Service – Southern California Gas Company
- Water Service – City of Grover Beach
- Sewer Service – City of Grover Beach
- Solid Waste Service – City of Grover Beach



User-Provided Information

As described in ASTM E 1527-13 Section 6, City of Pismo Beach, Public Works Department was interviewed for actual knowledge pertaining to the subject property to help identify recognized environmental conditions. Benjamin Fine, Director of Public Works/City Engineer with the City of Pismo Beach, completed the User Questionnaire as provided by ASTM Appendix X3. A copy of the completed questionnaire is included as Appendix A.

Based on our review of the completed questionnaire, Mr. Fine did not review the following sources of information and is unaware of information regarding the following:

- Recorded land title records (or judicial records, where appropriate) that identify any environmental liens filed or recorded against the subject property
- Recorded land title records (or judicial records, where appropriate) that identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the subject property under federal, tribal, state or local law

Based on our review of the completed questionnaire, Mr. Fine is unaware of information regarding the following:

- Specialized knowledge or experience related to the subject property or nearby properties
- Reduction in value for the subject property relative to any known environmental issues
- Commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of releases or threatened releases
- Obvious indicators that point to the presence or likely presence of releases at the subject property
- Pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the subject property
- Pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property
- Notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products



Records Review

Physical Setting Sources

Topography

The current USGS topographic map (Oceano Quadrangle, 2012) indicates that the subject property is situated at an elevation of about 25 feet above mean sea level with topography sloping down to the west. The adjacent topography consists of relatively flat land gradually sloping to the west.

Geology and Hydrogeology

According to the California Geological Survey (CGS), *California Geomorphic Provinces, Note 36*¹, the subject property is located within the Coast Ranges Geomorphic Province. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevation above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Strata dip beneath alluvium of the Great Valley. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata.

Site Geology

According to the current United States Geological Survey Geologic Map of the Oceano Quadrangle (Dibblee, 2006), the subject property is underlain by Quaternary Older surficial deposits, described as older dissected alluvium.

Regional Groundwater Occurrence and Quality

The subject property is located within the Santa Maria River Valley groundwater basin.

The Santa Maria River Valley basin is bound on the north by the San Luis and Santa Lucia Ranges, on the east by the San Rafael Mountains, on the south by the Solomon Hills and the San Antonio Creek Valley Groundwater Basin, and on the west by the Pacific Ocean. Throughout most of the basin, groundwater is unconfined, except in the coastal portions where it is confined. The principal water-bearing units in this basin are alluvium (Holocene aged), dune sands (Pleistocene and Holocene aged), and the Orcutt (Pleistocene aged), Paso Robles (Pliocene – Pleistocene aged), Pismo (Pliocene aged), and Careaga (late Pliocene aged) Formations.

During the preparation of this Phase I ESA, we reviewed the California State Water Resources Control Board's (SWRCB's) online GeoTracker database to determine groundwater flow direction in the vicinity of the subject property. According to the *Case Closure Summary for the Former Jackpot Service Station* prepared by the Regional Water Quality Control Board (RWQCB) – Central Coast Region and dated August 1996, groundwater is reported to be between 4 and 14 feet below ground surface (bgs) and flows toward the west-southwest. This Former Jackpot Service Station property is located approximately 0.85 miles to the northwest of the subject property.

¹ https://www.conservation.ca.gov/cgs/Documents/Publications/Note_36.pdf



Standard Environmental Record Sources

Environmental Data Resources, Inc. (EDR) was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within specified radii of the property. A copy of the EDR report, which specifies the ASTM search distance for each public list, is included as Appendix B. As shown on the attached EDR report, federal, state and county lists were reviewed as part of the research effort. Please refer to Appendix B for a complete listing of sites reported by EDR and a description of the databases reviewed.

The Map Findings Summary, included in the EDR report, provides a summary of the databases searched, the number of reported facilities within the search radii, and whether the facility is located onsite or adjacent to the subject property. The following information is based on our review of the Map Findings Summary and the information contained in the EDR report.

Subject Property

The subject property was not listed on any of the regulatory databases reviewed.

Offsite Properties

Offsite properties listed by EDR fall under two general categories of databases: those reporting unauthorized releases of hazardous substances (e.g., Leaking Underground Storage Tank [LUST], National Priority List [a.k.a. Superfund sites], and corrective action facilities), and databases of businesses permitted to use hazardous materials or generate hazardous wastes, for which an unauthorized release has not been reported to a regulatory agency.

Rincon reviewed the EDR Radius Map and select detailed listings to evaluate their potential to impact the subject property, based on the following factors:

- Reported distance of the facility from the subject property
- The nature of the database on which the facility is listed, and/or whether the facility was listed on a database reporting unauthorized releases of hazardous materials, petroleum products, or hazardous wastes
- Reported case type (e.g., soil only, failed underground storage tank [UST] test only)
- Reported substance released (e.g., chlorinated solvents, gasoline, metals)
- Reported regulatory agency status (e.g., case closed, “no further action”)
- Location of the facility with respect to the reported groundwater flow direction (discussed in the Geology and Hydrogeology section of this report)

Facilities/properties that were interpreted by Rincon to be of potential environmental concern to the subject property, based on one or more of the factors listed above, are summarized in Table 2. In accordance with ASTM, contamination migration pathways in soil, groundwater, and soil vapor were considered in our analysis of offsite properties of potential environmental concern.



Table 2 EDR Listing Summary of Select Sites Within One-Eighth Mile of the Subject Property

Site Name	EDR Site ID	Site Address	Distance from Subject Property	Database Reference	Comments
Subject Property					
The subject property was not listed on any of the regulatory databases searched by EDR.					
Adjacent Properties					
Central Coast Water Treatment	A1	966 Huber Street	Adjacent Property – North	CUPA LISTINGS	California Unified Program Agency- Hazardous Materials
City of Pismo Beach – Well #23	A2	970- 990 Huber Street	Adjacent Property – East	CUPA LISTINGS	California Unified Program Agency- Hazardous Materials
Harry’s Radiator Service	3	989 S 4 th Street	Adjacent Property – West	CUPA LISTINGS, HAZNET	California Unified Program Agency- Hazardous Materials, Hazardous Waste Tracking System
Topco, Inc.	B4, B5	974 Griffin Street	Adjacent Property - East	CUPA LISTINGS, RCRA-LQG	California Unified Program Agency- Hazardous Materials, Large Quantity Generator of hazardous waste

Orphan Listings

EDR reported two orphan or unmapped site listings, which EDR is unable to plot due to insufficient address information. Based on Rincon’s review of the limited address information or site descriptions for the orphan listings, none of the listings are expected to impact the subject property.

Additional Environmental Record Sources

Review of Agency Files

As a follow-up to the database search, Rincon reviewed regulatory information for facilities within the specified search radii that were interpreted to have the potential to impact the subject property, based on one or more factors previously discussed (e.g., distance, open case status, upgradient location, soil vapor migration).

The following is a summary of our review of regulatory information obtained from review of online sources (e.g., SWRCB GeoTracker database, Department of Toxic Substances Control [DTSC] EnviroStor database) and/or files requested from the applicable regulatory agency, as described below.

Subject Property

The subject property was not listed in any of the databases searched by EDR.



Adjacent Properties

Four adjacent properties were listed in databases searched by EDR.

- **Central Coast Water Treatment – 966 Huber Street.** This property is located adjacent to the north of the subject property and is listed on the Certified Unified Program Agency (CUPA) LISTINGS database searched by EDR.

The CUPA Listing database is defined by EDR as “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.”

The CUPA LISTING in the EDR report indicates that this adjacent property uses and stores hazardous materials which are permitted/regulated by the San Luis Obispo County CUPA (San Luis Obispo County Environmental Health Services Division [EHD]).

- **City of Pismo Beach – Well #23- 970-990 Huber Street.** According to the City of Pismo Beach, Well #23 is located across the street to the east of the subject property. This well is listed on the CUPA LISTINGS database searched by EDR. The CUPA LISTING in the EDR report indicates that hazardous materials associated with the well are used and stored on the adjacent property, which are permitted/regulated by the San Luis Obispo County CUPA (San Luis Obispo County EHD).
- **Harry’s Radiator Service – 989 S 4th Street.** This property is located adjacent to the southwest of the subject property and listed on the HAZNET and CUPA LISTINGS databases searched by EDR. The CUPA LISTING in the EDR report indicates that this adjacent property uses and stores hazardous materials, and generates hazardous wastes, which are permitted/regulated by the San Luis Obispo County CUPA (San Luis Obispo County EHD). According to the HAZNET listing, in 2007 and 2009 the site produced “unspecified oil-containing waste” which was disposed of at an accepting offsite facility.
- **Topco, Inc. – 974 Griffin Street.** This property is located adjacent to the northeast of the subject property and listed on the RCRA-LQG and CUPA LISTINGS database searched by EDR. The CUPA LISTING in the EDR report indicates that this adjacent property uses and stores hazardous materials, and generates hazardous wastes, which are permitted/regulated by the San Luis Obispo County CUPA (San Luis Obispo County EHD). The RCRA-LQG listing indicates the site is a large quantity generator of cadmium, chromium, lead and other inorganic soil waste.

Review of State of California Division of Oil, Gas, and Geothermal Resources Records

A review of the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) Online Mapping System² indicates that no oil wells are located on the subject property or adjacent properties, or within one-quarter mile of the subject property.

² <https://maps.conservation.ca.gov/doggr/wellfinder/>



Review of National Pipeline Mapping System Records

A review of the National Pipeline Mapping System (NPMS) online Public Map Viewer³ indicates that no gas transmission pipelines or hazardous liquid pipelines are located on the subject property or adjacent properties.

Known or Suspect Contaminated Release Sites with Potential Vapor Migration

The EDR report was reviewed to identify nearby known or suspect contaminated sites that have the potential for contaminated vapor originating from the nearby site to be migrating beneath the subject property. Based on the ASTM E 2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, the following minimum search distances were initially used to determine if contaminated soil vapors from a nearby known or suspect contaminated site have the potential to be migrating beneath the subject property:

- 1/10 mile (528 feet) for petroleum hydrocarbons
- 1/3 mile (1,760 feet) for other contaminants of concern (COCs)

If upgradient known or suspect contaminated sites are located within the above referenced distances from the subject property, online resources are reviewed to determine the extent of the contaminated plume at those sites. The following describes search distances for contaminated plumes of petroleum hydrocarbons (30 feet from the subject property) and other COCs (100 feet from the subject property). Per ASTM E 2600-15, vapors associated with impacted soil or groundwater present within these distances have the potential to migrate beneath the subject property.

Petroleum Hydrocarbons

Based on our review of the EDR report information as indicated above, there are no upgradient known or suspect petroleum hydrocarbon-contaminated sites within 528 feet of the subject property. Therefore, per ASTM E 2600-15, as this distance exceeds the 30-foot distance considered the critical distance wherein such migration may pose a threat to the subject property, there are no potential threats to the subject property posed by the potential migration of petroleum hydrocarbon vapors from listed sites.

The subject property is currently used for the storage of automobiles, trucks, RVs, storage containers, boats, trailers and miscellaneous equipment storage. The yards are unpaved. No spills or incidents were identified in the EDR report for the subject property. However, although no releases of hazardous materials have been reported, based on the nature of this type of storage yard, unreported hazardous materials releases may have occurred.

Other COCs

Based on our review of the EDR report, there are no upgradient known or suspect sites contaminated with other COCs within 1,760 feet of the subject property. Therefore, per ASTM E 2600-15, as this distance exceeds the 100-foot distance considered the critical distance wherein

³ <https://www.npms.phmsa.dot.gov/PublicViewer/>



such migration may pose a threat to the subject property, there are no known potential threats to the subject property posed by the potential migration of other COC vapors from listed sites.

Historical Use Information on the Property and the Adjoining Properties

The historical records review completed for this Phase I ESA includes aerial photographs and topographic maps and city directories as detailed in the following sections. Copies of the historical resources reviewed are included in Appendix C. Table 3 provides a summary of the historical use information available for the subject property.

Review of Aerial Photographs

Aerial photographs from EDR's aerial photograph collection were obtained. In addition, a current aerial from Google Earth was reviewed. The aerial photographs were reviewed on June 6, 2019.

Review of Historical Topographic Maps

Historical topographic maps from EDR's map collection were obtained. The historical topographic maps were reviewed on June 6, 2019.

Review of City Directory Listings

EDR was contracted to provide copies of city directory listings for the subject property. The city directory listings were reviewed on June 6, 2019. As indicated in the attached report, no records were provided for the subject property. Listings for adjacent properties are summarized below.

Review of Fire Insurance Maps

EDR was contracted to provide copies of fire insurance maps (i.e. Sanborns) for the subject property. As indicated in the attached report, fire insurance maps were not available for the subject property or adjacent properties.

Review of Building Permit Records

Building permit records were not reviewed because no buildings have been developed on the subject property.

Other Historical Sources

Based on the historical information obtained, no additional historical sources were reviewed.



Summary of Historical Uses

Subject Property

Table 3 Historical Use of the Subject Property

Year	Use	Source
Subject Property		
1897	The subject property appears to be vacant.	Topographic Map (TM)
1900	Similar to the 1897 TM.	TM
1918	Similar to the 1900 TM.	TM
1939	The subject property appears to be agricultural land.	Aerial Photograph (AP)
1942	Similar to the 1918 TM.	TM
1949	Similar to the 1939 AP.	AP
1952	Surrounding buildings/structures are depicted.	TM
1956	Similar to the 1949 AP.	AP
1960	Similar to the 1956 AP.	AP
1963	The subject property appears to be vacant.	AP
1965	Calvin Court is depicted farther to the south.	TM
1976	The subject property appears to be vacant land.	AP
1978	Similar to the 1965 TM. The subject property appears to be vacant with some storage on the northern portion.	TM, AP
1979	Similar to the 1978 TM.	TM
1981	The subject property appears to be vacant with the addition of what appears to be miscellaneous equipment storage located on the northern portion of the subject property and the adjacent property to the north of the subject property.	AP
1993	Similar to the 1979 TM.	TM
1994	Similar to the 1993 TM. It appears the majority of the subject property is vacant with the exception of parked vehicles in the northern portion of the subject property.	TM, AP
2006	The subject property is occupied by what appears to be vehicles and miscellaneous equipment storage.	AP
2009	Similar to 2006 AP.	AP
2012	The subject property and surrounding areas are shaded white. Individual structures are not depicted. Similar to 2009 AP.	TM, AP
2016	The subject property appears to be in use for vehicle/ boat/ trailer/ miscellaneous equipment storage.	AP



Based on Table 3 above, the following historical uses of the subject property have the potential to impact the subject property:

- **Agricultural land:** 1939 to 1960
- **Vehicle, boat, trailer and miscellaneous equipment storage:** 1994 to present day

Northern Adjacent Property (966 Huber Street)

Based on our review of the documents listed above, it appears that the northern adjacent property was developed with the following:

- 1939 to 1960: Agricultural land
- 1963 to 1978: Vacant
- 1981: Equipment located on the property.
- 1994: Vacant
- 2000 to present day: One industrial structure; Central Coast Water Treatment

Eastern Adjacent Properties (964, 974, 978 Griffin Street)

Based on our review of the documents listed above, it appears that the eastern adjacent property were developed with the following:

- 1939: Agricultural land
- 1949 to 1981: Land disturbance, two tanks, and one structure
- 1994: Vacant
- 2000 to 2014: Pacific West Roofing Supply (964 Griffin Street); Topco Inc A De Corporation (974 Griffin Street)
- 2006 to present day: Structures and equipment occupying site

Southern Adjacent Property

Based on our review of the documents listed above, it appears that the southern adjacent property was developed with the following:

- 1897 to present day: Undeveloped land

Western Adjacent Properties (983, 989 4th Street)

Based on our review of the documents listed above, it appears that the western adjacent properties were developed with the following:

- 1939 to 1960: Agricultural land
- 1963: Vacant
- 1996 to 1981: One structure
- 1994 to present day: Two structures and a vehicle storage yard.



Gaps in Historical Sources

Several gaps of greater than five years were identified in the historical records reviewed, from 1900 to 1918, 1918 to 1939, 1942 to 1949, 1965 to 1976, 1981 to 1993, and from 1994 to 2006. These gaps are considered insignificant because the subject property use appears to be similar prior to and following the gaps.



Interviews

Rincon performed interviews regarding the subject property and surrounding areas. The purpose of the interviews was to discuss current and historical conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the subject property.

Interview with Owner/Site Manager

An interview questionnaire was provided to the property owner, Joseph A. Wolosz, prior to the site reconnaissance. Mr. Wolosz completed the Owner Questionnaire on June 10, 2019. A copy of the completed questionnaire is included in Appendix A. The following information is based on our review of the completed questionnaire.

Mr. Wolosz indicated the following:

- The Wolosz Family Trust obtained ownership of the subject property in the 1970s.
- The subject property is currently used for the storage of tow trucks, trucks and roofing material.
- The subject property was formerly used for industrial asphalt maintenance.
- Mr. Wolosz is unaware of hazardous waste generated at the site.
- The western adjacent property was formerly used for industrial asphalt maintenance which formerly contained 55-gallon drums containing asphalt seal coating.

Mr. Wolosz indicated that he is unaware of the presence of industrial drums, storage tanks (above or below ground), fill dirt, pits, ponds, lagoons, sumps, clarifiers, solvent degreasers, stained soil, vent pipes, fill pipes, or access ways, stained surfaces, private wells, non-public water systems, transformers, capacitors, or hydraulic equipment, records indicating the presence of PCBs, or records indicating the presence of pesticides or herbicides at the subject property.

Mr. Wolosz indicated that he is not aware of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property. In addition, he is not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products at the subject property.

Interviews with Occupants

Occupants of the storage yards were not interviewed as part of this research effort.

Interviews with Local Government Officials

Rincon contacted the following agencies for records pertaining to the subject property and/or adjacent properties:

- **City of Pismo Beach-** Hazardous materials records (CUPA records) for the adjacent City of Pismo Beach Well #23 were requested from the City of Pismo Beach on June 12, 2019. As of the date of this report, CUPA records (if any) have not been provided for our review.



- **City of Grover Beach-** Hazardous materials records (CUPA records) for the adjacent properties identified above in Table 2 were requested from the City of Grover Beach contacts provided to us by the City of Pismo Beach on June 17, 2019. As of the date of this report CUPA records (if any) have not been provided for our review.
- **County of San Luis Obispo-** Per the request of the client, public records for the subject property and adjacent properties were not requested from the County of San Luis Obispo.

Interviews with Others

Rincon did not attempt to interview neighboring property owners or others as part of this Phase I ESA.



Site Reconnaissance

Rincon performed a reconnaissance of the subject property on June 12, 2019. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property.

Methodology and Limiting Conditions

The site reconnaissance was conducted by:

1. Observing the subject property from public thoroughfares,
2. Observing the adjacent properties from public thoroughfares,
3. Observing the subject property from adjacent dirt roads.

Our observation of the subject property was limited by physical obstructions including locked gates. The interior of the subject property was not accessible, due to the locked gates. The subject property was only accessible from the perimeter of the subject property.

Current Use of the Property and Adjacent Properties

The subject property is currently in use as a several storage yards which are separated with chain link fencing. The yards are used for the storage of automobiles, trucks, RVs, storage containers, boats, trailers and miscellaneous equipment storage. The northwestern portion of the subject property is occupied by American Roof Removal/ American Roofing Co. The yards are unpaved.

The subject property is located in an area that is primarily composed of industrial, commercial and residential land uses. Properties in the vicinity of the subject property include a water treatment facility, automobile repair shops, a towing company, storage yards and single-family residences. The current adjacent properties as follows:

- Northern Properties: Central Coast Water Treatment, Inc. - a commercial and industrial water treatment system company (966 Huber Street)
- Eastern Properties: Huber Street followed by storage yards (964 and 978 Griffin Street) and 974 Griffin Street (Topco, Inc.) an American retail food GPO (Group Purchasing Organization).
- Southern Properties: Undeveloped land (Eucalyptus tree grove) followed by Calvin Court and then residential homes
- Western Properties: Toyworx Automotive (983 S. 4th Street), Kautz Towing (985 S. 4th Street) and Harrys Radiator Service (989 S 4th Street)

Past Use of the Property and Adjacent Properties

Based on our site reconnaissance, past uses at the subject property and adjacent properties are not readily apparent.



Current or Past Uses in the Surrounding Areas

The subject property is surrounded by residential, commercial, and industrial land uses as detailed in the Site Description section of this report. Past uses of the surrounding area are not readily apparent based on the site reconnaissance.

Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions

Geologic, hydrogeologic, hydrologic, and topographic information are as previously stated in the Physical Settings Section of this report.

General Description of Structures

There are no permanent structures located on the subject property.

Exterior Observations

Hazardous Substances and Petroleum Products

The subject property is currently used for the storage of automobiles, trucks, RVs, storage containers, boats, trailers and miscellaneous equipment storage. The yards are unpaved. Because the interior of the subject property was not accessible, except for from the perimeter, it is unknown if other hazardous substances or petroleum products are present in the areas that were not accessible during the site reconnaissance.

Storage Tanks

During the site reconnaissance, no above- or below-ground storage tanks or evidence of underground storage tanks were observed on the subject property.

Odors

During the site reconnaissance, Rincon did not identify any strong, pungent, or noxious odors.

Pools of Liquid

During the site reconnaissance, no pools of liquid were observed.

Drums

During the site reconnaissance, two drums were observed on the southeastern corner of the subject property. The contents of the drums were not able to be identified during the site reconnaissance. Rincon did not observe indications of releases from the drums on the subject property. Because the interior of the subject property was not accessible, except for from the perimeter, is unknown if other drums are present in the areas that were not accessible during the site reconnaissance.



Unidentified Substance Containers

Unidentified substance containers or unidentified containers that might contain hazardous substances were observed throughout the subject property during the site reconnaissance. Because the interior of the subject property was not accessible, except for from the perimeter, it is unknown if releases from these containers have occurred, or if other unidentified substance containers or unidentified containers that might contain hazardous substances are present in the areas that were not accessible during the site reconnaissance.

Indications of Polychlorinated Biphenyls (PCBs)

During the site reconnaissance, transformers were not observed on the subject property. In addition, other hydraulic operated equipment was not observed. Because the interior of the subject property was not accessible, except for from the perimeter, it is unknown if other hydraulic equipment is present in the areas that were not accessible during the site reconnaissance.

Two pole-mounted transformers were observed adjacent to the east across Huber Street. There were no indications of releases in the vicinity of the transformers.

Other Conditions of Concern

During the site reconnaissance, Rincon did not note any of the following:

- Stains or corrosion
- Clarifiers and sumps
- Degreasers/parts washers
- Pools of liquid
- Pits, ponds, and lagoons
- Stained soil or stained pavement
- Stressed vegetation
- Solid waste/debris
- Wastewater
- Wells
- Septic systems/effluent disposal system

Because the interior of the subject property was not accessible, except for from the perimeter, it is unknown if other conditions of concern are present in the areas that were not accessible during the site reconnaissance.



Evaluation

Findings

Known or suspect recognized environmental conditions associated with the subject property include the following:

- Former agricultural use of the subject property.
- Automobile, trucks, RV, boat, trailer and miscellaneous equipment storage on the subject property.
- Western adjacent automobile repair use.

Opinions

- A. **Former agricultural use of the subject property.** According to the historical resources reviewed, the subject property appears to have been used for agricultural purposes as early as 1939. In general, it appears that the subject property remained used for agricultural purposes from approximately 1939 through approximately 1960. Agricultural land use is typically associated with the use of chlorinated and arsenical pesticides. Because the site has not been redeveloped, and remains unpaved, there is the potential for residual pesticides (if any were used on the site) to be remain in shallow soil beneath the site. Therefore, the former use of the subject property for agricultural purposes is considered a potential *Recognized Environmental Condition*.
- B. **Automobile, trucks, RV, boat, trailer and miscellaneous equipment storage on the subject property.** The subject property is currently used for the storage of automobiles, trucks, RVs, storage containers, boats, trailers and miscellaneous equipment storage. The yards are unpaved. No spills or incidents were identified in the EDR report for the subject property. However, although no releases of hazardous materials have been reported, based on the nature of this type of storage yard, unreported hazardous materials releases may have occurred. Therefore, the current use of the subject property is considered *Potential Recognized Environmental Condition*.
- C. **Western adjacent automobile repair facilities and towing/vehicle storage yard.** According to historical documents reviewed, the western adjacent properties have been occupied by automobile repair facilities and a towing company/vehicle storage yard from at least 1994 to present day. No spills or incidents related to this site were identified in the EDR report. However, although no releases of hazardous materials have been reported in association with the adjacent property businesses, based on the nature of auto repair/towing/vehicle storage facilities, unreported hazardous materials releases may have occurred. Therefore, the adjacent automobile repair facilities and towing/vehicle storage yard are considered *Potential Recognized Environmental Conditions*.



Conclusions

Rincon has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527 for the 1.5-acre parcel, located on Huber Street in Grover Beach, California. Any exceptions to, or deletions from, this practice are described in the Deviations section of this report. This assessment has revealed evidence of three Potential RECs in connection with the subject property as follows:

Potential Recognized Environmental Conditions

1. Former agricultural use of the subject property.
2. Automobile, truck, RV, boat, trailer and miscellaneous equipment storage on the subject property.
3. Western adjacent automobile repair facilities and towing/vehicle storage yard.

Recommendations

To determine if above identified potential RECs have impacted soil beneath the subject property, a soil matrix assessment on the subject property is recommended.

Deviations

The following Deviations from ASTM E 1527-13 practice were encountered during the completion of this Phase I ESA:

- Site Reconnaissance- Our observation of the subject property was limited by physical obstructions including locked gates. The interior of the subject property was not accessible, due to the locked gates. The subject property was only accessible from the perimeter of the subject property.



References

The following reference materials were used in preparation of this Phase I ESA:

Aerial Photographs

Photos provided by Environmental Data Resources, Inc. (EDR) on June 6, 2019.

City Directory Listings

Listings provided by EDR on June 10, 2019.

Environmental Database

EDR report dated June 5, 2019.

Geology

California Geologic Survey (CGS), *California Geomorphic Provinces Note 36*, December 2002.
Accessed June 6, 2019;

California Department of Water Resources (DWR), *California's Groundwater Bulletin 118*, 2003.
Accessed June 6, 2019;

Groundwater

California Department of Water Resources (DWR), *California's Groundwater Bulletin 118*, 2003,
<http://www.water.ca.gov/groundwater/bulletin118/publications.cfm>. Accessed June 6, 2019;

RWQCB online database (GeoTracker), <http://geotracker.waterboards.ca.gov/>. Accessed June 6, 2019.

Historical Topographic Maps

Maps provided by EDR on June 5, 2019.

Oil and Gas Records

State of California, Division of Oil, Gas, and Geothermal Resources (DOGGR) website:
<https://www.conservation.ca.gov/dog/Pages/Wellfinder.aspx>. Accessed June 6, 2019.

Pipelines

National Pipeline Mapping System (NPMS) Public Map Viewer:
<https://www.npms.phmsa.dot.gov/PublicViewer/>. Accessed June 6, 2019.

Topography

USGS topographic map (Oceano Quadrangle, 2012).



Approximately 1.5 Acre Parcel, Huber Street, Grover Beach, California
Phase I Environmental Site Assessment

Other

Department of Toxic Substances Control (DTSC) online EnviroStor database:
<http://www.envirostor.dtsc.ca.gov/public/>. Accessed June 6, 2019.

City of Grover Beach online database: <http://grover.org/index.aspx?nid=19>. Accessed June 6, 2019.



Signatures of Environmental Professionals

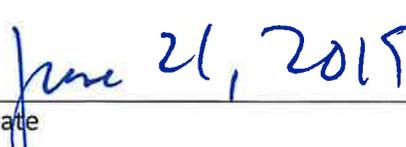
The qualified environmental professionals that are responsible for preparing the report include Walt Hamann and Sarah A. Larese. Their qualifications are summarized in the following section.

"We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."



Signature
Walt Hamann, PG, CEG, CHG

Name



Date
Vice President

Title



Signature
Sarah A. Larese

Name



Date
Senior Environmental Scientist

Title



Qualifications of Environmental Consultants

The environmental consultants responsible for conducting this Phase I ESA and preparing the report include Walt Hamann, Sarah A. Larese, and Michelle Carter. Their qualifications are summarized below.

Environmental Professional Qualifications	X2.1.1 (2) (i) - Professional Engineer or Professional Geologist License or Registration, and 3 years of full-time relevant experience	X2.1.1 (2) (ii) - Licensed or certified by the Federal Government, State, Tribe, or U.S. Territory to perform environmental inquiries	X2.1.1 (2) (iii) – Baccalaureate or Higher Degree from and accredited institution of higher education in a discipline of engineering or science and the equivalent of 5 years of full-time relevant experience	X2.1.1 (2) (iii) – Equivalent of 10 years of full-time relevant experience
Walt Hamann	PG, CHG, CEG		MS Geology	30 years
Sarah Larese			BA Environmental Studies	19 years
Michelle Carter			BS Earth Science	1 year

Walt Hamann, PG, CEG, CHG, is a Principal and Senior Geologist with Rincon Consultants. He holds a Bachelor of Arts degree in geology from the University of California, Santa Barbara and a Master of Science degree in geology from the University of California, Los Angeles. He has over 30 years of experience conducting assessment and remediation projects and has prepared or overseen the preparation of hundreds of Phase I and Phase II Environmental Site Assessments throughout California. Mr. Hamann is a Professional Geologist (#4742), Certified Engineering Geologist (#1635), and Certified Hydrogeologist (#208) with the State of California.

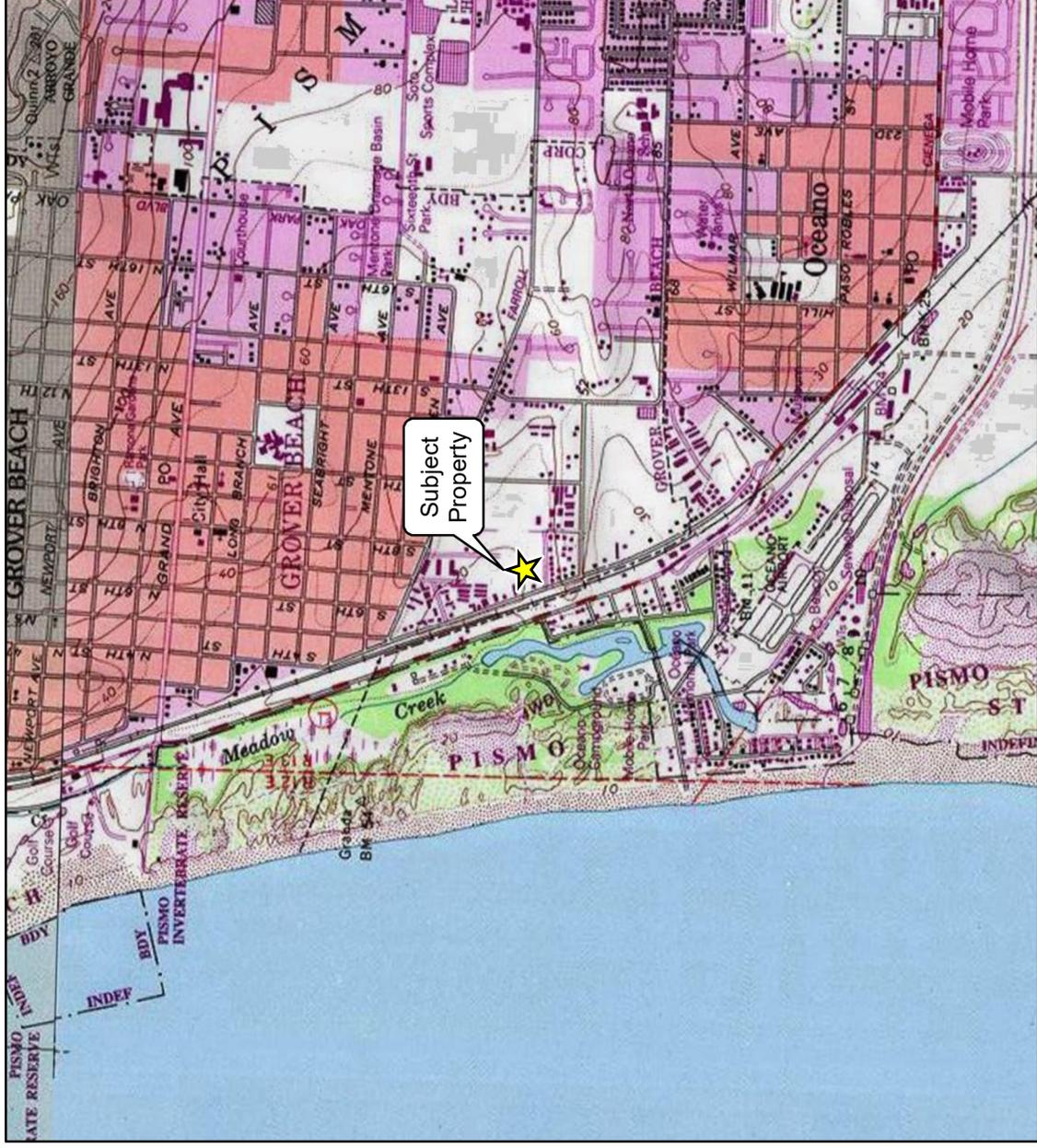
Sarah A. Larese is a Senior Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in environmental studies from the University of California, Santa Barbara, California. Ms. Larese has experience in development, implementation and project management of environmental assessment and remediation projects, especially relating to underground storage tanks. Ms. Larese’s responsibilities at Rincon include implementation of Phase I and II Environmental Site Assessments as well as conducting site remediation field activities and preparation of environmental reports. She has 19 years of experience conducting research, assessment and remediation projects.

Michelle Carter is an Associate Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in Earth Science with an emphasis in Geology from the University of California, Santa Barbara. Ms. Carter’s responsibilities at Rincon include implementation of Phase I Environmental Site Assessment reports for a variety of commercial, rural, and industrial properties. She also has experience with Phase II Environmental Site Assessments, which involve soil, groundwater, and soil vapor assessments.



Figures

Aproximately 1.5 Acre Parcel, Huber Street, Grover Beach, California
Phase I Environmental Site Assessment

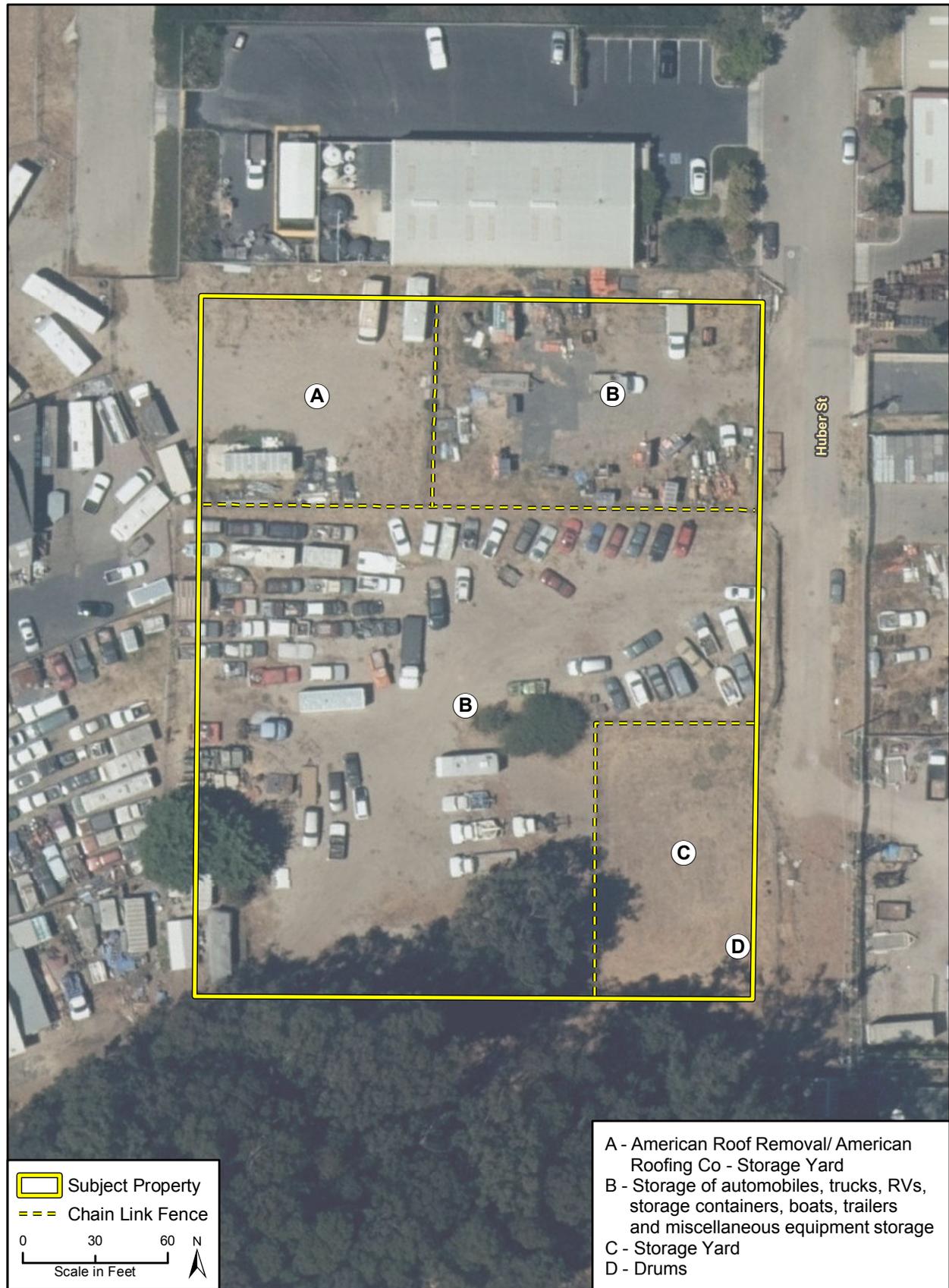


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Vicinity Map

Figure 1
Rincon Consultants, Inc.



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Site Map

Figure 2



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Adjacent Land Use Map

Figure 3

Approximately 1.5 Acre Parcel, Huber Street, Grover Beach, California
Phase I Environmental Site Assessment



Photograph 1. View of the eastern portion of the subject property, facing west.



Photograph 2. View of vehicles and campers parked on the southeastern portion of the subject property, facing southwest.



Photograph 3. View of storage containers and equipment located on the eastern portion of the subject property, facing south.



Photograph 4. View of two 55-gallon drums located on the southeastern portion of the subject property, facing south.



Photograph 5. View of the southeastern portion of the subject property facing north.



Photograph 6. View of the American Roofing business on the northwestern portion of the subject property, facing east.

Approximately 1.5 Acre Parcel, Huber Street, Grover Beach, California
Phase I Environmental Site Assessment



Photograph 7. View of the eastern adjacent pole-mounted transformers along Huber Street, facing south-southeast.



Photograph 8. View of the southern adjacent undeveloped land (eucalyptus grove).



Photograph 9. View of one of the eastern adjacent properties (City of Pismo Beach Well #23).



Photograph 7. View of one of the eastern adjacent storage yards (across Huber Street, 974 Griffin Street), facing east.



Photograph 8. View of the northern adjacent property (Central Coast Water Treatment, Inc-966 Huber Street), facing east



Photograph 9. View of one of the western adjacent properties, facing southwest.



Appendix A

Interview Documentation



User Questionnaire

Rincon Project Number: 19-07931

Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

To qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the “Brownfields Amendments”), the user must provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that “all appropriate inquiries” is not complete.

We respectfully request that you fill out this form and email it to Sarah Larese at SLarese@Rinconconsultants.com within one week from the date of this transmittal.

Project Description

1. Why is the Phase I ESA required or being performed?

The City of Pismo Beach is wanting to purchase the subject property and wants to know if the site is contaminated.

2. What type of property transaction is planned? (i.e. sale, purchase, exchange)

Purchase

3. What is the entire site address?

Unknown

4. What is the Assessor’s Parcel Number(s)?

APN 060-543-016

5. Are any considerations beyond the requirements of Practice E1527 to be considered? (i.e. lien search, asbestos & lead based paint, radon)

unknown



Rincon Project Number: 19-07931
Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

6. Identify all parties who will rely on the Phase I report.

City of Pismo Beach

7. Identify the Site Manager/Contact and how the contact can be reached.

Benjamin A. Fine, P.E. Director of Public Works/City Engineer
805-773-7037 bfine@pismoeach.org

8. Identify the Site Owner and how the owner can be reached.

Wolosz Family Trust, Joe Wolosz
(415) 519-5639 joeywolosz@gmail.com

9. Do you have copies of any available prior environmental site assessment reports, documents, correspondence, etc., concerning any other knowledge or experience with the property that may be pertinent to the environmental professional (i.e. title report, previous Ph I and II ESAs, Environmental Impact Studies)?

No



Rincon Project Number: 19-07931
Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

Subject Property Information

1. Did a search of recorded land title records (or judicial records, where appropriate) identify any environmental liens filed or recorded against the property?

Please mark the box with the most appropriate response:

I **have not** reviewed the records and **do not know** if there are any filed or recorded environmental liens.

I **have** reviewed the records, and **No, there aren't any** filed or recorded environmental liens.

I **have** reviewed the records, and **Yes, there are** environmental liens. Explain:

2. Did a search of recorded land title records (or judicial records, where appropriate) identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?

Please mark the box with the most appropriate response:

I **have not** reviewed the records and **do not know** if there are any filed/recorded AULs or any AULs in place at the site.

I **have** reviewed the records, and **No, there aren't any** filed/recorded AULs or any AULs in place at the site.

I **have** reviewed the records, and **Yes, there are** AULs filed, recorded, and/or in place at the site. Explain:

3. Does the Title Report provide any information pertaining to environmental cleanup liens or activity and use limitations (AULs) for the subject property?

Please mark the box with the most appropriate response:

I **have not** reviewed the Title Report and **do not know** if it provides environmental cleanup liens or AULs information.

I **have** reviewed the Title Report, and **No, it does not provide** environmental cleanup liens or AULs information..

I **have** reviewed the Title Report, and **Yes, it does provide** environmental cleanup liens or AULs information. Explain:



Rincon Project Number: 19-07931
Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

4. Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

Please mark the box with the most appropriate response:

No, I do not have any specialized knowledge and/or experience related to the property or nearby properties.

Yes, I **do** have specialized knowledge and/or experience related to the property or nearby properties. Explain:

5. As the user of this ESA, based on your knowledge and experience related to the property, are you aware of any information pertaining to a reduction in value for the subject property relative to any known environmental issues?

Please mark the box with the most appropriate response:

No, I do not have any information about a reduction in property value relative to environmental issues.

Yes, I do have information about a reduction in property value relative to environmental issues. Explain:

6. Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

Please mark the box with the most appropriate response:

Yes, I do believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Skip to question #7.

No, I do not believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Proceed to question #6a.

a. If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? (40 CFR 312.29)

Please mark the box with the most appropriate response

No, I have not considered the idea that known or believed contamination at the site has caused the lower purchase price.

Yes, I have considered the idea that known or believed contamination at the site has caused the lower purchase price. Explain:

The purchase price is agreed to be the appraised value. The appraisal has not been complete



Rincon Project Number: 19-07931
Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

7. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:

Please mark the box with the most appropriate response:

a. Do you know the past uses of the property?
 I **do not** know.
 I **do** know. Explain:

b. Do you know of specific chemicals are present or once were present at the property?
 I **do not** know.
 I **do** know. Explain:

c. Do you know of any spills or other chemical releases that have taken place at the property?
 I **do not** know.
 I **do** know. Explain:

d. Do you know of any environmental cleanups have taken place at the property?
 I **do not** know.
 I **do** know. Explain:

8. Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?

Please mark the box with the most appropriate response:

No, I do not know and/or do not have any experience with any obvious indicators that point to the presence or likely presence of contamination at the property.

Yes, I do know of and/or do have experience with obvious indicators that point to the presence or likely presence of contamination at the property. Explain:



Rincon Project Number: 19-07931
Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

9. Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site?

Please mark the box with the most appropriate response:

No, I am not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site.

Yes, I am aware of pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site. Explain:

10. Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site?

Please mark the box with the most appropriate response:

No, I am not aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site.

Yes, I am aware of pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site. Explain:

11. Are you aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?

Please mark the box with the most appropriate response:

No, I am not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products..

Yes, I am aware of a notice, or notices, from a government entity (or multiple government entities) regarding a possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products. Explain:



Rincon Project Number: 19-07931
Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

This questionnaire was completed by (please print)

Name Benjamin A. Fine, P.E.
 Title Director of Public Works/City Engineer
 Firm City of Pismo Beach
 Street Address 760 Mattie Road
 City, State, Zip Code Pismo Beach, CA 93449
 Phone Number 805-773-7037
 Fax Number _____

What is the Preparer’s relationship to the property (i.e., owner, occupant, property manager, employee, agent, consultant, etc.)? representative for purchaser

Copies of the completed questionnaire should be faxed, emailed (preferably) or mailed to:

Rincon Consultants, Inc.
 Attention: Environmental Site Assessment Division
 180 N Ashwood Avenue
 Ventura, CA 93003
 Fax: (805) 644-4455
 Email: SLarese@rinconconsultants.com

Preparer represents that to the best of the preparer’s knowledge the above statements and facts are true and correct and to the best of the preparer’s knowledge no material facts have been suppressed or misstated.

Signature Benjamin A. Fine  Digitally signed by Benjamin A. Fine
 Date: 2019.06.20 11:35:16 -07'00' Date _____



Property Owner Interview Questionnaire

Rincon Project Number: 19-07931

Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

This questionnaire should be completed by the current property owner or a designated representative of the current property owner. We respectfully request that you fill out and return this form via fax at (805) 644-4455 or email to us at SLarese@rinconconsultants.com within one week from the date of this transmittal.

1. Was the subject property or any adjoining property ever used as:

- | | |
|---|---|
| <input type="checkbox"/> a gasoline or other fueling station | <input type="checkbox"/> a junkyard or landfill |
| <input checked="" type="checkbox"/> a motor vehicle repair facility | <input type="checkbox"/> a waste treatment, storage, disposal, processing or recycling facility |
| <input type="checkbox"/> a commercial printing facility | <input type="checkbox"/> a machine shop |
| <input type="checkbox"/> a dry cleaners | <input type="checkbox"/> a manufacturing facility |
| <input type="checkbox"/> a photo developing laboratory | <input type="checkbox"/> an oil production facility (including oil wells) |
| <input type="checkbox"/> a metal plating facility | <input checked="" type="checkbox"/> any other industrial use |
| <input type="checkbox"/> a farm | |

Please check all that apply above and describe:

Storage of tow trucks and roofing materials

2. Please describe the current land uses of the subject property and those surrounding your property. Please indicate all businesses/companies located on property.

2a. Current Use of Subject Property:

Please check all that apply: <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input checked="" type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other- Please Describe	Please include a brief description of current operation: Storage of tow trucks, trucks, and roofing material
---	---

2b. Current Use of Northern Adjoining Properties:

Please check all that apply: <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input checked="" type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other- Please Describe	Please include a brief description of current operation: Industrial zone, cannabis corridor
---	--



Rincon Project Number: 19-07931

Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

2c. Current Use of Southern Adjoining Properties:

Please check all that apply: <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input checked="" type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other- Please Describe	Please include a brief description of current operation: Industrial zone, cannabis corridor
---	--

2d. Current Use of Western Adjoining Properties:

Please check all that apply: <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input checked="" type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other- Please Describe	Please include a brief description of current operation: Car and truck storage
---	---

2e. Current Use of Eastern Adjoining Properties:

Please check all that apply: <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input checked="" type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other- Please Describe	Please include a brief description of current operation: City of Pismo water, industrial, cannabis corridor
---	--

3. Please describe the previous land uses of your property and those surrounding your property. Include property ownership and dates of operation if known.

3a. Previous Use of Subject Property:

Please check all that apply: <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input checked="" type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other- Please Describe	Please include a brief description of current operation: Asphalt maintenance, industrial
---	---

3b. Previous Use of Northern Adjoining Properties:

Please check all that apply: <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input checked="" type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other- Please Describe	Please include a brief description of current operation: Industrial
---	--



Rincon Project Number: 19-07931
Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

3c. Previous Use of Southern Adjoining Properties:

Please check all that apply: <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input checked="" type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other- Please Describe	Please include a brief description of current operation: Industrial
---	---

3d. Previous Use of Western Adjoining Properties:

Please check all that apply: <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input checked="" type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other- Please Describe	Please include a brief description of current operation: Asphalt maintenance
---	--

3e. Previous Use of Eastern Adjoining Properties:

Please check all that apply: <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input checked="" type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other- Please Describe	Please include a brief description of current operation: Industrial
---	---

4. Who is the current owner of the property?

The Wolosz Family Trust

5. When did current ownership begin?

Not sure, I believe in the 1970s

6. What is the age of the on-site facility?

NA

7. Who is the previous owner of the property?

NA

8. Please indicate the property's current:

Electrical service provider	NA
Natural Gas service provider	NA
Water service provider	NA
Sewer service provider	NA
Solid waste hauler	NA



Rincon Project Number: 19-07931

Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

9. To the best of your knowledge, has your facility previously or does your facility currently store or use any of the following in individual containers larger than 5 gallons in volume or 50 gallons in the aggregate? (if Yes or Unknown, include how many, type, and size)

<input type="checkbox"/> Damaged or discarded automotive or industrial batteries	I do not know
<input type="checkbox"/> Paints	I do not know
<input type="checkbox"/> Oils or solvents	I do not know
<input checked="" type="checkbox"/> Motor vehicle fleet	Tow trucks, trucks, cars
<input type="checkbox"/> Pesticides or herbicides	I do not know
<input type="checkbox"/> Other chemicals or hazardous substances	I do not know

10. Please indicate any wastes generated at the facility:

Hazardous Waste	Quantity	Disposal Method
I do not know	I do not know	I do not know

11. Are there currently or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon) or sacks of chemicals located on the property or at the facility?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: I do not know but the parcel adjacent to the west had 55 gallon oil drums on site for asphalt seal coating
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

12. Are there currently or to the best of your knowledge have there been previously, any evidence of fill dirt having been brought onto the property that originated from a contaminated site or that is of an unknown origin?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	



Rincon Project Number: 19-07931

Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

13. Are there currently or to the best of your knowledge have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

14. Are there currently or to the best of your knowledge have there been previously, any sumps, clarifiers, or solvent degreasers on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

15. Are there currently or to the best of your knowledge have there been previously, any stained soil on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

16. Are there currently or to the best of your knowledge have there been previously, any storage tanks (above or below ground) located on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: I don't think so
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

17. Are there currently or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways (etc.) indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: I do not know
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

18. If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government agency?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: I do not know
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	



Rincon Project Number: 19-07931

Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

19. Are there currently or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water, or are emitting foul odors?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: I do not know
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

20. To the best of your knowledge has your facility previously or does your facility currently, discharge wastewater on or adjacent to the property other than storm water into a sanitary sewer system?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: I do not know
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

21. Have any of the following ever been dumped above grade, buried and/or burned on the property? (please check all that apply and describe if possible)

<input type="checkbox"/> Hazardous substances	I do not know
<input type="checkbox"/> Petroleum products	I do not know
<input type="checkbox"/> Unidentified waste materials	I do not know
<input type="checkbox"/> Tires	I do not know
<input type="checkbox"/> Automotive or industrial batteries	I do not know
<input type="checkbox"/> Other waste materials (please describe)	I do not know

22. Are there currently or to the best of your knowledge have there been previously, a transformer, capacitor or any hydraulic equipment on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: I do not know
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

23. Are there currently or to the best of your knowledge have there been previously any records indicating the presence of PCBs?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: I do not know
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	



Rincon Project Number: 19-07931
Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

24. Are there currently or to the best of your knowledge have there been previously any records indicating the presence of pesticides or herbicides?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: I do not know
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

25. Do you have any knowledge of environmental liens that may have been recorded against the property or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

26. Do you have any knowledge of activity and use limitations (AULs) such as engineering controls, deed restrictions, land use restrictions, or institutional controls that may have been recorded against the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

27. Have you been informed of the past or current existence of hazardous substances, petroleum products, or environmental violations with respect to the property or any facility located on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

28. Do you have any knowledge of any environmental site assessments of the property or facility?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

29. Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release of any hazardous substances or petroleum products involving the property by any owner or occupant of the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	



Rincon Project Number: 19-07931
Site Name and Full Address: 1.5-Acre Parcel (APN 060-543-016), Grover Beach, California

30. Are there any site-specific geotechnical or geologic reports available for the subject property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

31. Is there a Title Report available for the subject property?

<input checked="" type="checkbox"/> Yes	If Yes or Unknown, please describe: City of Pismo ordered one
<input type="checkbox"/> No	
<input type="checkbox"/> Unknown	

This questionnaire was completed by (please print)

Name Joseph A. Wolosz
 Title Trustee
 Firm _____
 Street Address 6633 Yount Street
 City, State, Zip Code Yountville, CA 94599
 Phone Number 415-519-5639
 Fax Number 415-727-3939

What is the Preparer's relationship to the property (i.e., owner, occupant, property manager, employee, agent, consultant, etc.)? Trustee for the ownership trust

Copies of the completed questionnaire should be faxed, emailed (preferably) or mailed to:

Rincon Consultants, Inc.
 Attention: Environmental Site Assessment Division
 180 N Ashwood Avenue
 Ventura, CA 93003
 Fax: (805) 644-4455
 Email: SLarese@rinconconsultants.com

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's knowledge no material facts have been suppressed or misstated.

Signature member: B087DBC9-A29A-45E3-93EE-32104E9839B4
ED889566-45CF-4AF3-BA4B-4D4C8E1534E7  Digitally signed by member: B087DBC9-A29A-45E3-93EE-32104E9839B4
ED889566-45CF-4AF3-BA4B-4D4C8E1534E7
Date: 2019.06.10 12:08:08 -07'00' Date June 10, 2019

Appendix B

Regulatory Records Search

1.5-Acre Parcel

Huber Street

Grover Beach, CA 93433

Inquiry Number: 05674764.2r

June 05, 2019

The EDR Radius Map™ Report with GeoCheck®



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

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	132
Government Records Searched/Data Currency Tracking	GR-1
 <u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-10
Physical Setting Source Map Findings	A-12
Physical Setting Source Records Searched	PSGR-1

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

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EXECUTIVE SUMMARY

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

TARGET PROPERTY INFORMATION

ADDRESS

HUBER STREET
GROVER BEACH, CA 93433

COORDINATES

Latitude (North): 35.1107450 - 35° 6' 38.68"
Longitude (West): 120.6227690 - 120° 37' 21.96"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 716659.8
UTM Y (Meters): 3887712.5
Elevation: 23 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5620044 OCEANO, CA
Version Date:	2012
Northeast Map:	5629194 ARROYO GRANDE NE, CA
Version Date:	2012
Southwest Map:	5603502 OCEANO OE W, CA
Version Date:	2012
Northwest Map:	5620046 PISMO BEACH, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140604, 20140924
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
HUBER STREET
GROVER BEACH, CA 93433

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	CENTRAL COAST WATER	966 HUBER ST	CUPA Listings	Lower	51, 0.010, NNE
A2	CITY OF PISMO BEACH	970-990 HUBER ST	CUPA Listings	Lower	51, 0.010, NNE
3	HARRY'S RADIATOR SER	989 S 4TH ST	CUPA Listings, HAZNET	Higher	104, 0.020, SW
B4	TOPCO INC	974 GRIFFIN ST	CUPA Listings	Higher	250, 0.047, ENE
B5	TOPCO INC	974 GRIFFIN ST.	RCRA-LQG	Higher	250, 0.047, ENE
B6	COASTAL DEMO INC	958 GRIFFIN ST	RCRA NonGen / NLR	Higher	314, 0.059, NE
C7	LOUIE'S AUTO CLINIC	954 GRIFFIN ST	CUPA Listings	Higher	366, 0.069, NE
C8	LOUIE'S AUTO CLINIC	954 GRIFFIN ST	CERS HAZ WASTE, CERS	Higher	366, 0.069, NE
D9	FARIAS AUTO SERVICE	933 S 4TH ST D	CERS HAZ WASTE, CUPA Listings	Lower	380, 0.072, NW
B10	TOSTE GRADING & PAVI	941 GRIFFIN ST	CERS HAZ WASTE, CUPA Listings, CERS	Higher	386, 0.073, ENE
D11	TOYWORX AUTOMOTIVE	983 S 4TH ST STE B	RCRA NonGen / NLR	Lower	477, 0.090, NW
D12	TOYWORX AUTOMOTIVE	983 S 4TH ST #B	CERS HAZ WASTE, CUPA Listings, CERS	Lower	477, 0.090, NW
D13	KAUTZ CHEVRON SERVIC	983 S 4TH ST	EDR Hist Auto	Lower	477, 0.090, NW
C14	AATCO	952 GRIFFIN ST	EDR Hist Auto	Higher	495, 0.094, NE
C15	COINMACH CORP	921 GRIFFIN ST STE G	EDR Hist Cleaner	Higher	534, 0.101, NE
C16	CLASSIC RESTORATIONS	921 GRIFFIN ST UNIT	RCRA-SQG, FINDS, ECHO	Higher	534, 0.101, NE
C17	J.B. DEWAR, INC.	933 HUBER STREET	UST, FINDS	Higher	554, 0.105, NNE
C18	JB DEWAR CARDLOCK	933 HUBER ST	CERS HAZ WASTE, SWEEPS UST, CERS TANKS, CUPA...	Higher	554, 0.105, NNE
E19	ARROYO WATER WELL SU	936 HUBER ST	HIST UST, CUPA Listings	Higher	554, 0.105, North
F20	JAMES CROOKS TRUCKIN	1050 GRIFFIN ST STE	DRYCLEANERS	Higher	597, 0.113, ESE
F21	MID STATE PRECISION,	901 HIGHLAND WAY A-D	CERS HAZ WASTE, CERS	Higher	608, 0.115, SE
F22	MID STATE PRECISION,	901 HIGHLAND WAY E	CUPA Listings	Higher	608, 0.115, SE
F23	MCGUIRE GRINDERS, IN	901 HIGHLAND WAY #D	CUPA Listings	Higher	608, 0.115, SE
E24	EUROLINK DESIGN CORP	930 HUBER ST #H	CUPA Listings	Higher	628, 0.119, North
E25	SUPREME AUTOMOTIVE	923 HUBER ST	CUPA Listings	Higher	686, 0.130, NNE
F26	TROXELL'S BRAKE & AL	939 HIGHLAND WAY	RCRA NonGen / NLR	Higher	689, 0.130, SE
F27	TROXELL'S BRAKE & AL	939 HIGHLAND WAY	CUPA Listings	Higher	689, 0.130, SE
F28	ADAPT AUTOWORKS	949 HIGHLAND WAY UNI	CUPA Listings	Higher	733, 0.139, SE
F29	THE HIVE LABORATORY	949 HIGHLAND WAY	CUPA Listings, HAZNET, WDR	Higher	733, 0.139, SE
G30	AARON'S ADVANCED AUT	410 LEONI DR #1	CUPA Listings	Lower	739, 0.140, NNW
G31	AARON'S ADVANCED AUT	410 LEONI DR #1	CERS HAZ WASTE, CERS	Lower	739, 0.140, NNW
E32		948 HUBER	AST	Higher	755, 0.143, North
E33	GROVER BEACH CABLE S	948 HUBER ST	CUPA Listings	Higher	755, 0.143, North
G34	JIM DOTSON (OWNER OF	901 S 4TH STREET	HIST UST	Lower	766, 0.145, NW
G35	C & J AUTOMOTIVE	901 S 4TH STREET	RCRA NonGen / NLR	Lower	766, 0.145, NW
G36	C & J AUTOMOTIVE	901 S 4TH ST	CERS HAZ WASTE, CUPA Listings	Lower	766, 0.145, NW
E37	KNOWLTON BROTHERS IN	920 HUBER ST	RCRA NonGen / NLR	Higher	790, 0.150, North
F38	GE FORGE AND TOOL WO	959 HIGHLAND WAY	CUPA Listings, NPDES, CERS	Higher	801, 0.152, SE
F39	ELLISON ENVIRONMENTA	981 HIGHLAND WAY	CUPA Listings, HAZNET, CERS	Higher	810, 0.153, SE

MAPPED SITES SUMMARY

Target Property Address:
 HUBER STREET
 GROVER BEACH, CA 93433

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
G40	PACIFIC ELECTRONIC M	451 LEONI DR	RCRA-SQG, FINDS, ECHO	Higher	864, 0.164, NNW
41	JAMES R WHITE OILFIE	479 LEONI	HIST UST	Higher	923, 0.175, NNW
42	COASTAL DUNES RV PAR	1001 PACIFIC BLVD	CERS HAZ WASTE, CUPA Listings, CERS	Higher	942, 0.178, South
H43	APODACA PAVING	1021 HUSTON ST	CUPA Listings	Higher	953, 0.180, ESE
I44	CENTRAL COAST PRINTI	921 HUSTON	CUPA Listings	Higher	979, 0.185, ENE
I45	CENTRAL COAST PRINTI	921 HUSTON ST	RCRA NonGen / NLR	Higher	979, 0.185, ENE
J46	OKUI FARMS	1253 S 4TH ST	CERS HAZ WASTE, CUPA Listings	Higher	1031, 0.195, South
J47	OKUI FARMS	1253 S 4TH ST	RCRA NonGen / NLR	Higher	1031, 0.195, South
K48	M & S AUTOMOTIVE SPE	881 S 4TH ST	CUPA Listings	Lower	1033, 0.196, NW
H49	VERIZON WIRELESS GRO	1035 HIGHLAND WAY	CUPA Listings, CERS	Higher	1053, 0.199, ESE
50	KB HORSESHOES INC	1053 HIGHLAND WAY	RCRA NonGen / NLR	Higher	1144, 0.217, ESE
K51	BILL SIMPSON CONSTRU	833 SO 4TH ST	HIST UST	Higher	1194, 0.226, NNW
52	JACKPOT SERVICE STAT	105 HWY 1 N	LUST, CERS	Higher	2004, 0.380, NW
53	TOSCO - FACILITY #56	684 GRAND AVE	LUST, Notify 65	Higher	3749, 0.710, North
54	VIC'S MOBIL	402 GRAND	LUST, HIST CORTESE, Notify 65	Higher	3917, 0.742, NNW
55	ARROYO GRANDE/ EARTH	1325 ASH STREET	Toxic Pits	Higher	4995, 0.946, ENE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

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

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

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

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

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

Federal CERCLIS NFRAP site list

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

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

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

Federal RCRA generators list

RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

EXECUTIVE SUMMARY

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR..... EnviroStor Database

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

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

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

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database

SWRCY..... Recycler Database

HAULERS..... Registered Waste Tire Haulers Listing

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

HIST Cal-Sites..... Historical Calsites Database

SCH..... School Property Evaluation Program

CDL..... Clandestine Drug Labs

EXECUTIVE SUMMARY

US CDL..... National Clandestine Laboratory Register
PFAS..... PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

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
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
ROD..... Records Of Decision
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS..... Material Licensing Tracking System
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
FUSRAP..... Formerly Utilized Sites Remedial Action Program
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS..... Lead Smelter Sites
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
US MINES..... Mines Master Index File
ABANDONED MINES..... Abandoned Mines

EXECUTIVE SUMMARY

FINDS.....	Facility Index System/Facility Registry System
UXO.....	Unexploded Ordnance Sites
ECHO.....	Enforcement & Compliance History Information
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
EMI.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HIST CORTESE.....	Hazardous Waste & Substance Site List
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
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)
WIP.....	Well Investigation Program Case List
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)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

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.

EXECUTIVE SUMMARY

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

Federal RCRA generators list

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

A review of the RCRA-LQG list, as provided by EDR, and dated 03/25/2019 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
TOPCO INC EPA ID:: CAL000273696	974 GRIFFIN ST.	ENE 0 - 1/8 (0.047 mi.)	B5	11

RCRA-SQG: 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.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/25/2019 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>CLASSIC RESTORATIONS</i> EPA ID:: CAD982497406	<i>921 GRIFFIN ST UNIT</i>	<i>NE 0 - 1/8 (0.101 mi.)</i>	<i>C16</i>	<i>44</i>
<i>PACIFIC ELECTRONIC M</i> EPA ID:: CAD982337057	<i>451 LEONI DR</i>	<i>NNW 1/8 - 1/4 (0.164 mi.)</i>	<i>G40</i>	<i>103</i>

State and tribal leaking storage tank lists

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 is 1 LUST site within

EXECUTIVE SUMMARY

approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JACKPOT SERVICE STAT	105 HWY 1 N	NW 1/4 - 1/2 (0.380 mi.)	52	125
Database: LUST REG 3, Date of Government Version: 05/19/2003 Database: LUST, Date of Government Version: 12/10/2018 Status: Completed - Case Closed Status: Case Closed Global Id: T0607900185 Global ID: T0607900185				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

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

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
J.B. DEWAR, INC.	933 HUBER STREET	NNE 0 - 1/8 (0.105 mi.)	C17	46
Database: UST, Date of Government Version: 12/10/2018 Facility Id: FA0002865				

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.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	948 HUBER	N 1/8 - 1/4 (0.143 mi.)	E32	93
Database: AST, Date of Government Version: 07/06/2016				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

Toxic Pits: The Toxic Pits Cleanup Act Sites database identifies sites suspected of containing hazardous substances where cleanup has not yet been completed. The data come from the State Water Resources Control Board.

A review of the Toxic Pits list, as provided by EDR, and dated 07/01/1995 has revealed that there is 1 Toxic Pits site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ARROYO GRANDE/ EARTH	1325 ASH STREET	ENE 1/2 - 1 (0.946 mi.)	55	131

EXECUTIVE SUMMARY

Closure Date: 08/05/93
 Task #: 83012
 Status: CLOSED

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

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 04/09/2019 has revealed that there are 10 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>LOUIE'S AUTO CLINIC</i>	<i>954 GRIFFIN ST</i>	<i>NE 0 - 1/8 (0.069 mi.)</i>	<i>C8</i>	<i>14</i>
<i>TOSTE GRADING & PAVI</i>	<i>941 GRIFFIN ST</i>	<i>ENE 0 - 1/8 (0.073 mi.)</i>	<i>B10</i>	<i>22</i>
<i>JB DEWAR CARDLOCK</i>	<i>933 HUBER ST</i>	<i>NNE 0 - 1/8 (0.105 mi.)</i>	<i>C18</i>	<i>46</i>
<i>MID STATE PRECISION,</i>	<i>901 HIGHLAND WAY A-D</i>	<i>SE 0 - 1/8 (0.115 mi.)</i>	<i>F21</i>	<i>78</i>
<i>COASTAL DUNES RV PAR</i>	<i>1001 PACIFIC BLVD</i>	<i>S 1/8 - 1/4 (0.178 mi.)</i>	<i>42</i>	<i>105</i>
<i>OKUI FARMS</i>	<i>1253 S 4TH ST</i>	<i>S 1/8 - 1/4 (0.195 mi.)</i>	<i>J46</i>	<i>116</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>FARIAS AUTO SERVICE</i>	<i>933 S 4TH ST D</i>	<i>NW 0 - 1/8 (0.072 mi.)</i>	<i>D9</i>	<i>18</i>
<i>TOYWORX AUTOMOTIVE</i>	<i>983 S 4TH ST #B</i>	<i>NW 0 - 1/8 (0.090 mi.)</i>	<i>D12</i>	<i>37</i>
<i>AARON'S ADVANCED AUT</i>	<i>410 LEONI DR #1</i>	<i>NNW 1/8 - 1/4 (0.140 mi.)</i>	<i>G31</i>	<i>88</i>
<i>C & J AUTOMOTIVE</i>	<i>901 S 4TH ST</i>	<i>NW 1/8 - 1/4 (0.145 mi.)</i>	<i>G36</i>	<i>96</i>

Local Lists of Registered Storage Tanks

SWEEPS UST: 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.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>JB DEWAR CARDLOCK</i>	<i>933 HUBER ST</i>	<i>NNE 0 - 1/8 (0.105 mi.)</i>	<i>C18</i>	<i>46</i>
Status: A Tank Status: A Comp Number: 20702				

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 are 4 HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>ARROYO WATER WELL SU</i>	<i>936 HUBER ST</i>	<i>N 0 - 1/8 (0.105 mi.)</i>	<i>E19</i>	<i>77</i>

EXECUTIVE SUMMARY

Facility Id: 00000045106				
JAMES R WHITE OILFIE Facility Id: 00000044870	479 LEONI	NNW 1/8 - 1/4 (0.175 mi.)	41	104
BILL SIMPSON CONSTRU Facility Id: 00000002829	833 SO 4TH ST	NNW 1/8 - 1/4 (0.226 mi.)	K51	124

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JIM DOTSON (OWNER OF Facility Id: 00000010494	901 S 4TH STREET	NW 1/8 - 1/4 (0.145 mi.)	G34	94

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

A review of the CERS TANKS list, as provided by EDR, and dated 04/09/2019 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JB DEWAR CARDLOCK	933 HUBER ST	NNE 0 - 1/8 (0.105 mi.)	C18	46

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/25/2019 has revealed that there are 8 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COASTAL DEMO INC EPA ID:: CAL000367501	958 GRIFFIN ST	NE 0 - 1/8 (0.059 mi.)	B6	12
TROXELL'S BRAKE & AL EPA ID:: CAL000175472	939 HIGHLAND WAY	SE 1/8 - 1/4 (0.130 mi.)	F26	84
KNOWLTON BROTHERS IN EPA ID:: CAL000349580	920 HUBER ST	N 1/8 - 1/4 (0.150 mi.)	E37	98
CENTRAL COAST PRINTI EPA ID:: CAL000285328	921 HUSTON ST	ENE 1/8 - 1/4 (0.185 mi.)	I45	115
OKUI FARMS EPA ID:: CAL000298545	1253 S 4TH ST	S 1/8 - 1/4 (0.195 mi.)	J47	118
KB HORSESHOES INC EPA ID:: CAL000394047	1053 HIGHLAND WAY	ESE 1/8 - 1/4 (0.217 mi.)	50	123

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
TOYWORX AUTOMOTIVE	983 S 4TH ST STE B	NW 0 - 1/8 (0.090 mi.)	D11	36

EXECUTIVE SUMMARY

EPA ID:: CAL000281584
 C & J AUTOMOTIVE 901 S 4TH STREET NW 1/8 - 1/4 (0.145 mi.) G35 95
 EPA ID:: CAL000148616

CUPA Listings: 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.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 28 CUPA Listings sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HARRY'S RADIATOR SER Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0002163 Facility Id: FA0001574 Status: Inactive, non-billable	989 S 4TH ST	SW 0 - 1/8 (0.020 mi.)	3	9
TOPCO INC Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0005648 Status: Active, billable	974 GRIFFIN ST	ENE 0 - 1/8 (0.047 mi.)	B4	10
LOUIE'S AUTO CLINIC Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0008210 Status: Inactive, non-billable Status: Active, billable	954 GRIFFIN ST	NE 0 - 1/8 (0.069 mi.)	C7	14
TOSTE GRADING & PAVI Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0001580 Status: Inactive, non-billable Status: Active, billable	941 GRIFFIN ST	ENE 0 - 1/8 (0.073 mi.)	B10	22
JB DEWAR CARDLOCK Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0002865 Status: Active, billable Status: Inactive, non-billable Status: Active, exempt from billing	933 HUBER ST	NNE 0 - 1/8 (0.105 mi.)	C18	46
ARROYO WATER WELL SU Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0001586 Status: Inactive, non-billable	936 HUBER ST	N 0 - 1/8 (0.105 mi.)	E19	77
MID STATE PRECISION, Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0002165 Status: Inactive, non-billable Status: Active, billable	901 HIGHLAND WAY E	SE 0 - 1/8 (0.115 mi.)	F22	82
MCGUIRE GRINDERS, IN Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0007651	901 HIGHLAND WAY #D	SE 0 - 1/8 (0.115 mi.)	F23	82

EXECUTIVE SUMMARY

Facility Id: FA0013681 Status: Inactive, non-billable Status: Active, billable				
EUROLINK DESIGN CORP	930 HUBER ST #H	N 0 - 1/8 (0.119 mi.)	E24	83
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0006877 Status: Inactive, non-billable				
SUPREME AUTOMOTIVE	923 HUBER ST	NNE 1/8 - 1/4 (0.130 mi.)	E25	83
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0002155 Status: Active, billable Status: Inactive, non-billable				
TROXELL'S BRAKE & AL	939 HIGHLAND WAY	SE 1/8 - 1/4 (0.130 mi.)	F27	85
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0002311 Status: Inactive, non-billable				
ADAPT AUTOWORKS	949 HIGHLAND WAY UNI	SE 1/8 - 1/4 (0.139 mi.)	F28	86
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0005524 Status: Inactive, non-billable				
THE HIVE LABORATORY	949 HIGHLAND WAY	SE 1/8 - 1/4 (0.139 mi.)	F29	87
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0013372 Status: Active, billable				
GROVER BEACH CABLE S	948 HUBER ST	N 1/8 - 1/4 (0.143 mi.)	E33	93
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0004956 Status: Inactive, non-billable Status: Active, billable				
GE FORGE AND TOOL WO	959 HIGHLAND WAY	SE 1/8 - 1/4 (0.152 mi.)	F38	99
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0002164 Status: Inactive, non-billable Status: Active, billable				
ELLISON ENVIRONMENTA	981 HIGHLAND WAY	SE 1/8 - 1/4 (0.153 mi.)	F39	101
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0011234 Status: Inactive, non-billable				
COASTAL DUNES RV PAR	1001 PACIFIC BLVD	S 1/8 - 1/4 (0.178 mi.)	42	105
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0004052 Status: Inactive, non-billable Status: Active, billable				
APODACA PAVING	1021 HUSTON ST	ESE 1/8 - 1/4 (0.180 mi.)	H43	113
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0001587 Status: Inactive, non-billable Status: Active, billable				
CENTRAL COAST PRINTI	921 HUSTON	ENE 1/8 - 1/4 (0.185 mi.)	I44	114
Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0006689				

EXECUTIVE SUMMARY

Status: Inactive, non-billable

Status: Active, billable

OKUI FARMS **1253 S 4TH ST** **S 1/8 - 1/4 (0.195 mi.)** **J46** **116**

Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019

Facility Id: FA0005740

Status: Inactive, non-billable

Status: Active, billable

VERIZON WIRELESS GRO **1035 HIGHLAND WAY** **ESE 1/8 - 1/4 (0.199 mi.)** **H49** **120**

Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019

Facility Id: FA0006921

Status: Active, billable

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CENTRAL COAST WATER Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0005649 Status: Inactive, non-billable Status: Active, billable	966 HUBER ST	NNE 0 - 1/8 (0.010 mi.)	A1	8
CITY OF PISMO BEACH Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0001584 Status: Inactive, non-billable Status: Active, billable	970-990 HUBER ST	NNE 0 - 1/8 (0.010 mi.)	A2	8
FARIAS AUTO SERVICE Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0002153 Status: Inactive, non-billable	933 S 4TH ST D	NW 0 - 1/8 (0.072 mi.)	D9	18
TOYWORX AUTOMOTIVE Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0007964 Status: Active, exempt from billing Status: Active, billable	983 S 4TH ST #B	NW 0 - 1/8 (0.090 mi.)	D12	37
AARON'S ADVANCED AUT Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0008256 Status: Inactive, non-billable Status: Active, billable	410 LEONI DR #1	NNW 1/8 - 1/4 (0.140 mi.)	G30	88
C & J AUTOMOTIVE Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0002154 Status: Inactive, non-billable Status: Active, billable	901 S 4TH ST	NW 1/8 - 1/4 (0.145 mi.)	G36	96
M & S AUTOMOTIVE SPE Database: CUPA SAN LUIS OBISPO, Date of Government Version: 02/13/2019 Facility Id: FA0005407 Status: Inactive, non-billable	881 S 4TH ST	NW 1/8 - 1/4 (0.196 mi.)	K48	119

EXECUTIVE SUMMARY

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.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JAMES CROOKS TRUCKIN Database: DRYCLEANERS, Date of Government Version: 03/01/2019 EPA Id: CAD981404015	1050 GRIFFIN ST STE	ESE 0 - 1/8 (0.113 mi.)	F20	78

Notify 65: 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.

A review of the Notify 65 list, as provided by EDR, and dated 03/18/2019 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
TOSCO - FACILITY #56	684 GRAND AVE	N 1/2 - 1 (0.710 mi.)	53	128
VIC'S MOBIL	402 GRAND	NNW 1/2 - 1 (0.742 mi.)	54	130

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: 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.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AATCO	952 GRIFFIN ST	NE 0 - 1/8 (0.094 mi.)	C14	43
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KAUTZ CHEVRON SERVIC	983 S 4TH ST	NW 0 - 1/8 (0.090 mi.)	D13	42

EXECUTIVE SUMMARY

EDR Hist Cleaner: 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.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist Cleaner site within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COINMACH CORP	921 GRIFFIN ST STE G	NE 0 - 1/8 (0.101 mi.)	C15	44

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 05674764.2R



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands
-  Areas of Concern

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

SITE NAME: 1.5-Acre Parcel
 ADDRESS: Huber Street
 Grover Beach CA 93433
 LAT/LONG: 35.110745 / 120.622769

CLIENT: Rincon
 CONTACT: Sarah Larese
 INQUIRY #: 05674764.2r
 DATE: June 05, 2019 5:32 pm

DETAIL MAP - 05674764.2R



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern



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

SITE NAME: 1.5-Acre Parcel
 ADDRESS: Huber Street
 Grover Beach CA 93433
 LAT/LONG: 35.110745 / 120.622769

CLIENT: Rincon
 CONTACT: Sarah Larese
 INQUIRY #: 05674764.2r
 DATE: June 05, 2019 5:36 pm

MAP FINDINGS SUMMARY

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

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	1	NR	1
CERS HAZ WASTE	0.250		6	4	NR	NR	NR	10
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		1	3	NR	NR	NR	4
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		1	0	NR	NR	NR	1
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		2	6	NR	NR	NR	8
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		13	15	NR	NR	NR	28

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

A1
NNE
< 1/8
0.010 mi.
51 ft.

CENTRAL COAST WATER TREATMENT
966 HUBER ST
GROVER BEACH, CA 93433

CUPA Listings S110743868
N/A

Site 1 of 2 in cluster A

Relative:
Lower
Actual:
20 ft.

CUPA SAN LUIS OBISPO:
 Facility Id: FA0005649
 Program Element Code: 0705
 Program Element: STATE SITE SURCHARGE
 Record Id: PR0008698
 Cross Street: Not reported
 Status Code: 02
 Status: Inactive, non-billable
 Latitude: 35.11145
 Longitude: -120.62258

Facility Id: FA0005649
 Program Element Code: 0726
 Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
 Record Id: PR0008697
 Cross Street: Not reported
 Status Code: 01
 Status: Active, billable
 Latitude: 35.11145
 Longitude: -120.62258

A2
NNE
< 1/8
0.010 mi.
51 ft.

CITY OF PISMO BEACH - WELL #23
970-990 HUBER ST
GROVER BEACH, CA 93433

CUPA Listings S117540837
N/A

Site 2 of 2 in cluster A

Relative:
Lower
Actual:
21 ft.

CUPA SAN LUIS OBISPO:
 Facility Id: FA0001584
 Program Element Code: 0705
 Program Element: STATE SITE SURCHARGE
 Record Id: PR0006479
 Cross Street: FARROLL
 Status Code: 02
 Status: Inactive, non-billable
 Latitude: 35.11092
 Longitude: -120.62218

Facility Id: FA0001584
 Program Element Code: 0726
 Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
 Record Id: PR0001584
 Cross Street: FARROLL
 Status Code: 01
 Status: Active, billable
 Latitude: 35.11092
 Longitude: -120.62218

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

3
SW
< 1/8
0.020 mi.
104 ft.

HARRY'S RADIATOR SERVICE
989 S 4TH ST
GROVER BEACH, CA 93433

CUPA Listings **S113138286**
HAZNET **N/A**

Relative:
Higher
Actual:
27 ft.

CUPA SAN LUIS OBISPO:

Facility Id: FA0002163
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006734
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.24410
Longitude: -120.64175

Facility Id: FA0002163
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0001581
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.24410
Longitude: -120.64175

Facility Id: FA0002163
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0002163
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.24410
Longitude: -120.64175

Facility Id: FA0001574
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006474
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11013
Longitude: -120.62347

Facility Id: FA0001574
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0001574
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11013
Longitude: -120.62347

HAZNET:

Site Name: HARRYS RADIATOR SERVICE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HARRY'S RADIATOR SERVICE (Continued)

S113138286

Year: 2009
GEPAID: CAL000296695
Contact: DARRELL BORING
Telephone: 8054890626
Mailing Name: Not reported
Mailing Address: 1645 22ND ST
Mailing City,St,Zip: OCEANO, CA 93445
Gen County: San Luis Obispo
TSD EPA ID: CAD980887418
TSD County: Alameda
Tons: 0.0834
CA Waste Code: 223-Unspecified oil-containing waste
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery
(H010-H129) Or (H131-H135)
Facility County: San Luis Obispo

Site Name: HARRYS RADIATOR SERVICE
Year: 2007
GEPAID: CAL000296695
Contact: DARRELL BORING
Telephone: 8054890626
Mailing Name: Not reported
Mailing Address: 1645 22ND ST
Mailing City,St,Zip: OCEANO, CA 93445
Gen County: San Luis Obispo
TSD EPA ID: NVD980895338
TSD County: 99
Tons: 0.22935
CA Waste Code: 223-Unspecified oil-containing waste
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery
(H010-H129) Or (H131-H135)
Facility County: San Luis Obispo

B4
ENE
< 1/8
0.047 mi.
250 ft.

TOPCO INC
974 GRIFFIN ST
GROVER BEACH, CA 93433

CUPA Listings S107149321
N/A

Site 1 of 4 in cluster B

Relative:
Higher

CUPA SAN LUIS OBISPO:
Facility Id: FA0005648
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0008695
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11103
Longitude: -120.62137

Actual:
26 ft.

Facility Id: FA0005648
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0008696
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11103

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOPCO INC (Continued)

S107149321

Longitude: -120.62137

**B5
ENE
< 1/8
0.047 mi.
250 ft.**

**TOPCO INC
974 GRIFFIN ST.
GROVER BEACH, CA 93433**

**RCRA-LQG 1014386787
CAL000273696**

Site 2 of 4 in cluster B

**Relative:
Higher
Actual:
26 ft.**

RCRA-LQG:
Date form received by agency: 02/26/2010
Facility name: TOPCO INC
Facility address: 974 GRIFFIN ST.
GROVER BEACH, CA 93433
EPA ID: CAL000273696
Mailing address: GRIFFIN ST.
GROVER BEACH, CA 93433
Contact: DIANA M OURSTON
Contact address: GRIFFIN ST.
GROVER BEACH, CA 93433
Contact country: US
Contact telephone: 805-473-1535
Contact email: TOPCOINC@AOL.COM
EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: TOPCO INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 09/14/1998
Owner/Op end date: Not reported

Owner/operator name: TOPCO MANAGEMENT, LLC
Owner/operator address: GRIFFIN ST.
GROVER BEACH, CA 93433
Owner/operator country: Not reported
Owner/operator telephone: 805-473-1535
Owner/operator email: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOPCO INC (Continued)

1014386787

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 12/29/2009
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

B6
NE
< 1/8
0.059 mi.
314 ft.

COASTAL DEMO INC
958 GRIFFIN ST
GROVER BEACH, CA 93433

RCRA NonGen / NLR **1024831229**
CAL000367501

Site 3 of 4 in cluster B

Relative:
Higher

RCRA NonGen / NLR:

Actual:
25 ft.

Date form received by agency: 09/15/2011
Facility name: COASTAL DEMO INC
Facility address: 958 GRIFFIN ST
GROVER BEACH, CA 93433-3019
EPA ID: CAL000367501
Mailing address: PO BOX 729
PISMO BEACH, CA 93448-0000
Contact: RYAN GALLAGHER
Contact address: PO BOX 729
PISMO BEACH, CA 93448-0000
Contact country: Not reported
Contact telephone: 805-473-9451
Contact email: RG@COASTALDEMOLITIONINC.COM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COASTAL DEMO INC (Continued)

1024831229

EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: COASTAL DEMO INC
Owner/operator address: 166 N. 9TH STREET
GROVER BEACH, CA 93433

Owner/operator country: Not reported
Owner/operator telephone: 805-473-9451
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: RYAN GALLAGHER
Owner/operator address: PO BOX 729
PISMO BEACH, CA 93448

Owner/operator country: Not reported
Owner/operator telephone: 805-473-9451
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOUIE'S AUTO CLINIC (Continued)

S121785935

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-31-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Items marked NA not reviewed during inspection.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-14-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: WELL RUN REPAIR SHOP. VERY CLEAN
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-15-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Coordinates:
Site ID: 45186
Facility Name: LOUIE'S AUTO CLINIC
Env Int Type Code: HWG
Program ID: 10439584
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.111990
Longitude: -120.621700

Affiliation:
Affiliation Type Desc: Parent Corporation
Entity Name: LOUIE'S AUTO CLINIC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOUIE'S AUTO CLINIC (Continued)

S121785935

Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 954 GRIFFIN ST
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

CERS TANKS:

Site ID: 45186
CERS ID: 10439584
Site Name: LOUIE'S AUTO CLINIC
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 45186
Site Name: LOUIE'S AUTO CLINIC
Violation Date: 03-25-2015
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 04/15/2015. PROVIDE COPIES.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-25-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-31-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Items marked NA not reviewed during inspection.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-14-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: WELL RUN REPAIR SHOP. VERY CLEAN
Eval Division: San Luis Obispo County Environmental Health

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOUIE'S AUTO CLINIC (Continued)

S121785935

Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-15-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Coordinates:
Site ID: 45186
Facility Name: LOUIE'S AUTO CLINIC
Env Int Type Code: HWG
Program ID: 10439584
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.111990
Longitude: -120.621700

Affiliation:
Affiliation Type Desc: Parent Corporation
Entity Name: LOUIE'S AUTO CLINIC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 954 GRIFFIN ST
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FARIAS AUTO SERVICE (Continued)

S110743665

Site ID: 115941
Site Name: FARIAS AUTO SERVICE
Violation Date: 09-09-2015
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 03/09/2016.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 115941
Site Name: FARIAS AUTO SERVICE
Violation Date: 05-23-2016
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 06/22/2016. NEW CONTINGENCY PLAN REQUIRED AS FACILITY IS OPERATING IN A NEW LOCATION, AT 834 SHERIDAN RD., ARROYO GRANDE
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 115941
Site Name: FARIAS AUTO SERVICE
Violation Date: 01-10-2014
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 06/13/2014. PROVIDE COPIES OF WASTE DISPOSAL RECORDS FROM THE PAST 3 YEARS.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 115941
Site Name: FARIAS AUTO SERVICE
Violation Date: 05-23-2016
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description: Failure to obtain and/or maintain an Active EPA ID.
Violation Notes: Returned to compliance on 06/22/2016. NEW EPA ID# REQUIRED FOR NEW LOCATION.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 115941
Site Name: FARIAS AUTO SERVICE
Violation Date: 05-30-2014
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 06/13/2014. UPDATE HMBP VIA ONLINE PORTAL.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FARIAS AUTO SERVICE (Continued)

S110743665

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 115941
Site Name: FARIAS AUTO SERVICE
Violation Date: 05-30-2014
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 06/13/2014.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-14-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-10-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: FACILITY HAS NOT BEEN OPEN DURING ATTEMPTED INSPECTIONS. PROVIDE DOCUMENTS WITHIN 30 DAYS, OR ADVISE IF FACILITY IS NO LONGER IN OPERATION.

Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-23-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: FACILITY MOVED TO 834 SHERIDAN RD. NEW HMBP REQUIRED. NEW EPA ID# REQUIRED. MRF TO ACCOUNTANT TO CHANGE FACILITY ADDRESS

Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-30-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: UPDATE HMBP VIA ONLINE PORTAL. NOTIFY THIS OFFICE IF FACILITY IS OUT OF BUSINESS.

Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FARIAS AUTO SERVICE (Continued)

S110743665

Eval Date: 09-09-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Affiliation:

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 933 4TH ST D
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: FARIAS AUTO SERVICE
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

CUPA SAN LUIS OBISPO:

Facility Id: FA0002153
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006728
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11196
Longitude: -120.62418

Facility Id: FA0002153
Program Element Code: 1125
Program Element: HAZWASTE GEN (1 WS <27 GAL/MO, SELF REPORTER)
Record Id: PR0002153
Cross Street: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

FARIAS AUTO SERVICE (Continued)

S110743665

Status Code: 02
 Status: Inactive, non-billable
 Latitude: 35.11196
 Longitude: -120.62418

B10
ENE
 < 1/8
 0.073 mi.
 386 ft.

TOSTE GRADING & PAVING
941 GRIFFIN ST
GROVER BEACH, CA 93433

CERS HAZ WASTE
CUPA Listings
CERS

S110743547
N/A

Site 4 of 4 in cluster B

Relative:
Higher
Actual:
26 ft.

CERS HAZ WASTE:
 Site ID: 77114
 CERS ID: 10436161
 CERS Description: Hazardous Waste Generator

Violations:

Site ID: 77114
 Site Name: TOSTE GRADING & PAVING
 Violation Date: 04-23-2015
 Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
 Violation Description: Haz Waste Generator Program - Release/Leaks/Spills - General
 Violation Notes: Returned to compliance on 07/08/2015. REPAIR SECONDARY CONTAINMENT FOR SEAL TANK. A HOLE HAS BEEN CUT IN IT FOR AN ACCESS PANEL. EXTEND WALL OUT IF NEEDED.
 Violation Division: San Luis Obispo County Environmental Health
 Violation Program: HW
 Violation Source: CERS

Site ID: 77114
 Site Name: TOSTE GRADING & PAVING
 Violation Date: 09-19-2016
 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 business plan when storing/handling a hazardous material at or above reportable quantities.
 Violation Notes: Returned to compliance on 02/01/2017. UPDATE HAZARDOUS MATERIAL BUSINESS PLAN THROUGH PUBLIC PORTAL BY 10/19/2016 A NEW USER NAME AND PASSWORD TO LOGIN IS REQUIRED AS EMPLOYEE WHO UPDATED PLAN IN 2015 LEFT THE COMPANY WEBSITE: www.ezsubmitslogov.org
 Violation Division: San Luis Obispo County Environmental Health
 Violation Program: HMRRP
 Violation Source: CERS

Site ID: 77114
 Site Name: TOSTE GRADING & PAVING
 Violation Date: 04-23-2015
 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.
 Violation Notes: Returned to compliance on 09/19/2016. CONDUCT TRAINING WHICH COVERS HAZARD COMMUNICATION PROGRAM- SAFETY DATA SHEETS (SDS) AND SPILL PROCEDURES. PROVIDE COPY OF TRAINING DOCUMENTATION TO THIS OFFICE.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 04-23-2015
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 09/19/2016. UPDATE SITE MAP, LOCATIONS OF HAZMAT HAVE CHANGED. INCLUDE UTILITIES SHUT OFFS AND NORTH ARROW.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 04-23-2015
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description: Failure to properly close hazardous waste containers when not in active use.
Violation Notes: Returned to compliance on 07/08/2015. ENSURE DRUMS ARE CLOSED WHEN NOT IN USE.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 04-23-2015
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 09/19/2016. RE-CERTIFY HAZMAT BUSINESS PLAN VIA ONLINE PORTAL. DUE BY MARCH 1ST OF EACH YEAR.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 12-21-2018
Citation: 40 CFR 1 265.171 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.171
Violation Description: Failure to accumulate hazardous waste in a container that is in good condition.
Violation Notes: Properly manage containers of hazardous waste including used oil, filters, coolant. Observed many open 5-gallon buckets and 55-gal drums in waste storage area. Review good housekeeping with employees and document with a training sign-in sheet. Send your inspector a copy when completed.
Violation Division: San Luis Obispo County Environmental Health

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Violation Program: HW
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 11-06-2017
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 11/13/2017. SEPARATE ACETYLENE AND OXYGEN COMPRESSED GAS CYLINDERS, BY 20 FEET, THAT ARE STORED CAPPED AND CHAINED IN THE SHOP, BY 11/10/2017, AND NOTIFY INSPECTOR. WHEN OXYGEN AND ACETYLENE COMPRESSED GAS CYLINDERS ARE NOT ON A CART AND IN USE, WHEN STORED, SEPARATE BY 20 FEET, WITH CAPS ON AND CHAINED.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 12-21-2018
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: Not reported
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-06-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: PLEASE INCORPORATE MORE SPECIFIC HAZARD COMMUNICATION EMPLOYEE TRAINING IN YOUR SAFETY MEETINGS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-07-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-19-2016
Violations Found: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	San Luis Obispo County Environmental Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-23-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	San Luis Obispo County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	09-19-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	San Luis Obispo County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-06-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	San Luis Obispo County Environmental Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	11-13-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	San Luis Obispo County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-21-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Ensure extra compressed gas cylinders, empty or full, are chained up.
Eval Division:	San Luis Obispo County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-02-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	ALL VIOLATIONS CLEARED. NOTICE OF VIOLATION HEARING SCHEDULED FOR 2/14/2017 IS CANCELLED.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 02-07-2019
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 02-07-2019
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Items marked N/A not reviewed during inspection. Observed several 55-gal drums of partially full and empty Part A/Part B epoxy bonder cannisters. Determine if a hazardous waste, and if so, provide management plan to properly store and dispose of wastes (i.e. waste cannisters will be stored in a labeled, closed drum in hazardous waste accumulation area and will be properly disposed of under hazardous waste manifest regularly..).

Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-23-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: LABEL SEAL TANKS WITH NFPA 704 HAZARD DIAMONDS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-21-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Enforcement Action:
Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Site Address: 941 GRIFFIN ST
Site City: GROVER BEACH
Site Zip: 93433
Enf Action Date: 09-19-2016
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: San Luis Obispo County Environmental Health

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Enf Action Program: HMRRP
Enf Action Source: CERS

Coordinates:
Site ID: 77114
Facility Name: TOSTE GRADING & PAVING
Env Int Type Code: HWG
Program ID: 10436161
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.111290
Longitude: -120.620780

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Angela Harrison
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Anthony Toste
Entity Title: PRESIDENT
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: TOSTE GRADING & PAVING
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
Entity Name: Anthony Toste
Entity Title: Not reported
Affiliation Address: P.O. Box 941
Affiliation City: Grover Beach
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93483
Affiliation Phone: (805) 489-1791

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 941 Griffin Street
Affiliation City: Grover Beach
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: ANTHONY TOSTE
Entity Title: Not reported
Affiliation Address: P.O. Box 941
Affiliation City: Grover Beach
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93483
Affiliation Phone: (805) 431-2546

Affiliation Type Desc: Operator
Entity Name: ANTHONY TOSTE
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: (805) 431-2546

Affiliation Type Desc: Environmental Contact
Entity Name: Ed Rains
Entity Title: Not reported
Affiliation Address: P.O. Box 407
Affiliation City: Grover Beach
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93483
Affiliation Phone: Not reported

CUPA SAN LUIS OBISPO:

Facility Id: FA0001580
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006477
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Latitude: 35.11150
Longitude: -120.62117

Facility Id: FA0001580
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0001580
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11150
Longitude: -120.62117

Facility Id: FA0001580
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0007226
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11150
Longitude: -120.62117

CERS TANKS:

Site ID: 77114
CERS ID: 10436161
Site Name: TOSTE GRADING & PAVING
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 04-23-2015
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Release/Leaks/Spills - General
Violation Notes: Returned to compliance on 07/08/2015. REPAIR SECONDARY CONTAINMENT FOR SEAL TANK. A HOLE HAS BEEN CUT IN IT FOR AN ACCESS PANEL. EXTEND WALL OUT IF NEEDED.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 09-19-2016
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 business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 02/01/2017. UPDATE HAZARDOUS MATERIAL BUSINESS PLAN THROUGH PUBLIC PORTAL BY 10/19/2016 A NEW USER NAME AND PASSWORD TO LOGIN IS REQUIRED AS EMPLOYEE WHO UPDATED PLAN IN 2015 LEFT THE COMPANY WEBSITE: www.ezsubmitslogov.org
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 04-23-2015
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.
Violation Notes: Returned to compliance on 09/19/2016. CONDUCT TRAINING WHICH COVERS HAZARD COMMUNICATION PROGRAM- SAFETY DATA SHEETS (SDS) AND SPILL PROCEDURES. PROVIDE COPY OF TRAINING DOCUMENTATION TO THIS OFFICE.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 04-23-2015
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 09/19/2016. UPDATE SITE MAP, LOCATIONS OF HAZMAT HAVE CHANGED. INCLUDE UTILITIES SHUT OFFS AND NORTH ARROW.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 04-23-2015
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description: Failure to properly close hazardous waste containers when not in active use.
Violation Notes: Returned to compliance on 07/08/2015. ENSURE DRUMS ARE CLOSED WHEN NOT IN USE.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 04-23-2015
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 09/19/2016. RE-CERTIFY HAZMAT BUSINESS PLAN VIA ONLINE PORTAL. DUE BY MARCH 1ST OF EACH YEAR.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 12-21-2018
Citation: 40 CFR 1 265.171 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.171
Violation Description: Failure to accumulate hazardous waste in a container that is in good condition.
Violation Notes: Properly manage containers of hazardous waste including used oil, filters, coolant. Observed many open 5-gallon buckets and 55-gal drums in waste storage area. Review good housekeeping with employees and document with a training sign-in sheet. Send your inspector a copy when completed.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 11-06-2017
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 11/13/2017. SEPARATE ACETYLENE AND OXYGEN COMPRESSED GAS CYLINDERS, BY 20 FEET, THAT ARE STORED CAPPED AND CHAINED IN THE SHOP, BY 11/10/2017, AND NOTIFY INSPECTOR. WHEN OXYGEN AND ACETYLENE COMPRESSED GAS CYLINDERS ARE NOT ON A CART AND IN USE, WHEN STORED, SEPARATE BY 20 FEET, WITH CAPS ON AND CHAINED.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Violation Date: 12-21-2018
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: Not reported
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-06-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: PLEASE INCORPORATE MORE SPECIFIC HAZARD COMMUNICATION EMPLOYEE TRAINING IN YOUR SAFETY MEETINGS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Eval General Type: Other/Unknown
Eval Date: 07-07-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-19-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-23-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-19-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-06-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-13-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-21-2018
Violations Found: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Eval Type: Routine done by local agency
Eval Notes: Ensure extra compressed gas cylinders, empty or full, are chained up.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 02-02-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: ALL VIOLATIONS CLEARED. NOTICE OF VIOLATION HEARING SCHEDULED FOR 2/14/2017 IS CANCELLED.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 02-07-2019
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 02-07-2019
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Items marked N/A not reviewed during inspection. Observed several 55-gal drums of partially full and empty Part A/Part B epoxy bonder cannisters. Determine if a hazardous waste, and if so, provide management plan to properly store and dispose of wastes (i.e. waste cannisters will be stored in a labeled, closed drum in hazardous waste accumulation area and will be properly disposed of under hazardous waste manifest regularly..).
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-23-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: LABEL SEAL TANKS WITH NFPA 704 HAZARD DIAMONDS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-21-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Enforcement Action:

Site ID: 77114
Site Name: TOSTE GRADING & PAVING
Site Address: 941 GRIFFIN ST
Site City: GROVER BEACH
Site Zip: 93433
Enf Action Date: 09-19-2016
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: San Luis Obispo County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Coordinates:

Site ID: 77114
Facility Name: TOSTE GRADING & PAVING
Env Int Type Code: HWG
Program ID: 10436161
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.111290
Longitude: -120.620780

Affiliation:

Affiliation Type Desc: Document Preparer
Entity Name: Angela Harrison
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Anthony Toste
Entity Title: PRESIDENT
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: TOSTE GRADING & PAVING
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Entity Name: Anthony Toste
Entity Title: Not reported
Affiliation Address: P.O. Box 941
Affiliation City: Grover Beach
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93483
Affiliation Phone: (805) 489-1791

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 941 Griffin Street
Affiliation City: Grover Beach
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: ANTHONY TOSTE
Entity Title: Not reported
Affiliation Address: P.O. Box 941
Affiliation City: Grover Beach
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93483
Affiliation Phone: (805) 431-2546

Affiliation Type Desc: Operator
Entity Name: ANTHONY TOSTE
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: (805) 431-2546

Affiliation Type Desc: Environmental Contact
Entity Name: Ed Rains
Entity Title: Not reported
Affiliation Address: P.O. Box 407
Affiliation City: Grover Beach
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93483

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSTE GRADING & PAVING (Continued)

S110743547

Affiliation Phone: Not reported

**D11
NW
< 1/8
0.090 mi.
477 ft.**

**TOYWORX AUTOMOTIVE
983 S 4TH ST STE B
GROVER BEACH, CA 93433**

**RCRA NonGen / NLR 1024808770
CAL000281584**

Site 2 of 4 in cluster D

**Relative:
Lower**

RCRA NonGen / NLR:

**Actual:
22 ft.**

Date form received by agency: 04/27/2004
Facility name: TOYWORX AUTOMOTIVE
Facility address: 983 S 4TH ST STE B
GROVER BEACH, CA 93433
EPA ID: CAL000281584
Contact: DANIEL ARNDT
Contact address: 983 S 4TH ST STE B
GROVER BEACH, CA 93433
Contact country: Not reported
Contact telephone: 805-474-1288
Contact email: TOYWORX@SBCGLOBAL.NET
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: DANIEL ARNDT
Owner/operator address: 983 S 4TH ST STE B
GROVER BEACH, CA 93433
Owner/operator country: Not reported
Owner/operator telephone: 805-474-1288
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: DANIEL ARNDT
Owner/operator address: 983 S 4TH ST STE B
GROVER BEACH, CA 93433
Owner/operator country: Not reported
Owner/operator telephone: 805-474-1288
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

TOYWORX AUTOMOTIVE (Continued)

1024808770

Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Violation Status: No violations found

**D12
 NW
 < 1/8
 0.090 mi.
 477 ft.**

**TOYWORX AUTOMOTIVE
 983 S 4TH ST #B
 GROVER BEACH, CA 93433**

**CERS HAZ WASTE
 CUPA Listings
 CERS**

**S110744188
 N/A**

Site 3 of 4 in cluster D

**Relative:
 Lower
 Actual:
 22 ft.**

CERS HAZ WASTE:
 Site ID: 163009
 CERS ID: 10439500
 CERS Description: Hazardous Waste Generator

Violations:

Site ID: 163009
 Site Name: TOYWORX AUTOMOTIVE
 Violation Date: 05-25-2016
 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 06/24/2016. UPDATE/CERTIFY HMBP ELECTRONICALLY BY 6/24/2016
 Violation Division: San Luis Obispo County Environmental Health
 Violation Program: HMRRP
 Violation Source: CERS

Site ID: 163009
 Site Name: TOYWORX AUTOMOTIVE
 Violation Date: 05-25-2016
 Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
 Violation Description: Haz Waste Generator Program - Training - General
 Violation Notes: Returned to compliance on 06/24/2016. SUBMIT COPY OF EMPLOYEE HAZARD COMMUNICATION TRAINING DOCUMENTATION, TO YOUR INSPECTOR, BY 6/24/2016
 Violation Division: San Luis Obispo County Environmental Health
 Violation Program: HW
 Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
 Eval Date: 05-25-2016
 Violations Found: Yes
 Eval Type: Routine done by local agency
 Eval Notes: Not reported
 Eval Division: San Luis Obispo County Environmental Health

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOYWORX AUTOMOTIVE (Continued)

S110744188

Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-31-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-27-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-08-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-31-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: FACILITY IS CLEAN AND WELL MAINTAINED.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOYWORX AUTOMOTIVE (Continued)

S110744188

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-25-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-23-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Affiliation:

Affiliation Type Desc: Parent Corporation
Entity Name: TOYWORX AUTOMOTIVE
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 983 S 4TH ST #B
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

CUPA SAN LUIS OBISPO:

Facility Id: FA0007964
Program Element Code: 0711
Program Element: HAZMAT DISCLOSURE/WASTE GEN ONLY > TQ
Record Id: PR0013981
Cross Street: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOYWORX AUTOMOTIVE (Continued)

S110744188

Status Code: 04
Status: Active, exempt from billing
Latitude: 35.11076
Longitude: -120.62376

Facility Id: FA0007964
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0012082
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11076
Longitude: -120.62376

CERS TANKS:

Site ID: 163009
CERS ID: 10439500
Site Name: TOYWORX AUTOMOTIVE
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 163009
Site Name: TOYWORX AUTOMOTIVE
Violation Date: 05-25-2016
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 06/24/2016. UPDATE/CERTIFY HMBP ELECTRONICALLY BY 6/24/2016
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 163009
Site Name: TOYWORX AUTOMOTIVE
Violation Date: 05-25-2016
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Training - General
Violation Notes: Returned to compliance on 06/24/2016. SUBMIT COPY OF EMPLOYEE HAZARD COMMUNICATION TRAINING DOCUMENTATION, TO YOUR INSPECTOR, BY 6/24/2016
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-25-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOYWORX AUTOMOTIVE (Continued)

S110744188

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-31-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-27-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-08-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-31-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: FACILITY IS CLEAN AND WELL MAINTAINED.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-25-2016
Violations Found: Yes

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOYWORX AUTOMOTIVE (Continued)

S110744188

Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-23-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Affiliation:

Affiliation Type Desc: Parent Corporation
Entity Name: TOYWORX AUTOMOTIVE
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 983 S 4TH ST #B
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

D13
NW
< 1/8
0.090 mi.
477 ft.

KAUTZ CHEVRON SERVICE
983 S 4TH ST
GROVER BEACH, CA 93433

EDR Hist Auto 1020310659
N/A

Site 4 of 4 in cluster D

Relative:
Lower

EDR Hist Auto

Actual:
22 ft.

Year: Name:
1977 COASTAL ENGINE REBUILDERS

Type:
General Automotive Repair Shops

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

KAUTZ CHEVRON SERVICE (Continued)

1020310659

1978	COASTAL ENGINE REBUILDERS	General Automotive Repair Shops
1979	COASTAL ENGINE REBUILDERS	General Automotive Repair Shops
1979	COASTAL ENGINE REBUILDERS	General Automotive Repair Shops
1980	COASTAL ENGINE REBUILDERS	General Automotive Repair Shops
1989	C&J AUTOMOTIVE & RV REPAIR	General Automotive Repair Shops
1990	COASTAL AUTOMOTIVE & MACHINE	Machine And Other Job Shop Work
1990	C&J AUTOMOTIVE & RV REPAIR	General Automotive Repair Shops
1991	C&J AUTOMOTIVE & RV REPAIR	General Automotive Repair Shops
1991	COASTAL AUTOMOTIVE & MACHINE	Machine And Other Job Shop Work
1992	COASTAL AUTOMOTIVE & MACHINE	Machine And Other Job Shop Work
1992	C&J AUTOMOTIVE & RV REPAIR	General Automotive Repair Shops
1993	COASTAL AUTOMOTIVE & MACHINE	Machine And Other Job Shop Work
1993	C&J AUTOMOTIVE & RV REPAIR	General Automotive Repair Shops
1994	C&J AUTOMOTIVE & RV REPAIR	General Automotive Repair Shops
1994	COASTAL AUTOMOTIVE & MACHINE	Machine And Other Job Shop Work
1995	COASTAL AUTOMOTIVE & MACHINE	Machine And Other Job Shop Work
1996	KAUTZ CHEVRON SERVICE	Gasoline Service Stations
1997	KAUTZ CHEVRON SERVICE	Gasoline Service Stations
1999	EASY AUTO REPAIR	General Automotive Repair Shops
1999	KAUTZ CHEVRON SERVICE	Gasoline Service Stations
2000	EASY AUTO REPAIR	General Automotive Repair Shops
2000	KAUTZ CHEVRON SERVICE	Gasoline Service Stations
2001	EASY AUTO REPAIR	General Automotive Repair Shops
2001	KAUTZ CHEVRON SERVICE	Gasoline Service Stations
2002	KAUTZ CHEVRON SERVICE	Gasoline Service Stations
2002	EASY AUTO REPAIR	General Automotive Repair Shops
2003	EASY AUTO REPAIR	General Automotive Repair Shops
2003	KAUTZ CHEVRON SERVICE	Gasoline Service Stations
2004	KAUTZ CHEVRON SERVICE	Gasoline Service Stations
2005	KAUTZ CHEVRON SERVICE	Gasoline Service Stations, NEC
2005	TOYWORX AUTOMOTIVE	General Automotive Repair Shops
2006	TOYWORX AUTOMOTIVE	General Automotive Repair Shops
2006	KAUTZ CHEVRON SERVICE	Gasoline Service Stations, NEC
2007	TOYWORX AUTOMOTIVE	General Automotive Repair Shops
2007	KAUTZ CHEVRON SERVICE	Gasoline Service Stations, NEC
2008	TOYWORX AUTOMOTIVE	General Automotive Repair Shops
2008	KAUTZ CHEVRON SERVICE	Gasoline Service Stations, NEC
2009	TOYWORX AUTOMOTIVE	General Automotive Repair Shops
2010	TOYWORX AUTOMOTIVE	General Automotive Repair Shops
2011	TOYWORX AUTOMOTIVE	General Automotive Repair Shops
2012	TOYWORX AUTOMOTIVE	General Automotive Repair Shops
2013	TOYWORX AUTOMOTIVE	General Automotive Repair Shops
2014	TOYWORX AUTOMOTIVE	General Automotive Repair Shops

C14
NE
 < 1/8
 0.094 mi.
 495 ft.

AATCO
952 GRIFFIN ST
GROVER BEACH, CA 93433

EDR Hist Auto 1020706938
N/A

Site 3 of 7 in cluster C

Relative: EDR Hist Auto
Higher

Actual:
 27 ft.

Year:	Name:
1989	AATCO TRANSMISSION
1989	AATCO
1990	AATCO
1991	AATCO
1992	AATCO

Type:
Automotive Transmission Repair Shops
Automotive Repair Shops, NEC

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

AATCO (Continued)

1020706938

1993	AATCO	Automotive Repair Shops, NEC
1994	AATCO	Automotive Repair Shops, NEC
1995	AATCO	Automotive Repair Shops, NEC

C15
NE
 < 1/8
 0.101 mi.
 534 ft.

COINMACH CORP
921 GRIFFIN ST STE G
GROVER BEACH, CA 93433

EDR Hist Cleaner

1018679385
N/A

Site 4 of 7 in cluster C

Relative:
Higher

EDR Hist Cleaner

Actual:
29 ft.

Year:	Name:	Type:
2011	COINMACH CORP	Laundry And Drycleaner Agents
2012	COINMACH CORP	Laundry And Drycleaner Agents

C16
NE
 < 1/8
 0.101 mi.
 534 ft.

CLASSIC RESTORATIONS LTD
921 GRIFFIN ST UNIT E
GROVER BEACH, CA 93433

RCRA-SQG
FINDS
ECHO

1000386729
CAD982497406

Site 5 of 7 in cluster C

Relative:
Higher

RCRA-SQG:

Actual:
29 ft.

Date form received by agency: 06/07/1990
 Facility name: CLASSIC RESTORATIONS LTD
 Facility address: 921 GRIFFIN ST UNIT E
 GROVER BEACH, CA 93433
 EPA ID: CAD982497406
 Contact: ENVIRONMENTAL MANAGER
 Contact address: 921 GRIFFIN ST UNIT E
 GROVER CITY, CA 93433
 Contact country: US
 Contact telephone: 805-489-7062
 Contact email: Not reported
 EPA Region: 09
 Classification: Small Small Quantity Generator
 Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: NOT REQUIRED
 Owner/operator address: NOT REQUIRED
 NOT REQUIRED, ME 99999
 Owner/operator country: Not reported
 Owner/operator telephone: 415-555-1212
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Private
 Owner/Operator Type: Operator
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CLASSIC RESTORATIONS LTD (Continued)

1000386729

Owner/operator name: SULBORSKI PAUL
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110008279790

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.

ECHO:

Envid: 1000386729
Registry ID: 110008279790
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110008279790>

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

C17
NNE
< 1/8
0.105 mi.
554 ft.

J.B. DEWAR, INC.
933 HUBER STREET
GROVER BEACH, CA 93433

Site 6 of 7 in cluster C

UST **1008238739**
FINDS **N/A**

Relative:
Higher
Actual:
26 ft.

UST:

Facility ID: FA0002865
Permitting Agency: San Luis Obispo County Environmental Health
Latitude: 35.11265
Longitude: -120.62177

Facility ID: FA0002865
Permitting Agency: SAN LUIS OBISPO COUNTY
Latitude: 35.1141501
Longitude: -120.6205055

Facility ID: Not reported
Permitting Agency: San Luis Obispo County Environmental Hea
Latitude: 35.11266
Longitude: -120.62177

FINDS:

Registry ID: 110021273771

Environmental Interest/Information System
HAZARDOUS AIR POLLUTANT MAJOR

STATE MASTER

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

C18
NNE
< 1/8
0.105 mi.
554 ft.

JB DEWAR CARDLOCK
933 HUBER ST
GROVER BEACH, CA 93433

Site 7 of 7 in cluster C

CERS HAZ WASTE **U003786191**
SWEEPS UST **N/A**
CERS TANKS
CUPA Listings
CERS

Relative:
Higher
Actual:
26 ft.

CERS HAZ WASTE:

Site ID: 125160
CERS ID: 10574065
CERS Description: Hazardous Waste Generator

Violations:

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 16 2636(f)(5) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(5)
Violation Description: "Failure to meet one or more of the following monitoring requirements in lieu of the requirement to be tightness tested annually: The monitoring system maintains all product piping outside the dispenser to be fail-safe and shut down the pump when a leak is detected. The monitoring system shuts down the pump or stops flow when a leak is detected in the under dispenser containment (UDC)."

Violation Notes: Returned to compliance on 07/25/2017. RED DIESEL FILL SUMP SENSOR FAILED, CLEANED OUT, RETESTED AND PASSED.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-18-2018
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

Violation Description: Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 p.s.i.g. and restrict or shut off the flow of product through the piping when a leak is detected.

Violation Notes: Returned to compliance on 07/19/2018. 87 Line Leak Detector failed testing, was adjusted, and passed. Corrected on site.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-23-2015
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

Violation Description: Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs.

Violation Notes: Returned to compliance on 07/25/2016. 87 PRODUCT LINE LEAK DETECTOR FAILED TESTING. REPLACE LINE LEAK DETECTOR AND RE-TEST.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286

Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.

Violation Notes: Returned to compliance on 08/02/2017. 1. UPDATE UST TANK FORMS IN ELECTRONIC PORTAL, BY 8/24/2017, AS RESPONSIBLE PERSONNEL LISTED ON FORMS ARE NO LONGER WITH COMPANY. 2. SUBMIT MONITORING PLANS FOR EACH TANK, ELECTRONICALLY, BY 8/24/2017. A REVIEW OF UST MONITORING PLAN IN EHS ELECTRONIC PORTAL SUBMITTED 12/2016 REVEAL ONLY 1 MONITORING PLAN FOR 1 TANK WAS SUBMITTED.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Violation Description: 16, Section(s) 2715(f)
Failure to have at least one employee present during operating hours that has been trained in the proper operation and maintenance of the UST system by a designated operator (DO).

Violation Notes: Returned to compliance on 08/02/2017. IMMEDIATELY SUBMIT COPIES OF EMPLOYEE ANNUAL UST TRAINING DOCUMENTATION IN BEST MANAGEMENT PRACTICES, TO YOUR INSPECTOR. 2017 EMPLOYEE UST REFRESHER TRAINING NOT AVAILABLE ON SITE DURING THE INSPECTION.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-18-2018
Citation: 23 CCR 16 2641(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(a)

Violation Description: Failure of leak detection equipment to be located such that equipment is capable of detecting a leak at the earliest possible opportunity.

Violation Notes: Returned to compliance on 12/11/2018. Observed red diesel turbine sump sensor secured approximately half-way up mount tube. The sensor cord runs through a cap that sits on top of the mount tube and the tube length is approximately 26". Additionally, a portion of the mount tube cap had to be unscrewed to pull the sensor cord through to sit at the lowest point of the mount tube. THIS IS MARKED AS A CLASS II VIOLATION FOR FAILURE TO PROPERLY SECURE THE LEAK SENSOR AT THE LOWEST POINT OF THE SUMP FOR DETECTION OF A RELEASE AT THE EARLIEST POSSIBLE OPPORTUNITY. THIS WILL RESULT IN A NOTICE OF VIOLATION OFFICE HEARING AND SHOW CAUSE LETTER. Sensor was secured at the lowest point in the sump during the inspection. ** AMENDED REPORT-- Violation has been removed after 12/11/2018 Enforcement Committee Review for the following reasons: The facility has deep sumps and sensors are mounted in pvc tubes with wire compression caps. The tester was observed pulling on the cap and the sensor wiring in order to and [Truncated]

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 16 2715(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(e)

Violation Description: Failure to maintain a copy of the designated operator monthly inspections for the last 12 months on-site or off-site at a readily available location, if approved by the UPA.

Violation Notes: Returned to compliance on 08/02/2017. IMMEDIATELY SUBMIT COPIES OF THE 5/17 AND 6/17 UST DESIGNATED OPERATOR INSPECTIONS REPORTS TO YOUR INSPECTOR. A REVIEW OF D.O. REPORTS FROM 2016-2017 REVEAL 2 MONTHLY DO REPORTS ARE MISSING.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-24-2014

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Citation: HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)

Violation Description: Failure to maintain secondary containment, as evidenced by failure of secondary containment testing.

Violation Notes: Returned to compliance on 07/25/2014. SECONDARY PRODUCT PIPING ON RED DIESEL FAILED TESTING. MAKE REQUIRED REPAIRS AND RETEST. OBTAIN A REPAIR PERMIT IF BREAKING GROUND OR REPLACING COMPONENTS.

Violation Division: San Luis Obispo County Environmental Health

Violation Program: UST

Violation Source: CERS

Site ID: 125160

Site Name: JB DEWAR CARDLOCK

Violation Date: 07-25-2017

Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple

Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.

Violation Notes: Returned to compliance on 08/02/2017. SUBMIT COPIES OF HAZARDOUS WASTE DISPOSAL MANIFEST, TO YOUR INSPECTOR, BY 8/24/2017. COPIES OF WASTE DISPOSAL MANIFESTS ARE NOT KEPT ON SITE FOR THE INSPECTOR TO REVIEW.

Violation Division: San Luis Obispo County Environmental Health

Violation Program: UST

Violation Source: CERS

Site ID: 125160

Site Name: JB DEWAR CARDLOCK

Violation Date: 07-24-2014

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 07/29/2014. UPDATE HAZMAT BUSINESS PLAN VIA ONLINE PORTAL.

Violation Division: San Luis Obispo County Environmental Health

Violation Program: HMRRP

Violation Source: CERS

Site ID: 125160

Site Name: JB DEWAR CARDLOCK

Violation Date: 07-25-2017

Citation: HSC 6.7 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e)

Violation Description: Failure to maintain secondary containment (e.g. failure of secondary containment testing).

Violation Notes: Returned to compliance on 08/02/2017. DETERMINE CAUSE OF CLEAR DIESEL HI FLOW TURBINE SUMP HYDROSTATIC TESTING FAILURE BY 8/24/2017 CLEAR DIESEL HI FLOW TURBINE SUMP FAILED HYDROSTATIC TESTING. CAUSE OF FAILURE NOT DETERMINED DURING TESTING. ** REMINDER: FACILITY IS WITHIN 1500 FEET OF A DRINKING WATER WELL AND TIMELINE TO DIAGNOSE AND REPAIR IS WITHIN 7 DAYS IF THERE ARE CRACKED PENETRATIONS AT BOTTOM OF SUMP. FACILITY HAS LONGER TIME FRAME FOR REPAIR IF LEVEL OF CONTAINMENT IN SUMP IS ABOVE THE PRODUCT AND VENT LINE. SCHEDULE WITH INSPECTOR TO WITNESS THE TESTING.***

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description: Failure of the line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitor at least hourly. Be capable of detecting a release of 3.0 gallons per hour at 10 p.s.i.g. Restrict or shut off the flow of product through the piping when a leak is detected.
Violation Notes: Returned to compliance on 08/02/2017. CLEAR DIESEL HIGH FLOW LINE LEAK DETECTOR FAILED, ADJUSTMENT TO VALVE MADE BY TECHNICIAN, RETESTED AND PASSED.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-24-2014
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.

Violation Notes: Returned to compliance on 07/25/2014. PROVIDE RECENT COPIES.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-18-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On site with Ricky Binger of B & T Service Station Contractors for annual monitoring system certification. Items marked N/A not reviewed during inspection. Send your inspector a copy of the B&T Work Order for replacement/repair of the clear diesel ATG probe in Nov. 2017. Send your inspector a copy of the testing report within 30 days.

Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-21-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-25-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-27-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: HYDROSTATIC TESTING OF DIESEL FILL SUMP, PASSED
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-23-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-24-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-24-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ON SITE WITH B&T TECHS TO PERFORM ANNUAL LEAK MONITORING SYSTEM CERTIFICATION AND SB 989 TESTING. PROVIDE COPIES OF TEST REPORTS WITHIN 30 DAYS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-29-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Eval Date: 07-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-02-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: ALL VIOLATIONS CLEARED
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-24-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-25-2017
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-18-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-23-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ON SITE WITH B&T TECHS. TO PERFORM ANNUAL UST LEAK MONITORING SYSTEM CERTIFICATION. A SMALL AMOUNT OF RAINWATER WAS FOUND AND REMOVED FROM A COUPLE OF THE TURBINE SUMPS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-25-2016

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-25-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ON SITE WITH ICC TECHNICIAN JAMES WELSCH AND MIKE CONROY FOR ANNUAL MONITOR CERTIFICATION AND SB989 TESTING. CLEAR DIESEL HIGH FLOW TURBINE SUMP FAILED HYDROSTATIC TESTING.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-29-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Coordinates:
Site ID: 125160
Facility Name: JB DEWAR CARDLOCK
Env Int Type Code: HWG
Program ID: 10574065
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.112650
Longitude: -120.621770

Affiliation:
Affiliation Type Desc: Operator
Entity Name: JB Dewar Inc
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: (805) 543-0180

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Affiliation Type Desc: Legal Owner
Entity Name: JB DEWAR
Entity Title: Not reported
Affiliation Address: PO BOX 3059
Affiliation City: SAN LUIS OBISPO
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93403
Affiliation Phone: (805) 543-0180

Affiliation Type Desc: UST Tank Operator
Entity Name: J.B. Dewar, Inc.
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 93403
Affiliation Phone: (805) 543-0180

Affiliation Type Desc: Parent Corporation
Entity Name: J.B. Dewar, Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Owner
Entity Name: J.B. Dewar, Inc.
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 93403
Affiliation Phone: (805) 543-0180

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Document Preparer
Entity Name: Casey Guenther
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Dave Parsons
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93403
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 75 PRADO ROAD
Affiliation City: SAN LUIS OBISPO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93401
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Casey Guenther
Entity Title: Operations Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: UST Permit Applicant
Entity Name: Jim Clark
Entity Title: Operations Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (805) 540-7114

Affiliation Type Desc: UST Property Owner Name
Entity Name: Ken & Sandi Dewar FamilyTrust
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 93433
Affiliation Phone: (805) 543-0180

SWEEPS UST:
Status: Active
Comp Number: 20702

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Number: 9
Board Of Equalization: Not reported
Referral Date: 03-16-93
Action Date: 03-16-93
Created Date: 05-10-91
Owner Tank Id: Not reported
SWRCB Tank Id: 40-000-020702-000001
Tank Status: A
Capacity: 10000
Active Date: 05-10-91
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 4

Status: Active
Comp Number: 20702
Number: 9
Board Of Equalization: Not reported
Referral Date: 03-16-93
Action Date: 03-16-93
Created Date: 05-10-91
Owner Tank Id: Not reported
SWRCB Tank Id: 40-000-020702-000002
Tank Status: A
Capacity: 10000
Active Date: 05-10-91
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 20702
Number: 9
Board Of Equalization: Not reported
Referral Date: 03-16-93
Action Date: 03-16-93
Created Date: 05-10-91
Owner Tank Id: Not reported
SWRCB Tank Id: 40-000-020702-000003
Tank Status: A
Capacity: 10000
Active Date: 03-23-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 20702
Number: 9
Board Of Equalization: Not reported
Referral Date: 03-16-93
Action Date: 03-16-93
Created Date: 05-10-91
Owner Tank Id: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

SWRCB Tank Id: 40-000-020702-000004
Tank Status: A
Capacity: 12000
Active Date: 05-10-91
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

CERS TANKS:

Facility Name: JB DEWAR CARDLOCK
Site ID: 125160
CERS ID: 10574065
CERS Description: Underground Storage Tank

Violations:

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 16 2636(f)(5) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(5)
Violation Description: "Failure to meet one or more of the following monitoring requirements in lieu of the requirement to be tightness tested annually: The monitoring system maintains all product piping outside the dispenser to be fail-safe and shut down the pump when a leak is detected. The monitoring system shuts down the pump or stops flow when a leak is detected in the under dispenser containment (UDC)."
Violation Notes: Returned to compliance on 07/25/2017. RED DIESEL FILL SUMP SENSOR FAILED, CLEANED OUT, RETESTED AND PASSED.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-18-2018
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description: Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 p.s.i.g. and restrict or shut off the flow of product through the piping when a leak is detected.
Violation Notes: Returned to compliance on 07/19/2018. 87 Line Leak Detector failed testing, was adjusted, and passed. Corrected on site.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-23-2015
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description: Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

flow of product through the piping or trigger an alarm when a release occurs.

Violation Notes: Returned to compliance on 07/25/2016. 87 PRODUCT LINE LEAK DETECTOR FAILED TESTING. REPLACE LINE LEAK DETECTOR AND RE-TEST.

Violation Division: San Luis Obispo County Environmental Health

Violation Program: UST

Violation Source: CERS

Site ID: 125160

Site Name: JB DEWAR CARDLOCK

Violation Date: 07-25-2017

Citation: 23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286

Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.

Violation Notes: Returned to compliance on 08/02/2017. 1. UPDATE UST TANK FORMS IN ELECTRONIC PORTAL, BY 8/24/2017, AS RESPONSIBLE PERSONNEL LISTED ON FORMS ARE NO LONGER WITH COMPANY. 2. SUBMIT MONITORING PLANS FOR EACH TANK, ELECTRONICALLY, BY 8/24/2017. A REVIEW OF UST MONITORING PLAN IN EHS ELECTRONIC PORTAL SUBMITTED 12/2016 REVEAL ONLY 1 MONITORING PLAN FOR 1 TANK WAS SUBMITTED.

Violation Division: San Luis Obispo County Environmental Health

Violation Program: UST

Violation Source: CERS

Site ID: 125160

Site Name: JB DEWAR CARDLOCK

Violation Date: 07-25-2017

Citation: 23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(f)

Violation Description: Failure to have at least one employee present during operating hours that has been trained in the proper operation and maintenance of the UST system by a designated operator (DO).

Violation Notes: Returned to compliance on 08/02/2017. IMMEDIATELY SUBMIT COPIES OF EMPLOYEE ANNUAL UST TRAINING DOCUMENTATION IN BEST MANAGEMENT PRACTICES, TO YOUR INSPECTOR. 2017 EMPLOYEE UST REFRESHER TRAINING NOT AVAILABLE ON SITE DURING THE INSPECTION.

Violation Division: San Luis Obispo County Environmental Health

Violation Program: UST

Violation Source: CERS

Site ID: 125160

Site Name: JB DEWAR CARDLOCK

Violation Date: 07-18-2018

Citation: 23 CCR 16 2641(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(a)

Violation Description: Failure of leak detection equipment to be located such that equipment is capable of detecting a leak at the earliest possible opportunity.

Violation Notes: Returned to compliance on 12/11/2018. Observed red diesel turbine sump sensor secured approximately half-way up mount tube. The sensor cord runs through a cap that sits on top of the mount tube and the tube length is approximately 26". Additionally, a portion of the mount tube cap had to be unscrewed to pull the sensor cord through to sit at the lowest point of the mount tube. THIS IS MARKED AS A CLASS II VIOLATION FOR FAILURE TO PROPERLY SECURE THE LEAK SENSOR AT THE LOWEST POINT OF THE SUMP FOR DETECTION OF A RELEASE AT THE EARLIEST POSSIBLE OPPORTUNITY. THIS WILL RESULT IN A NOTICE OF VIOLATION OFFICE HEARING

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

AND SHOW CAUSE LETTER. Sensor was secured at the lowest point in the sump during the inspection. ** AMENDED REPORT-- Violation has been removed after 12/11/2018 Enforcement Committee Review for the following reasons: The facility has deep sumps and sensors are mounted in pvc tubes with wire compression caps. The tester was observed pulling on the cap and the sensor wiring in order to and [Truncated]

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 16 2715(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(e)

Violation Description: Failure to maintain a copy of the designated operator monthly inspections for the last 12 months on-site or off-site at a readily available location, if approved by the UPA.

Violation Notes: Returned to compliance on 08/02/2017. IMMEDIATELY SUBMIT COPIES OF THE 5/17 AND 6/17 UST DESIGNATED OPERATOR INSPECTIONS REPORTS TO YOUR INSPECTOR. A REVIEW OF D.O. REPORTS FROM 2016-2017 REVEAL 2 MONTHLY DO REPORTS ARE MISSING.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-24-2014
Citation: HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)

Violation Description: Failure to maintain secondary containment, as evidenced by failure of secondary containment testing.

Violation Notes: Returned to compliance on 07/25/2014. SECONDARY PRODUCT PIPING ON RED DIESEL FAILED TESTING. MAKE REQUIRED REPAIRS AND RETEST. OBTAIN A REPAIR PERMIT IF BREAKING GROUND OR REPLACING COMPONENTS.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple

Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.

Violation Notes: Returned to compliance on 08/02/2017. SUBMIT COPIES OF HAZARDOUS WASTE DISPOSAL MANIFEST, TO YOUR INSPECTOR, BY 8/24/2017. COPIES OF WASTE DISPOSAL MANIFESTS ARE NOT KEPT ON SITE FOR THE INSPECTOR TO REVIEW.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Violation Date: 07-24-2014
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 07/29/2014. UPDATE HAZMAT BUSINESS PLAN VIA ONLINE PORTAL.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: HSC 6.7 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e)
Violation Description: Failure to maintain secondary containment (e.g. failure of secondary containment testing).
Violation Notes: Returned to compliance on 08/02/2017. DETERMINE CAUSE OF CLEAR DIESEL HI FLOW TURBINE SUMP HYDROSTATIC TESTING FAILURE BY 8/24/2017 CLEAR DIESEL HI FLOW TURBINE SUMP FAILED HYDROSTATIC TESTING. CAUSE OF FAILURE NOT DETERMINED DURING TESTING. ** REMINDER: FACILITY IS WITHIN 1500 FEET OF A DRINKING WATER WELL AND TIMELINE TO DIAGNOSE AND REPAIR IS WITHIN 7 DAYS IF THERE ARE CRACKED PENETRATIONS AT BOTTOM OF SUMP. FACILITY HAS LONGER TIME FRAME FOR REPAIR IF LEVEL OF CONTAINMENT IN SUMP IS ABOVE THE PRODUCT AND VENT LINE. SCHEDULE WITH INSPECTOR TO WITNESS THE TESTING.***
Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description: Failure of the line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitor at least hourly. Be capable of detecting a release of 3.0 gallons per hour at 10 p.s.i.g. Restrict or shut off the flow of product through the piping when a leak is detected.
Violation Notes: Returned to compliance on 08/02/2017. CLEAR DIESEL HIGH FLOW LINE LEAK DETECTOR FAILED, ADJUSTMENT TO VALVE MADE BY TECHNICIAN, RETESTED AND PASSED.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-24-2014
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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Violation Notes: hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Division: Returned to compliance on 07/25/2014. PROVIDE RECENT COPIES.
Violation Program: San Luis Obispo County Environmental Health
Violation Source: HMRRP
CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-18-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On site with Ricky Binger of B & T Service Station Contractors for annual monitoring system certification. Items marked N/A not reviewed during inspection. Send your inspector a copy of the B&T Work Order for replacement/repair of the clear diesel ATG probe in Nov. 2017. Send your inspector a copy of the testing report within 30 days.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-21-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-25-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-27-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: HYDROSTATIC TESTING OF DIESEL FILL SUMP, PASSED
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-23-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-24-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-24-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ON SITE WITH B&T TECHS TO PERFORM ANNUAL LEAK MONITORING SYSTEM CERTIFICATION AND SB 989 TESTING. PROVIDE COPIES OF TEST REPORTS WITHIN 30 DAYS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-29-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-02-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: ALL VIOLATIONS CLEARED
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-24-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Eval Date: 07-25-2017
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-18-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-23-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ON SITE WITH B&T TECHS. TO PERFORM ANNUAL UST LEAK MONITORING SYSTEM CERTIFICATION. A SMALL AMOUNT OF RAINWATER WAS FOUND AND REMOVED FROM A COUPLE OF THE TURBINE SUMPS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-25-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-25-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ON SITE WITH ICC TECHNICIAN JAMES WELSCH AND MIKE CONROY FOR ANNUAL MONITOR CERTIFICATION AND SB989 TESTING. CLEAR DIESEL HIGH FLOW TURBINE SUMP FAILED HYDROSTATIC TESTING.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-29-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Coordinates:
Site ID: 125160
Facility Name: JB DEWAR CARDLOCK
Env Int Type Code: HWG
Program ID: 10574065
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.112650
Longitude: -120.621770

Affiliation:
Affiliation Type Desc: Operator
Entity Name: JB Dewar Inc
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: (805) 543-0180

Affiliation Type Desc: Legal Owner
Entity Name: JB DEWAR
Entity Title: Not reported
Affiliation Address: PO BOX 3059
Affiliation City: SAN LUIS OBISPO
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93403
Affiliation Phone: (805) 543-0180

Affiliation Type Desc: UST Tank Operator
Entity Name: J.B. Dewar, Inc.
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 93403
Affiliation Phone: (805) 543-0180

Affiliation Type Desc: Parent Corporation
Entity Name: J.B. Dewar, Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Owner
Entity Name: J.B. Dewar, Inc.
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 93403
Affiliation Phone: (805) 543-0180

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Document Preparer
Entity Name: Casey Guenther
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Dave Parsons
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93403
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 75 PRADO ROAD
Affiliation City: SAN LUIS OBISPO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93401
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Casey Guenther
Entity Title: Operations Manager

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: UST Permit Applicant
Entity Name: Jim Clark
Entity Title: Operations Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (805) 540-7114

Affiliation Type Desc: UST Property Owner Name
Entity Name: Ken & Sandi Dewar FamilyTrust
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 93433
Affiliation Phone: (805) 543-0180

CUPA SAN LUIS OBISPO:

Facility Id: FA0002865
Program Element Code: 0301
Program Element: UST FACILITY ANNUAL PERMIT
Record Id: PR0002862
Cross Street: FARROLL
Status Code: 01
Status: Active, billable
Latitude: 35.11266
Longitude: -120.62197

Facility Id: FA0002865
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0007093
Cross Street: FARROLL
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11266
Longitude: -120.62197

Facility Id: FA0002865
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0002034
Cross Street: FARROLL
Status Code: 01
Status: Active, billable
Latitude: 35.11266

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Longitude: -120.62197
Facility Id: FA0002865
Program Element Code: 1140
Program Element: HAZWASTE GEN UST SITE
Record Id: PR0019129
Cross Street: FARROLL
Status Code: 04
Status: Active, exempt from billing
Latitude: 35.11266
Longitude: -120.62197

CERS TANKS:
Site ID: 125160
CERS ID: 10574065
Site Name: JB DEWAR CARDLOCK
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 16 2636(f)(5) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(5)
Violation Description: "Failure to meet one or more of the following monitoring requirements in lieu of the requirement to be tightness tested annually: The monitoring system maintains all product piping outside the dispenser to be fail-safe and shut down the pump when a leak is detected. The monitoring system shuts down the pump or stops flow when a leak is detected in the under dispenser containment (UDC)."
Violation Notes: Returned to compliance on 07/25/2017. RED DIESEL FILL SUMP SENSOR FAILED, CLEANED OUT, RETESTED AND PASSED.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-18-2018
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description: Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 p.s.i.g. and restrict or shut off the flow of product through the piping when a leak is detected.
Violation Notes: Returned to compliance on 07/19/2018. 87 Line Leak Detector failed testing, was adjusted, and passed. Corrected on site.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-23-2015
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Violation Description: Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs.

Violation Notes: Returned to compliance on 07/25/2016. 87 PRODUCT LINE LEAK DETECTOR FAILED TESTING. REPLACE LINE LEAK DETECTOR AND RE-TEST.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286

Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.

Violation Notes: Returned to compliance on 08/02/2017. 1. UPDATE UST TANK FORMS IN ELECTRONIC PORTAL, BY 8/24/2017, AS RESPONSIBLE PERSONNEL LISTED ON FORMS ARE NO LONGER WITH COMPANY. 2. SUBMIT MONITORING PLANS FOR EACH TANK, ELECTRONICALLY, BY 8/24/2017. A REVIEW OF UST MONITORING PLAN IN EHS ELECTRONIC PORTAL SUBMITTED 12/2016 REVEAL ONLY 1 MONITORING PLAN FOR 1 TANK WAS SUBMITTED.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(f)

Violation Description: Failure to have at least one employee present during operating hours that has been trained in the proper operation and maintenance of the UST system by a designated operator (DO).

Violation Notes: Returned to compliance on 08/02/2017. IMMEDIATELY SUBMIT COPIES OF EMPLOYEE ANNUAL UST TRAINING DOCUMENTATION IN BEST MANAGEMENT PRACTICES, TO YOUR INSPECTOR. 2017 EMPLOYEE UST REFRESHER TRAINING NOT AVAILABLE ON SITE DURING THE INSPECTION.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-18-2018
Citation: 23 CCR 16 2641(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(a)

Violation Description: Failure of leak detection equipment to be located such that equipment is capable of detecting a leak at the earliest possible opportunity.

Violation Notes: Returned to compliance on 12/11/2018. Observed red diesel turbine sump sensor secured approximately half-way up mount tube. The sensor cord runs through a cap that sits on top of the mount tube and the tube length is approximately 26". Additionally, a portion of the mount tube cap had to be unscrewed to pull the sensor cord through to sit at the lowest point of the mount tube. THIS IS MARKED AS A CLASS II VIOLATION

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

FOR FAILURE TO PROPERLY SECURE THE LEAK SENSOR AT THE LOWEST POINT OF THE SUMP FOR DETECTION OF A RELEASE AT THE EARLIEST POSSIBLE OPPORTUNITY. THIS WILL RESULT IN A NOTICE OF VIOLATION OFFICE HEARING AND SHOW CAUSE LETTER. Sensor was secured at the lowest point in the sump during the inspection. ** AMENDED REPORT-- Violation has been removed after 12/11/2018 Enforcement Committee Review for the following reasons: The facility has deep sumps and sensors are mounted in pvc tubes with wire compression caps. The tester was observed pulling on the cap and the sensor wiring in order to and [Truncated]

Violation Division:
Violation Program:
Violation Source:

San Luis Obispo County Environmental Health
UST
CERS

Site ID:
Site Name:
Violation Date:
Citation:

125160
JB DEWAR CARDLOCK
07-25-2017
23 CCR 16 2715(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(e)

Violation Description:

Failure to maintain a copy of the designated operator monthly inspections for the last 12 months on-site or off-site at a readily available location, if approved by the UPA.

Violation Notes:

Returned to compliance on 08/02/2017. IMMEDIATELY SUBMIT COPIES OF THE 5/17 AND 6/17 UST DESIGNATED OPERATOR INSPECTIONS REPORTS TO YOUR INSPECTOR. A REVIEW OF D.O. REPORTS FROM 2016-2017 REVEAL 2 MONTHLY DO REPORTS ARE MISSING.

Violation Division:
Violation Program:
Violation Source:

San Luis Obispo County Environmental Health
UST
CERS

Site ID:
Site Name:
Violation Date:
Citation:

125160
JB DEWAR CARDLOCK
07-24-2014
HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)

Violation Description:

Failure to maintain secondary containment, as evidenced by failure of secondary containment testing.

Violation Notes:

Returned to compliance on 07/25/2014. SECONDARY PRODUCT PIPING ON RED DIESEL FAILED TESTING. MAKE REQUIRED REPAIRS AND RETEST. OBTAIN A REPAIR PERMIT IF BREAKING GROUND OR REPLACING COMPONENTS.

Violation Division:
Violation Program:
Violation Source:

San Luis Obispo County Environmental Health
UST
CERS

Site ID:
Site Name:
Violation Date:
Citation:

125160
JB DEWAR CARDLOCK
07-25-2017
HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple

Violation Description:

UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.

Violation Notes:

Returned to compliance on 08/02/2017. SUBMIT COPIES OF HAZARDOUS WASTE DISPOSAL MANIFEST, TO YOUR INSPECTOR, BY 8/24/2017. COPIES OF WASTE DISPOSAL MANIFESTS ARE NOT KEPT ON SITE FOR THE INSPECTOR TO REVIEW.

Violation Division:
Violation Program:
Violation Source:

San Luis Obispo County Environmental Health
UST
CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-24-2014
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 07/29/2014. UPDATE HAZMAT BUSINESS PLAN VIA ONLINE PORTAL.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: HSC 6.7 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c), 25290.2(c), 25291(a)(2), 25292(e)
Violation Description: Failure to maintain secondary containment (e.g. failure of secondary containment testing).
Violation Notes: Returned to compliance on 08/02/2017. DETERMINE CAUSE OF CLEAR DIESEL HI FLOW TURBINE SUMP HYDROSTATIC TESTING FAILURE BY 8/24/2017 CLEAR DIESEL HI FLOW TURBINE SUMP FAILED HYDROSTATIC TESTING. CAUSE OF FAILURE NOT DETERMINED DURING TESTING. ** REMINDER: FACILITY IS WITHIN 1500 FEET OF A DRINKING WATER WELL AND TIMELINE TO DIAGNOSE AND REPAIR IS WITHIN 7 DAYS IF THERE ARE CRACKED PENETRATIONS AT BOTTOM OF SUMP. FACILITY HAS LONGER TIME FRAME FOR REPAIR IF LEVEL OF CONTAINMENT IN SUMP IS ABOVE THE PRODUCT AND VENT LINE. SCHEDULE WITH INSPECTOR TO WITNESS THE TESTING.***
Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-25-2017
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description: Failure of the line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitor at least hourly. Be capable of detecting a release of 3.0 gallons per hour at 10 p.s.i.g. Restrict or shut off the flow of product through the piping when a leak is detected.
Violation Notes: Returned to compliance on 08/02/2017. CLEAR DIESEL HIGH FLOW LINE LEAK DETECTOR FAILED, ADJUSTMENT TO VALVE MADE BY TECHNICIAN, RETESTED AND PASSED.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: UST
Violation Source: CERS

Site ID: 125160
Site Name: JB DEWAR CARDLOCK
Violation Date: 07-24-2014
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

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.
Violation Notes: Returned to compliance on 07/25/2014. PROVIDE RECENT COPIES.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-18-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On site with Ricky Binger of B & T Service Station Contractors for annual monitoring system certification. Items marked N/A not reviewed during inspection. Send your inspector a copy of the B&T Work Order for replacement/repair of the clear diesel ATG probe in Nov. 2017. Send your inspector a copy of the testing report within 30 days.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-21-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-25-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-27-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: HYDROSTATIC TESTING OF DIESEL FILL SUMP, PASSED
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-23-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-24-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-24-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ON SITE WITH B&T TECHS TO PERFORM ANNUAL LEAK MONITORING SYSTEM CERTIFICATION AND SB 989 TESTING. PROVIDE COPIES OF TEST REPORTS WITHIN 30 DAYS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-29-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-02-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: ALL VIOLATIONS CLEARED
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-24-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Eval General Type: Other/Unknown
Eval Date: 07-25-2017
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-18-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-23-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ON SITE WITH B&T TECHS. TO PERFORM ANNUAL UST LEAK MONITORING SYSTEM CERTIFICATION. A SMALL AMOUNT OF RAINWATER WAS FOUND AND REMOVED FROM A COUPLE OF THE TURBINE SUMPS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-25-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-25-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ON SITE WITH ICC TECHNICIAN JAMES WELSCH AND MIKE CONROY FOR ANNUAL MONITOR CERTIFICATION AND SB989 TESTING. CLEAR DIESEL HIGH FLOW TURBINE SUMP FAILED HYDROSTATIC TESTING.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-29-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: UST
Eval Source: CERS

Coordinates:
Site ID: 125160
Facility Name: JB DEWAR CARDLOCK
Env Int Type Code: HWG
Program ID: 10574065
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.112650
Longitude: -120.621770

Affiliation:
Affiliation Type Desc: Operator
Entity Name: JB Dewar Inc
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: (805) 543-0180

Affiliation Type Desc: Legal Owner
Entity Name: JB DEWAR
Entity Title: Not reported
Affiliation Address: PO BOX 3059
Affiliation City: SAN LUIS OBISPO
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93403
Affiliation Phone: (805) 543-0180

Affiliation Type Desc: UST Tank Operator
Entity Name: J.B. Dewar, Inc.
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 93403
Affiliation Phone: (805) 543-0180

Affiliation Type Desc: Parent Corporation
Entity Name: J.B. Dewar, Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Owner
Entity Name: J.B. Dewar, Inc.
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 93403
Affiliation Phone: (805) 543-0180

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Document Preparer
Entity Name: Casey Guenther
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Dave Parsons
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93403
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 75 PRADO ROAD
Affiliation City: SAN LUIS OBISPO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93401
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Casey Guenther
Entity Title: Operations Manager

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JB DEWAR CARDLOCK (Continued)

U003786191

Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: UST Permit Applicant
Entity Name: Jim Clark
Entity Title: Operations Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (805) 540-7114

Affiliation Type Desc: UST Property Owner Name
Entity Name: Ken & Sandi Dewar FamilyTrust
Entity Title: Not reported
Affiliation Address: PO Box 3059
Affiliation City: San Luis Obispo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 93433
Affiliation Phone: (805) 543-0180

Site ID: 474257
CERS ID: 110021273771
Site Name: J.B. DEWAR, INC.
CERS Description: US EPA Air Emission Inventory System (EIS)

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: Ken Dewar
Entity Title: Not reported
Affiliation Address: POBOX 3059
Affiliation City: SANLUIOBISPO
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: UST PO Name
Entity Name: KEN & AMP SANDI DEWAR FAMILYTRUST
Entity Title: Not reported
Affiliation Address: POBOX 3059
Affiliation City: SANLUIOBISPO
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

E19 **ARROYO WATER WELL SUPPLY**
North **936 HUBER ST**
< 1/8 **GROVER CITY, CA 93433**
0.105 mi.
554 ft. **Site 1 of 6 in cluster E**

HIST UST **U001585294**
CUPA Listings **N/A**

Relative:
Higher
Actual:
25 ft.

HIST UST:
File Number: 0002B6A5
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B6A5.pdf>
Region: STATE
Facility ID: 00000045106
Facility Type: Gas Station
Other Type: Not reported
Contact Name: TOM RALPH
Telephone: 8054892258
Owner Name: ARROYO WATER WELL SUPPLY
Owner Address: 936 HUBER ST.
Owner City,St,Zip: GROVER CITY, CA 93433
Total Tanks: 0003

Tank Num: 001
Container Num: 2
Year Installed: 1981
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: 1
Year Installed: 1981
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 003
Container Num: 3
Year Installed: 1981
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Visual

[Click here for Geo Tracker PDF:](#)

CUPA SAN LUIS OBISPO:
Facility Id: FA0001586
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006480
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11283
Longitude: -120.62275

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ARROYO WATER WELL SUPPLY (Continued)

U001585294

Facility Id: FA0001586
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0001586
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11283
Longitude: -120.62275

**F20
ESE
< 1/8
0.113 mi.
597 ft.**

**JAMES CROOKS TRUCKING INC.
1050 GRIFFIN ST STE E
GROVER BEACH, CA 93433
Site 1 of 10 in cluster F**

**DRYCLEANERS S111075455
N/A**

**Relative:
Higher
Actual:
49 ft.**

DRYCLEANERS:
EPA Id: CAD981404015
NAICS Code: 812331
NAICS Description: Linen Supply
SIC Code: 7213
SIC Description: Linen Supply
Create Date: 04/10/1987
Facility Active: No
Inactive Date: 10/21/2005
Facility Addr2: Not reported
Owner Name: JAMES CROOKS TRUCKING INC.
Owner Address: PO BOX 1080
Owner Address 2: Not reported
Owner Telephone: 8056801460
Contact Name: JAMES CROOKS, PRESIDENT
Contact Address: PO BOX 1080
Contact Address 2: Not reported
Contact Telephone: 8056801460
Mailing Name: Not reported
Mailing Address 1: PO BOX 1080
Mailing Address 2: Not reported
Mailing City: PISMO BEACH
Mailing State: CA
Mailing Zip: 93448
Owner Fax: Not reported
Region Code: 3

**F21
SE
< 1/8
0.115 mi.
608 ft.**

**MID STATE PRECISION, INC
901 HIGHLAND WAY A-D
GROVER BEACH, CA 93433
Site 2 of 10 in cluster F**

**CERS HAZ WASTE S121743377
CERS N/A**

**Relative:
Higher
Actual:
57 ft.**

CERS HAZ WASTE:
Site ID: 135031
CERS ID: 10437292
CERS Description: Hazardous Waste Generator
Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-02-2017

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MID STATE PRECISION, INC (Continued)

S121743377

Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-02-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Metal shavings from machining shops are considered hazardous waste until recycled. Provide hazardous waste determination on metal shavings or discontinue practice of throwing small amounts of metal shavings into solid waste bin. Attach copies of metal recycling receipts along with IWMA receipts to next Self-Certification Letter that is sent to facility in Spring annually.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-31-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 901 HIGHLAND WAY A-D
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MID STATE PRECISION, INC (Continued)

S121743377

Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Parent Corporation
Entity Name: MID STATE PRECISION, INC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

CERS TANKS:
Site ID: 135031
CERS ID: 10437292
Site Name: MID STATE PRECISION, INC
CERS Description: Chemical Storage Facilities

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-02-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-02-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Metal shavings from machining shops are considered hazardous waste until recycled. Provide hazardous waste determination on metal shavings or discontinue practice of throwing small amounts of metal shavings into solid waste bin. Attach copies of metal recycling receipts along with IWMA receipts to next Self-Certification Letter

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MID STATE PRECISION, INC (Continued)

S121743377

that is sent to facility in Spring annually.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-31-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 901 HIGHLAND WAY A-D
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Parent Corporation
Entity Name: MID STATE PRECISION, INC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

F22
SE
< 1/8
0.115 mi.
608 ft.

MID STATE PRECISION, INC
901 HIGHLAND WAY E
GROVER BEACH, CA 93433

Site 3 of 10 in cluster F

CUPA Listings **S115950046**
N/A

Relative:
Higher

Actual:
57 ft.

CUPA SAN LUIS OBISPO:

Facility Id: FA0002165
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006736
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10901
Longitude: -120.62104

Facility Id: FA0002165
Program Element Code: 0710
Program Element: HAZMAT DISCLOSURE/HWG ONLY < TQ
Record Id: PR0001585
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10901
Longitude: -120.62104

Facility Id: FA0002165
Program Element Code: 1125
Program Element: HAZWASTE GEN (1 WS <27 GAL/MO, SELF REPORTER)
Record Id: PR0002165
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.10901
Longitude: -120.62104

F23
SE
< 1/8
0.115 mi.
608 ft.

MCGUIRE GRINDERS, INC
901 HIGHLAND WAY #D
GROVER BEACH, CA 93433

Site 4 of 10 in cluster F

CUPA Listings **S117845598**
N/A

Relative:
Higher

Actual:
57 ft.

CUPA SAN LUIS OBISPO:

Facility Id: FA0007651
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0011728
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10900
Longitude: -120.62105

Facility Id: FA0007651
Program Element Code: 1125
Program Element: HAZWASTE GEN (1 WS <27 GAL/MO, SELF REPORTER)
Record Id: PR0011729
Cross Street: Not reported
Status Code: 02

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MCGUIRE GRINDERS, INC (Continued)

S117845598

Status: Inactive, non-billable
Latitude: 35.10900
Longitude: -120.62105

Facility Id: FA0013681
Program Element Code: 1125
Program Element: HAZWASTE GEN (1 WS <27 GAL/MO, SELF REPORTER)
Record Id: PR0019182
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: Not reported
Longitude: Not reported

E24
North
< 1/8
0.119 mi.
628 ft.

EUROLINK DESIGN CORPORATION
930 HUBER ST #H
GROVER BEACH, CA 93433

CUPA Listings S117845517
N/A

Site 2 of 6 in cluster E

Relative:
Higher
Actual:
25 ft.

CUPA SAN LUIS OBISPO:
Facility Id: FA0006877
Program Element Code: 1110
Program Element: UNIV WASTE GENERATOR (CESQUWG)
Record Id: PR0010630
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

E25
NNE
1/8-1/4
0.130 mi.
686 ft.

SUPREME AUTOMOTIVE
923 HUBER ST
GROVER BEACH, CA 93433

CUPA Listings S103676331
N/A

Site 3 of 6 in cluster E

Relative:
Higher
Actual:
29 ft.

CUPA SAN LUIS OBISPO:
Facility Id: FA0002155
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0001576
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11292
Longitude: -120.62202

Facility Id: FA0002155
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0002155
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11292

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUPREME AUTOMOTIVE (Continued)

S103676331

Longitude: -120.62202
Facility Id: FA0002155
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006730
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11292
Longitude: -120.62202

**F26
SE
1/8-1/4
0.130 mi.
689 ft.**

**TROXELL'S BRAKE & ALIGNMENT
939 HIGHLAND WAY
GROVER BEACH, CA 93433**

**RCRA NonGen / NLR 1024796413
CAL000175472**

Site 5 of 10 in cluster F

**Relative:
Higher**

RCRA NonGen / NLR:

**Actual:
57 ft.**

Date form received by agency: 12/23/1996
Facility name: TROXELL'S BRAKE & ALIGNMENT
Facility address: 939 HIGHLAND WAY
GROVER BEACH, CA 93433-0000
EPA ID: CAL000175472
Mailing address: 1151 HIGHLAND WAY
SUITE B
GROVER BEACH, CA 93433-0000
Contact: LAURI BROWN
Contact address: 1151 HIGHLAND WAY SUITE B
GROVER BEACH, CA 93433
Contact country: Not reported
Contact telephone: 805-489-0499
Contact email: PISMOPOWERWAGON@AOL.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: LAURI BROWN
Owner/operator address: 1151 HIGHLAND WAY SUITE B
GROVER BEACH, CA 93433
Owner/operator country: Not reported
Owner/operator telephone: 805-489-0499
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported
Owner/operator name: ANDREW BROWN
Owner/operator address: 1151 HIGHLAND WAY SUITE B
GROVER BEACH, CA 93433
Owner/operator country: Not reported
Owner/operator telephone: 805-489-0499
Owner/operator email: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TROXELL'S BRAKE & ALIGNMENT (Continued)

1024796413

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

F27
SE
1/8-1/4
0.130 mi.
689 ft.

TROXELL'S BRAKE & ALIGNMENT
939 HIGHLAND WAY
GROVER BEACH, CA 93433
Site 6 of 10 in cluster F

CUPA Listings S110743697
N/A

Relative:
Higher
Actual:
57 ft.

CUPA SAN LUIS OBISPO:
Facility Id: FA0002311
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006856
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10922
Longitude: -120.62061

Facility Id: FA0002311
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0001805
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10922
Longitude: -120.62061

Facility Id: FA0002311
Program Element Code: 1125
Program Element: HAZWASTE GEN (1 WS <27 GAL/MO, SELF REPORTER)
Record Id: PR0002311
Cross Street: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TROXELL'S BRAKE & ALIGNMENT (Continued)

S110743697

Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10922
Longitude: -120.62061

F28
SE
1/8-1/4
0.139 mi.
733 ft.

ADAPT AUTOWORKS
949 HIGHLAND WAY UNIT B
GROVER BEACH, CA 93433

CUPA Listings

S117039726
N/A

Site 7 of 10 in cluster F

Relative:
Higher
Actual:
58 ft.

CUPA SAN LUIS OBISPO:

Facility Id: FA0005524
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0008505
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10908
Longitude: -120.62051

Facility Id: FA0005524
Program Element Code: 0710
Program Element: HAZMAT DISCLOSURE/HWG ONLY < TQ
Record Id: PR0016583
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10908
Longitude: -120.62051

Facility Id: FA0005524
Program Element Code: 1125
Program Element: HAZWASTE GEN (1 WS <27 GAL/MO, SELF REPORTER)
Record Id: PR0016582
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10908
Longitude: -120.62051

Facility Id: FA0005524
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0008504
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10908
Longitude: -120.62051

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

F29
SE
1/8-1/4
0.139 mi.
733 ft.

THE HIVE LABORATORY LLC
949 HIGHLAND WAY
GROVER BEACH, CA 93433

CUPA Listings
HAZNET
WDR

S113079679
N/A

Site 8 of 10 in cluster F

Relative:
Higher

CUPA SAN LUIS OBISPO:

Actual:
58 ft.

Facility Id: FA0013372
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0018887
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 0.00000
Longitude: 0.00000

Facility Id: FA0013372
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0019169
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 0.00000
Longitude: 0.00000

HAZNET:

Site Name: HARRY'S RADIATOR SRV
Year: 2007
GEPAID: CAL000145033
Contact: DARRELL K. BORING, OWNER
Telephone: 8054890626
Mailing Name: Not reported
Mailing Address: 949 HIGHLAND WAY # 1
Mailing City,St,Zip: GROVER BEACH, CA 934330000
Gen County: San Luis Obispo
TSD EPA ID: CAD980887418
TSD County: Alameda
Tons: 0.2
CA Waste Code: 223-Unspecified oil-containing waste
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: San Luis Obispo

WDR:

Global ID: WDR100040065
Status: DRAFT - WDR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G30
NNW
1/8-1/4
0.140 mi.
739 ft.

AARON'S ADVANCED AUTOMOTIVE
410 LEONI DR #1
GROVER BEACH, CA 93433

CUPA Listings **S110744231**
N/A

Site 1 of 6 in cluster G

Relative:
Lower

CUPA SAN LUIS OBISPO:

Actual:
20 ft.

Facility Id: FA0008256
Program Element Code: 0710
Program Element: HAZMAT DISCLOSURE/HWG ONLY < TQ
Record Id: PR0013995
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11268
Longitude: -120.62442

Facility Id: FA0008256
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0013880
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11268
Longitude: -120.62442

G31
NNW
1/8-1/4
0.140 mi.
739 ft.

AARON'S ADVANCED AUTOMOTIVE
410 LEONI DR #1
GROVER BEACH, CA 93433

CERS HAZ WASTE **S121793737**
CERS **N/A**

Site 2 of 6 in cluster G

Relative:
Lower

CERS HAZ WASTE:

Actual:
20 ft.

Site ID: 89186
CERS ID: 10439626
CERS Description: Hazardous Waste Generator

Violations:

Site ID: 89186
Site Name: AARON'S ADVANCED AUTOMOTIVE
Violation Date: 05-13-2015
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

Violation Description: Haz Waste Generator Program - Training - General
Violation Notes: Returned to compliance on 07/08/2015.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 89186
Site Name: AARON'S ADVANCED AUTOMOTIVE
Violation Date: 08-30-2016
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

Violation Description: Hazardous Waste Generator Program - Training - General
Violation Notes: Returned to compliance on 12/09/2016. SUBMIT COPY OF EMPLOYEE HAZARD COMMUNICATION TRAINING DOCUMENTATION TO YOUR INSPECTOR BY 9/29/16
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AARON'S ADVANCED AUTOMOTIVE (Continued)

S121793737

Violation Source: CERS

Site ID: 89186
Site Name: AARON'S ADVANCED AUTOMOTIVE
Violation Date: 05-13-2015
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

Violation Description: Haz Waste Generator Program - Training - General
Violation Notes: Returned to compliance on 07/08/2015. I WILL EMAIL YOU A TRAINING PACKET.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-13-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-30-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: FACILITY HAS CONTINGENCY PLAN ON FILE
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-08-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-03-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Items marked N/A not reviewed during inspection.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-06-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: SEND COPY OF EMPLOYEE HAZARD COMMUNICATION TRAINING DOCUMENTATION TO YOUR INSPECTOR BY 12/11/2017

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AARON'S ADVANCED AUTOMOTIVE (Continued)

S121793737

Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-09-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Affiliation:

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 410 LEONI DR #1
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Parent Corporation
Entity Name: AARON'S ADVANCED AUTOMOTIVE
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

CERS TANKS:

Site ID: 89186
CERS ID: 10439626
Site Name: AARON'S ADVANCED AUTOMOTIVE
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 89186
Site Name: AARON'S ADVANCED AUTOMOTIVE
Violation Date: 05-13-2015
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AARON'S ADVANCED AUTOMOTIVE (Continued)

S121793737

Violation Description: Haz Waste Generator Program - Training - General
Violation Notes: Returned to compliance on 07/08/2015.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 89186
Site Name: AARON'S ADVANCED AUTOMOTIVE
Violation Date: 08-30-2016
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

Violation Description: Hazardous Waste Generator Program - Training - General
Violation Notes: Returned to compliance on 12/09/2016. SUBMIT COPY OF EMPLOYEE HAZARD COMMUNICATION TRAINING DOCUMENTATION TO YOUR INSPECTOR BY 9/29/16

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 89186
Site Name: AARON'S ADVANCED AUTOMOTIVE
Violation Date: 05-13-2015
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

Violation Description: Haz Waste Generator Program - Training - General
Violation Notes: Returned to compliance on 07/08/2015. I WILL EMAIL YOU A TRAINING PACKET.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-13-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-30-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: FACILITY HAS CONTINGENCY PLAN ON FILE
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-08-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AARON'S ADVANCED AUTOMOTIVE (Continued)

S121793737

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-03-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Items marked N/A not reviewed during inspection.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-06-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: SEND COPY OF EMPLOYEE HAZARD COMMUNICATION TRAINING DOCUMENTATION TO YOUR INSPECTOR BY 12/11/2017
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-09-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Affiliation:

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 410 LEONI DR #1
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Parent Corporation
Entity Name: AARON'S ADVANCED AUTOMOTIVE
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AARON'S ADVANCED AUTOMOTIVE (Continued)

S121793737

Affiliation Phone: Not reported

E32
North
1/8-1/4
0.143 mi.
755 ft.

948 HUBER
GROVER BEACH, CA
Site 4 of 6 in cluster E

AST A100345423
N/A

Relative:
Higher
Actual:
28 ft.

AST:
Certified Unified Program Agencies: San Luis Obispo
Owner: GROVER BEACH CABLE STATION
Total Gallons: 10000
CERSID: Not reported
Facility ID: Not reported
Business Name: Not reported
Phone: Not reported
Fax: Not reported
Mailing Address: Not reported
Mailing Address City: Not reported
Mailing Address State: Not reported
Mailing Address Zip Code: Not reported
Operator Name: Not reported
Operator Phone: Not reported
Owner Phone: Not reported
Owner Mail Address: Not reported
Owner State: Not reported
Owner Zip Code: Not reported
Owner Country: Not reported
Property Owner Name: Not reported
Property Owner Phone: Not reported
Property Owner Mailing Address: Not reported
Property Owner City: Not reported
Property Owner Stat : Not reported
Property Owner Zip Code: Not reported
Property Owner Country: Not reported
EPAID: Not reported

E33
North
1/8-1/4
0.143 mi.
755 ft.

GROVER BEACH CABLE STATION
948 HUBER ST
GROVER BEACH, CA 93433
Site 5 of 6 in cluster E

CUPA Listings S110743782
N/A

Relative:
Higher
Actual:
28 ft.

CUPA SAN LUIS OBISPO:
Facility Id: FA0004956
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0007230
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11179
Longitude: -120.62235

Facility Id: FA0004956

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GROVER BEACH CABLE STATION (Continued)

S110743782

Program Element Code: 0727
Program Element: HAZMAT DISCLOSURE - 5-10 HAZARDOUS MATERIALS
Record Id: PR0007229
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11179
Longitude: -120.62235

Facility Id: FA0004956
Program Element Code: 1201
Program Element: AGT ANNUAL TANK PERMIT
Record Id: PR0008495
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11179
Longitude: -120.62235

**G34
NW
1/8-1/4
0.145 mi.
766 ft.**

**JIM DOTSON (OWNER OF PROPERTY)
901 S 4TH STREET
GROVER CITY, CA 93433**

**HIST UST U001585302
N/A**

Site 3 of 6 in cluster G

**Relative:
Lower
Actual:
22 ft.**

HIST UST:
File Number: 0002BA53
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002BA53.pdf>
Region: STATE
Facility ID: 00000010494
Facility Type: Other
Other Type: PLUMBING
Contact Name: Not reported
Telephone: 8054898466
Owner Name: SEBASTIAN OIL DISTRIBUTOR
Owner Address: 1131 EL CAMINO REAL
Owner City,St,Zip: ARROYO GRANDE, CA 93420
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1978
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: 12
Leak Detection: None

Click here for Geo Tracker PDF:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G35
NW
1/8-1/4
0.145 mi.
766 ft.

C & J AUTOMOTIVE
901 S 4TH STREET
GROVER BEACH, CA 93433

RCRA NonGen / NLR **1024794499**
CAL000148616

Site 4 of 6 in cluster G

Relative:
Lower

RCRA NonGen / NLR:

Actual:
22 ft.

Date form received by agency: 12/29/1994
Facility name: C & J AUTOMOTIVE
Facility address: 901 S 4TH STREET
GROVER BEACH, CA 93433-0000
EPA ID: CAL000148616
Mailing address: 901 S 4TH ST
GROVER BEACH, CA 93433-0000
Contact: JIM ALFORD
Contact address: 901 S 4TH ST
GROVER BEACH, CA 93433
Contact country: Not reported
Contact telephone: 805-481-6710
Contact email: JALFORDG@AOL.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: JIM ALFORD
Owner/operator address: 901 S 4TH ST
GROVER BEACH, CA 93433
Owner/operator country: Not reported
Owner/operator telephone: 805-481-6710
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: JIM ALFORD
Owner/operator address: 901 S 4TH ST
GROVER BEACH, CA 93433
Owner/operator country: Not reported
Owner/operator telephone: 805-481-6710
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

C & J AUTOMOTIVE (Continued)

1024794499

On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Violation Status: No violations found

**G36
 NW
 1/8-1/4
 0.145 mi.
 766 ft.**

**C & J AUTOMOTIVE
 901 S 4TH ST
 GROVER BEACH, CA 93433**

**CERS HAZ WASTE
 CUPA Listings**

**S103953718
 N/A**

Site 5 of 6 in cluster G

**Relative:
 Lower
 Actual:
 22 ft.**

CERS HAZ WASTE:
 Site ID: 100844
 CERS ID: 10437277
 CERS Description: Hazardous Waste Generator

Evaluation:
 Eval General Type: Compliance Evaluation Inspection
 Eval Date: 03-21-2017
 Violations Found: No
 Eval Type: Routine done by local agency
 Eval Notes: Not reported
 Eval Division: San Luis Obispo County Environmental Health
 Eval Program: HW
 Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
 Eval Date: 03-26-2014
 Violations Found: No
 Eval Type: Routine done by local agency
 Eval Notes: Not reported
 Eval Division: San Luis Obispo County Environmental Health
 Eval Program: HW
 Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
 Eval Date: 05-01-2015
 Violations Found: No
 Eval Type: Routine done by local agency
 Eval Notes: Not reported
 Eval Division: San Luis Obispo County Environmental Health
 Eval Program: HW
 Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
 Eval Date: 01-22-2016
 Violations Found: No
 Eval Type: Routine done by local agency
 Eval Notes: Not reported
 Eval Division: San Luis Obispo County Environmental Health
 Eval Program: HW
 Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

C & J AUTOMOTIVE (Continued)

S103953718

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-09-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-19-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: CESQG: WASTE DISPOSAL RECORDS SUBMITTED.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Coordinates:
Site ID: 100844
Facility Name: C & J AUTOMOTIVE
Env Int Type Code: HWG
Program ID: 10437277
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.112880
Longitude: -120.624620

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 901 S 4TH ST
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: C & J AUTOMOTIVE
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

C & J AUTOMOTIVE (Continued)

S103953718

Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

CUPA SAN LUIS OBISPO:

Facility Id: FA0002154
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006729
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11248
Longitude: -120.62500

Facility Id: FA0002154
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0001573
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11248
Longitude: -120.62500

Facility Id: FA0002154
Program Element Code: 1125
Program Element: HAZWASTE GEN (1 WS <27 GAL/MO, SELF REPORTER)
Record Id: PR0002154
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11248
Longitude: -120.62500

E37
North
1/8-1/4
0.150 mi.
790 ft.

KNOWLTON BROTHERS INC
920 HUBER ST
GROVER BEACH, CA 93433

RCRA NonGen / NLR **1024824922**
CAL000349580

Site 6 of 6 in cluster E

Relative:
Higher
Actual:
29 ft.

RCRA NonGen / NLR:
Date form received by agency: 01/27/2010
Facility name: KNOWLTON BROTHERS INC
Facility address: 920 HUBER ST
GROVER BEACH, CA 93433-3004
EPA ID: CAL000349580
Contact: BRUCE KNOWLTON
Contact address: 920 HUBER ST
GROVER BEACH, CA 93433
Contact country: Not reported
Contact telephone: 805-481-6940
Contact email: BRUCEKNOWLTON1950@GMAIL.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KNOWLTON BROTHERS INC (Continued)

1024824922

Owner/Operator Summary:

Owner/operator name: KNOWLTON BROTHERS INC
Owner/operator address: 343 MCCARTHY AVE
OCEANO, CA 93445
Owner/operator country: Not reported
Owner/operator telephone: 805-489-2813
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BRUCE KNOWLTON
Owner/operator address: 920 HUBER ST
GROVER BEACH, CA 93433
Owner/operator country: Not reported
Owner/operator telephone: 805-481-6940
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

F38
SE
1/8-1/4
0.152 mi.
801 ft.

GE FORGE AND TOOL WORKS
959 HIGHLAND WAY
GROVER CITY, CA 93433
Site 9 of 10 in cluster F

CUPA Listings **S107149613**
NPDES **N/A**
CERS

Relative:
Higher
Actual:
56 ft.

CUPA SAN LUIS OBISPO:
Facility Id: FA0002164
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006735
Cross Street: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GE FORGE AND TOOL WORKS (Continued)

S107149613

Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10905
Longitude: -120.62037

Facility Id: FA0002164
Program Element Code: 0727
Program Element: HAZMAT DISCLOSURE - 5-10 HAZARDOUS MATERIALS
Record Id: PR0001583
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.10905
Longitude: -120.62037

Facility Id: FA0002164
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0002164
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.10905
Longitude: -120.62037

NPDES:

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: 3 40I027873
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: 09/18/2018
Operator Name: GE Forge and Tool Works
Operator Address: 959 Highland Way
Operator City: Grover Beach
Operator State: California
Operator Zip: 93433

Facility Status: Active
NPDES Number: CAS000001
Region: 3
Agency Number: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GE FORGE AND TOOL WORKS (Continued)

S107149613

Regulatory Measure ID: 501542
Place ID: Not reported
Order Number: 97-03-DWQ
WDID: 3 40I027873
Regulatory Measure Type: Enrollee
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 09/18/2018
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: 959 Highland Way
Discharge Name: GE Forge and Tool Works
Discharge City: Grover Beach
Discharge State: California
Discharge Zip: 93433
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

CERS TANKS:

Site ID: 508865
CERS ID: 866962
Site Name: GE FORGE AND TOOL WORKS
CERS Description: Industrial Facility Storm Water

Affiliation:

Affiliation Type Desc: Owner/Operator
Entity Name: GE Forge and Tool Works
Entity Title: Operator
Affiliation Address: 959 Highland Way
Affiliation City: Grover Beach
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

**F39
SE
1/8-1/4
0.153 mi.
810 ft.**

**ELLISON ENVIRONMENTAL DBA FLUID RESOURCE MANAGEMEN
981 HIGHLAND WAY
GROVER BEACH, CA 93433**

**CUPA Listings S117349029
HAZNET N/A
CERS**

Site 10 of 10 in cluster F

**Relative:
Higher
Actual:
56 ft.**

CUPA SAN LUIS OBISPO:
Facility Id: FA0011234
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0016643
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ELLISON ENVIRONMENTAL DBA FLUID RESOURCE MANAGEMENT (Continued)

S117349029

HAZNET:

Site Name: ELLISON ENVIRONMENTAL DBA FLUID RESOURCE MANAGEMENT
Year: 2016
GEPaid: CAL000396795
Contact: ROBIN RANSFORD
Telephone: 8055977100
Mailing Name: Not reported
Mailing Address: 981 HIGHLAND WAY
Mailing City,St,Zip: GROVER BEACH, CA 93433
Gen County: San Luis Obispo
TSD EPA ID: AZR000501510
TSD County: 99
Tons: 0.3
CA Waste Code: 352-Other organic solids
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery
(H010-H129) Or (H131-H135)
Facility County: San Luis Obispo

CERS TANKS:

Site ID: 177818
CERS ID: 10598812
Site Name: FLUID RESOURCE MANAGEMENT
CERS Description: Chemical Storage Facilities

Coordinates:

Site ID: 177818
Facility Name: FLUID RESOURCE MANAGEMENT
Env Int Type Code: HMBP
Program ID: 10598812
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.108980
Longitude: -120.619910

Affiliation:

Affiliation Type Desc: Parent Corporation
Entity Name: FLUID RESOURCE MANAGEMENT
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G40
NNW
1/8-1/4
0.164 mi.
864 ft.

PACIFIC ELECTRONIC MFG
451 LEONI DR
GROVER BEACH, CA 93433

RCRA-SQG **1000250722**
FINDS **CAD982337057**
ECHO

Site 6 of 6 in cluster G

Relative:
Higher

RCRA-SQG:

Actual:
24 ft.

Date form received by agency: 12/03/1987
Facility name: PACIFIC ELECTRONIC MFG
Facility address: 451 LEONI DR
GROVER BEACH, CA 93433
EPA ID: CAD982337057
Contact: ENVIRONMENTAL MANAGER
Contact address: 451 LEONI DR
GROVER CITY, CA 93433
Contact country: US
Contact telephone: 805-481-9631
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: THOMAS BRENNAN
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PACIFIC ELECTRONIC MFG (Continued)

1000250722

Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110008276338

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.

ECHO:

Envid: 1000250722
 Registry ID: 110008276338
 DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110008276338>

**41
 NNW
 1/8-1/4
 0.175 mi.
 923 ft.**

**JAMES R WHITE OILFIELD MAINT
 479 LEONI
 GROVER CITY, CA 93433**

**HIST UST U001585301
 N/A**

**Relative:
 Higher
 Actual:
 28 ft.**

HIST UST:
 File Number: 0002B89E
 URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B89E.pdf>
 Region: STATE
 Facility ID: 00000044870
 Facility Type: Other
 Other Type: MAINTENANCE
 Contact Name: Not reported
 Telephone: 8057722273
 Owner Name: JAMES R. WHITE OILFIELD MAINT
 Owner Address: 479 LEONI
 Owner City,St,Zip: GROVER CITY, CA 93433
 Total Tanks: 0001

 Tank Num: 001
 Container Num: 1
 Year Installed: 1978

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

JAMES R WHITE OILFIELD MAINTE (Continued)

U001585301

Tank Capacity: 00000500
 Tank Used for: PRODUCT
 Type of Fuel: REGULAR
 Container Construction Thickness: Not reported
 Leak Detection: Visual, Vapor Sniff Well

[Click here for Geo Tracker PDF:](#)

42
South
1/8-1/4
0.178 mi.
942 ft.

COASTAL DUNES RV PARK & CAMPGROUND
1001 PACIFIC BLVD
OCEANO, CA 93445

CERS HAZ WASTE
CUPA Listings
CERS

S110743766
N/A

Relative:
Higher
Actual:
28 ft.

CERS HAZ WASTE:
 Site ID: 445814
 CERS ID: 10436470
 CERS Description: Hazardous Waste Generator

Violations:

Site ID: 445814
 Site Name: COASTAL DUNES RV PARK & CAMPGROUND
 Violation Date: 09-12-2018
 Citation: HSC 6.5 25189.5(a),25201(a) - California Health and Safety Code, Chapter 6.5, Section(s) 25189.5(a),25201(a)
 Violation Description: Failure to dispose of hazardous waste at a facility which has a permit from DTSC or disposing of hazardous waste at any point which is not authorized according to HSC 6.5.
 Violation Notes: Returned to compliance on 09/12/2018. Per facility representative, business generates small amounts of used oil and paper filters from equipment. Immediately begin properly managing and disposing of hazardous wastes including used oil and filters. Businesses cannot take hazardous wastes to household take back programs such as O'Reilly's and AutoZone; however, you may take small amounts of wastes to the local landfills through the Integrated Waste Management Authority on a business day. Contact the program manager Patti Toews at (805) 782-8530 for more information. Maintain all disposal receipts on file at the facility. Additionally, hazardous wastes may be picked up by a licensed hazardous waste hauler.
 Violation Division: San Luis Obispo County Environmental Health
 Violation Program: HW
 Violation Source: CERS

Site ID: 445814
 Site Name: COASTAL DUNES RV PARK & CAMPGROUND
 Violation Date: 02-21-2014
 Citation: HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)
 Violation Description: Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.
 Violation Notes: Returned to compliance on 03/20/2014. UPDATE VIA PORTAL OR CERS
 Violation Division: San Luis Obispo County Environmental Health
 Violation Program: HMRRP
 Violation Source: CERS

Site ID: 445814
 Site Name: COASTAL DUNES RV PARK & CAMPGROUND

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COASTAL DUNES RV PARK & CAMPGROUND (Continued)

S110743766

Violation Date: 09-12-2018
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
Violation Notes: Returned to compliance on 09/12/2018. See GT05.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 445814
Site Name: COASTAL DUNES RV PARK & CAMPGROUND
Violation Date: 07-07-2017
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 11/06/2017. UPDATE HAZARDOUS MATERIAL BUSINESS PLAN FORM "S", ELECTRONICALLY, WITH NEW PRIMARY EMERGENCY CONTACT AND ENVIRONMENTAL CONTACT, BY 8/6/2017
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-05-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-21-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-12-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-06-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COASTAL DUNES RV PARK & CAMPGROUND (Continued)

S110743766

Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-12-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Items marked N/A not reviewed during inspection. Hazardous Materials Business Plan Certification due November 2018 through SLO County Portal. Select Hazardous Waste Generator on Business Activities page.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Coordinates:
Site ID: 445814
Facility Name: COASTAL DUNES RV PARK & CAMPGROUND
Env Int Type Code: HMBP
Program ID: 10436470
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.108100
Longitude: -120.623390

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1001 PACIFIC BLVD
Affiliation City: OCEANO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93445
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Chuck Woodard
Entity Title: Not reported
Affiliation Address: 1144 Monterey St.
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93408
Affiliation Phone: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COASTAL DUNES RV PARK & CAMPGROUND (Continued)

S110743766

Affiliation Type Desc: Legal Owner
Entity Name: COUNTY OF SAN LUIS OBISPO
Entity Title: Not reported
Affiliation Address: 1144 Monterey St.
Affiliation City: SAN LUIS OBISPO
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93408
Affiliation Phone: (805) 781-5930

Affiliation Type Desc: Operator
Entity Name: San Luis Obispo County Parks
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: (805) 781-5930

Affiliation Type Desc: Property Owner
Entity Name: San Luis Obispo County Parks
Entity Title: Not reported
Affiliation Address: 1144 Monterey St.
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93408
Affiliation Phone: (805) 781-5930

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Document Preparer
Entity Name: Don Melin
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Don Melin
Entity Title: Parks Superintendent
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COASTAL DUNES RV PARK & CAMPGROUND (Continued)

S110743766

Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: COASTAL DUNES RV PARK & CAMPGROUND
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

CUPA SAN LUIS OBISPO:

Facility Id: FA0004052
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0009075
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11235
Longitude: -120.62557

Facility Id: FA0004052
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0009074
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11235
Longitude: -120.62557

Facility Id: FA0004052
Program Element Code: 1123
Program Element: HAZWASTE GEN (2 WASTE STREAMS <27 GAL/MO)
Record Id: PR0019106
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11235
Longitude: -120.62557

CERS TANKS:

Site ID: 445814
CERS ID: 10436470
Site Name: COASTAL DUNES RV PARK & CAMPGROUND
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 445814
Site Name: COASTAL DUNES RV PARK & CAMPGROUND
Violation Date: 09-12-2018
Citation: HSC 6.5 25189.5(a),25201(a) - California Health and Safety Code, Chapter 6.5, Section(s) 25189.5(a),25201(a)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COASTAL DUNES RV PARK & CAMPGROUND (Continued)

S110743766

Violation Description: Failure to dispose of hazardous waste at a facility which has a permit from DTSC or disposing of hazardous waste at any point which is not authorized according to HSC 6.5.

Violation Notes: Returned to compliance on 09/12/2018. Per facility representative, business generates small amounts of used oil and paper filters from equipment. Immediately begin properly managing and disposing of hazardous wastes including used oil and filters. Businesses cannot take hazardous wastes to household take back programs such as O'Reilly's and AutoZone; however, you may take small amounts of wastes to the local landfills through the Integrated Waste Management Authority on a business day. Contact the program manager Patti Toews at (805) 782-8530 for more information. Maintain all disposal receipts on file at the facility. Additionally, hazardous wastes may be picked up by a licensed hazardous waste hauler.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 445814
Site Name: COASTAL DUNES RV PARK & CAMPGROUND
Violation Date: 02-21-2014
Citation: HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)

Violation Description: Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.

Violation Notes: Returned to compliance on 03/20/2014. UPDATE VIA PORTAL OR CERS

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 445814
Site Name: COASTAL DUNES RV PARK & CAMPGROUND
Violation Date: 09-12-2018
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22

Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.

Violation Notes: Returned to compliance on 09/12/2018. See GT05.

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 445814
Site Name: COASTAL DUNES RV PARK & CAMPGROUND
Violation Date: 07-07-2017
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 11/06/2017. UPDATE HAZARDOUS MATERIAL BUSINESS PLAN FORM "S", ELECTRONICALLY, WITH NEW PRIMARY EMERGENCY CONTACT AND ENVIRONMENTAL CONTACT, BY 8/6/2017

Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COASTAL DUNES RV PARK & CAMPGROUND (Continued)

S110743766

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-05-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-21-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-12-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-06-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-12-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Items marked N/A not reviewed during inspection. Hazardous Materials Business Plan Certification due November 2018 through SLO County Portal. Select Hazardous Waste Generator on Business Activities page.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COASTAL DUNES RV PARK & CAMPGROUND (Continued)

S110743766

Coordinates:

Site ID: 445814
Facility Name: COASTAL DUNES RV PARK & CAMPGROUND
Env Int Type Code: HMBP
Program ID: 10436470
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.108100
Longitude: -120.623390

Affiliation:

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1001 PACIFIC BLVD
Affiliation City: OCEANO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93445
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Chuck Woodard
Entity Title: Not reported
Affiliation Address: 1144 Monterey St.
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93408
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: COUNTY OF SAN LUIS OBISPO
Entity Title: Not reported
Affiliation Address: 1144 Monterey St.
Affiliation City: SAN LUIS OBISPO
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93408
Affiliation Phone: (805) 781-5930

Affiliation Type Desc: Operator
Entity Name: San Luis Obispo County Parks
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: (805) 781-5930

Affiliation Type Desc: Property Owner
Entity Name: San Luis Obispo County Parks
Entity Title: Not reported
Affiliation Address: 1144 Monterey St.
Affiliation City: San Luis Obispo

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COASTAL DUNES RV PARK & CAMPGROUND (Continued)

S110743766

Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 93408
Affiliation Phone: (805) 781-5930

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Document Preparer
Entity Name: Don Melin
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Don Melin
Entity Title: Parks Superintendent
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: COASTAL DUNES RV PARK & CAMPGROUND
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

H43 **APODACA PAVING**
ESE **1021 HUSTON ST**
1/8-1/4 **GROVER BEACH, CA 93433**
0.180 mi.
953 ft. **Site 1 of 2 in cluster H**

CUPA Listings **S110743550**
N/A

Relative: CUPA SAN LUIS OBISPO:
Higher Facility Id: FA0001587
Program Element Code: 0705
Actual: Program Element: STATE SITE SURCHARGE
37 ft. Record Id: PR0006481
Cross Street: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

APODACA PAVING (Continued)

S110743550

Status Code: 02
Status: Inactive, non-billable
Latitude: 35.10983
Longitude: -120.61926

Facility Id: FA0001587
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0001587
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.10983
Longitude: -120.61926

**I44
ENE
1/8-1/4
0.185 mi.
979 ft.**

**CENTRAL COAST PRINTING
921 HUSTON
GROVER BEACH, CA 93433
Site 1 of 2 in cluster I**

**CUPA Listings S106089325
N/A**

**Relative:
Higher**

CUPA SAN LUIS OBISPO:
Facility Id: FA0006689
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0006892
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11227
Longitude: -120.61939

**Actual:
37 ft.**

Facility Id: FA0006689
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0010417
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11227
Longitude: -120.61939

Facility Id: FA0006689
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0002350
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11227
Longitude: -120.61939

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

I45
ENE
1/8-1/4
0.185 mi.
979 ft.

CENTRAL COAST PRINTING
921 HUSTON ST
GROVER BEACH, CA 93433

RCRA NonGen / NLR
1024809585
CAL000285328

Site 2 of 2 in cluster I

Relative:
Higher

RCRA NonGen / NLR:

Actual:
37 ft.

Date form received by agency: 08/05/2004
Facility name: CENTRAL COAST PRINTING
Facility address: 921 HUSTON ST
GROVER BEACH, CA 93433
EPA ID: CAL000285328
Contact: DOUG SPEER
Contact address: 921 HUSTON ST
GROVER BEACH, CA 93433
Contact country: Not reported
Contact telephone: 805-489-0661
Contact email: DOUG@CCPRINTING.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: DAVE ANDERSON
Owner/operator address: 921 HUSTON ST
GROVER BEACH, CA 93433

Owner/operator country: Not reported
Owner/operator telephone: 805-489-0661
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: DOUG SPEER
Owner/operator address: 921 HUSTON ST
GROVER BEACH, CA 93433

Owner/operator country: Not reported
Owner/operator telephone: 805-489-0661
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CENTRAL COAST PRINTING (Continued)

1024809585

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

J46
South
1/8-1/4
0.195 mi.
1031 ft.

OKUI FARMS
1253 S 4TH ST
GROVER BEACH, CA 93433
Site 1 of 2 in cluster J

CERS HAZ WASTE **S110743895**
CUPA Listings **N/A**

Relative:
Higher
Actual:
29 ft.

CERS HAZ WASTE:
Site ID: 53614
CERS ID: 10439008
CERS Description: Hazardous Waste Generator

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-23-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-30-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-28-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-31-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HW
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OKUI FARMS (Continued)

S110743895

Affiliation:

Affiliation Type Desc: Parent Corporation
Entity Name: OKUI FARMS
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1253 S 4TH ST
Affiliation City: GROVER BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93433
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

CUPA SAN LUIS OBISPO:

Facility Id: FA0005740
Program Element Code: 0772
Program Element: HAZMAT DISCLOSURE -1-4 AG HAZARDOUS MATERIALS
Record Id: PR0008886
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11670
Longitude: -120.62671

Facility Id: FA0005740
Program Element Code: 1124
Program Element: HAZWASTE GEN - AG (1 WS <27 GAL/MO, SELF REP)
Record Id: PR0008887
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.11670
Longitude: -120.62671

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

J47
South
1/8-1/4
0.195 mi.
1031 ft.

OKUI FARMS
1253 S 4TH ST
GROVER BEACH, CA 93433

RCRA NonGen / NLR **1024812177**
CAL000298545

Site 2 of 2 in cluster J

Relative:
Higher

RCRA NonGen / NLR:

Actual:
29 ft.

Date form received by agency: 09/16/2005
Facility name: OKUI FARMS
Facility address: 1253 S 4TH ST
GROVER BEACH, CA 93433
EPA ID: CAL000298545
Mailing address: PO BOX 575
OCEANO, CA 93475-0000
Contact: CHARLES OKUI
Contact address: 107 LA COLIMA
PISMO BEACH, CA 93449
Contact country: Not reported
Contact telephone: 805-459-0314
Contact email: OKUIFARMS@YAHOO.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: CHARLES OKUI
Owner/operator address: 107 LA COLIMA
PISMO BEACH, CA 93449
Owner/operator country: Not reported
Owner/operator telephone: 805-459-0314
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: HIRONOBU & CHIYOKO OKUI
Owner/operator address: PO BOX 575
OCEANO, CA 93475
Owner/operator country: Not reported
Owner/operator telephone: 805-489-2415
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OKUI FARMS (Continued)

1024812177

On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

**K48
NW
1/8-1/4
0.196 mi.
1033 ft.**

**M & S AUTOMOTIVE SPECIALISTS
881 S 4TH ST
GROVER BEACH, CA 93433**

**CUPA Listings S117845197
N/A**

Site 1 of 2 in cluster K

**Relative:
Lower
Actual:
22 ft.**

CUPA SAN LUIS OBISPO:

Facility Id: FA0005407
Program Element Code: 0705
Program Element: STATE SITE SURCHARGE
Record Id: PR0008117
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11342
Longitude: -120.62520

Facility Id: FA0005407
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0008115
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11342
Longitude: -120.62520

Facility Id: FA0005407
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0008116
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.11342
Longitude: -120.62520

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

H49
ESE
1/8-1/4
0.199 mi.
1053 ft.

VERIZON WIRELESS GROVER BEACH
1035 HIGHLAND WAY
GROVER BEACH, CA 93433

CUPA Listings S110744060
CERS N/A

Site 2 of 2 in cluster H

Relative:
Higher

CUPA SAN LUIS OBISPO:

Actual:
55 ft.

Facility Id: FA0006921
Program Element Code: 0726
Program Element: HAZMAT DISCLOSURE - 1-4 HAZARDOUS MATERIALS
Record Id: PR0010718
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 0.00000
Longitude: 0.00000

CERS TANKS:

Site ID: 81306
CERS ID: 10143413
Site Name: VERIZON WIRELESS GROVER BEACH
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 81306
Site Name: Verizon Wireless Grover Beach
Violation Date: 07-31-2014
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 08/11/2014. UPDATE HMBP VIA CERS.
Violation Division: San Luis Obispo County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-04-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-23-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-09-2015
Violations Found: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VERIZON WIRELESS GROVER BEACH (Continued)

S110744060

Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-07-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: UPDATE HMBP VIA CERS.
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-25-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Luis Obispo County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Coordinates:
Site ID: 81306
Facility Name: Verizon Wireless Grover Beach
Env Int Type Code: HMBP
Program ID: 10143413
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 35.109190
Longitude: -120.619190

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Steve Skanderson
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Environmental Compliance

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VERIZON WIRELESS GROVER BEACH (Continued)

S110744060

Entity Title: Not reported
Affiliation Address: 295 Parkshore Drive
Affiliation City: Folsom
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95630
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 295 Parkshore Drive
Affiliation City: Folsom
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95630
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: armand delgado
Entity Title: environmental compliance mgr
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Operator
Entity Name: Verizon Wireless
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: (866) 694-2415

Affiliation Type Desc: CUPA District
Entity Name: SLO County Env Health
Entity Title: Not reported
Affiliation Address: 2156 Sierra Way
Affiliation City: San Luis Obispo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93406
Affiliation Phone: (805) 781-5544

Affiliation Type Desc: Legal Owner
Entity Name: Verizon Wireless
Entity Title: Not reported
Affiliation Address: 295 Parkshore Drive
Affiliation City: Folsom
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95630
Affiliation Phone: (866) 694-2415

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VERIZON WIRELESS GROVER BEACH (Continued)

S110744060

Affiliation Type Desc: Parent Corporation
Entity Name: Verizon Wireless [Northern 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: Not reported

50
ESE
1/8-1/4
0.217 mi.
1144 ft.

KB HORSESHOES INC
1053 HIGHLAND WAY
GROVER BEACH, CA 93433

RCRA NonGen / NLR

1024843028
CAL000394047

Relative:
Higher

RCRA NonGen / NLR:

Actual:
56 ft.

Date form received by agency: 02/10/2014
Facility name: KB HORSESHOES INC
Facility address: 1053 HIGHLAND WAY
GROVER BEACH, CA 93433
EPA ID: CAL000394047
Mailing address: 2023 PREISKER LANE
SUITE F
SANTA MARIA, CA 93454-0000
Contact: KIM ANGELL
Contact address: 2023 PREISKER LANE SUITE F
SANTA MARIA, CA 93454
Contact country: Not reported
Contact telephone: 805-489-5000
Contact email: KIM@KBHORSESHOES.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: KB HORSESHOES INC
Owner/operator address: 8225 OYSTER ROCK PL
ARROYO GRANDE, CA 93420
Owner/operator country: Not reported
Owner/operator telephone: 805-489-3770
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: KIM ANGELL
Owner/operator address: 2023 PREISKER LANE SUITE F
SANTA MARIA, CA 93454
Owner/operator country: Not reported
Owner/operator telephone: 805-489-5000
Owner/operator email: Not reported
Owner/operator fax: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KB HORSESHOES INC (Continued)

1024843028

Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

**K51
NNW
1/8-1/4
0.226 mi.
1194 ft.**

**BILL SIMPSON CONSTRUCTION INC
833 SO 4TH ST
GROVER CITY, CA 93433
Site 2 of 2 in cluster K**

**HIST UST U001585295
N/A**

**Relative:
Higher
Actual:
23 ft.**

HIST UST:
File Number: 0002B6BA
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B6BA.pdf>
Region: STATE
Facility ID: 00000002829
Facility Type: Other
Other Type: CONSTRUCTION
Contact Name: Not reported
Telephone: 8054812000
Owner Name: BILL SIMPSON CONSTRUCTION INC.
Owner Address: 833 SO. 4TH ST.
Owner City,St,Zip: GROVER CITY, CA 93433
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1977
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 002
Container Num: 2
Year Installed: 1974
Tank Capacity: 00000550

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BILL SIMPSON CONSTRUCTION INC (Continued)

U001585295

Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: None

[Click here for Geo Tracker PDF:](#)

**52
NW
1/4-1/2
0.380 mi.
2004 ft.**

**JACKPOT SERVICE STAT (FORMER)
105 HWY 1 N
GROVER CITY, CA 93433**

**LUST S104971118
CERS N/A**

**Relative:
Higher
Actual:
26 ft.**

LUST:

Lead Agency: CENTRAL COAST RWQCB (REGION 3)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607900185
Global Id: T0607900185
Latitude: 35.1221989834654
Longitude: -120.630311965942
Status: Completed - Case Closed
Status Date: 09/18/1997
Case Worker: Not reported
RB Case Number: 854
Local Agency: SAN LUIS OBISPO COUNTY
File Location: State Records Center
Local Case Number: Not reported
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:

Global Id: T0607900185
Contact Type: Local Agency Caseworker
Contact Name: Linnea Grossman
Organization Name: SAN LUIS OBISPO COUNTY
Address: PO BOX 1489
City: SAN LUIS OBISPO
Email: lgrossman@co.slo.ca.us
Phone Number: 8057815544

LUST:

Global Id: T0607900185
Action Type: Other
Date: 07/20/1990
Action: Leak Reported

Global Id: T0607900185
Action Type: ENFORCEMENT
Date: 08/30/1996
Action: Letter - Notice

Global Id: T0607900185
Action Type: ENFORCEMENT
Date: 08/21/1996
Action: Technical Correspondence / Assistance / Other

Global Id: T0607900185

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JACKPOT SERVICE STAT (FORMER) (Continued)

S104971118

Action Type:	ENFORCEMENT
Date:	12/19/1996
Action:	Closure/No Further Action Letter
Global Id:	T0607900185
Action Type:	ENFORCEMENT
Date:	08/28/1996
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0607900185
Action Type:	Other
Date:	07/16/1990
Action:	Leak Discovery
Global Id:	T0607900185
Action Type:	RESPONSE
Date:	08/14/1996
Action:	Other Report / Document
Global Id:	T0607900185
Action Type:	RESPONSE
Date:	12/02/1996
Action:	Well Destruction Report
Global Id:	T0607900185
Action Type:	RESPONSE
Date:	10/29/1992
Action:	Site Assessment Report
Global Id:	T0607900185
Action Type:	Other
Date:	06/22/1990
Action:	Leak Stopped
LUST:	
Global Id:	T0607900185
Status:	Completed - Case Closed
Status Date:	12/19/1996
Global Id:	T0607900185
Status:	Completed - Case Closed
Status Date:	09/18/1997
Global Id:	T0607900185
Status:	Open - Case Begin Date
Status Date:	06/22/1990
Global Id:	T0607900185
Status:	Open - Remediation
Status Date:	01/31/1995
Global Id:	T0607900185
Status:	Open - Site Assessment
Status Date:	06/22/1990
Global Id:	T0607900185
Status:	Open - Site Assessment

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JACKPOT SERVICE STAT (FORMER) (Continued)

S104971118

Status Date: 01/04/1993
Global Id: T0607900185
Status: Open - Site Assessment
Status Date: 01/08/1993

LUST REG 3:

Region: 3
Regional Board: Central Coast Region
Facility County: San Luis Obispo
Global ID: T0607900185
Status: Case Closed
Case Number: 854
Local Case Num: Not reported
Case Type: O
Substance: Gasoline
Quantity: Not reported
Abatement Method: Other
Leak Source: UNK
Leak Cause: Overfill
How Stopped: Not reported
How Discovered: Tank Closure
Release Date: 07/20/1990
Discovered Date: 7/16/90
Enter Date: 08/08/1990
Stop Date: 6/22/90
Review Date: 09/18/1997
Enforce Date: Not reported
Close Date: 9/18/97
Enforcement Type: Not reported
Responsible Party: Not reported
RP Address: Not reported
Contact: Not reported
Cross Street: GRAND AVE
Local Agency: 40000
Lead Agency: Regional Board
Staff Initials: FJD
Confirm Leak: 6/22/90
Workplan: 1/4/93
Prelim Assess: 1/8/93
Pollution Char: / /
Remedial Plan: Not reported
Remedial Action: 1/31/95
Monitoring: / /
Pilot Program: UST
Interim Action: 0
Funding: Not reported
MTBE Class: *
Max MTBE Grnd Wtr: Not reported
Max MTBE Soil: Not reported
Max MTBE Data: / /
MTBE Tested: NT
Lat/Long: 35.1219477 / -120.6297716
Soil Qualifier: Not reported
Grnd Wtr Qualifier: Not reported
Mtbe Concentratn: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JACKPOT SERVICE STAT (FORMER) (Continued)

S104971118

Mtbe Fuel: 1
Org Name: Not reported
Basin Plan: 10.31
Beneficial: Not reported
Priority: LOP/MODERATE - POTENTIAL WATER IMPACT
UST Cleanup Fund ID: Not reported
Suspended: Not reported
Operator: Not reported
Water System: PISMO BEACH WATER DEPARTMENT
Well Name: WELL 05
Distance From Well: 0
Assigned Name: 32S/13E-19Q02 M
Summary: AIR SPARGING/VAPOR EXTRATION SYSTEM SHUT-DOWN. WORKPLAN WAS SUBMITTED BY CONSULTANT (EARTH SYS ENVIRONMTAL)FOR REVIEW (1-5-93). AWAITING RESULTS OF FURTHER MONITORING.NO CONTAMINANT IN GROUND WATER. POST ACTION MONITORING CONT.THIS CASE IS C

CERS TANKS:

Site ID: 244538
CERS ID: T0607900185
Site Name: JACKPOT SERVICE STAT (FORMER)
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Local Agency Caseworker
Entity Name: LINNEA GROSSMAN - SAN LUIS OBISPO COUNTY
Entity Title: Not reported
Affiliation Address: PO BOX 1489
Affiliation City: SAN LUIS OBISPO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 8057815544

53
North
1/2-1
0.710 mi.
3749 ft.

TOSCO - FACILITY #5660
684 GRAND AVE
GROVER CITY, CA 93433

LUST S100233900
Notify 65 N/A

Relative:
Higher
Actual:
52 ft.

LUST:

Lead Agency: SAN LUIS OBISPO COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607900162
Global Id: T0607900162
Latitude: 35.1212490405161
Longitude: -120.623072683811
Status: Completed - Case Closed
Status Date: 12/26/1989
Case Worker: LG
RB Case Number: 722
Local Agency: SAN LUIS OBISPO COUNTY
File Location: Local Agency
Local Case Number: Not reported
Potential Media Affect: Under Investigation
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSCO - FACILITY #5660 (Continued)

S100233900

LUST:

Global Id: T0607900162
Contact Type: Local Agency Caseworker
Contact Name: Linnea Grossman
Organization Name: SAN LUIS OBISPO COUNTY
Address: PO BOX 1489
City: SAN LUIS OBISPO
Email: lgrossman@co.slo.ca.us
Phone Number: 8057815544

LUST:

Global Id: T0607900162
Action Type: Other
Date: 10/25/1989
Action: Leak Reported

Global Id: T0607900162
Action Type: ENFORCEMENT
Date: 06/26/2002
Action: Staff Letter

Global Id: T0607900162
Action Type: RESPONSE
Date: 07/30/2002
Action: Other Report / Document

Global Id: T0607900162
Action Type: RESPONSE
Date: 08/22/2002
Action: Soil and Water Investigation Workplan

Global Id: T0607900162
Action Type: RESPONSE
Date: 07/30/2002
Action: Other Report / Document

Global Id: T0607900162
Action Type: Other
Date: 10/20/1989
Action: Leak Discovery

Global Id: T0607900162
Action Type: ENFORCEMENT
Date: 06/27/2002
Action: Staff Letter

LUST:

Global Id: T0607900162
Status: Completed - Case Closed
Status Date: 12/26/1989

Global Id: T0607900162
Status: Open - Case Begin Date
Status Date: 10/20/1989

Global Id: T0607900162

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOSCO - FACILITY #5660 (Continued)

S100233900

Status: Open - Site Assessment
Status Date: 12/20/1989

NOTIFY 65:

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

54
NNW
1/2-1
0.742 mi.
3917 ft.

**VIC'S MOBIL
402 GRAND
GROVER CITY, CA 91403**

**LUST U000043432
HIST CORTESE N/A
Notify 65**

**Relative:
Higher
Actual:
29 ft.**

LUST:

Lead Agency: SAN LUIS OBISPO COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607900160
Global Id: T0607900160
Latitude: 35.1217857
Longitude: -120.6264385
Status: Completed - Case Closed
Status Date: 03/22/1990
Case Worker: LG
RB Case Number: 716
Local Agency: SAN LUIS OBISPO COUNTY
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Under Investigation
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:

Global Id: T0607900160
Contact Type: Local Agency Caseworker
Contact Name: Linnea Grossman
Organization Name: SAN LUIS OBISPO COUNTY
Address: PO BOX 1489
City: SAN LUIS OBISPO
Email: lgrossman@co.slo.ca.us
Phone Number: 8057815544

LUST:

Global Id: T0607900160
Action Type: Other
Date: 11/15/1989
Action: Leak Reported

Global Id: T0607900160
Action Type: Other
Date: 11/02/1989
Action: Leak Discovery

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VIC'S MOBIL (Continued)

U000043432

LUST:

Global Id: T0607900160
Status: Completed - Case Closed
Status Date: 03/22/1990

Global Id: T0607900160
Status: Open - Case Begin Date
Status Date: 11/02/1989

Global Id: T0607900160
Status: Open - Remediation
Status Date: 02/14/1990

Global Id: T0607900160
Status: Open - Site Assessment
Status Date: 11/02/1989

Global Id: T0607900160
Status: Open - Site Assessment
Status Date: 01/04/1990

HIST CORTESE:

Region: CORTESE
Facility County Code: 40
Reg By: LTNKA
Reg Id: 716

NOTIFY 65:

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

55
ENE
1/2-1
0.946 mi.
4995 ft.

ARROYO GRANDE/ EARTHEN POND
1325 ASH STREET
ARROYO GRANDE, CA 93420

Toxic Pits S100925086
N/A

Relative:
Higher
Actual:
78 ft.

TOXIC PITS:

Region: 03
Task #: 83012
Owner: CITY OF ARROYO GRANDE
1/2 Mi Limit: Y
Num. of Pits: 1
Cease Discharge Due: 05/30/91
Cease Discharge Complete: 05/30/91
Closure Due: 10/31/92
Closure Completed: 08/05/93
Status: CLOSED
Hydro Geological Assessment Report Due: 07/30/92
Final Hydro Geological Assessment Review Completed: / /

Count: 0 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
NO SITES FOUND					

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

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

Date of Government Version: 04/11/2019	Source: EPA
Date Data Arrived at EDR: 04/18/2019	Telephone: N/A
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 04/18/2019
Number of Days to Update: 26	Next Scheduled EDR Contact: 07/15/2019
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

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

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

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

Date of Government Version: 04/11/2019	Source: EPA
Date Data Arrived at EDR: 04/18/2019	Telephone: N/A
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 04/18/2019
Number of Days to Update: 26	Next Scheduled EDR Contact: 07/15/2019
	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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

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

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

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

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/15/2019
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 known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

Date of Government Version: 04/11/2019	Source: EPA
Date Data Arrived at EDR: 04/18/2019	Telephone: 800-424-9346
Date Made Active in Reports: 05/23/2019	Last EDR Contact: 04/18/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 07/29/2019
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019	Source: EPA
Date Data Arrived at EDR: 03/27/2019	Telephone: 800-424-9346
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

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

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

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

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

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

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - 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). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

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

Date of Government Version: 02/22/2019	Source: Department of the Navy
Date Data Arrived at EDR: 03/07/2019	Telephone: 843-820-7326
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 05/10/2019
Number of Days to Update: 41	Next Scheduled EDR Contact: 08/26/2019
	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: 01/31/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/04/2019	Telephone: 703-603-0695
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 05/29/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

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: 01/31/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/04/2019	Telephone: 703-603-0695
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 05/29/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

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

Date of Government Version: 03/25/2019

Date Data Arrived at EDR: 03/26/2019

Date Made Active in Reports: 05/01/2019

Number of Days to Update: 36

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 03/26/2019

Next Scheduled EDR Contact: 07/08/2019

Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/28/2019

Date Data Arrived at EDR: 01/29/2019

Date Made Active in Reports: 03/05/2019

Number of Days to Update: 35

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 04/30/2019

Next Scheduled EDR Contact: 08/12/2019

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

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

Date of Government Version: 01/28/2019

Date Data Arrived at EDR: 01/29/2019

Date Made Active in Reports: 03/05/2019

Number of Days to Update: 35

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 04/30/2019

Next Scheduled EDR Contact: 08/12/2019

Data Release Frequency: Quarterly

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

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an 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: 02/11/2019

Date Data Arrived at EDR: 02/12/2019

Date Made Active in Reports: 03/05/2019

Number of Days to Update: 21

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 05/14/2019

Next Scheduled EDR Contact: 08/26/2019

Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: see region list
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/11/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Quarterly

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	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	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	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: Varies

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	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

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

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	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	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/22/2008	Telephone: 916-464-4834
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 07/01/2011
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	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	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

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

Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Quarterly

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	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	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	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	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: 10/10/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/08/2019	Telephone: 415-972-3372
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 08/05/2019
	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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
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: 02/19/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
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: 11/01/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
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: 09/24/2018
Date Data Arrived at EDR: 03/12/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 50

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

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

Date of Government Version: 10/13/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
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: 10/17/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	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	Source: California Regional Water Quality Control Board, North Coast Region (1)
Date Data Arrived at EDR: 04/07/2003	Telephone: 707-576-2220
Date Made Active in Reports: 04/25/2003	Last EDR Contact: 08/01/2011
Number of Days to Update: 18	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	Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-286-0457
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Quarterly

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	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/18/2006	Telephone: 805-549-3147
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 07/18/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: Semi-Annually

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	Source: Region Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 11/18/2004	Telephone: 213-576-6600
Date Made Active in Reports: 01/04/2005	Last EDR Contact: 07/01/2011
Number of Days to Update: 47	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: Varies

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	Source: Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 04/05/2005	Telephone: 916-464-3291
Date Made Active in Reports: 04/21/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 16	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: Semi-Annually

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: Semi-Annually

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: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

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

Date of Government Version: 03/11/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/13/2019	Telephone: 916-327-7844
Date Made Active in Reports: 04/03/2019	Last EDR Contact: 03/13/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 06/24/2019
	Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/10/2018	Source: SWRCB
Date Data Arrived at EDR: 12/11/2018	Telephone: 916-341-5851
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/11/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Semi-Annually

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 03/18/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 07/01/2019
	Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

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

Date of Government Version: 10/16/2018	Source: EPA Region 8
Date Data Arrived at EDR: 03/07/2019	Telephone: 303-312-6137
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

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

Date of Government Version: 10/10/2018	Source: EPA Region 9
Date Data Arrived at EDR: 03/08/2019	Telephone: 415-972-3368
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 10/17/2018	Source: EPA Region 10
Date Data Arrived at EDR: 03/07/2019	Telephone: 206-553-2857
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	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: 11/07/2018	Source: EPA Region 7
Date Data Arrived at EDR: 03/07/2019	Telephone: 913-551-7003
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

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

Date of Government Version: 11/01/2018	Source: EPA Region 6
Date Data Arrived at EDR: 03/07/2019	Telephone: 214-665-7591
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

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

Date of Government Version: 10/12/2018	Source: EPA Region 5
Date Data Arrived at EDR: 03/07/2019	Telephone: 312-886-6136
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	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: 09/24/2018	Source: EPA Region 4
Date Data Arrived at EDR: 03/12/2019	Telephone: 404-562-9424
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

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

Date of Government Version: 10/03/2018	Source: EPA, Region 1
Date Data Arrived at EDR: 03/07/2019	Telephone: 617-918-1313
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

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

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 03/25/2019
Number of Days to Update: 142	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing

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

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

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

Date of Government Version: 01/28/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/29/2019	Telephone: 916-323-3400
Date Made Active in Reports: 03/05/2019	Last EDR Contact: 04/30/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/12/2019
	Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfields Sites Listing

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

Date of Government Version: 03/25/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/26/2019	Telephone: 916-323-7905
Date Made Active in Reports: 04/29/2019	Last EDR Contact: 03/26/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/08/2019
	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: 12/17/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/18/2018	Telephone: 202-566-2777
Date Made Active in Reports: 01/11/2019	Last EDR Contact: 06/04/2019
Number of Days to Update: 24	Next Scheduled EDR Contact: 07/01/2019
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/10/2000	Telephone: 916-227-4448
Date Made Active in Reports: 05/10/2000	Last EDR Contact: 04/25/2019
Number of Days to Update: 30	Next Scheduled EDR Contact: 08/12/2019
	Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/11/2019	Source: Department of Conservation
Date Data Arrived at EDR: 03/13/2019	Telephone: 916-323-3836
Date Made Active in Reports: 04/30/2019	Last EDR Contact: 03/13/2019
Number of Days to Update: 48	Next Scheduled EDR Contact: 06/24/2019
	Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 03/26/2019	Source: Integrated Waste Management Board
Date Data Arrived at EDR: 03/27/2019	Telephone: 916-341-6422
Date Made Active in Reports: 04/30/2019	Last EDR Contact: 05/09/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/26/2019
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 04/26/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 08/12/2019
	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	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 04/22/2019
Number of Days to Update: 137	Next Scheduled EDR Contact: 08/05/2019
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: Department of Health & Human Services, Indian Health Service
Date Data Arrived at EDR: 08/06/2014	Telephone: 301-443-1452
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 04/23/2019
Number of Days to Update: 176	Next Scheduled EDR Contact: 08/12/2019
	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: 02/24/2019	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 02/26/2019	Telephone: 202-307-1000
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 05/24/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 09/09/2019
	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	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

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

Date of Government Version: 01/28/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/29/2019	Telephone: 916-323-3400
Date Made Active in Reports: 03/05/2019	Last EDR Contact: 04/30/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/12/2019
	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: 12/31/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 06/12/2018	Telephone: 916-255-6504
Date Made Active in Reports: 08/06/2018	Last EDR Contact: 05/02/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 07/22/2019
	Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CERS HAZ WASTE: CERS HAZ WASTE

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

Date of Government Version: 04/09/2019	Source: CalEPA
Date Data Arrived at EDR: 04/11/2019	Telephone: 916-323-2514
Date Made Active in Reports: 05/08/2019	Last EDR Contact: 04/11/2019
Number of Days to Update: 27	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/24/2019	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 02/26/2019	Telephone: 202-307-1000
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 05/24/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/21/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 02/22/2019	Telephone: 866-480-1028
Date Made Active in Reports: 04/15/2019	Last EDR Contact: 05/16/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 06/24/2019
	Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/04/2018	Source: Department of Public Health
Date Data Arrived at EDR: 12/06/2018	Telephone: 707-463-4466
Date Made Active in Reports: 12/14/2018	Last EDR Contact: 05/24/2019
Number of Days to Update: 8	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Annually

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 09/11/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/11/2018
Number of Days to Update: 29

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

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

Date of Government Version: 04/09/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 05/08/2019
Number of Days to Update: 27

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 32

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/04/2019	Source: DTSC and SWRCB
Date Data Arrived at EDR: 03/05/2019	Telephone: 916-323-3400
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 06/04/2019
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/16/2019
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/25/2019	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/26/2019	Telephone: 202-366-4555
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 03/26/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 07/08/2019
	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: 10/24/2018	Source: Office of Emergency Services
Date Data Arrived at EDR: 01/24/2019	Telephone: 916-845-8400
Date Made Active in Reports: 03/05/2019	Last EDR Contact: 04/26/2019
Number of Days to Update: 40	Next Scheduled EDR Contact: 08/05/2019
	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: 12/10/2018	Source: State Water Quality Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	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: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	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: 03/07/2019	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 04/03/2019	Telephone: 202-528-4285
Date Made Active in Reports: 05/23/2019	Last EDR Contact: 05/21/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 09/02/2019
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 04/12/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 07/22/2019
	Data Release Frequency: Semi-Annually

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: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 04/12/2019
Number of Days to Update: 339	Next Scheduled EDR Contact: 07/22/2019
	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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/13/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/07/2019
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/10/2019
Next Scheduled EDR Contact: 08/19/2019
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: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 07/01/2019
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/02/2019
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: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/24/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 06/17/2019
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: 04/25/2019
Date Data Arrived at EDR: 05/02/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/11/2019	Source: EPA
Date Data Arrived at EDR: 04/18/2019	Telephone: 202-564-6023
Date Made Active in Reports: 05/23/2019	Last EDR Contact: 05/10/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/19/2019
	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: 03/20/2019	Source: EPA
Date Data Arrived at EDR: 04/10/2019	Telephone: 202-566-0500
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 04/10/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/22/2019
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 04/08/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 07/22/2019
	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	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

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	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

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: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 04/22/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 03/07/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/17/2019
	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: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 03/05/2019
Number of Days to Update: 40	Next Scheduled EDR Contact: 06/17/2019
	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: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 04/26/2019
Number of Days to Update: 15	Next Scheduled EDR Contact: 08/05/2019
	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: 04/02/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/02/2019	Telephone: 202-343-9775
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 04/02/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 07/15/2019
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 51

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
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: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 30

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/22/2019
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: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 07/22/2019
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: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
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 1931 and 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

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: 11/27/2018
Date Data Arrived at EDR: 02/27/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 33

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/29/2019
Next Scheduled EDR Contact: 09/09/2019
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005	Source: USGS
Date Data Arrived at EDR: 02/29/2008	Telephone: 703-648-7709
Date Made Active in Reports: 04/18/2008	Last EDR Contact: 05/31/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 09/09/2019
	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	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 05/31/2019
Number of Days to Update: 97	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/27/2019	Source: Department of Interior
Date Data Arrived at EDR: 03/28/2019	Telephone: 202-208-2609
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 03/21/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 06/24/2019
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/15/2019	Source: EPA
Date Data Arrived at EDR: 03/05/2019	Telephone: (415) 947-8000
Date Made Active in Reports: 03/15/2019	Last EDR Contact: 03/05/2019
Number of Days to Update: 10	Next Scheduled EDR Contact: 06/17/2019
	Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/07/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/09/2019	Telephone: 202-564-2280
Date Made Active in Reports: 05/23/2019	Last EDR Contact: 04/09/2019
Number of Days to Update: 44	Next Scheduled EDR Contact: 07/22/2019
	Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017	Source: Department of Defense
Date Data Arrived at EDR: 01/17/2019	Telephone: 703-704-1564
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 04/15/2019
Number of Days to Update: 74	Next Scheduled EDR Contact: 07/29/2019
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2018	Telephone: 202-564-0527
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 05/24/2019
Number of Days to Update: 71	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019	Source: EPA
Date Data Arrived at EDR: 02/21/2019	Telephone: 800-385-6164
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 05/21/2019
Number of Days to Update: 39	Next Scheduled EDR Contact: 09/02/2019
	Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/25/2019	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 03/26/2019	Telephone: 916-323-3400
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 03/26/2019
Number of Days to Update: 36	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 04/18/2019	Source: San Francisco County Department of Environmental Health
Date Data Arrived at EDR: 04/19/2019	Telephone: 415-252-3896
Date Made Active in Reports: 04/30/2019	Last EDR Contact: 04/18/2019
Number of Days to Update: 11	Next Scheduled EDR Contact: 08/19/2019
	Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 01/23/2019	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 02/26/2019	Telephone: 925-454-2361
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 05/14/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/26/2019
	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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/19/2019
Date Data Arrived at EDR: 03/22/2019
Date Made Active in Reports: 04/09/2019
Number of Days to Update: 18

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/23/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/01/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 35

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
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: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
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: 12/31/2017
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 47

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 07/01/2019
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: 11/01/2018
Date Data Arrived at EDR: 11/02/2018
Date Made Active in Reports: 12/13/2018
Number of Days to Update: 41

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/10/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 41

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 14

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/09/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 04/09/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 50

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/20/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 877-786-9427
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

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

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/20/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 04/09/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 51

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/09/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/10/2018	Source: Department of Conservation
Date Data Arrived at EDR: 12/12/2018	Telephone: 916-322-1080
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 34	Next Scheduled EDR Contact: 03/25/2019
	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: 02/20/2019	Source: Department of Public Health
Date Data Arrived at EDR: 03/05/2019	Telephone: 916-558-1784
Date Made Active in Reports: 04/02/2019	Last EDR Contact: 06/04/2019
Number of Days to Update: 28	Next Scheduled EDR Contact: 09/16/2019
	Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/11/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 02/12/2019	Telephone: 916-445-9379
Date Made Active in Reports: 03/07/2019	Last EDR Contact: 05/14/2019
Number of Days to Update: 23	Next Scheduled EDR Contact: 08/26/2019
	Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/04/2019	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 03/05/2019	Telephone: 916-445-4038
Date Made Active in Reports: 04/05/2019	Last EDR Contact: 06/04/2019
Number of Days to Update: 31	Next Scheduled EDR Contact: 09/16/2019
	Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/11/2019	Source: Department of Conservation
Date Data Arrived at EDR: 03/13/2019	Telephone: 916-323-3836
Date Made Active in Reports: 04/29/2019	Last EDR Contact: 03/13/2019
Number of Days to Update: 47	Next Scheduled EDR Contact: 06/24/2019
	Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/18/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/19/2019	Telephone: 916-445-3846
Date Made Active in Reports: 04/29/2019	Last EDR Contact: 03/18/2019
Number of Days to Update: 41	Next Scheduled EDR Contact: 07/01/2019
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 04/27/2018	Source: Department of Conservation
Date Data Arrived at EDR: 06/13/2018	Telephone: 916-445-2408
Date Made Active in Reports: 07/17/2018	Last EDR Contact: 03/13/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 06/24/2019
	Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 12/10/2018	Source: State Water Resource Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	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: 05/08/2018	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 07/11/2018	Telephone: 559-445-5577
Date Made Active in Reports: 09/13/2018	Last EDR Contact: 04/12/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 07/22/2019
	Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 05/16/2019
Number of Days to Update: 9	Next Scheduled EDR Contact: 09/02/2019
	Data Release Frequency: Quarterly

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
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: 03/05/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

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

Date of Government Version: 04/09/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 05/08/2019
Number of Days to Update: 27

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
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: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: Department of Resources Recycling and Recovery
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/13/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 196	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	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/30/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 182	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	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 01/11/2019	Telephone: 510-567-6700
Date Made Active in Reports: 03/05/2019	Last EDR Contact: 04/22/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 07/22/2019
	Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/07/2019	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 01/08/2019	Telephone: 510-567-6700
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 04/08/2019
Number of Days to Update: 59	Next Scheduled EDR Contact: 04/24/2047
	Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 01/07/2019
Date Data Arrived at EDR: 01/08/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 58

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
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: 04/08/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/02/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 27

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 08/19/2019
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: 02/14/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 17

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/29/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 29

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/29/2019
Next Scheduled EDR Contact: 08/12/2019
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: 04/10/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 19

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/20/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 01/18/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 41

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
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: 29

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
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: 05/16/2019
Date Data Arrived at EDR: 05/17/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 13

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/12/2019
Number of Days to Update: 28

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

LASSEN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 01/17/2019
Date Data Arrived at EDR: 01/18/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 46

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/19/2018
Date Data Arrived at EDR: 01/10/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 56

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/16/2019
Next Scheduled EDR Contact: 07/29/2019
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: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
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: 01/01/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 54

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 04/30/2012	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/17/2019	Telephone: 626-458-6973
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 04/17/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 07/29/2019
	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: 01/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 04/05/2019	Telephone: 213-978-3800
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 04/05/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 07/15/2019
	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: 01/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 04/05/2019	Telephone: 213-978-3800
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 04/05/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 07/15/2019
	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: 01/30/2019	Source: Community Health Services
Date Data Arrived at EDR: 02/01/2019	Telephone: 323-890-7806
Date Made Active in Reports: 03/07/2019	Last EDR Contact: 04/16/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/29/2019
	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	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 04/15/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/29/2019
	Data Release Frequency: Semi-Annually

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: 03/09/2017	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 03/10/2017	Telephone: 562-570-2563
Date Made Active in Reports: 05/03/2017	Last EDR Contact: 04/22/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/02/2018	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 10/05/2018	Telephone: 310-618-2973
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 04/22/2019
Number of Days to Update: 28	Next Scheduled EDR Contact: 08/05/2019
	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: 02/20/2019	Source: Madera County Environmental Health
Date Data Arrived at EDR: 02/22/2019	Telephone: 559-675-7823
Date Made Active in Reports: 03/07/2019	Last EDR Contact: 05/16/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 09/02/2019
	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	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 03/29/2019
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/15/2019
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 03/11/2019	Source: Merced County Environmental Health
Date Data Arrived at EDR: 03/19/2019	Telephone: 209-381-1094
Date Made Active in Reports: 05/08/2019	Last EDR Contact: 05/16/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 09/02/2019
	Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2019	Source: Mono County Health Department
Date Data Arrived at EDR: 02/26/2019	Telephone: 760-932-5580
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 05/23/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Varies

MONTEREY COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 02/05/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 26

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/01/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
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: 02/21/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 14

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 9

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/13/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/09/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 21

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/09/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 21

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST ORANGE: List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 02/05/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 31

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2019
Next Scheduled EDR Contact: 08/19/2019
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: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/12/2019
Number of Days to Update: 42

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/18/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 46

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
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: 04/11/2019
Date Data Arrived at EDR: 04/12/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 18

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 01/29/2019
Date Data Arrived at EDR: 01/31/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 36

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/07/2018
Date Data Arrived at EDR: 01/04/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 60

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/02/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2018
Date Data Arrived at EDR: 12/28/2018
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 67

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/02/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 48

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 33

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
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: 03/06/2019
Date Data Arrived at EDR: 03/06/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 54

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
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: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversight 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: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/05/2018
Date Data Arrived at EDR: 11/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 38

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 02/13/2019
Date Data Arrived at EDR: 02/15/2019
Date Made Active in Reports: 03/14/2019
Number of Days to Update: 27

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
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: 03/04/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 02/13/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 15

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Annually

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 01/30/2019
Date Data Arrived at EDR: 02/01/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 34

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
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: 03/05/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 53

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 27

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

SONOMA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 03/18/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 36

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 19

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 33

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 12/13/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 28

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List Cupa facility list

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/18/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 42

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 12/27/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 19

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
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: 05/02/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 02/28/2019
Number of Days to Update: 35

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Annually

LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/09/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/26/2019	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 04/25/2019	Telephone: 805-654-2813
Date Made Active in Reports: 05/30/2019	Last EDR Contact: 04/23/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/26/2019	Source: Environmental Health Division
Date Data Arrived at EDR: 03/13/2019	Telephone: 805-654-2813
Date Made Active in Reports: 04/03/2019	Last EDR Contact: 03/13/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 06/24/2019
	Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 12/26/2018	Source: Yolo County Department of Health
Date Data Arrived at EDR: 01/03/2019	Telephone: 530-666-8646
Date Made Active in Reports: 01/16/2019	Last EDR Contact: 03/29/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 07/15/2019
	Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 02/08/2019	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 02/12/2019	Telephone: 530-749-7523
Date Made Active in Reports: 03/06/2019	Last EDR Contact: 04/25/2019
Number of Days to Update: 22	Next Scheduled EDR Contact: 08/12/2019
	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: 02/11/2019	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 02/12/2019	Telephone: 860-424-3375
Date Made Active in Reports: 03/04/2019	Last EDR Contact: 05/14/2019
Number of Days to Update: 20	Next Scheduled EDR Contact: 08/26/2019
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 04/10/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/30/2019
Date Made Active in Reports: 02/14/2019
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/01/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/27/2018
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/17/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

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 PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

1.5-ACRE PARCEL
HUBER STREET
GROVER BEACH, CA 93433

TARGET PROPERTY COORDINATES

Latitude (North): 35.110745 - 35° 6' 38.68"
Longitude (West): 120.622769 - 120° 37' 21.97"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 716659.8
UTM Y (Meters): 3887712.5
Elevation: 23 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5620044 OCEANO, CA
Version Date: 2012

Northeast Map: 5629194 ARROYO GRANDE NE, CA
Version Date: 2012

Southwest Map: 5603502 OCEANO OE W, CA
Version Date: 2012

Northwest Map: 5620046 PISMO BEACH, CA
Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

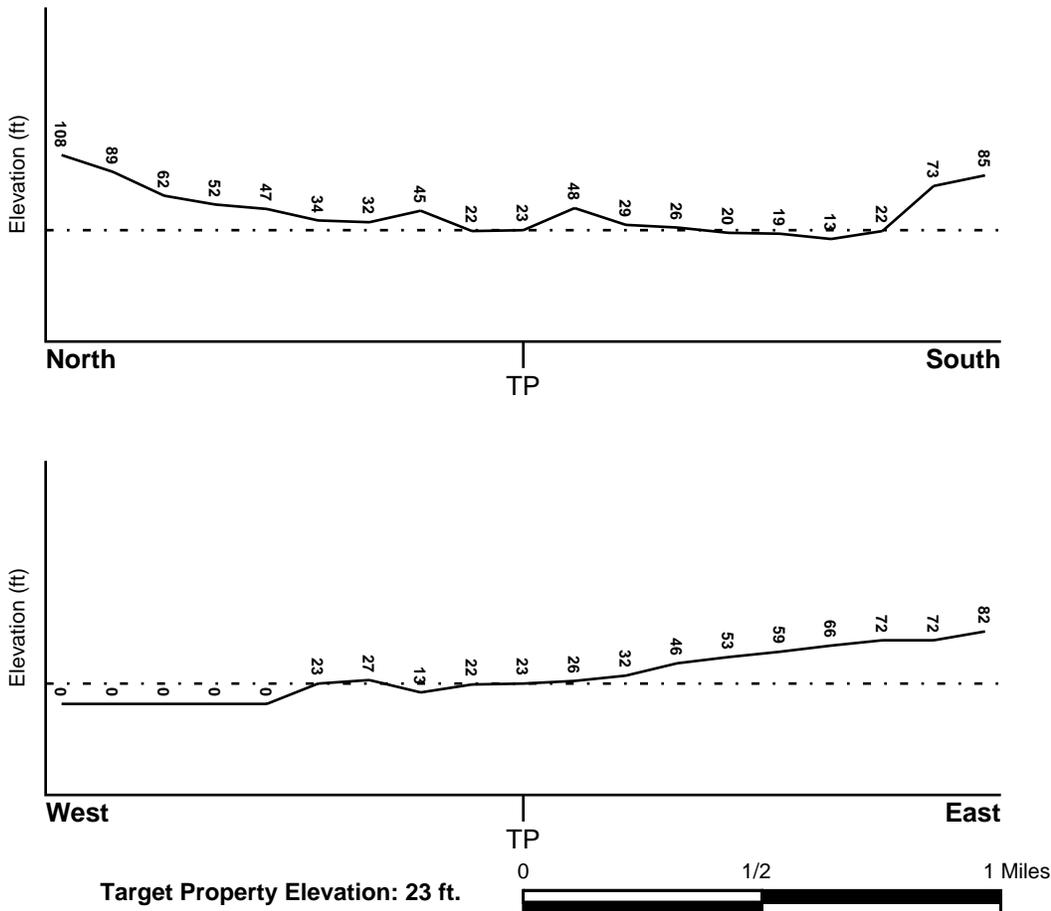
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06079C1601G	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06079C1344G	FEMA FIRM Flood data
06079C1363G	FEMA FIRM Flood data
06079C1582G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
OCEANO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

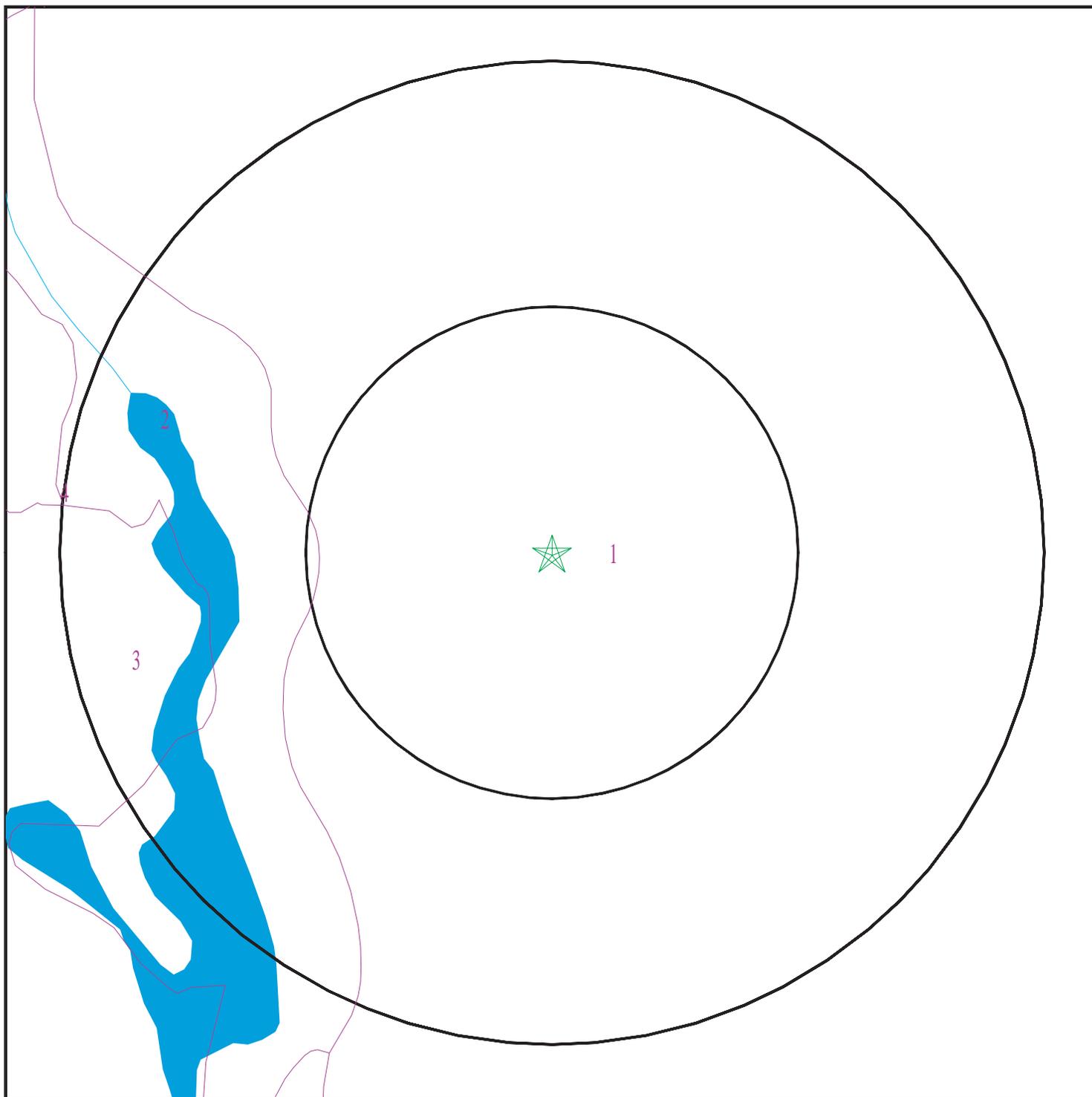
Era:	Cenozoic
System:	Tertiary
Series:	Miocene
Code:	Tm (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

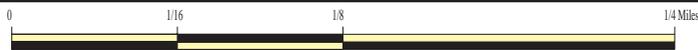
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 05674764.2r



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: 1.5-Acre Parcel
ADDRESS: Huber Street
Grover Beach CA 93433
LAT/LONG: 35.110745 / 120.622769

CLIENT: Rincon
CONTACT: Sarah Larese
INQUIRY #: 05674764.2r
DATE: June 05, 2019 5:37 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Oceano

Soil Surface Texture: sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	29 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 6 Min: 5.1
2	29 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 6 Min: 5.1

Soil Map ID: 2

Soil Component Name: Psamments

Soil Surface Texture: loamy sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Very poorly drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 38 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	18 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9
2	18 inches	50 inches	stratified loamy sand to loamy fine sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9
3	50 inches	59 inches	loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9

Soil Map ID: 3

Soil Component Name: Dune land

Soil Surface Texture: fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: Min:
2	5 inches	59 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: Min:

Soil Map ID: 4

Soil Component Name: Water

Soil Surface Texture: fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	USGS40000160671	0 - 1/8 Mile NE
A3	USGS40000160681	0 - 1/8 Mile NE
A4	USGS40000160683	0 - 1/8 Mile North
9	USGS40000160665	1/8 - 1/4 Mile East
B12	USGS40000160619	1/8 - 1/4 Mile SSE
C13	USGS40000160689	1/4 - 1/2 Mile ENE
E15	USGS40000160719	1/4 - 1/2 Mile NW
E16	USGS40000160720	1/4 - 1/2 Mile NW
E17	USGS40000160721	1/4 - 1/2 Mile NW
G23	USGS40000160599	1/4 - 1/2 Mile SW
G24	USGS40000160600	1/4 - 1/2 Mile SW
G25	USGS40000160601	1/4 - 1/2 Mile SW
F26	USGS40000160618	1/4 - 1/2 Mile ESE
I40	USGS40000160664	1/2 - 1 Mile East
J42	USGS40000160567	1/2 - 1 Mile SSE
K43	USGS40000160713	1/2 - 1 Mile ENE
K44	USGS40000160702	1/2 - 1 Mile ENE
45	USGS40000160766	1/2 - 1 Mile North
L47	USGS40000160594	1/2 - 1 Mile ESE
48	USGS40000160593	1/2 - 1 Mile ESE
N53	USGS40000160607	1/2 - 1 Mile ESE
O56	USGS40000160663	1/2 - 1 Mile East
Q58	USGS40000160767	1/2 - 1 Mile NW
Q59	USGS40000160768	1/2 - 1 Mile NW
Q60	USGS40000160769	1/2 - 1 Mile NW
P61	USGS40000169945	1/2 - 1 Mile SSE
65	USGS40000160757	1/2 - 1 Mile NE
66	USGS40000160712	1/2 - 1 Mile ENE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

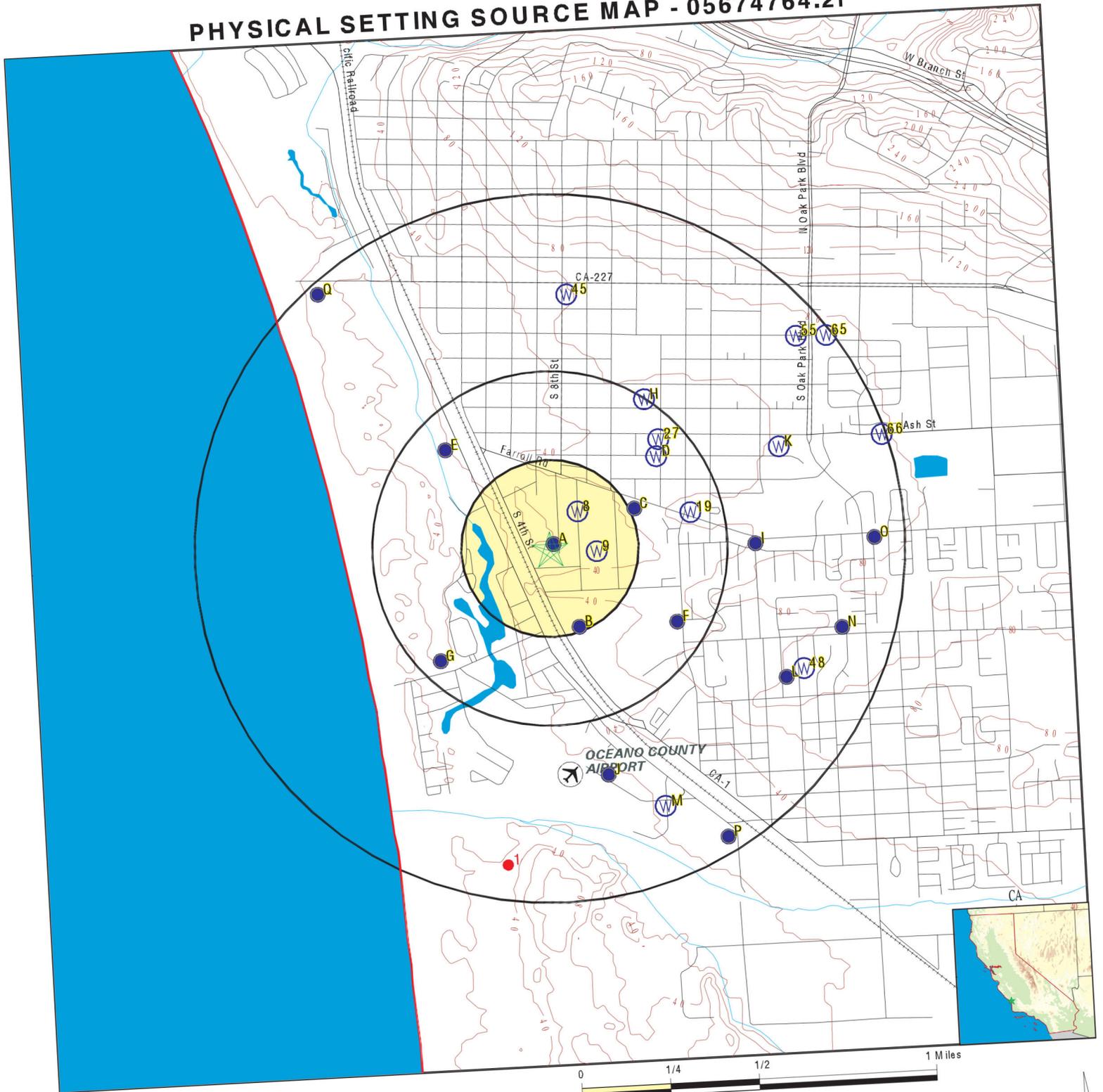
MAP ID	WELL ID	LOCATION FROM TP
A2	CADWR8000016143	0 - 1/8 Mile NNW
A5	CADWR8000016136	0 - 1/8 Mile ESE
A6	CADWR8000016139	0 - 1/8 Mile West
A7	18095	0 - 1/8 Mile East
8	18096	1/8 - 1/4 Mile NE
B10	CADWR8000016086	1/8 - 1/4 Mile South
C11	CADWR8000016148	1/8 - 1/4 Mile ENE
D14	22561	1/4 - 1/2 Mile NE
F18	CADWR8000016085	1/4 - 1/2 Mile SE
19	18083	1/4 - 1/2 Mile ENE
E20	CADWR8000016168	1/4 - 1/2 Mile NW
E21	CADWR8000016169	1/4 - 1/2 Mile NW
E22	CADWR8000016170	1/4 - 1/2 Mile NW
27	18097	1/4 - 1/2 Mile NE
D28	18098	1/4 - 1/2 Mile NE
G29	CADWR8000016074	1/4 - 1/2 Mile SW
G30	CADWR8000016075	1/4 - 1/2 Mile SW
G31	CADWR8000016076	1/4 - 1/2 Mile SW
H32	18082	1/4 - 1/2 Mile NE
H33	18081	1/4 - 1/2 Mile NE
H34	18080	1/4 - 1/2 Mile NE
H35	18091	1/4 - 1/2 Mile NE
H36	18094	1/4 - 1/2 Mile NE
H37	18093	1/4 - 1/2 Mile NE
H38	18092	1/4 - 1/2 Mile NE
I39	CADWR8000016135	1/2 - 1 Mile East
J41	CADWR8000016036	1/2 - 1 Mile South
L46	CADWR8000016062	1/2 - 1 Mile ESE
M49	18099	1/2 - 1 Mile SSE
M50	18100	1/2 - 1 Mile SSE
M51	18101	1/2 - 1 Mile SSE
N52	CADWR8000016079	1/2 - 1 Mile ESE
O54	CADWR8000016134	1/2 - 1 Mile East
55	CADWR8000016209	1/2 - 1 Mile NE
P57	CADWR8000016010	1/2 - 1 Mile SSE
Q62	CADWR8000016217	1/2 - 1 Mile NW
Q63	CADWR8000016218	1/2 - 1 Mile NW
Q64	CADWR8000016219	1/2 - 1 Mile NW

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG13000011913	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 05674764.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: 1.5-Acre Parcel
ADDRESS: Huber Street
 Grover Beach CA 93433
LAT/LONG: 35.110745 / 120.622769

CLIENT: Rincon
CONTACT: Sarah Laresé
INQUIRY #: 05674764.2r
DATE: June 05, 2019 5:37 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A1
NE
0 - 1/8 Mile
Higher

FED USGS USGS40000160671

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E30K016M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19650805	Well Depth:	152
Well Depth Units:	ft	Well Hole Depth:	180
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	28	Level reading date:	1979-04-12
Feet below surface:	13.9	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1979-01-09	Feet below surface:	15.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1978-05-01	Feet below surface:	14.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-10-18	Feet below surface:	18.7
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-04-15	Feet below surface:	18.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-09-30	Feet below surface:	17.8
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-07-19	Feet below surface:	19.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-04-20	Feet below surface:	17.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1975-09-26	Feet below surface:	17.0
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1975-07-29	Feet below surface:	16.9
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1975-05-05	Feet below surface:	16.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1975-04-04	Feet below surface:	15.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1975-01-02	Feet below surface:	14.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-11-07	Feet below surface:	15.4
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1974-10-09	Feet below surface:	15.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-18	Feet below surface:	15.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	14.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-26	Feet below surface:	13.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-12-24	Feet below surface:	14.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-05	Feet below surface:	16.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	16.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-08	Feet below surface:	16.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-13	Feet below surface:	16.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	15.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-18	Feet below surface:	17.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-20	Feet below surface:	18.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-26	Feet below surface:	17.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-02	Feet below surface:	17.0
Feet to sea level:	Not Reported	Note:	Not Reported

**A2
NNW
0 - 1/8 Mile
Lower**

CA WELLS CADWR8000016143

State Well #:	32S13E30K004M	Station ID:	23511
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

**A3
NE
0 - 1/8 Mile
Lower**

FED USGS USGS40000160681

Organization ID:	USGS-CA
Organization Name:	USGS California Water Science Center

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Monitor Location:	032S013E30K004M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	California Coastal Basin aquifers	Aquifer Type:	Not Reported
Formation Type:	Not Reported	Well Depth:	100
Construction Date:	1972	Well Hole Depth:	Not Reported
Well Depth Units:	ft		
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	29	Level reading date:	1980-05-06
Feet below surface:	15.0	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-10-30	Feet below surface:	16.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-12	Feet below surface:	13.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-01-09	Feet below surface:	14.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-01	Feet below surface:	13.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-18	Feet below surface:	19.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-19	Feet below surface:	19.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-15	Feet below surface:	18.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-30	Feet below surface:	18.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-17	Feet below surface:	19.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-19	Feet below surface:	19.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	16.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-29	Feet below surface:	17.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-07	Feet below surface:	15.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-09	Feet below surface:	15.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-26	Feet below surface:	13.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-18	Feet below surface:	15.5
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1974-05-08	Feet below surface:	13.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-12-31	Feet below surface:	14.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-05	Feet below surface:	16.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	16.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-08	Feet below surface:	24.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-13	Feet below surface:	16.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	14.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-03	Feet below surface:	14.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-18	Feet below surface:	18.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-20	Feet below surface:	18.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-26	Feet below surface:	18.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-02	Feet below surface:	16.9
Feet to sea level:	Not Reported	Note:	Not Reported

A4
North
0 - 1/8 Mile
Lower

FED USGS USGS40000160683

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E30K006M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	158
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	30	Level reading date:	1979-04-12
Feet below surface:	12.4	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1979-01-09	Feet below surface:	12.4
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1978-05-01	Feet below surface:	12.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-18	Feet below surface:	17.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-18	Feet below surface:	18.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-15	Feet below surface:	17.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-30	Feet below surface:	16.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-19	Feet below surface:	18.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	15.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-26	Feet below surface:	16.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-29	Feet below surface:	15.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-05	Feet below surface:	14.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-04	Feet below surface:	13.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-02	Feet below surface:	13.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-07	Feet below surface:	14.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-09	Feet below surface:	14.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-18	Feet below surface:	14.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	12.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-25	Feet below surface:	12.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-12-24	Feet below surface:	12.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-05	Feet below surface:	14.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	16.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-08	Feet below surface:	14.8
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1973-07-13	Feet below surface:	15.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	11.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-03	Feet below surface:	13.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-18	Feet below surface:	16.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-20	Feet below surface:	12.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-26	Feet below surface:	16.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-02	Feet below surface:	15.7
Feet to sea level:	Not Reported	Note:	Not Reported

**A5
ESE
0 - 1/8 Mile
Higher**

CA WELLS CADWR8000016136

State Well #:	32S13E30K011M	Station ID:	37560
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

**A6
West
0 - 1/8 Mile
Higher**

CA WELLS CADWR8000016139

State Well #:	32S13E30K016M	Station ID:	23513
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

**A7
East
0 - 1/8 Mile
Higher**

CA WELLS 18095

Seq:	18095	Prim sta c:	32S/13E-30K18 M
Frds no:	4010008009	County:	40
District:	06	User id:	TAP
System no:	4010008	Water type:	G
Source nam:	WELL 21 (1990)	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	350639.4	Longitude:	1203713.2
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System no:	4010008	System nam:	PISMO BEACH WATER DEPARTMENT
Hqname:	Not Reported	Address:	PO BOX 3
City:	PISMO BEACH	State:	CA
Zip:	93449	Zip ext:	Not Reported
Pop serv:	8294	Connection:	4179
Area serve:	PISMO BEACH		

**8
NE
1/8 - 1/4 Mile
Higher**

CA WELLS 18096

Seq:	18096
Frds no:	4010008010
District:	06
System no:	4010008
Source nam:	WELL 22/23 (1990)/HUBER WELL
Latitude:	350644.8
Precision:	3
Comment 1:	Not Reported
Comment 3:	Not Reported
Comment 5:	Not Reported
Comment 7:	Not Reported

Prim sta c:	32S/13E-30K19 M
County:	40
User id:	TAP
Water type:	G
Station ty:	WELL/AMBNT/MUN/INTAKE
Longitude:	1203713.2
Status:	AR
Comment 2:	Not Reported
Comment 4:	Not Reported
Comment 6:	Not Reported

System no:	4010008
Hqname:	Not Reported
City:	PISMO BEACH
Zip:	93449
Pop serv:	8294
Area serve:	PISMO BEACH

System nam:	PISMO BEACH WATER DEPARTMENT
Address:	PO BOX 3
State:	CA
Zip ext:	Not Reported
Connection:	4179

Sample date:	17-OCT-17
Chemical:	NITRATE (AS N)
Dir:	0.4

Finding:	1.1
Report units:	MG/L

Sample date:	10-MAR-16
Chemical:	SODIUM
Dir:	0.

Finding:	63.
Report units:	MG/L

Sample date:	10-MAR-16
Chemical:	NITRATE + NITRITE (AS N)
Dir:	0.4

Finding:	1.
Report units:	MG/L

Sample date:	10-MAR-16
Chemical:	SPECIFIC CONDUCTANCE
Dir:	0.

Finding:	1150.
Report units:	US

Sample date:	10-MAR-16
Chemical:	PH, LABORATORY
Dir:	0.

Finding:	7.
Report units:	Not Reported

Sample date:	10-MAR-16
Chemical:	ALKALINITY (TOTAL) AS CaCO3
Dir:	0.

Finding:	230.
Report units:	MG/L

Sample date:	10-MAR-16
Chemical:	BICARBONATE ALKALINITY
Dir:	0.

Finding:	280.
Report units:	MG/L

Sample date:	10-MAR-16
Chemical:	TURBIDITY, LABORATORY

Finding:	0.2
Report units:	NTU

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.1		
Sample date:	10-MAR-16	Finding:	720.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	10-MAR-16	Finding:	90.
Chemical:	ZINC	Report units:	UG/L
Dir:	50.		
Sample date:	10-MAR-16	Finding:	30.
Chemical:	IRON	Report units:	UG/L
Dir:	100.		
Sample date:	10-MAR-16	Finding:	70.
Chemical:	COPPER	Report units:	UG/L
Dir:	50.		
Sample date:	10-MAR-16	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	10-MAR-16	Finding:	219.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	10-MAR-16	Finding:	58.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	10-MAR-16	Finding:	3.
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-MAR-16	Finding:	1.3
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dir:	0.		
Sample date:	10-MAR-16	Finding:	11.8
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	10-MAR-16	Finding:	46.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-MAR-16	Finding:	105.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-MAR-16	Finding:	451.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	10-MAR-16	Finding:	1.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	03-MAR-16	Finding:	7.
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	03-MAR-16	Finding:	41.3
Chemical:	BARIUM	Report units:	UG/L
Dir:	100.		
Sample date:	03-MAR-16	Finding:	5.
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dir:	10.		
Sample date:	03-MAR-16	Finding:	3.
Chemical:	ARSENIC	Report units:	UG/L
Dir:	2.		
Sample date:	01-JUN-15	Finding:	1.25
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	01-JUN-15	Finding:	3.67
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		
Sample date:	01-JUN-15	Finding:	1.06
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	03-MAR-14	Finding:	3.1
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-FEB-14	Finding:	45.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAR-13	Finding:	0.5
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	13-MAR-13	Finding:	0.3
Chemical:	LANGELIER INDEX AT SOURCE TEMP.	Report units:	Not Reported
Dir:	0.		
Sample date:	13-MAR-13	Finding:	730.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	13-MAR-13	Finding:	5.
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	13-MAR-13	Finding:	80.
Chemical:	IRON	Report units:	UG/L
Dir:	100.		
Sample date:	13-MAR-13	Finding:	200.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	13-MAR-13	Finding:	3.
Chemical:	ARSENIC	Report units:	UG/L
Dir:	2.		
Sample date:	13-MAR-13	Finding:	235.
Chemical:	SULFATE	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.5		
Sample date:	13-MAR-13	Finding:	68.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	13-MAR-13	Finding:	4.
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-MAR-13	Finding:	1.5
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dir:	0.		
Sample date:	13-MAR-13	Finding:	73.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-MAR-13	Finding:	46.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-MAR-13	Finding:	110.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-MAR-13	Finding:	464.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	13-MAR-13	Finding:	340.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	13-MAR-13	Finding:	280.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	13-MAR-13	Finding:	7.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	13-MAR-13	Finding:	1110.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	13-MAR-13	Finding:	2.9
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	13-MAR-13	Finding:	12.2
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	13-MAR-13	Finding:	700.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	13-MAR-13	Finding:	50.6
Chemical:	BARIUM	Report units:	UG/L
Dir:	100.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

9

East
1/8 - 1/4 Mile
Higher

FED USGS USGS40000160665

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E30K011M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	70
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	18	Level reading date:	1979-04-11
Feet below surface:	19.7	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-01-09	Feet below surface:	20.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	21.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-01	Feet below surface:	19.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-19	Feet below surface:	25.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-15	Feet below surface:	26.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1976-09-30	Feet below surface:	24.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	21.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-05	Feet below surface:	24.1
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1974-11-07	Feet below surface:	21.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	21.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-18	Feet below surface:	24.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-20	Feet below surface:	25.5
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1971-10-28	Feet below surface:	23.0
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1970-10-20	Feet below surface:	23.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-04-01	Feet below surface:	28.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-04-04	Feet below surface:	23.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-28	Feet below surface:	28.3
Feet to sea level:	Not Reported	Note:	Not Reported

B10
South
1/8 - 1/4 Mile
Higher

CA WELLS CADWR8000016086

State Well #:	32S13E30P002M	Station ID:	37562
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

C11
ENE
1/8 - 1/4 Mile
Higher

CA WELLS CADWR8000016148

State Well #:	32S13E30J008M	Station ID:	23510
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

B12
SSE
1/8 - 1/4 Mile
Higher

FED USGS USGS40000160619

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E30P002M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	28	Level reading date:	1979-10-30
Feet below surface:	22.3	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1979-04-11	Feet below surface:	20.0
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1978-12-04	Feet below surface:	21.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-01	Feet below surface:	20.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-30	Feet below surface:	23.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	22.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-26	Feet below surface:	22.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-05	Feet below surface:	22.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-08	Feet below surface:	21.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	20.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	22.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-20	Feet below surface:	23.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-18	Feet below surface:	24.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-27	Feet below surface:	22.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-10-25	Feet below surface:	22.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-04-22	Feet below surface:	21.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-10-20	Feet below surface:	23.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-04-01	Feet below surface:	19.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-05-13	Feet below surface:	23.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-03-20	Feet below surface:	22.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-10-03	Feet below surface:	28.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-18	Feet below surface:	25.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-10-04	Feet below surface:	26.2
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1967-03-27	Feet below surface:	23.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-10-21	Feet below surface:	27.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-03-11	Feet below surface:	23.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-10-13	Feet below surface:	28.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-04-19	Feet below surface:	23.5
Feet to sea level:	Not Reported	Note:	Not Reported

C13
ENE
1/4 - 1/2 Mile
Higher

FED USGS USGS40000160689

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E30J008M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	26	Level reading date:	1980-05-06
Feet below surface:	33.0	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-10-30	Feet below surface:	35.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-11	Feet below surface:	31.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	33.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-01	Feet below surface:	31.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-19	Feet below surface:	38.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-18	Feet below surface:	34.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-15	Feet below surface:	35.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-30	Feet below surface:	37.1
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1976-04-20	Feet below surface:	35.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-05	Feet below surface:	33.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-07	Feet below surface:	33.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	31.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-05	Feet below surface:	33.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	32.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-19	Feet below surface:	36.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-27	Feet below surface:	35.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-10-25	Feet below surface:	35.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-04-22	Feet below surface:	33.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-10-20	Feet below surface:	35.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-04-01	Feet below surface:	38.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-04-04	Feet below surface:	35.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-24	Feet below surface:	41.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-04-12	Feet below surface:	39.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-10-13	Feet below surface:	43.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-04-19	Feet below surface:	37.5
Feet to sea level:	Not Reported	Note:	Not Reported

**D14
NE
1/4 - 1/2 Mile
Higher**

CA WELLS 22561

Seq:	22561	Prim sta c:	F40/004-NO3-TRT
Frds no:	4010004001	County:	40
District:	06	User id:	TAP
System no:	4010004	Water type:	G
Source nam:	NO3 TP - TREATED	Station ty:	WELL/AMBNT/MUN/INTAKE/TREATED

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Latitude:	350650.0	Longitude:	1203700.0
Precision:	3	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4010004	System nam:	GROVER BEACH WATER DEPARTMENT
Hqname:	Not Reported	Address:	BOX 365
City:	GROVER BEACH	State:	CA
Zip:	93483	Zip ext:	Not Reported
Pop serv:	12720	Connection:	3950
Area serve:	GROVER CITY		
Sample date:	25-FEB-14	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-AUG-12	Finding:	120.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	06-AUG-12	Finding:	20.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	06-AUG-12	Finding:	110.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	06-AUG-12	Finding:	640.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	06-AUG-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-JUL-12	Finding:	120.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUL-12	Finding:	630.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	10-JUL-12	Finding:	94.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUL-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-JUL-12	Finding:	31.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	19-JUN-12	Finding:	24.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	12-JUN-12	Finding:	15.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	12-JUN-12	Finding:	100.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	130.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	12-JUN-12	Finding:	600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		

**E15
NW
1/4 - 1/2 Mile
Lower**

FED USGS USGS40000160719

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E30F001M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19650518	Well Depth:	55
Well Depth Units:	ft	Well Hole Depth:	803
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	25	Level reading date:	1980-05-09
Feet below surface:	10.53	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-11-07	Feet below surface:	11.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-17	Feet below surface:	10.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	10.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-24	Feet below surface:	9.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-07	Feet below surface:	12.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-17	Feet below surface:	12.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-09	Feet below surface:	12.25

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-14	Feet below surface:	11.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-07	Feet below surface:	11.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-06-07	Feet below surface:	10.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-01	Feet below surface:	10.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-20	Feet below surface:	11.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-29	Feet below surface:	12.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-23	Feet below surface:	10.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-29	Feet below surface:	11.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-26	Feet below surface:	11.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-02	Feet below surface:	10.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-02	Feet below surface:	10.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-12-15	Feet below surface:	10.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-08-04	Feet below surface:	14.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-06-03	Feet below surface:	14.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-03-27	Feet below surface:	12.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-01-29	Feet below surface:	11.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-10-03	Feet below surface:	14.60
Feet to sea level:	Not Reported	Note:	Not Reported

**E16
NW
1/4 - 1/2 Mile
Lower**

FED USGS USGS40000160720

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E30F002M	Type:	Well

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19650518	Well Depth:	100
Well Depth Units:	ft	Well Hole Depth:	803
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	23	Level reading date:	1980-05-09
Feet below surface:	11.88	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-11-07	Feet below surface:	11.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-17	Feet below surface:	11.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	10.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-24	Feet below surface:	10.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-07	Feet below surface:	13.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-17	Feet below surface:	13.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-09	Feet below surface:	12.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-14	Feet below surface:	12.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-07	Feet below surface:	12.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-06-07	Feet below surface:	10.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-01	Feet below surface:	11.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-20	Feet below surface:	11.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-29	Feet below surface:	13.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-23	Feet below surface:	11.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-29	Feet below surface:	12.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-26	Feet below surface:	12.1
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1971-06-02	Feet below surface:	12.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-02	Feet below surface:	11.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-12-15	Feet below surface:	11.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-03-27	Feet below surface:	13.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-01-29	Feet below surface:	12.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-10-03	Feet below surface:	14.81
Feet to sea level:	Not Reported	Note:	Not Reported

**E17
NW
1/4 - 1/2 Mile
Lower**

FED USGS USGS40000160721

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18060006
Monitor Location:	032S013E30F003M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	372
Aquifer:	California Coastal Basin aquifers	Well Hole Depth:	803
Formation Type:	Not Reported		
Construction Date:	19650518		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	25	Level reading date:	1980-05-09
Feet below surface:	7.02	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-11-07	Feet below surface:	7.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-17	Feet below surface:	5.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	6.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-24	Feet below surface:	4.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-07	Feet below surface:	10.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-17	Feet below surface:	8.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-09	Feet below surface:	14.24
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1976-01-14	Feet below surface:	7.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-07	Feet below surface:	8.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-06-07	Feet below surface:	5.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-01	Feet below surface:	5.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-20	Feet below surface:	7.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-29	Feet below surface:	9.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-23	Feet below surface:	5.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-29	Feet below surface:	6.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-26	Feet below surface:	8.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-02	Feet below surface:	7.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-02	Feet below surface:	5.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-12-15	Feet below surface:	5.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-08-04	Feet below surface:	10.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-06-03	Feet below surface:	9.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-03-27	Feet below surface:	6.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-01-29	Feet below surface:	6.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-10-03	Feet below surface:	9.44
Feet to sea level:	Not Reported	Note:	Not Reported

**F18
SE
1/4 - 1/2 Mile
Higher**

CA WELLS CADWR8000016085

State Well #:	32S13E30R002M	Station ID:	23516
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

19
ENE
1/4 - 1/2 Mile
Higher

CA WELLS 18083

Seq:	18083	Prim sta c:	32S/13E-29E07 M
Frds no:	4010004005	County:	40
District:	06	User id:	TAP
System no:	4010004	Water type:	G
Source nam:	WELL 04	Station ty:	WELL/AMBNT
Latitude:	350643.2	Longitude:	1203653.4
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4010004	System nam:	GROVER BEACH WATER DEPARTMENT
Hqname:	Not Reported	Address:	BOX 365
City:	GROVER BEACH	State:	CA
Zip:	93483	Zip ext:	Not Reported
Pop serv:	12720	Connection:	3950
Area serve:	GROVER CITY		

Sample date:	01-AUG-17	Finding:	450.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		

Sample date:	01-AUG-17	Finding:	2.5
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		

Sample date:	01-AUG-17	Finding:	420.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		

Sample date:	01-AUG-17	Finding:	350.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		

Sample date:	01-AUG-17	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		

Sample date:	01-AUG-17	Finding:	1000.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		

Sample date:	01-AUG-17	Finding:	4.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	01-AUG-17	Finding:	3.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	01-AUG-17	Finding:	32.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	01-AUG-17	Finding:	640.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	01-AUG-17	Finding:	1.1
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	01-AUG-17	Finding:	0.14
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	01-AUG-17	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	01-AUG-17	Finding:	3.9
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	01-AUG-17	Finding:	100.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	01-AUG-17	Finding:	48.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	01-AUG-17	Finding:	42.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	01-AUG-17	Finding:	51.
Chemical:	ZINC	Report units:	UG/L
Dir:	50.		
Sample date:	01-AUG-17	Finding:	26.
Chemical:	MANGANESE	Report units:	UG/L
Dir:	20.		
Sample date:	01-AUG-17	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	01-AUG-17	Finding:	140.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	02-AUG-16	Finding:	4.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	13-AUG-14	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	13-AUG-14	Finding:	0.94
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	13-AUG-14	Finding:	640.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	13-AUG-14	Finding:	0.17
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	13-AUG-14	Finding:	150.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	13-AUG-14	Finding:	31.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	13-AUG-14	Finding:	2.6
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-AUG-14	Finding:	43.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-AUG-14	Finding:	48.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-AUG-14	Finding:	96.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-AUG-14	Finding:	440.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	13-AUG-14	Finding:	410.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	13-AUG-14	Finding:	340.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	13-AUG-14	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	13-AUG-14	Finding:	950.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	13-AUG-14	Finding:	27.
Chemical:	MANGANESE	Report units:	UG/L
Dir:	20.		
Sample date:	21-MAY-14	Finding:	51.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	110.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	21-MAY-14	Finding:	480.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	440.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	360.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	960.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	21-MAY-14	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	21-MAY-14	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	02-JAN-13	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	02-JAN-13	Finding:	0.269
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		

**E20
NW
1/4 - 1/2 Mile
Lower**

CA WELLS CADWR8000016168

State Well #:	32S13E30F001M	Station ID:	23507
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

**E21
NW
1/4 - 1/2 Mile
Lower**

CA WELLS CADWR8000016169

State Well #:	32S13E30F002M	Station ID:	23508
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

E22
NW
 1/4 - 1/2 Mile
 Lower

CA WELLS CADWR8000016170

State Well #:	32S13E30F003M	Station ID:	23509
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

G23
SW
 1/4 - 1/2 Mile
 Lower

FED USGS USGS40000160599

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E30N001M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19650608	Well Depth:	40
Well Depth Units:	ft	Well Hole Depth:	873
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	18	Level reading date:	1980-05-09
Feet below surface:	4.97	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-11-07	Feet below surface:	5.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-17	Feet below surface:	5.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	5.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-24	Feet below surface:	5.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-07	Feet below surface:	6.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-17	Feet below surface:	6.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-07	Feet below surface:	6.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-21	Feet below surface:	6.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-14	Feet below surface:	6.15
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-07-07	Feet below surface:	6.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-01	Feet below surface:	6.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-06-07	Feet below surface:	6.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-20	Feet below surface:	6.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-29	Feet below surface:	6.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-29	Feet below surface:	6.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-29	Feet below surface:	6.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-26	Feet below surface:	6.23
Feet to sea level:	Not Reported	Note:	Not Reported

**G24
SW
1/4 - 1/2 Mile
Lower**

FED USGS USGS40000160600

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E30N002M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19650608	Well Depth:	255
Well Depth Units:	ft	Well Hole Depth:	873
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	17	Level reading date:	1980-05-09
Feet below surface:	5.30	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-11-07	Feet below surface:	3.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-17	Feet below surface:	4.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	3.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-24	Feet below surface:	3.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-07	Feet below surface:	6.67
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1977-05-17	Feet below surface:	6.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-07	Feet below surface:	6.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-21	Feet below surface:	6.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-14	Feet below surface:	5.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-07	Feet below surface:	5.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-01	Feet below surface:	4.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-06-07	Feet below surface:	4.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-20	Feet below surface:	4.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-29	Feet below surface:	7.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-29	Feet below surface:	3.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-29	Feet below surface:	5.81
Feet to sea level:	Not Reported	Note:	Not Reported

**G25
SW
1/4 - 1/2 Mile
Lower**

FED USGS USGS40000160601

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18060006
Monitor Location:	032S013E30N003M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	135
Aquifer:	California Coastal Basin aquifers	Well Hole Depth:	873
Formation Type:	Not Reported		
Construction Date:	19650608		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	18	Level reading date:	1980-05-09
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	1979-11-07	Feet below surface:	1.03
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1979-04-17	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1978-12-04	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1978-04-24	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1977-11-07	Feet below surface:	4.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-17	Feet below surface:	2.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-07	Feet below surface:	4.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-21	Feet below surface:	3.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-07	Feet below surface:	2.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-01	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1975-01-14	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1974-06-07	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1973-09-20	Feet below surface:	1.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-29	Feet below surface:	4.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-29	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1971-11-29	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1971-08-26	Feet below surface:	2.20
Feet to sea level:	Not Reported	Note:	Not Reported

**F26
ESE
1/4 - 1/2 Mile
Higher**

FED USGS USGS40000160618

Organization ID:	USGS-CA	
Organization Name:	USGS California Water Science Center	
Monitor Location:	032S013E30R002M	Type: Well
Description:	Not Reported	HUC: 18060006

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19560624	Well Depth:	120
Well Depth Units:	ft	Well Hole Depth:	128
Well Hole Depth Units:	ft		
Ground water levels,Number of Measurements:	38	Level reading date:	1980-05-06
Feet below surface:	36.4	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-10-30	Feet below surface:	38.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-11	Feet below surface:	35.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	38.3
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1978-05-02	Feet below surface:	35.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-19	Feet below surface:	42.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-18	Feet below surface:	43.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-15	Feet below surface:	43.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-30	Feet below surface:	40.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-17	Feet below surface:	43.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-19	Feet below surface:	43.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	39.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-24	Feet below surface:	41.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-05	Feet below surface:	40.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-04	Feet below surface:	39.9
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.
Level reading date:	1975-01-02	Feet below surface:	36.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-07	Feet below surface:	38.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-09	Feet below surface:	32.1

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-18	Feet below surface:	38.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	36.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-26	Feet below surface:	35.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-12-24	Feet below surface:	35.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-03	Feet below surface:	38.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	39.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-08	Feet below surface:	40.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-13	Feet below surface:	39.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	38.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-03	Feet below surface:	36.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-20	Feet below surface:	39.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-07-26	Feet below surface:	42.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-16	Feet below surface:	46.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-27	Feet below surface:	38.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-03	Feet below surface:	38.9
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-02-24	Feet below surface:	36.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-10-25	Feet below surface:	39.2
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1971-08-23	Feet below surface:	40.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1971-07-14	Feet below surface:	39.5
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1971-06-03	Feet below surface:	40.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

27
NE
1/4 - 1/2 Mile
Higher

CA WELLS 18097

Seq: 18097
Frds no: 4010005005
District: 06
System no: 4010005
Source nam: WELL 07
Latitude: 350654.4
Precision: 3
Comment 1: Not Reported
Comment 3: Not Reported
Comment 5: Not Reported
Comment 7: Not Reported

Prim sta c: 32S/13E-31H08 M
County: 40
User id: TAP
Water type: G
Station ty: WELL/AMBNT/MUN/INTAKE
Longitude: 1203658.6
Status: AR
Comment 2: Not Reported
Comment 4: Not Reported
Comment 6: Not Reported

System no: 4010005
Hqname: Not Reported
City: OCEANO
Zip: 93445
Pop serv: 6700
Area serve: OCEANO

System nam: OCEANO COMM SERVICES DIST.
Address: 1655 FRONT ST.
State: CA
Zip ext: Not Reported
Connection: 1776

Sample date: 16-AUG-12
Chemical: TURBIDITY, LABORATORY
Dir: 0.1

Finding: 0.31
Report units: NTU

Sample date: 16-AUG-12
Chemical: PH, LABORATORY
Dir: 0.

Finding: 7.5
Report units: Not Reported

Sample date: 16-AUG-12
Chemical: ALKALINITY (TOTAL) AS CaCO3
Dir: 0.

Finding: 340.
Report units: MG/L

Sample date: 16-AUG-12
Chemical: BICARBONATE ALKALINITY
Dir: 0.

Finding: 420.
Report units: MG/L

Sample date: 16-AUG-12
Chemical: HARDNESS (TOTAL) AS CaCO3
Dir: 0.

Finding: 430.
Report units: MG/L

Sample date: 16-AUG-12
Chemical: CALCIUM
Dir: 0.

Finding: 88.
Report units: MG/L

Sample date: 16-AUG-12
Chemical: MAGNESIUM
Dir: 0.

Finding: 50.
Report units: MG/L

Sample date: 16-AUG-12
Chemical: SODIUM
Dir: 0.

Finding: 34.
Report units: MG/L

Sample date: 16-AUG-12
Chemical: POTASSIUM
Dir: 0.

Finding: 2.9
Report units: MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	16-AUG-12	Finding:	36.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	170.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	16-AUG-12	Finding:	0.34
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	16-AUG-12	Finding:	810.
Chemical:	IRON	Report units:	UG/L
Dir:	100.		
Sample date:	16-AUG-12	Finding:	64.
Chemical:	MANGANESE	Report units:	UG/L
Dir:	20.		
Sample date:	16-AUG-12	Finding:	710.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	1000.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		

**D28
NE
1/4 - 1/2 Mile
Higher**

CA WELLS 18098

Seq:	18098	Prim sta c:	32S/13E-31H09 M
Frds no:	4010005006	County:	40
District:	06	User id:	TAP
System no:	4010005	Water type:	G
Source nam:	WELL 08	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	350653.4	Longitude:	1203657.6
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4010005	System nam:	OCEANO COMM SERVICES DIST.
Hqname:	Not Reported	Address:	1655 FRONT ST.
City:	OCEANO	State:	CA
Zip:	93445	Zip ext:	Not Reported
Pop serv:	6700	Connection:	1776
Area serve:	OCEANO		
Sample date:	11-JAN-18	Finding:	9.1e-002
Chemical:	RADIUM 226	Report units:	PCI/L
Dir:	1.		
Sample date:	11-JAN-18	Finding:	0.109
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	11-JAN-18	Finding:	0.4

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Chemical: Dir:	RADIUM 228 MDA95 0.	Report units:	PCI/L
Sample date: Chemical: Dir:	11-JAN-18 RADIUM 228 COUNTING ERROR 0.	Finding: Report units:	0.638 PCI/L
Sample date: Chemical: Dir:	11-JAN-18 RADIUM 226 MDA95 0.	Finding: Report units:	0.322 PCI/L
Sample date: Chemical: Dir:	14-NOV-17 GROSS ALPHA 3.	Finding: Report units:	6.7 PCI/L
Sample date: Chemical: Dir:	14-NOV-17 GROSS ALPHA COUNTING ERROR 0.	Finding: Report units:	5.2 PCI/L
Sample date: Chemical: Dir:	14-NOV-17 URANIUM (PCI/L) 1.	Finding: Report units:	8.3 PCI/L
Sample date: Chemical: Dir:	14-NOV-17 URANIUM COUNTING ERROR 0.	Finding: Report units:	1.4 PCI/L
Sample date: Chemical: Dir:	14-NOV-17 GROSS ALPHA MDA95 0.	Finding: Report units:	2.1 PCI/L
Sample date: Chemical: Dir:	14-NOV-17 IRON 100.	Finding: Report units:	200. UG/L
Sample date: Chemical: Dir:	14-NOV-17 URANIUM MDA95 0.	Finding: Report units:	0.88 PCI/L
Sample date: Chemical: Dir:	17-OCT-17 RADIUM 226 COUNTING ERROR 0.	Finding: Report units:	8.3e-002 PCI/L
Sample date: Chemical: Dir:	17-OCT-17 RADIUM 228 COUNTING ERROR 0.	Finding: Report units:	0.644 PCI/L
Sample date: Chemical: Dir:	17-OCT-17 RADIUM 226 MDA95 0.	Finding: Report units:	0.322 PCI/L
Sample date: Chemical: Dir:	17-OCT-17 RADIUM 228 MDA95 0.	Finding: Report units:	0.506 PCI/L
Sample date: Chemical: Dir:	15-AUG-17 GROSS ALPHA 3.	Finding: Report units:	8.2 PCI/L
Sample date: Chemical: Dir:	15-AUG-17 GROSS ALPHA COUNTING ERROR 0.	Finding: Report units:	3.8 PCI/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	15-AUG-17	Finding:	5.
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dir:	1.		
Sample date:	15-AUG-17	Finding:	1.3
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	15-AUG-17	Finding:	2.9
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	15-AUG-17	Finding:	0.89
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	06-JUN-17	Finding:	0.363
Chemical:	RADIUM 226 MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	06-JUN-17	Finding:	230.
Chemical:	IRON	Report units:	UG/L
Dir:	100.		
Sample date:	06-JUN-17	Finding:	0.159
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	06-JUN-17	Finding:	0.291
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	06-JUN-17	Finding:	0.192
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	11-MAY-17	Finding:	2.8
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	11-MAY-17	Finding:	1.2
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	11-MAY-17	Finding:	6.9
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dir:	1.		
Sample date:	11-MAY-17	Finding:	3.1
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	11-MAY-17	Finding:	5.7
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		
Sample date:	11-MAY-17	Finding:	0.88
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	23-MAR-17	Finding:	0.11
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	23-MAR-17	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	23-MAR-17	Finding:	0.276
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	23-MAR-17	Finding:	0.363
Chemical:	RADIUM 226 MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	21-FEB-17	Finding:	160.
Chemical:	IRON	Report units:	UG/L
Dir:	100.		
Sample date:	16-FEB-17	Finding:	8.8
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		
Sample date:	16-FEB-17	Finding:	110.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-FEB-17	Finding:	350.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	16-FEB-17	Finding:	990.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	16-FEB-17	Finding:	20.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dir:	0.		
Sample date:	16-FEB-17	Finding:	3.6
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	16-FEB-17	Finding:	8.2
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dir:	1.		
Sample date:	16-FEB-17	Finding:	2.03
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	16-FEB-17	Finding:	1.43
Chemical:	LANGELIER INDEX AT SOURCE TEMP.	Report units:	Not Reported
Dir:	0.		
Sample date:	16-FEB-17	Finding:	1.3
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	16-FEB-17	Finding:	2.7
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	16-FEB-17	Finding:	0.88
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	16-FEB-17	Finding:	13.28
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	13-SEP-16	Finding:	1.2
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	13-SEP-16	Finding:	5.
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	13-SEP-16	Finding:	6.8
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dir:	1.		
Sample date:	13-SEP-16	Finding:	5.3
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	13-SEP-16	Finding:	9.6
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		
Sample date:	13-SEP-16	Finding:	0.88
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	26-JUL-16	Finding:	9.2e-002
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	26-JUL-16	Finding:	3.8e-002
Chemical:	RADIUM 226	Report units:	PCI/L
Dir:	1.		
Sample date:	26-JUL-16	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	26-JUL-16	Finding:	0.363
Chemical:	RADIUM 226 MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	26-JUL-16	Finding:	0.496
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	30-JUN-16	Finding:	3.9
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	30-JUN-16	Finding:	1.2
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	30-JUN-16	Finding:	4.9
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	30-JUN-16	Finding:	6.8
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dir:	1.		
Sample date:	30-JUN-16	Finding:	0.88
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	02-JUN-15	Finding:	0.533
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	02-JUN-15	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	02-JUN-15	Finding:	0.418
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0	Dir:	0.
Report units:	PCI/L		
Sample date:	02-JUN-15	Finding:	0.185
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.	Report units:	PCI/L
Dir:	0.		
Sample date:	02-JUN-15	Finding:	6.7e-002
Chemical:	RA-226 FOR CWS OR TOTAL RA FOR NTNC BY 903.0	Dir:	0.
Report units:	PCI/L		
Sample date:	12-MAY-15	Finding:	6.7
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dir:	1.		
Sample date:	12-MAY-15	Finding:	1.1
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	12-MAY-15	Finding:	0.88
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	21-APR-15	Finding:	8.
Chemical:	COLOR	Report units:	UNITS
Dir:	0.		
Sample date:	21-APR-15	Finding:	2.3
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	21-APR-15	Finding:	1000.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	21-APR-15	Finding:	7.2
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	21-APR-15	Finding:	370.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	21-APR-15	Finding:	450.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	21-APR-15	Finding:	480.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	21-APR-15	Finding:	110.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-APR-15	Finding:	50.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-APR-15	Finding:	44.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-APR-15	Finding:	2.4
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-APR-15	Finding:	41.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	21-APR-15	Finding:	170.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	21-APR-15	Finding:	0.18
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	21-APR-15	Finding:	2.5
Chemical:	ARSENIC	Report units:	UG/L
Dir:	2.		
Sample date:	21-APR-15	Finding:	980.
Chemical:	IRON	Report units:	UG/L
Dir:	100.		
Sample date:	21-APR-15	Finding:	6.9
Chemical:	LEAD	Report units:	UG/L
Dir:	5.		
Sample date:	21-APR-15	Finding:	43.
Chemical:	MANGANESE	Report units:	UG/L
Dir:	20.		
Sample date:	21-APR-15	Finding:	7.8
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	21-APR-15	Finding:	30.
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		
Sample date:	21-APR-15	Finding:	5.2
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	21-APR-15	Finding:	670.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	21-APR-15	Finding:	3.13
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	16-AUG-12	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	16-AUG-12	Finding:	7.1
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	16-AUG-12	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dir:	1.		
Sample date:	16-AUG-12	Finding:	20.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dir:	0.		
Sample date:	16-AUG-12	Finding:	370.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	450.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	470.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	100.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	53.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	44.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	12.47
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	16-AUG-12	Finding:	2.8
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	43.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	16-AUG-12	Finding:	170.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	16-AUG-12	Finding:	0.23
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	16-AUG-12	Finding:	34.
Chemical:	MANGANESE	Report units:	UG/L
Dir:	20.		
Sample date:	16-AUG-12	Finding:	4.63
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	16-AUG-12	Finding:	0.61
Chemical:	LANGELIER INDEX AT SOURCE TEMP.	Report units:	Not Reported
Dir:	0.		
Sample date:	16-AUG-12	Finding:	1.22
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	16-AUG-12	Finding:	710.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	1100.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	28-JUN-12	Finding:	710.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	28-JUN-12	Finding:	9.1
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	28-JUN-12	Finding:	35.
Chemical:	MANGANESE	Report units:	UG/L
Dir:	20.		
Sample date:	28-JUN-12	Finding:	240.
Chemical:	IRON	Report units:	UG/L
Dir:	100.		
Sample date:	28-JUN-12	Finding:	2.5
Chemical:	ARSENIC	Report units:	UG/L
Dir:	2.		
Sample date:	28-JUN-12	Finding:	0.25
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	28-JUN-12	Finding:	40.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	28-JUN-12	Finding:	2.6
Chemical:	POTASSIUM	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	28-JUN-12	Finding:	44.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	28-JUN-12	Finding:	49.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	28-JUN-12	Finding:	57.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	28-JUN-12	Finding:	340.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	28-JUN-12	Finding:	210.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	28-JUN-12	Finding:	170.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	28-JUN-12	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	28-JUN-12	Finding:	1100.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	28-JUN-12	Finding:	160.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	12-JUN-12	Finding:	690.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	1.08
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	12-JUN-12	Finding:	0.23
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	12-JUN-12	Finding:	170.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	12-JUN-12	Finding:	42.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	2.6
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	12-JUN-12	Finding:	49.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	48.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	110.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	470.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	460.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	380.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	7.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	12-JUN-12	Finding:	1100.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	12-JUN-12	Finding:	14.
Chemical:	COLOR	Report units:	UNITS
Dir:	0.		
Sample date:	12-JUN-12	Finding:	30.
Chemical:	MANGANESE	Report units:	UG/L
Dir:	20.		

G29
SW
1/4 - 1/2 Mile
Lower

CA WELLS CADWR8000016074

State Well #:	32S13E30N001M	Station ID:	37561
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

G30
SW
1/4 - 1/2 Mile
Lower

CA WELLS CADWR8000016075

State Well #:	32S13E30N002M	Station ID:	23514
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

G31
SW
 1/4 - 1/2 Mile
 Lower

CA WELLS CADWR8000016076

State Well #:	32S13E30N003M	Station ID:	23515
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

H32
NE
 1/4 - 1/2 Mile
 Higher

CA WELLS 18082

Seq:	18082	Prim sta c:	32S/13E-29E03 M
Frds no:	4010004004	County:	40
District:	06	User id:	TAP
System no:	4010004	Water type:	G
Source nam:	WELL 03	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	350700.0	Longitude:	1203700.0
Precision:	8	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4010004	System nam:	GROVER BEACH WATER DEPARTMENT
Hqname:	Not Reported	Address:	BOX 365
City:	GROVER BEACH	State:	CA
Zip:	93483	Zip ext:	Not Reported
Pop serv:	12720	Connection:	3950
Area serve:	GROVER CITY		

Sample date:	20-FEB-18	Finding:	9.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	17-OCT-17	Finding:	8.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	11-JUL-17	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	13-JUN-17	Finding:	7.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	13-JUN-17	Finding:	7.9
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	13-JUN-17	Finding:	11.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	13-JUN-17	Finding:	0.55
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	13-JUN-17	Finding:	370.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	13-JUN-17	Finding:	190.
Chemical:	IRON	Report units:	UG/L
Dir:	100.		
Sample date:	13-JUN-17	Finding:	0.12
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	13-JUN-17	Finding:	93.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	13-JUN-17	Finding:	38.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	13-JUN-17	Finding:	2.3
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-JUN-17	Finding:	36.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-JUN-17	Finding:	550.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	13-JUN-17	Finding:	7.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	13-JUN-17	Finding:	97.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	13-JUN-17	Finding:	120.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	13-JUN-17	Finding:	180.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	13-JUN-17	Finding:	39.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	13-JUN-17	Finding:	21.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	04-APR-17	Finding:	3.4
Chemical:	NITRATE (AS N)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.4		
Sample date:	15-FEB-17	Finding:	3.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	08-NOV-16	Finding:	8.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	09-AUG-16	Finding:	8.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	10-MAY-16	Finding:	9.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	02-FEB-16	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	01-DEC-15	Finding:	8.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	05-AUG-15	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-MAY-15	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-FEB-15	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	12-NOV-14	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-AUG-14	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-JUN-14	Finding:	620.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	10-JUN-14	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	10-JUN-14	Finding:	110.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUN-14	Finding:	140.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	10-JUN-14	Finding:	210.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUN-14	Finding:	46.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUN-14	Finding:	24.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUN-14	Finding:	40.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUN-14	Finding:	2.2
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUN-14	Finding:	42.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUN-14	Finding:	110.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	10-JUN-14	Finding:	0.11
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	10-JUN-14	Finding:	140.
Chemical:	IRON	Report units:	UG/L
Dir:	100.		
Sample date:	10-JUN-14	Finding:	400.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUN-14	Finding:	45.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	10-JUN-14	Finding:	0.36
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	10-JUN-14	Finding:	0.6
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dir:	0.		
Sample date:	10-JUN-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	21-MAY-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	21-MAY-14	Finding:	0.11
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	21-MAY-14	Finding:	25.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	48.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	140.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	120.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	21-MAY-14	Finding:	630.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	21-MAY-14	Finding:	220.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	14-MAY-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-FEB-14	Finding:	50.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-NOV-13	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-AUG-13	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	07-MAY-13	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	13-FEB-13	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-NOV-12	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	07-AUG-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	02-MAY-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	07-FEB-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

**H33
NE
1/4 - 1/2 Mile
Higher**

CA WELLS 18081

Seq:	18081	Prim sta c:	32S/13E-29E02 M
Frds no:	4010004003	County:	40
District:	06	User id:	TAP
System no:	4010004	Water type:	G
Source nam:	WELL 02	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	350700.0	Longitude:	1203700.0
Precision:	8	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4010004	System nam:	GROVER BEACH WATER DEPARTMENT
Hqname:	Not Reported	Address:	BOX 365
City:	GROVER BEACH	State:	CA
Zip:	93483	Zip ext:	Not Reported
Pop serv:	12720	Connection:	3950
Area serve:	GROVER CITY		
Sample date:	06-FEB-18	Finding:	8.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	11-OCT-17	Finding:	8.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	11-JUL-17	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	04-APR-17	Finding:	7.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-FEB-17	Finding:	7.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	02-NOV-16	Finding:	8.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	02-AUG-16	Finding:	8.2

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Chemical: Dir:	NITRATE (AS N) 0.4	Report units:	MG/L
Sample date: Chemical: Dir:	07-JUN-16 SPECIFIC CONDUCTANCE 0.	Finding: Report units:	620. US
Sample date: Chemical: Dir:	07-JUN-16 AGGRSSIVE INDEX (CORROSIVITY) 0.	Finding: Report units:	11. Not Reported
Sample date: Chemical: Dir:	07-JUN-16 TURBIDITY, LABORATORY 0.1	Finding: Report units:	1.2 NTU
Sample date: Chemical: Dir:	07-JUN-16 TOTAL DISSOLVED SOLIDS 0.	Finding: Report units:	370. MG/L
Sample date: Chemical: Dir:	07-JUN-16 IRON 100.	Finding: Report units:	300. UG/L
Sample date: Chemical: Dir:	07-JUN-16 FLUORIDE (F) (NATURAL-SOURCE) 0.1	Finding: Report units:	0.14 MG/L
Sample date: Chemical: Dir:	07-JUN-16 SULFATE 0.5	Finding: Report units:	100. MG/L
Sample date: Chemical: Dir:	07-JUN-16 CHLORIDE 0.	Finding: Report units:	43. MG/L
Sample date: Chemical: Dir:	07-JUN-16 SODIUM 0.	Finding: Report units:	39. MG/L
Sample date: Chemical: Dir:	07-JUN-16 MAGNESIUM 0.	Finding: Report units:	24. MG/L
Sample date: Chemical: Dir:	07-JUN-16 CALCIUM 0.	Finding: Report units:	43. MG/L
Sample date: Chemical: Dir:	07-JUN-16 HARDNESS (TOTAL) AS CaCO3 0.	Finding: Report units:	200. MG/L
Sample date: Chemical: Dir:	07-JUN-16 NITRATE (AS N) 0.4	Finding: Report units:	9.1 MG/L
Sample date: Chemical: Dir:	07-JUN-16 BICARBONATE ALKALINITY 0.	Finding: Report units:	130. MG/L
Sample date: Chemical: Dir:	07-JUN-16 ALKALINITY (TOTAL) AS CaCO3 0.	Finding: Report units:	110. MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	07-JUN-16	Finding:	7.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	07-JUN-16	Finding:	5.
Chemical:	COLOR	Report units:	UNITS
Dir:	0.		
Sample date:	04-MAY-16	Finding:	9.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	02-FEB-16	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	03-NOV-15	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	05-AUG-15	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-MAY-15	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-FEB-15	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-NOV-14	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-AUG-14	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	21-MAY-14	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	21-MAY-14	Finding:	140.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	630.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	21-MAY-14	Finding:	120.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	47.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	220.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	21-MAY-14	Finding:	26.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	21-MAY-14	Finding:	0.11
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	14-MAY-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-FEB-14	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	13-AUG-13	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-AUG-13	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	30-JUL-13	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	24-JUL-13	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	16-JUL-13	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	09-JUL-13	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	02-JUL-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	25-JUN-13	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	18-JUN-13	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dir:	1.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	11-JUN-13	Finding:	600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	11-JUN-13	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	11-JUN-13	Finding:	0.2
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	11-JUN-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	11-JUN-13	Finding:	8.2e-002
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	11-JUN-13	Finding:	400.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	11-JUN-13	Finding:	0.17
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	11-JUN-13	Finding:	97.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	11-JUN-13	Finding:	37.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	11-JUN-13	Finding:	2.1
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	11-JUN-13	Finding:	40.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	11-JUN-13	Finding:	24.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	11-JUN-13	Finding:	45.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	11-JUN-13	Finding:	210.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	11-JUN-13	Finding:	140.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	11-JUN-13	Finding:	120.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	11-JUN-13	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	04-JUN-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-MAY-13	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	07-MAY-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-FEB-13	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-NOV-12	Finding:	48.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-AUG-12	Finding:	39.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	06-AUG-12	Finding:	130.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	06-AUG-12	Finding:	590.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	06-AUG-12	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-AUG-12	Finding:	100.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	10-JUL-12	Finding:	600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	10-JUL-12	Finding:	120.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUL-12	Finding:	36.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUL-12	Finding:	91.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	10-JUL-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	19-JUN-12	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	12-JUN-12	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	12-JUN-12	Finding:	580.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	12-JUN-12	Finding:	37.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	130.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	93.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	02-MAY-12	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	07-FEB-12	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

**H34
NE
1/4 - 1/2 Mile
Higher**

CA WELLS 18080

Seq:	18080	Prim sta c:	32S/13E-29E01 M
Frds no:	4010004002	County:	40
District:	06	User id:	TAP
System no:	4010004	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	350700.0	Longitude:	1203700.0
Precision:	8	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4010004	System nam:	GROVER BEACH WATER DEPARTMENT
Hqname:	Not Reported	Address:	BOX 365
City:	GROVER BEACH	State:	CA
Zip:	93483	Zip ext:	Not Reported
Pop serv:	12720	Connection:	3950
Area serve:	GROVER CITY		
Sample date:	27-MAR-18	Finding:	8.1

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	20-MAR-18	Finding:	8.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	14-MAR-18	Finding:	8.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	06-MAR-18	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	27-FEB-18	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	20-FEB-18	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	13-FEB-18	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	06-FEB-18	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	23-JAN-18	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	16-JAN-18	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	09-JAN-18	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	02-JAN-18	Finding:	7.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	27-DEC-17	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	19-DEC-17	Finding:	8.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	14-DEC-17	Finding:	8.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	08-DEC-17	Finding:	7.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	06-DEC-17	Finding:	11.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	06-DEC-17	Finding:	8.4
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	06-DEC-17	Finding:	580.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	06-DEC-17	Finding:	7.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	06-DEC-17	Finding:	93.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	06-DEC-17	Finding:	110.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	06-DEC-17	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	06-DEC-17	Finding:	200.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	06-DEC-17	Finding:	43.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	06-DEC-17	Finding:	23.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	06-DEC-17	Finding:	48.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	06-DEC-17	Finding:	2.2
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	06-DEC-17	Finding:	42.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	06-DEC-17	Finding:	100.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	06-DEC-17	Finding:	0.19
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	06-DEC-17	Finding:	340.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	06-DEC-17	Finding:	0.14
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	28-NOV-17	Finding:	7.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	21-NOV-17	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	14-NOV-17	Finding:	8.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-NOV-17	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-OCT-17	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	24-OCT-17	Finding:	8.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	17-OCT-17	Finding:	8.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	11-OCT-17	Finding:	8.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	03-OCT-17	Finding:	9.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	26-SEP-17	Finding:	9.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	19-SEP-17	Finding:	8.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	12-SEP-17	Finding:	9.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	05-SEP-17	Finding:	9.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	29-AUG-17	Finding:	9.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	22-AUG-17	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	15-AUG-17	Finding:	8.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	08-AUG-17	Finding:	9.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	01-AUG-17	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	25-JUL-17	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	18-JUL-17	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	11-JUL-17	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	03-JUL-17	Finding:	7.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	27-JUN-17	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	21-JUN-17	Finding:	7.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	13-JUN-17	Finding:	7.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-JUN-17	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	30-MAY-17	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	24-MAY-17	Finding:	7.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	16-MAY-17	Finding:	9.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	09-MAY-17	Finding:	8.5
Chemical:	NITRATE (AS N)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.4		
Sample date:	02-MAY-17	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	25-APR-17	Finding:	8.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	18-APR-17	Finding:	7.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	11-APR-17	Finding:	8.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	04-APR-17	Finding:	8.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	28-MAR-17	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	21-MAR-17	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	14-MAR-17	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-MAR-17	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	28-FEB-17	Finding:	7.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	22-FEB-17	Finding:	7.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	15-FEB-17	Finding:	7.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-FEB-17	Finding:	7.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-JAN-17	Finding:	6.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	24-JAN-17	Finding:	7.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	18-JAN-17	Finding:	7.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	10-JAN-17	Finding:	7.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	05-JAN-17	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	28-DEC-16	Finding:	7.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	19-DEC-16	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	13-DEC-16	Finding:	7.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	06-DEC-16	Finding:	7.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	29-NOV-16	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	22-NOV-16	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	15-NOV-16	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	08-NOV-16	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	02-NOV-16	Finding:	8.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	25-OCT-16	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	18-OCT-16	Finding:	7.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	12-OCT-16	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	03-OCT-16	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.4		
Sample date:	27-SEP-16	Finding:	8.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	21-SEP-16	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	13-SEP-16	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	06-SEP-16	Finding:	8.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	23-AUG-16	Finding:	9.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	17-AUG-16	Finding:	8.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	09-AUG-16	Finding:	7.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	02-AUG-16	Finding:	7.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	26-JUL-16	Finding:	8.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	19-JUL-16	Finding:	8.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	12-JUL-16	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-JUL-16	Finding:	9.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	28-JUN-16	Finding:	8.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	21-JUN-16	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	14-JUN-16	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	07-JUN-16	Finding:	8.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-MAY-16	Finding:	8.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	24-MAY-16	Finding:	8.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	17-MAY-16	Finding:	9.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	10-MAY-16	Finding:	9.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	27-APR-16	Finding:	9.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	19-APR-16	Finding:	9.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	12-APR-16	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	06-APR-16	Finding:	9.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	30-MAR-16	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	22-MAR-16	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	15-MAR-16	Finding:	7.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	09-MAR-16	Finding:	8.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	01-MAR-16	Finding:	9.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	23-FEB-16	Finding:	9.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	17-FEB-16	Finding:	9.9
Chemical:	NITRATE (AS N)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.4		
Sample date:	09-FEB-16	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	16-DEC-15	Finding:	9.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	08-DEC-15	Finding:	9.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	01-DEC-15	Finding:	8.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	24-NOV-15	Finding:	8.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	17-NOV-15	Finding:	8.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	10-NOV-15	Finding:	8.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	03-NOV-15	Finding:	8.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	27-OCT-15	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	20-OCT-15	Finding:	8.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	13-OCT-15	Finding:	8.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	06-OCT-15	Finding:	10.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	29-SEP-15	Finding:	9.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	22-SEP-15	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	15-SEP-15	Finding:	8.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	08-SEP-15	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	01-SEP-15	Finding:	9.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	25-AUG-15	Finding:	8.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	18-AUG-15	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	11-AUG-15	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-AUG-15	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	28-JUL-15	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	22-JUL-15	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	14-JUL-15	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	07-JUL-15	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	30-JUN-15	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-JUN-15	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	02-JUN-15	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	27-MAY-15	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	19-MAY-15	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	12-MAY-15	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	2.		
Sample date:	06-MAY-15	Finding:	3.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	28-APR-15	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	21-APR-15	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	14-APR-15	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	07-APR-15	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	31-MAR-15	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	24-MAR-15	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	17-MAR-15	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	09-MAR-15	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-MAR-15	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	24-FEB-15	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	18-FEB-15	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-FEB-15	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-FEB-15	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	27-JAN-15	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	20-JAN-15	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	13-JAN-15	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-JAN-15	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	30-DEC-14	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-DEC-14	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	09-DEC-14	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	09-DEC-14	Finding:	5.
Chemical:	COLOR	Report units:	UNITS
Dir:	0.		
Sample date:	09-DEC-14	Finding:	580.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	09-DEC-14	Finding:	7.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	09-DEC-14	Finding:	89.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	09-DEC-14	Finding:	110.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	09-DEC-14	Finding:	200.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	09-DEC-14	Finding:	45.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	09-DEC-14	Finding:	21.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	09-DEC-14	Finding:	45.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	09-DEC-14	Finding:	2.3
Chemical:	POTASSIUM	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	09-DEC-14	Finding:	41.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	09-DEC-14	Finding:	96.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	09-DEC-14	Finding:	0.18
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	09-DEC-14	Finding:	380.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	09-DEC-14	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	09-DEC-14	Finding:	11.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	02-DEC-14	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	25-NOV-14	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	19-NOV-14	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	12-NOV-14	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-NOV-14	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	30-OCT-14	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	21-OCT-14	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	14-OCT-14	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	07-OCT-14	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	30-SEP-14	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-SEP-14	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	18-SEP-14	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-SEP-14	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	15-JUL-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	08-JUL-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	01-JUL-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	24-JUN-14	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	17-JUN-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-JUN-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-JUN-14	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	28-MAY-14	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	21-MAY-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	21-MAY-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	21-MAY-14	Finding:	22.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	210.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	21-MAY-14	Finding:	120.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	97.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	21-MAY-14	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	21-MAY-14	Finding:	600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	21-MAY-14	Finding:	46.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-MAY-14	Finding:	42.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	08-MAY-14	Finding:	43.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	29-APR-14	Finding:	43.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	22-APR-14	Finding:	44.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	15-APR-14	Finding:	42.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	08-APR-14	Finding:	44.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	01-APR-14	Finding:	43.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	25-MAR-14	Finding:	42.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	18-MAR-14	Finding:	43.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	11-MAR-14	Finding:	44.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	05-MAR-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	19-FEB-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	11-FEB-14	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-FEB-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	28-JAN-14	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-JAN-14	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	14-JAN-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	07-JAN-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	31-DEC-13	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-DEC-13	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	17-DEC-13	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-DEC-13	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	04-DEC-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	26-NOV-13	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	19-NOV-13	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	12-NOV-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	2.		
Sample date:	05-NOV-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	29-OCT-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	22-OCT-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	15-OCT-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	08-OCT-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	01-OCT-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	24-SEP-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	18-SEP-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-SEP-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	04-SEP-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	27-AUG-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	20-AUG-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	13-AUG-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-AUG-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	30-JUL-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	24-JUL-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	16-JUL-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	09-JUL-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	02-JUL-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	25-JUN-13	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	18-JUN-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	11-JUN-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	04-JUN-13	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	28-MAY-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	21-MAY-13	Finding:	36.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	14-MAY-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	07-MAY-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	30-APR-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-APR-13	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	16-APR-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	09-APR-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	2.		
Sample date:	02-APR-13	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	26-MAR-13	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	19-MAR-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	12-MAR-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-MAR-13	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	26-FEB-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	20-FEB-13	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	13-FEB-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-FEB-13	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	29-JAN-13	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-JAN-13	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	15-JAN-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	09-JAN-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	02-JAN-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	26-DEC-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	18-DEC-12	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	11-DEC-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-DEC-12	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	27-NOV-12	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	19-NOV-12	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	13-NOV-12	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-NOV-12	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	30-OCT-12	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-OCT-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	16-OCT-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	09-OCT-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-OCT-12	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	25-SEP-12	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	18-SEP-12	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	11-SEP-12	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-SEP-12	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	2.		
Sample date:	28-AUG-12	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	21-AUG-12	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	14-AUG-12	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-AUG-12	Finding:	42.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	06-AUG-12	Finding:	120.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	06-AUG-12	Finding:	590.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	06-AUG-12	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-AUG-12	Finding:	110.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	31-JUL-12	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	24-JUL-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	17-JUL-12	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-JUL-12	Finding:	39.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUL-12	Finding:	120.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	10-JUL-12	Finding:	600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	10-JUL-12	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	10-JUL-12	Finding:	96.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	05-JUL-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	26-JUN-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	19-JUN-12	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	12-JUN-12	Finding:	1.09
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	0.156
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	96.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	12-JUN-12	Finding:	39.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	120.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	580.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	12-JUN-12	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	05-JUN-12	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	29-MAY-12	Finding:	36.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-MAY-12	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	16-MAY-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	08-MAY-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	2.		
Sample date:	02-MAY-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	23-APR-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	17-APR-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-APR-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-APR-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	27-MAR-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	20-MAR-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	13-MAR-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-MAR-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	28-FEB-12	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	21-FEB-12	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	14-FEB-12	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	07-FEB-12	Finding:	42.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	31-JAN-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	24-JAN-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	19-JAN-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	10-JAN-12	Finding:	36.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-JAN-12	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

**H35
NE
1/4 - 1/2 Mile
Higher**

CA WELLS 18091

Seq:	18091	Prim sta c:	32S/13E-30K04 M
Frds no:	4010008001	County:	40
District:	06	User id:	TAP
System no:	4010008	Water type:	G
Source nam:	WELL 01 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	350700.0	Longitude:	1203700.0
Precision:	8	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4010008	System nam:	PISMO BEACH WATER DEPARTMENT
Hqname:	Not Reported	Address:	PO BOX 3
City:	PISMO BEACH	State:	CA
Zip:	93449	Zip ext:	Not Reported
Pop serv:	8294	Connection:	4179
Area serve:	PISMO BEACH		

**H36
NE
1/4 - 1/2 Mile
Higher**

CA WELLS 18094

Seq:	18094	Prim sta c:	32S/13E-30K16 M
Frds no:	4010008004	County:	40
District:	06	User id:	TAP
System no:	4010008	Water type:	G
Source nam:	WELL 04 - AGRICULTURAL	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	350700.0	Longitude:	1203700.0
Precision:	8	Status:	AG
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4010008	System nam:	PISMO BEACH WATER DEPARTMENT
Hqname:	Not Reported	Address:	PO BOX 3
City:	PISMO BEACH	State:	CA
Zip:	93449	Zip ext:	Not Reported
Pop serv:	8294	Connection:	4179
Area serve:	PISMO BEACH		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H37
NE
1/4 - 1/2 Mile
Higher

CA WELLS 18093

Seq:	18093	Prim sta c:	32S/13E-30K06 M
Frds no:	4010008003	County:	40
District:	06	User id:	TAP
System no:	4010008	Water type:	G
Source nam:	WELL 03 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	350700.0	Longitude:	1203700.0
Precision:	8	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4010008	System nam:	PISMO BEACH WATER DEPARTMENT
Hqname:	Not Reported	Address:	PO BOX 3
City:	PISMO BEACH	State:	CA
Zip:	93449	Zip ext:	Not Reported
Pop serv:	8294	Connection:	4179
Area serve:	PISMO BEACH		

H38
NE
1/4 - 1/2 Mile
Higher

CA WELLS 18092

Seq:	18092	Prim sta c:	32S/13E-30K05 M
Frds no:	4010008002	County:	40
District:	06	User id:	TAP
System no:	4010008	Water type:	G
Source nam:	WELL 02 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	350700.0	Longitude:	1203700.0
Precision:	8	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4010008	System nam:	PISMO BEACH WATER DEPARTMENT
Hqname:	Not Reported	Address:	PO BOX 3
City:	PISMO BEACH	State:	CA
Zip:	93449	Zip ext:	Not Reported
Pop serv:	8294	Connection:	4179
Area serve:	PISMO BEACH		

I39
East
1/2 - 1 Mile
Higher

CA WELLS CADWR8000016135

State Well #:	32S13E29M004M	Station ID:	39717
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

I40
East
1/2 - 1 Mile
Higher

FED USGS USGS40000160664

Organization ID:	USGS-CA				
Organization Name:	USGS California Water Science Center				
Monitor Location:	032S013E29M004M	Type:	Well		
Description:	Not Reported	HUC:	18060006		
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported		
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported		
Aquifer:	California Coastal Basin aquifers				
Formation Type:	Not Reported	Aquifer Type:	Not Reported		
Construction Date:	1971	Well Depth:	88		
Well Depth Units:	ft	Well Hole Depth:	Not Reported		
Well Hole Depth Units:	Not Reported				

Ground water levels, Number of Measurements:	38	Level reading date:	1980-05-06
Feet below surface:	44.1	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1979-10-31	Feet below surface:	46.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1979-04-11	Feet below surface:	45.9
Feet to sea level:	Not Reported	Note:	The site was being pumped.

Level reading date:	1978-12-04	Feet below surface:	44.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1978-05-02	Feet below surface:	43.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-10-19	Feet below surface:	50.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-08-18	Feet below surface:	50.8
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-04-18	Feet below surface:	50.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-09-30	Feet below surface:	49.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-07-19	Feet below surface:	51.4
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-04-20	Feet below surface:	47.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1975-09-24	Feet below surface:	47.9
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1975-07-29	Feet below surface:	47.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1975-05-05	Feet below surface:	45.5
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-04-04	Feet below surface:	44.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-02	Feet below surface:	43.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-07	Feet below surface:	48.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-08	Feet below surface:	46.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-17	Feet below surface:	46.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-07	Feet below surface:	43.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-22	Feet below surface:	41.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-12-24	Feet below surface:	43.5
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.
Level reading date:	1973-11-05	Feet below surface:	49.1
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1973-09-12	Feet below surface:	46.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-07	Feet below surface:	50.5
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1973-07-13	Feet below surface:	46.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	46.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-03	Feet below surface:	43.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-19	Feet below surface:	48.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-07-26	Feet below surface:	50.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-16	Feet below surface:	49.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-27	Feet below surface:	47.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-03	Feet below surface:	49.3
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-02-28	Feet below surface:	44.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-10-25	Feet below surface:	47.4
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1971-08-23	Feet below surface:	50.5
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1971-07-14	Feet below surface:	47.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-03	Feet below surface:	47.0
Feet to sea level:	Not Reported	Note:	Not Reported

J41
South
1/2 - 1 Mile
Lower

CA WELLS CADWR8000016036

State Well #:	32S13E31G001M	Station ID:	37563
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

J42
SSE
1/2 - 1 Mile
Lower

FED USGS USGS40000160567

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18060006
Monitor Location:	032S013E31G001M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	30
Aquifer:	California Coastal Basin aquifers	Well Hole Depth:	Not Reported
Formation Type:	Not Reported		
Construction Date:	19510721		
Well Depth Units:	ft		
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	30	Level reading date:	1979-10-30
Feet below surface:	4.45	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1979-05-06	Feet below surface:	3.82
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1979-04-11	Feet below surface:	3.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1978-12-04	Feet below surface:	3.33
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1978-05-01	Feet below surface:	2.7
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-10-19	Feet below surface:	6.0
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-08-18	Feet below surface:	6.0
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1977-04-15	Feet below surface:	4.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-30	Feet below surface:	3.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	4.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-29	Feet below surface:	4.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-06	Feet below surface:	3.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-08	Feet below surface:	3.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	3.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-07	Feet below surface:	4.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-10	Feet below surface:	3.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-20	Feet below surface:	5.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-28	Feet below surface:	4.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-10-28	Feet below surface:	4.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-04-23	Feet below surface:	3.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-10-20	Feet below surface:	5.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-04-02	Feet below surface:	4.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-04-08	Feet below surface:	3.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-10-03	Feet below surface:	8.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-16	Feet below surface:	5.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-11-16	Feet below surface:	6.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-10-19	Feet below surface:	8.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-04-11	Feet below surface:	6.2
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1965-10-07	Feet below surface:	8.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-04-16	Feet below surface:	5.2
Feet to sea level:	Not Reported	Note:	Not Reported

**K43
ENE
1/2 - 1 Mile
Higher**

FED USGS USGS40000160713

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18060006
Monitor Location:	032S013E29E002M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Drainage Area:	Not Reported	Aquifer:	California Coastal Basin aquifers
Contrib Drainage Area:	Not Reported	Formation Type:	Not Reported
Aquifer:	California Coastal Basin aquifers	Construction Date:	19510101
Formation Type:	Not Reported	Well Depth Units:	ft
Construction Date:	19510101	Well Hole Depth Units:	Not Reported
Well Depth Units:	ft		
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	35	Level reading date:	1980-05-06
Feet below surface:	44.3	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-10-31	Feet below surface:	47.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-12	Feet below surface:	43.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-01-09	Feet below surface:	44.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-09-30	Feet below surface:	49.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-08	Feet below surface:	43.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-19	Feet below surface:	56.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-18	Feet below surface:	49.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-17	Feet below surface:	51.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-19	Feet below surface:	51.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	47.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-25	Feet below surface:	47.4
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-07-29	Feet below surface:	47.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-05	Feet below surface:	45.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-04	Feet below surface:	45.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-02	Feet below surface:	43.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-07	Feet below surface:	46.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-08	Feet below surface:	46.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-17	Feet below surface:	46.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	43.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-24	Feet below surface:	42.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-12-24	Feet below surface:	43.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-05	Feet below surface:	66.2
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1973-07-13	Feet below surface:	46.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	45.0
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.
Level reading date:	1973-04-03	Feet below surface:	67.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-10-19	Feet below surface:	48.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-07-26	Feet below surface:	50.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-16	Feet below surface:	77.3
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-04-27	Feet below surface:	46.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-03	Feet below surface:	49.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-28	Feet below surface:	44.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-10-25	Feet below surface:	47.3
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1971-08-23	Feet below surface:	42.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-02	Feet below surface:	46.2
Feet to sea level:	Not Reported	Note:	Not Reported

**K44
ENE
1/2 - 1 Mile
Higher**

FED USGS USGS40000160702

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E29E007M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19781025	Well Depth:	547
Well Depth Units:	ft	Well Hole Depth:	610
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	4	Level reading date:	1980-05-06
Feet below surface:	47.3	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1979-10-31	Feet below surface:	50.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1979-04-11	Feet below surface:	45.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1978-10-31	Feet below surface:	47.0
Feet to sea level:	Not Reported	Note:	Not Reported

**45
North
1/2 - 1 Mile
Higher**

FED USGS USGS40000160766

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E19Q002M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19730329	Well Depth:	500
Well Depth Units:	ft	Well Hole Depth:	574
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	28	Level reading date:	1980-05-06
Feet below surface:	47.2	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1979-10-31	Feet below surface:	53.7
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-12	Feet below surface:	45.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-01-09	Feet below surface:	52.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-02	Feet below surface:	45.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-19	Feet below surface:	50.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-19	Feet below surface:	50.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-18	Feet below surface:	48.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-12	Feet below surface:	48.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-27	Feet below surface:	49.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-17	Feet below surface:	51.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-19	Feet below surface:	52.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	218.4
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1975-09-25	Feet below surface:	119.2
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1975-07-29	Feet below surface:	48.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-05	Feet below surface:	46.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-04	Feet below surface:	46.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-02	Feet below surface:	45.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-07	Feet below surface:	46.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-08	Feet below surface:	47.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-17	Feet below surface:	50.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	39.9
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1974-02-22	Feet below surface:	44.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-12-24	Feet below surface:	45.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-05	Feet below surface:	47.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	47.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-06	Feet below surface:	47.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-13	Feet below surface:	47.5
Feet to sea level:	Not Reported	Note:	Not Reported

**L46
ESE
1/2 - 1 Mile
Higher**

CA WELLS CADWR8000016062

State Well #:	32S13E32D011M	Station ID:	37565
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

**L47
ESE
1/2 - 1 Mile
Higher**

FED USGS USGS40000160594

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18060006
Monitor Location:	032S013E32D003M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	200
Aquifer:	California Coastal Basin aquifers	Well Hole Depth:	Not Reported
Formation Type:	Not Reported		
Construction Date:	19520515		
Well Depth Units:	ft		
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	54	Level reading date:	1980-04-16
Feet below surface:	73.6	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-10-20	Feet below surface:	74.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-11-13	Feet below surface:	73.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-02	Feet below surface:	72.1
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1977-10-20	Feet below surface:	78.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-06	Feet below surface:	77.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-07	Feet below surface:	78.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-08	Feet below surface:	76.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-08	Feet below surface:	74.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-01	Feet below surface:	73.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-02-02	Feet below surface:	74.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-12-04	Feet below surface:	74.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-11-10	Feet below surface:	74.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-06	Feet below surface:	75.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-02	Feet below surface:	77.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-07	Feet below surface:	71.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-02-07	Feet below surface:	70.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-12-12	Feet below surface:	72.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11	Feet below surface:	72.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10	Feet below surface:	73.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-09	Feet below surface:	75.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-08	Feet below surface:	74.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-06-07	Feet below surface:	73.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	71.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-04-09	Feet below surface:	69.9
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1974-03-09	Feet below surface:	69.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-11	Feet below surface:	70.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-11	Feet below surface:	70.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-12-07	Feet below surface:	71.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-18	Feet below surface:	72.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-10-11	Feet below surface:	73.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-14	Feet below surface:	74.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-09	Feet below surface:	75.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-06-11	Feet below surface:	73.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-14	Feet below surface:	72.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-04	Feet below surface:	72.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-03-06	Feet below surface:	70.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-01-02	Feet below surface:	72.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-11-10	Feet below surface:	74.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-02	Feet below surface:	77.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-08-11	Feet below surface:	79.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-07-11	Feet below surface:	78.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-04	Feet below surface:	93.8
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-05-29	Feet below surface:	75.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-28	Feet below surface:	75.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-28	Feet below surface:	72.2
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1972-01-04	Feet below surface:	71.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-08	Feet below surface:	74.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-09-07	Feet below surface:	75.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-06	Feet below surface:	75.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-07-03	Feet below surface:	79.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-16	Feet below surface:	74.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-05-25	Feet below surface:	75.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-05-15	Feet below surface:	75.00
Feet to sea level:	Not Reported	Note:	Not Reported

48
ESE
1/2 - 1 Mile
Higher

FED USGS USGS40000160593

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18060006
Monitor Location:	032S013E32D011M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	606.85
Aquifer:	California Coastal Basin aquifers	Well Hole Depth:	668
Formation Type:	Not Reported		
Construction Date:	19791024		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	3	Level reading date:	1980-04-16
Feet below surface:	73.7	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-11-20	Feet below surface:	78.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-11-09	Feet below surface:	75.70
Feet to sea level:	Not Reported	Note:	Not Reported

M49
SSE
1/2 - 1 Mile
Lower

CA WELLS 18099

Seq:	18099	Prim sta c:	32S/13E-32D02 M
Frds no:	4010005001	County:	40
District:	06	User id:	TAP

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System no:	4010005	Water type:	G
Source nam:	WELL 03 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	350600.0	Longitude:	1203700.0
Precision:	4	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4010005	System nam:	OCEANO COMM SERVICES DIST.
Hqname:	Not Reported	Address:	1655 FRONT ST.
City:	OCEANO	State:	CA
Zip:	93445	Zip ext:	Not Reported
Pop serv:	6700	Connection:	1776
Area serve:	OCEANO		

**M50
SSE
1/2 - 1 Mile
Lower**

CA WELLS 18100

Seq:	18100	Prim sta c:	32S/13E-32D03 M
Frds no:	4010005002	County:	40
District:	06	User id:	TAP
System no:	4010005	Water type:	G
Source nam:	WELL 04	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	350600.0	Longitude:	1203700.0
Precision:	4	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4010005	System nam:	OCEANO COMM SERVICES DIST.
Hqname:	Not Reported	Address:	1655 FRONT ST.
City:	OCEANO	State:	CA
Zip:	93445	Zip ext:	Not Reported
Pop serv:	6700	Connection:	1776
Area serve:	OCEANO		

Sample date:	11-JAN-18	Finding:	2.1
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		

Sample date:	11-JAN-18	Finding:	4.5
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		

Sample date:	11-JAN-18	Finding:	4.4
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		

Sample date:	05-DEC-17	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	11-APR-17	Finding:	12.14
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		

Sample date:	11-APR-17	Finding:	20.
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Chemical: Dir:	SOURCE TEMPERATURE C 0.	Report units:	C
Sample date: Chemical: Dir:	11-APR-17 CALCIUM 0.	Finding: Report units:	100. MG/L
Sample date: Chemical: Dir:	11-APR-17 LANGELIER INDEX AT SOURCE TEMP. 0.	Finding: Report units:	0.29 Not Reported
Sample date: Chemical: Dir:	11-APR-17 LANGELIER INDEX @ 60 C 0.	Finding: Report units:	0.9 Not Reported
Sample date: Chemical: Dir:	11-APR-17 SPECIFIC CONDUCTANCE 0.	Finding: Report units:	960. US
Sample date: Chemical: Dir:	11-APR-17 ALKALINITY (TOTAL) AS CaCO3 0.	Finding: Report units:	250. MG/L
Sample date: Chemical: Dir:	11-APR-17 PH, LABORATORY 0.	Finding: Report units:	7.3 Not Reported
Sample date: Chemical: Dir:	13-DEC-16 NITRATE (AS N) 0.4	Finding: Report units:	6. MG/L
Sample date: Chemical: Dir:	04-OCT-16 SELENIUM 5.	Finding: Report units:	52. UG/L
Sample date: Chemical: Dir:	06-SEP-16 NITRATE (AS N) 0.4	Finding: Report units:	7.1 MG/L
Sample date: Chemical: Dir:	02-AUG-16 TURBIDITY, LABORATORY 0.1	Finding: Report units:	0.13 NTU
Sample date: Chemical: Dir:	02-AUG-16 NITRATE + NITRITE (AS N) 0.4	Finding: Report units:	7.1 MG/L
Sample date: Chemical: Dir:	02-AUG-16 TOTAL DISSOLVED SOLIDS 0.	Finding: Report units:	600. MG/L
Sample date: Chemical: Dir:	02-AUG-16 VANADIUM 3.	Finding: Report units:	3.9 UG/L
Sample date: Chemical: Dir:	02-AUG-16 MANGANESE 20.	Finding: Report units:	54. UG/L
Sample date: Chemical: Dir:	02-AUG-16 LEAD 5.	Finding: Report units:	6.5 UG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	02-AUG-16	Finding:	89.
Chemical:	COPPER	Report units:	UG/L
Dir:	50.		
Sample date:	02-AUG-16	Finding:	1.4
Chemical:	CADMIUM	Report units:	UG/L
Dir:	1.		
Sample date:	02-AUG-16	Finding:	120.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	02-AUG-16	Finding:	180.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	02-AUG-16	Finding:	44.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	02-AUG-16	Finding:	2.5
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	02-AUG-16	Finding:	38.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	02-AUG-16	Finding:	42.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	02-AUG-16	Finding:	95.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	02-AUG-16	Finding:	410.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	02-AUG-16	Finding:	7.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	02-AUG-16	Finding:	310.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	02-AUG-16	Finding:	250.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	02-AUG-16	Finding:	7.4
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	02-AUG-16	Finding:	960.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	02-AUG-16	Finding:	0.32
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.1		
Sample date:	07-JUN-16	Finding:	7.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	01-MAR-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	01-DEC-15	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	01-DEC-15	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	01-DEC-15	Finding:	57.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	03-NOV-15	Finding:	52.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	01-SEP-15	Finding:	27.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	04-AUG-15	Finding:	57.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	02-JUN-15	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-MAR-15	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-JAN-15	Finding:	60.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	09-DEC-14	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	02-DEC-14	Finding:	69.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	07-OCT-14	Finding:	73.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	09-SEP-14	Finding:	25.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	02-SEP-14	Finding:	74.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	05-AUG-14	Finding:	65.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	01-JUL-14	Finding:	70.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	03-JUN-14	Finding:	27.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-JUN-14	Finding:	79.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	06-MAY-14	Finding:	72.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	01-APR-14	Finding:	90.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	04-MAR-14	Finding:	90.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	04-MAR-14	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	06-FEB-14	Finding:	76.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	02-JAN-14	Finding:	83.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	03-DEC-13	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	03-DEC-13	Finding:	89.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	05-NOV-13	Finding:	76.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	01-OCT-13	Finding:	75.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	10-SEP-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	2.		
Sample date:	03-SEP-13	Finding:	78.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	08-AUG-13	Finding:	83.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	02-JUL-13	Finding:	75.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	04-JUN-13	Finding:	81.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	14-MAY-13	Finding:	88.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	23-APR-13	Finding:	87.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	16-AUG-12	Finding:	12.44
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	16-AUG-12	Finding:	1.19
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	16-AUG-12	Finding:	770.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	0.39
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	16-AUG-12	Finding:	210.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	16-AUG-12	Finding:	49.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	2.7
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	38.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	47.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	16-AUG-12	Finding:	120.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	490.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	350.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	290.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	16-AUG-12	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	16-AUG-12	Finding:	1100.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	16-AUG-12	Finding:	20.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dir:	0.		
Sample date:	16-AUG-12	Finding:	0.58
Chemical:	LANGELIER INDEX AT SOURCE TEMP.	Report units:	Not Reported
Dir:	0.		

**M51
SSE
1/2 - 1 Mile
Lower**

CA WELLS 18101

Seq:	18101	Prim sta c:	32S/13E-32D10 M
Frds no:	4010005003	County:	40
District:	06	User id:	TAP
System no:	4010005	Water type:	G
Source nam:	WELL 05	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	350600.0	Longitude:	1203700.0
Precision:	4	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4010005	System nam:	OCEANO COMM SERVICES DIST.
Hqname:	Not Reported	Address:	1655 FRONT ST.
City:	OCEANO	State:	CA
Zip:	93445	Zip ext:	Not Reported
Pop serv:	6700	Connection:	1776
Area serve:	OCEANO		
Sample date:	28-JUN-12	Finding:	230.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	28-JUN-12	Finding:	200.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Chemical: Dir:	ALKALINITY (TOTAL) AS CaCO ₃ 0.	Report units:	MG/L
Sample date: Chemical: Dir:	28-JUN-12 PH, LABORATORY 0.	Finding: Report units:	8.4 Not Reported
Sample date: Chemical: Dir:	28-JUN-12 SPECIFIC CONDUCTANCE 0.	Finding: Report units:	640. US
Sample date: Chemical: Dir:	28-JUN-12 FLUORIDE (F) (NATURAL-SOURCE) 0.1	Finding: Report units:	0.15 MG/L
Sample date: Chemical: Dir:	28-JUN-12 SULFATE 0.5	Finding: Report units:	84. MG/L
Sample date: Chemical: Dir:	28-JUN-12 CALCIUM 0.	Finding: Report units:	56. MG/L
Sample date: Chemical: Dir:	28-JUN-12 MAGNESIUM 0.	Finding: Report units:	30. MG/L
Sample date: Chemical: Dir:	28-JUN-12 SODIUM 0.	Finding: Report units:	36. MG/L
Sample date: Chemical: Dir:	28-JUN-12 POTASSIUM 0.	Finding: Report units:	3.3 MG/L
Sample date: Chemical: Dir:	28-JUN-12 HARDNESS (TOTAL) AS CaCO ₃ 0.	Finding: Report units:	260. MG/L
Sample date: Chemical: Dir:	28-JUN-12 TOTAL DISSOLVED SOLIDS 0.	Finding: Report units:	390. MG/L
Sample date: Chemical: Dir:	12-JUN-12 TOTAL DISSOLVED SOLIDS 0.	Finding: Report units:	730. MG/L
Sample date: Chemical: Dir:	12-JUN-12 NITRATE (AS NO ₃) 2.	Finding: Report units:	22. MG/L
Sample date: Chemical: Dir:	12-JUN-12 TURBIDITY, LABORATORY 0.1	Finding: Report units:	0.35 NTU
Sample date: Chemical: Dir:	12-JUN-12 MANGANESE 20.	Finding: Report units:	22. UG/L
Sample date: Chemical: Dir:	12-JUN-12 FLUORIDE (F) (NATURAL-SOURCE) 0.1	Finding: Report units:	0.33 MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	12-JUN-12	Finding:	48.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	2.8
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	46.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	52.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	110.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	500.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	350.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	290.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	12-JUN-12	Finding:	7.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	12-JUN-12	Finding:	1000.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	12-JUN-12	Finding:	8.
Chemical:	COLOR	Report units:	UNITS
Dir:	0.		
Sample date:	12-JUN-12	Finding:	210.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		

**N52
ESE
1/2 - 1 Mile
Higher**

CA WELLS CADWR8000016079

State Well #:	32S13E29N001M	Station ID:	23506
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

N53
ESE
1/2 - 1 Mile
Higher

FED USGS USGS40000160607

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E29N001M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19500101	Well Depth:	125
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels, Number of Measurements:	83	Level reading date:	1982-04-26
Feet below surface:	69.4	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1981-10-15	Feet below surface:	72.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1980-05-06	Feet below surface:	69.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1980-02-26	Feet below surface:	64.84
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1979-10-30	Feet below surface:	71.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1979-04-11	Feet below surface:	68.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1978-12-04	Feet below surface:	69.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1978-05-02	Feet below surface:	67.9
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-04-18	Feet below surface:	74.0
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-09-30	Feet below surface:	73.5
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-07-19	Feet below surface:	83.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.

Level reading date:	1976-04-20	Feet below surface:	72.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1975-09-25	Feet below surface:	73.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1975-07-29	Feet below surface:	73.6
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-05-05	Feet below surface:	82.9
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1975-04-04	Feet below surface:	83.2
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1975-01-02	Feet below surface:	69.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-07	Feet below surface:	71.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-09	Feet below surface:	71.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-18	Feet below surface:	75.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	68.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-25	Feet below surface:	68.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-05	Feet below surface:	70.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	0.00
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1973-04-03	Feet below surface:	68.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-20	Feet below surface:	73.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-07-26	Feet below surface:	86.6
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-06-16	Feet below surface:	75.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-04-28	Feet below surface:	72.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-01-28	Feet below surface:	74.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-10-07	Feet below surface:	78.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-07-22	Feet below surface:	78.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-06-18	Feet below surface:	76.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-03-20	Feet below surface:	76.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-01-11	Feet below surface:	76.2
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1968-12-07	Feet below surface:	76.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-11-07	Feet below surface:	81.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-10-03	Feet below surface:	84.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-09-11	Feet below surface:	91.7
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1968-08-05	Feet below surface:	82.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-07-02	Feet below surface:	94.3
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1968-06-12	Feet below surface:	94.1
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1968-05-16	Feet below surface:	76.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-25	Feet below surface:	89.1
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1968-03-12	Feet below surface:	88.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1968-02-19	Feet below surface:	75.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-01-08	Feet below surface:	75.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-12-21	Feet below surface:	74.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-10-04	Feet below surface:	76.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-08-09	Feet below surface:	81.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-07-05	Feet below surface:	76.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-04-26	Feet below surface:	80.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1967-03-03	Feet below surface:	76.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-09-15	Feet below surface:	82.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-09-08	Feet below surface:	81.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-08-10	Feet below surface:	100.6
Feet to sea level:	Not Reported	Note:	The site was being pumped.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1966-07-12	Feet below surface:	79.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-05-17	Feet below surface:	76.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-04-12	Feet below surface:	75.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-03-10	Feet below surface:	73.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-02-17	Feet below surface:	73.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-01-17	Feet below surface:	74.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-12-13	Feet below surface:	76.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-11-10	Feet below surface:	103.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-10-13	Feet below surface:	80.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-09-01	Feet below surface:	78.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-08-05	Feet below surface:	77.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-07-07	Feet below surface:	75.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-04-30	Feet below surface:	81.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-04-16	Feet below surface:	80.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-10-14	Feet below surface:	72.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-04-07	Feet below surface:	73.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-09-26	Feet below surface:	85.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-04-05	Feet below surface:	72.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-10-10	Feet below surface:	83.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-04-10	Feet below surface:	74.8
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1961-11-09	Feet below surface:	79.7
Feet to sea level:	Not Reported	Note:	The site was being pumped.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1961-04-12	Feet below surface:	75.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-11-23	Feet below surface:	75.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-03-24	Feet below surface:	86.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1959-12-31	Feet below surface:	75.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1958-11-19	Feet below surface:	75.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-11-19	Feet below surface:	98.10
Feet to sea level:	Not Reported	Note:	Not Reported

**O54
East
1/2 - 1 Mile
Higher**

CA WELLS CADWR8000016134

State Well #:	32S13E29L006M	Station ID:	23505
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

**55
NE
1/2 - 1 Mile
Higher**

CA WELLS CADWR8000016209

State Well #:	32S13E29C002M	Station ID:	37500
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

**O56
East
1/2 - 1 Mile
Higher**

FED USGS USGS40000160663

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18060006
Monitor Location:	032S013E29L006M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	197
Aquifer:	California Coastal Basin aquifers	Well Hole Depth:	197
Formation Type:	Not Reported		
Construction Date:	19600605		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements: 41 Level reading date: 1980-05-06

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet below surface:	60.6	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-12-31	Feet below surface:	63.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-11	Feet below surface:	59.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	60.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-02	Feet below surface:	59.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-19	Feet below surface:	67.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-18	Feet below surface:	65.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-30	Feet below surface:	65.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-17	Feet below surface:	68.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-19	Feet below surface:	68.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-24	Feet below surface:	65.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-29	Feet below surface:	65.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-05	Feet below surface:	63.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-02	Feet below surface:	59.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-07	Feet below surface:	62.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-08	Feet below surface:	62.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-07-17	Feet below surface:	62.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-07	Feet below surface:	59.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-22	Feet below surface:	58.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-12-24	Feet below surface:	59.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-05	Feet below surface:	62.4
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1973-09-12	Feet below surface:	63.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-08-08	Feet below surface:	62.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-13	Feet below surface:	63.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	61.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-03	Feet below surface:	59.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-19	Feet below surface:	64.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-07-26	Feet below surface:	68.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-16	Feet below surface:	67.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-22	Feet below surface:	64.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-03	Feet below surface:	63.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-29	Feet below surface:	61.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-23	Feet below surface:	63.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-07-14	Feet below surface:	64.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-03	Feet below surface:	62.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-04-22	Feet below surface:	61.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-01-19	Feet below surface:	39.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-10-14	Feet below surface:	64.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-08-17	Feet below surface:	68.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-07-20	Feet below surface:	77.9
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1960-06-05	Feet below surface:	68.00
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

P57
SSE
1/2 - 1 Mile
Higher

CA WELLS CADWR8000016010

State Well #:	32S13E31H007M	Station ID:	23517
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

Q58
NW
1/2 - 1 Mile
Higher

FED USGS USGS40000160767

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S012E24R001M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19650602	Well Depth:	60
Well Depth Units:	ft	Well Hole Depth:	848
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	25	Level reading date:	1980-05-09
Feet below surface:	16.96	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-11-07	Feet below surface:	16.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-17	Feet below surface:	16.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	16.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-04	Feet below surface:	16.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-07	Feet below surface:	17.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-17	Feet below surface:	17.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-09	Feet below surface:	17.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-14	Feet below surface:	17.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-07	Feet below surface:	16.72
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-04-01	Feet below surface:	16.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-06-07	Feet below surface:	15.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-20	Feet below surface:	16.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-29	Feet below surface:	16.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-29	Feet below surface:	16.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-29	Feet below surface:	16.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-26	Feet below surface:	16.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-02	Feet below surface:	16.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-02	Feet below surface:	16.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-12-15	Feet below surface:	16.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-08-04	Feet below surface:	17.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-06-03	Feet below surface:	17.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-03-27	Feet below surface:	16.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-01-29	Feet below surface:	16.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-10-03	Feet below surface:	16.45
Feet to sea level:	Not Reported	Note:	Not Reported

**Q59
NW
1/2 - 1 Mile
Higher**

FED USGS USGS40000160768

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18060006
Monitor Location:	032S012E24R002M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	100
Aquifer:	California Coastal Basin aquifers	Well Hole Depth:	848
Formation Type:	Not Reported		
Construction Date:	19650602		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground water levels,Number of Measurements:	24	Level reading date:	1980-05-09
Feet below surface:	17.36	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-11-07	Feet below surface:	16.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-17	Feet below surface:	17.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	16.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-04	Feet below surface:	16.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-07	Feet below surface:	17.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-17	Feet below surface:	17.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-09	Feet below surface:	17.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-14	Feet below surface:	17.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-07	Feet below surface:	17.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-01	Feet below surface:	17.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-06-07	Feet below surface:	15.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-20	Feet below surface:	16.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-29	Feet below surface:	17.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-29	Feet below surface:	16.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-29	Feet below surface:	17.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-26	Feet below surface:	16.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-02	Feet below surface:	17.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-02	Feet below surface:	16.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-12-15	Feet below surface:	16.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-06-03	Feet below surface:	17.78

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-03-27	Feet below surface:	17.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-01-29	Feet below surface:	17.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-10-03	Feet below surface:	17.12
Feet to sea level:	Not Reported	Note:	Not Reported

**Q60
NW
1/2 - 1 Mile
Higher**

FED USGS USGS40000160769

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S012E24R003M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19650602	Well Depth:	390
Well Depth Units:	ft	Well Hole Depth:	848
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	24	Level reading date:	1980-05-09
Feet below surface:	11.57	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-11-07	Feet below surface:	11.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-17	Feet below surface:	10.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	10.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-04	Feet below surface:	9.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-07	Feet below surface:	14.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-17	Feet below surface:	12.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-09	Feet below surface:	16.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-14	Feet below surface:	11.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-07	Feet below surface:	11.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-01	Feet below surface:	10.70

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-06-07	Feet below surface:	9.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-20	Feet below surface:	10.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-29	Feet below surface:	12.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-29	Feet below surface:	9.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-29	Feet below surface:	11.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-26	Feet below surface:	11.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-02	Feet below surface:	11.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-02	Feet below surface:	10.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-12-15	Feet below surface:	10.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-06-03	Feet below surface:	12.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-03-27	Feet below surface:	10.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-01-29	Feet below surface:	10.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-10-03	Feet below surface:	12.43
Feet to sea level:	Not Reported	Note:	Not Reported

**P61
SSE
1/2 - 1 Mile
Higher**

FED USGS USGS40000169945

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	032S013E31H007M	Type:	Well
Description:	Not Reported	HUC:	18060006
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	28	Level reading date:	1979-10-30
Feet below surface:	9.7	Feet to sea level:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Note:	Not Reported		
Level reading date:	1979-04-11	Feet below surface:	7.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-04	Feet below surface:	8.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-01	Feet below surface:	6.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-18	Feet below surface:	11.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-15	Feet below surface:	10.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-30	Feet below surface:	9.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	9.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-29	Feet below surface:	9.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-06	Feet below surface:	8.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-08	Feet below surface:	8.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-08	Feet below surface:	7.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-07	Feet below surface:	9.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-10	Feet below surface:	8.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-10-20	Feet below surface:	10.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-27	Feet below surface:	9.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-10-28	Feet below surface:	9.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-04-23	Feet below surface:	9.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-10-20	Feet below surface:	10.1
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.
Level reading date:	1970-04-01	Feet below surface:	9.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-04-10	Feet below surface:	8.0
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1968-10-03	Feet below surface:	13.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-16	Feet below surface:	11.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-11-16	Feet below surface:	11.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-10-24	Feet below surface:	13.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-04-11	Feet below surface:	11.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-10-07	Feet below surface:	13.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-04-16	Feet below surface:	10.3
Feet to sea level:	Not Reported	Note:	Not Reported

Q62
NW
1/2 - 1 Mile
Higher

CA WELLS CADWR8000016217

State Well #:	32S12E24R001M	Station ID:	23490
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

Q63
NW
1/2 - 1 Mile
Higher

CA WELLS CADWR8000016218

State Well #:	32S12E24R002M	Station ID:	23491
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

Q64
NW
1/2 - 1 Mile
Higher

CA WELLS CADWR8000016219

State Well #:	32S12E24R003M	Station ID:	37496
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Santa Maria	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

65
NE
1/2 - 1 Mile
Higher

FED USGS USGS40000160757

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18060006
Monitor Location:	032S013E29C002M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	198
Aquifer:	California Coastal Basin aquifers	Well Hole Depth:	Not Reported
Formation Type:	Not Reported		
Construction Date:	Not Reported		
Well Depth Units:	ft		
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	35	Level reading date:	1980-05-06
Feet below surface:	65.0	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-10-31	Feet below surface:	68.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-11	Feet below surface:	74.8
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1978-12-04	Feet below surface:	70.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-02	Feet below surface:	64.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-19	Feet below surface:	71.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-19	Feet below surface:	82.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-12	Feet below surface:	80.4
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1976-09-27	Feet below surface:	71.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	72.7
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1975-09-24	Feet below surface:	69.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-29	Feet below surface:	70.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-05	Feet below surface:	68.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-04	Feet below surface:	68.7
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1975-01-02	Feet below surface:	64.5
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.
Level reading date:	1973-12-24	Feet below surface:	64.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-11-05	Feet below surface:	68.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-12	Feet below surface:	24.8
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1973-08-07	Feet below surface:	69.5
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.
Level reading date:	1973-07-13	Feet below surface:	67.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-05-08	Feet below surface:	75.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1973-04-03	Feet below surface:	76.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-10-19	Feet below surface:	69.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-07-26	Feet below surface:	81.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-16	Feet below surface:	81.9
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-04-27	Feet below surface:	74.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-04-03	Feet below surface:	74.5
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1972-02-28	Feet below surface:	72.6
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1971-10-22	Feet below surface:	70.5
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1971-08-23	Feet below surface:	77.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1971-07-14	Feet below surface:	76.0
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1971-06-02	Feet below surface:	76.5
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1971-01-19	Feet below surface:	70.1
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1970-10-14	Feet below surface:	76.4
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1970-08-17	Feet below surface:	74.7
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

66
ENE
1/2 - 1 Mile
Higher

FED USGS USGS40000160712

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18060006
Monitor Location:	032S013E29F001M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	200
Aquifer:	California Coastal Basin aquifers	Well Hole Depth:	250
Formation Type:	Not Reported		
Construction Date:	19641001		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	34	Level reading date:	1980-05-06
Feet below surface:	61.0	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1979-10-31	Feet below surface:	61.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-12	Feet below surface:	57.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-31	Feet below surface:	61.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-02	Feet below surface:	57.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-19	Feet below surface:	65.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-18	Feet below surface:	64.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-01-18	Feet below surface:	71.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-27	Feet below surface:	64.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-16	Feet below surface:	65.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-22	Feet below surface:	62.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-25	Feet below surface:	62.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-28	Feet below surface:	62.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-08-22	Feet below surface:	66.3
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1972-07-17	Feet below surface:	66.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-06-22	Feet below surface:	68.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-05-22	Feet below surface:	63.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-19	Feet below surface:	62.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-03-30	Feet below surface:	57.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-02-23	Feet below surface:	59.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-01-24	Feet below surface:	66.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-12-31	Feet below surface:	66.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-22	Feet below surface:	61.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-10-18	Feet below surface:	63.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-09-24	Feet below surface:	63.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-08-23	Feet below surface:	64.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-07-20	Feet below surface:	63.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-06-24	Feet below surface:	62.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-05-21	Feet below surface:	60.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-04-22	Feet below surface:	61.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-10	Feet below surface:	59.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-02-18	Feet below surface:	58.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-01-21	Feet below surface:	57.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-10-01	Feet below surface:	65.00
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
South
1/2 - 1 Mile

OIL_GAS CAOG13000011913

API #:	0407900329	Well #:	1
Well Status:	Plugged	Well Type:	DH
Operator Name:	Madonna Construction Co.	Lease Name:	Oceano
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	SPUD Date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93433	42	0

Federal EPA Radon Zone for SAN LUIS OBISPO County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level \geq 2 pCi/L and \leq 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN LUIS OBISPO COUNTY, CA

Number of sites tested: 15

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.673 pCi/L	87%	7%	7%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix C

Historical Research Documentation

1.5-Acre Parcel

Huber Street

Grover Beach, CA 93433

Inquiry Number: 5674764.4

June 05, 2019

EDR Historical Topo Map Report

with QuadMatch™



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

EDR Historical Topo Map Report

06/05/19

Site Name:

1.5-Acre Parcel
Huber Street
Grover Beach, CA 93433
EDR Inquiry # 5674764.4

Client Name:

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Sarah Larese



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Rincon 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. EDR's 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.#	19-07931	Latitude:	35.110745 35° 6' 39" North
Project:	19-07931	Longitude:	-120.622769 -120° 37' 22" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	716654.80
		UTM Y Meters:	3887910.34
		Elevation:	23.05' above sea level

Maps Provided:

2012 1897
1993, 1994
1978, 1979
1965
1952
1942
1918
1900

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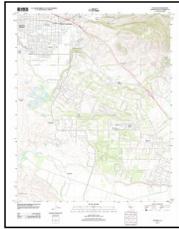
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Topo Sheet Key

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

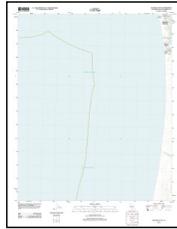
2012 Source Sheets



Oceano
2012
7.5-minute, 24000



Pismo Beach
2012
7.5-minute, 24000



Oceano OE W
2012
7.5-minute, 24000

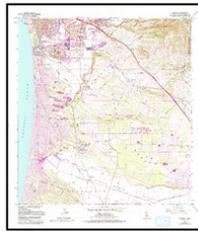


Arroyo Grande NE
2012
7.5-minute, 24000

1993, 1994 Source Sheets



Arroyo Grande NE
1993
7.5-minute, 24000
Aerial Photo Revised 1990



Oceano
1994
7.5-minute, 24000
Aerial Photo Revised 1987

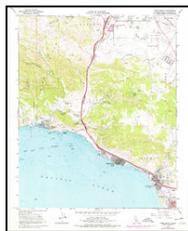


Pismo Beach
1994
7.5-minute, 24000
Aerial Photo Revised 1988

1978, 1979 Source Sheets



Arroyo Grande NE
1978
7.5-minute, 24000
Aerial Photo Revised 1976



Pismo Beach
1978
7.5-minute, 24000
Aerial Photo Revised 1976



Oceano
1979
7.5-minute, 24000
Aerial Photo Revised 1963

1965 Source Sheets



Pismo Beach
1965
7.5-minute, 24000
Aerial Photo Revised 1963



Arroyo Grande NE
1965
7.5-minute, 24000
Aerial Photo Revised 1963



Oceano
1965
7.5-minute, 24000
Aerial Photo Revised 1963

Topo Sheet Key

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

1952 Source Sheets



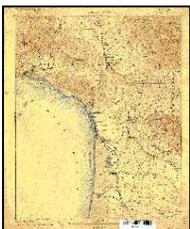
Arroyo Grande
1952
15-minute, 62500

1942 Source Sheets



Arroyo Grande
1942
15-minute, 62500

1918 Source Sheets



ARROYO GRANDE
1918
15-minute, 62500

1900 Source Sheets

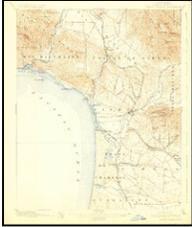


San Luis
1900
30-minute, 125000

Topo Sheet Key

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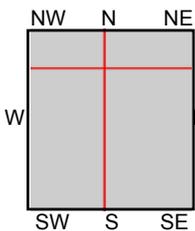
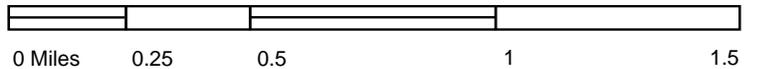
1897 Source Sheets



Arroyo Grande
1897
15-minute, 62500



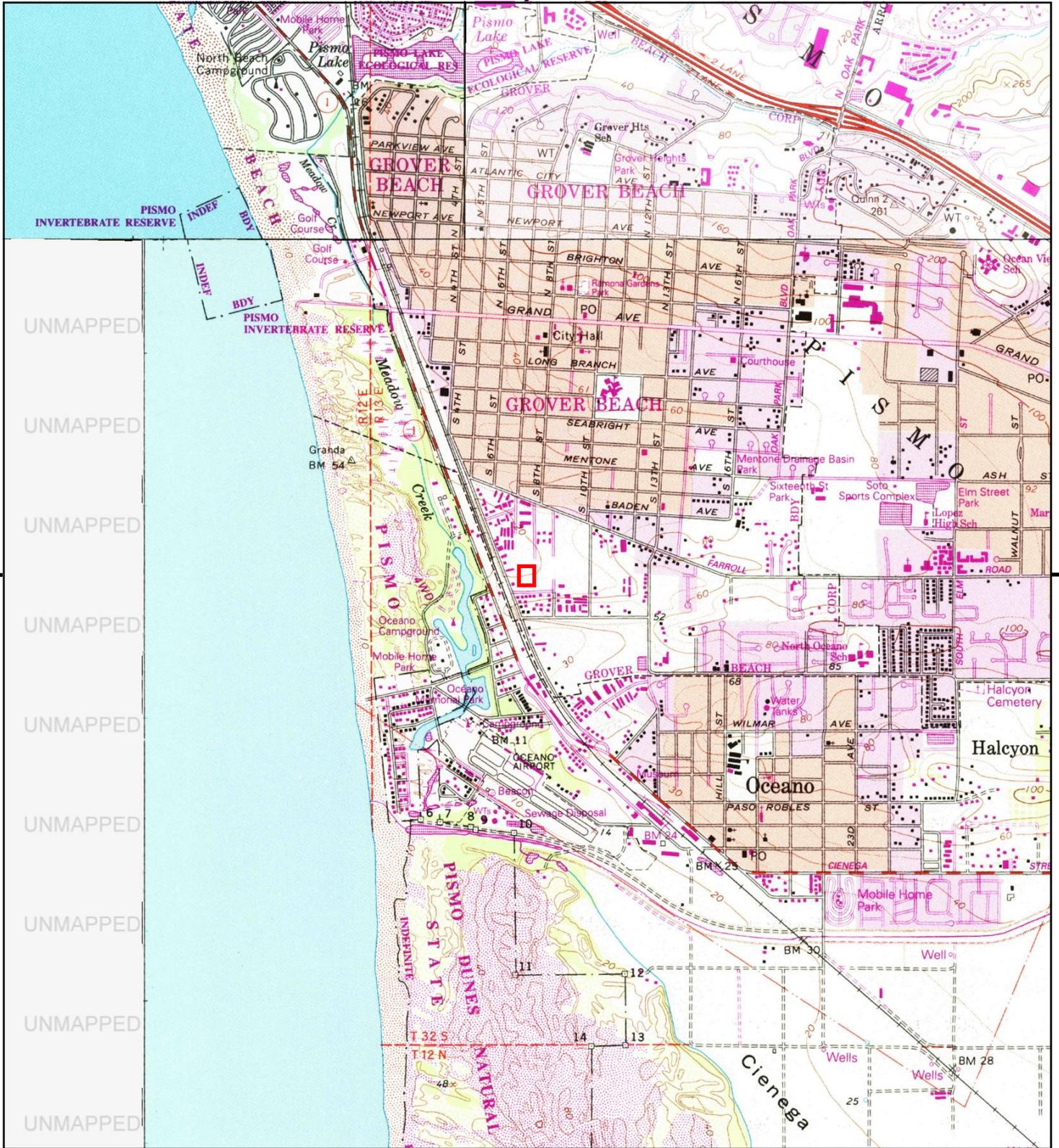
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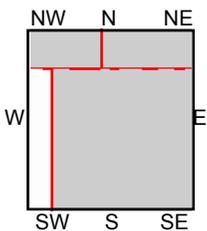
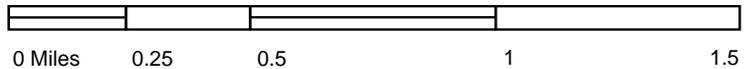
TP, Oceano, 2012, 7.5-minute
 NE, Arroyo Grande NE, 2012, 7.5-minute
 SW, Oceano OE W, 2012, 7.5-minute
 NW, Pismo Beach, 2012, 7.5-minute

SITE NAME: 1.5-Acre Parcel
ADDRESS: Huber Street
 Grover Beach, CA 93433
CLIENT: Rincon





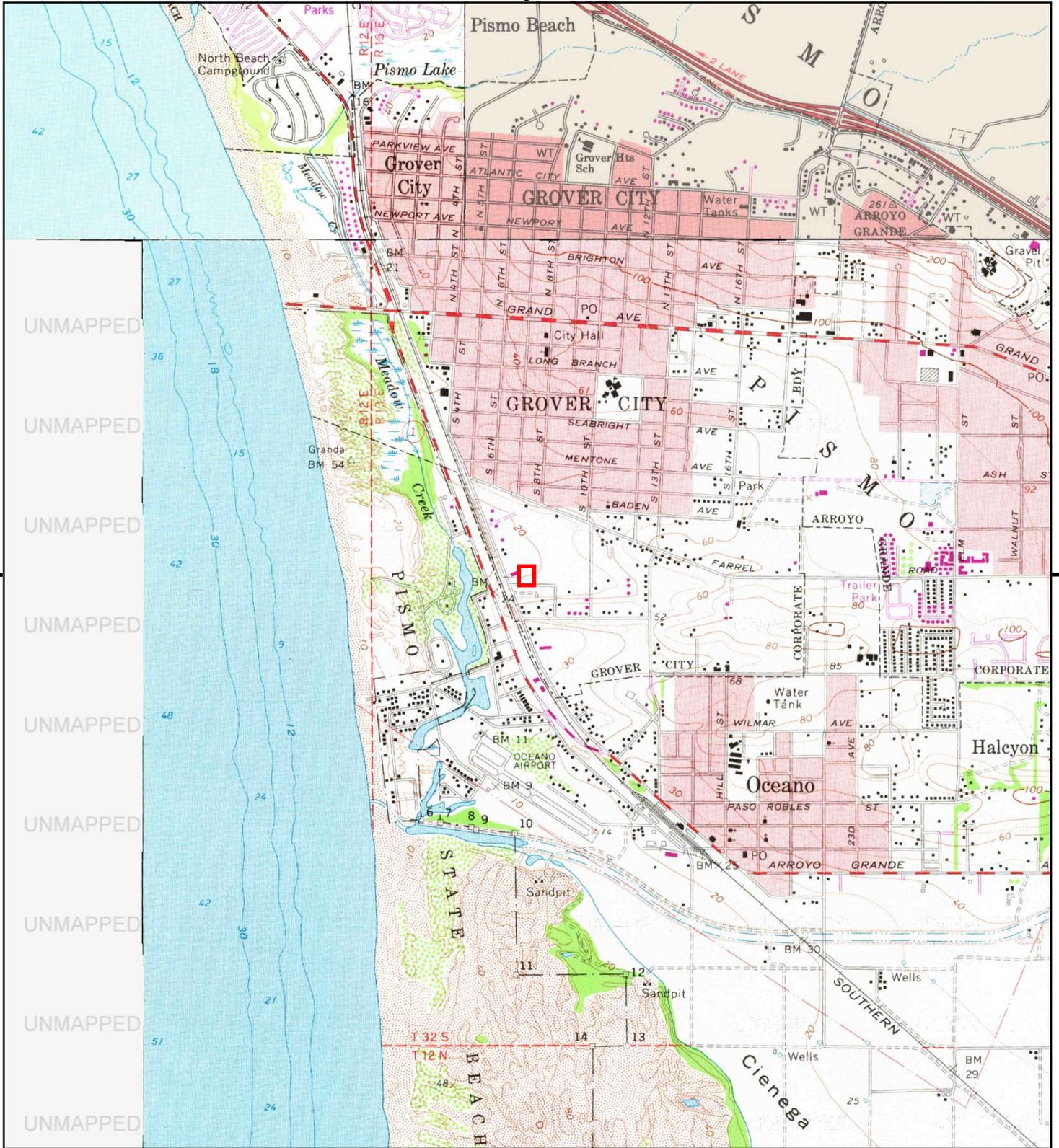
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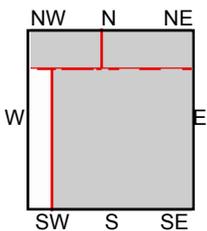
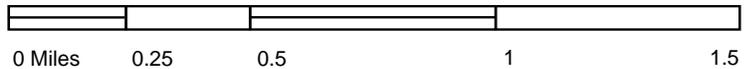
TP, Oceano, 1994, 7.5-minute
 NE, Arroyo Grande NE, 1993, 7.5-minute
 NW, Pismo Beach, 1994, 7.5-minute

SITE NAME: 1.5-Acre Parcel
 ADDRESS: Huber Street
 Grover Beach, CA 93433
 CLIENT: Rincon





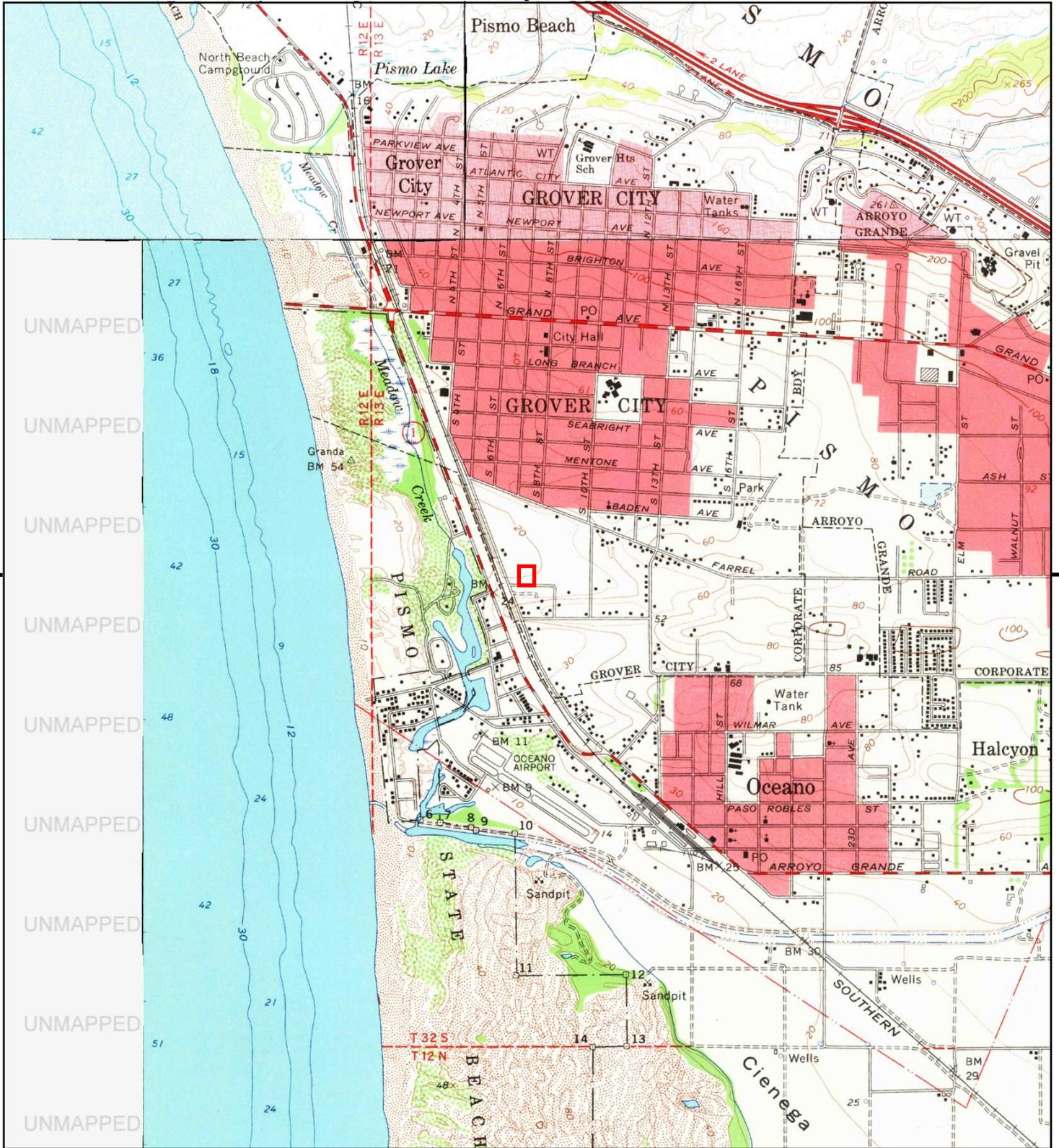
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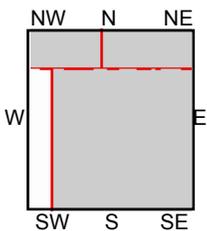
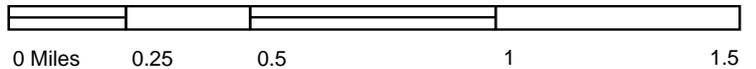
TP, Oceano, 1979, 7.5-minute
 NE, Arroyo Grande NE, 1978, 7.5-minute
 NW, Pismo Beach, 1978, 7.5-minute

SITE NAME: 1.5-Acre Parcel
ADDRESS: Huber Street
 Grover Beach, CA 93433
CLIENT: Rincon





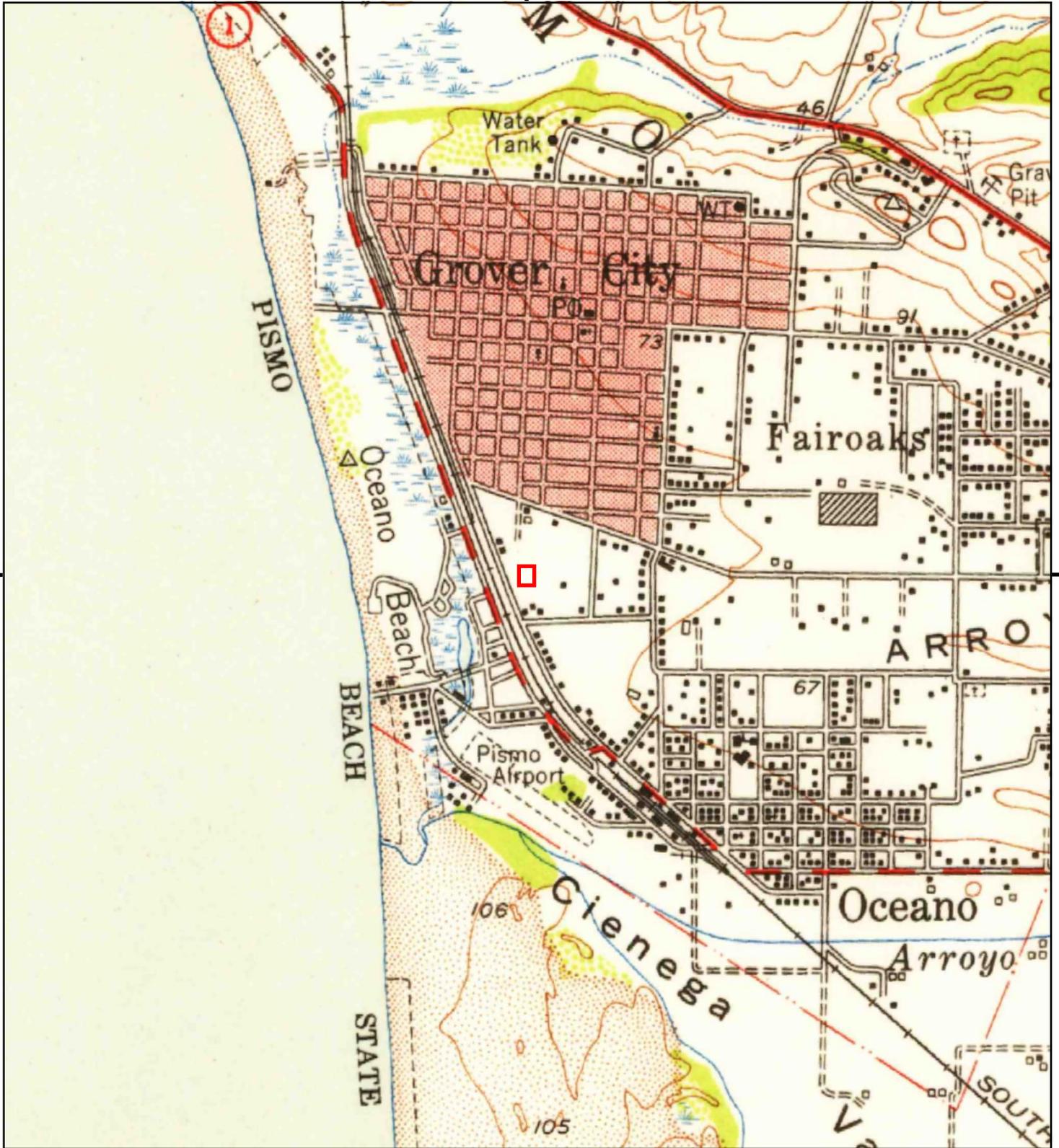
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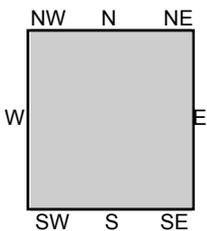
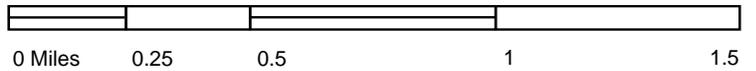
TP, Oceano, 1965, 7.5-minute
 NE, Arroyo Grande NE, 1965, 7.5-minute
 NW, Pismo Beach, 1965, 7.5-minute

SITE NAME: 1.5-Acre Parcel
ADDRESS: Huber Street
 Grover Beach, CA 93433
CLIENT: Rincon





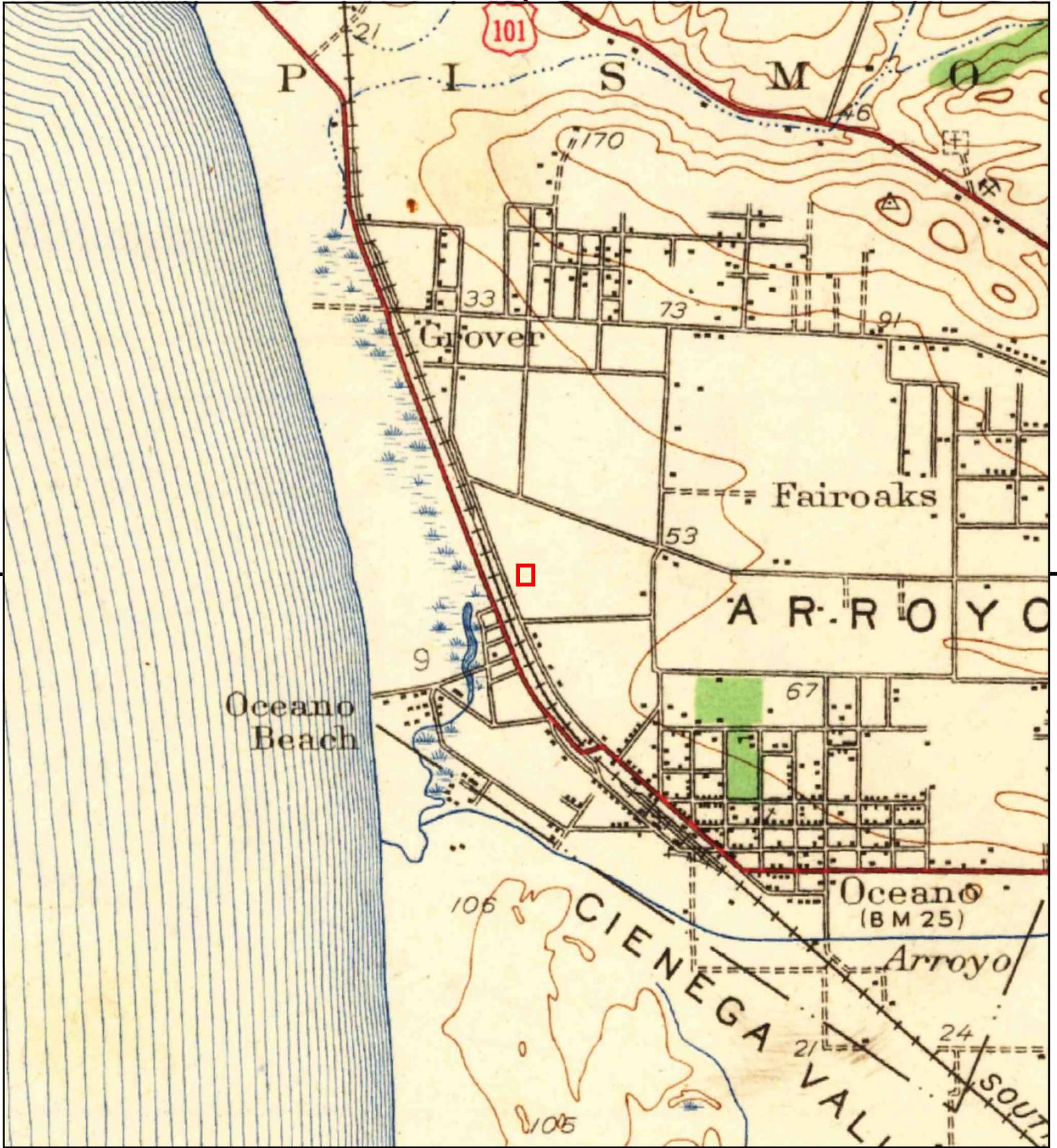
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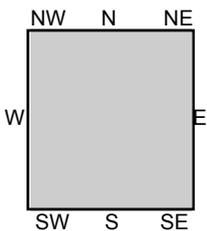
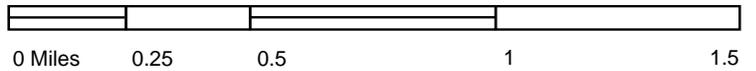
TP, Arroyo Grande, 1952, 15-minute

SITE NAME: 1.5-Acre Parcel
 ADDRESS: Huber Street
 Grover Beach, CA 93433
 CLIENT: Rincon





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



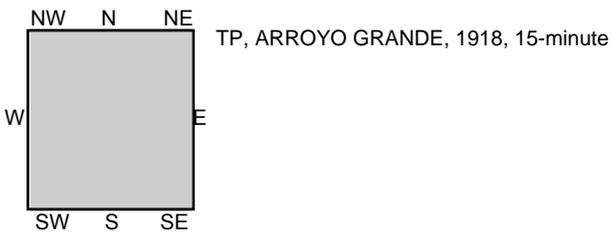
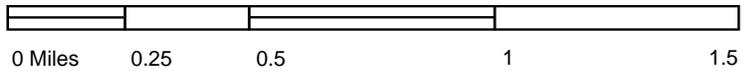
TP, Arroyo Grande, 1942, 15-minute

SITE NAME: 1.5-Acre Parcel
 ADDRESS: Huber Street
 Grover Beach, CA 93433
 CLIENT: Rincon





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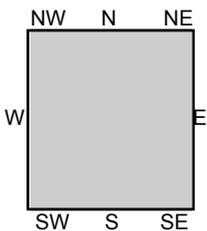
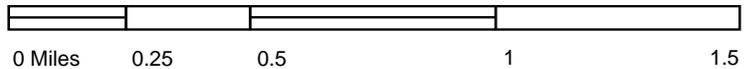


SITE NAME: 1.5-Acre Parcel
 ADDRESS: Huber Street
 Grover Beach, CA 93433
 CLIENT: Rincon





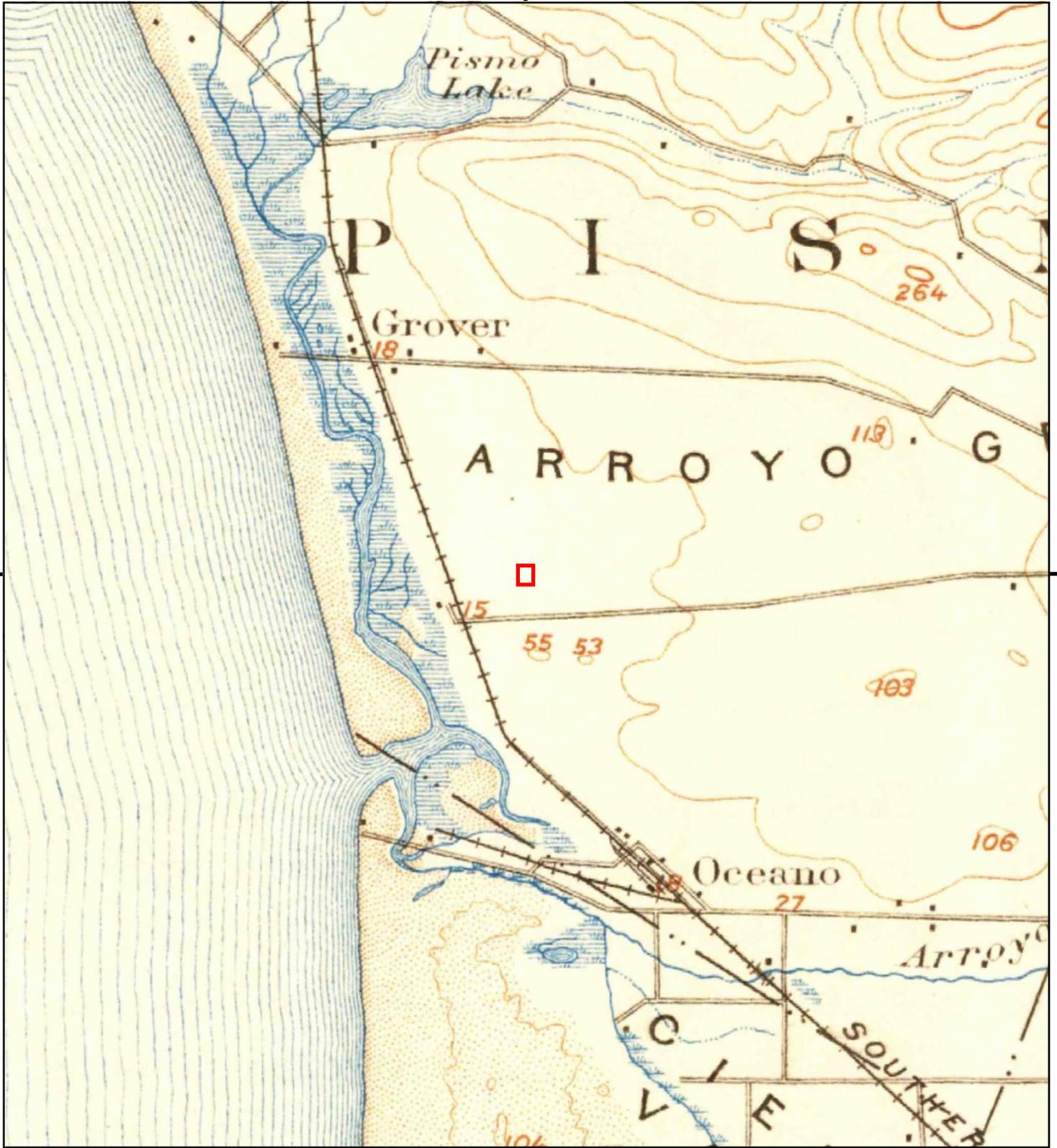
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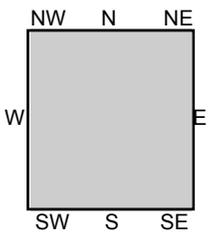
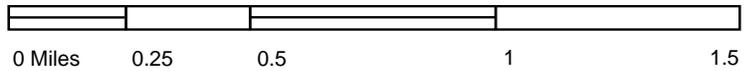
TP, San Luis, 1900, 30-minute

SITE NAME: 1.5-Acre Parcel
 ADDRESS: Huber Street
 Grover Beach, CA 93433
 CLIENT: Rincon





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



TP, Arroyo Grande, 1897, 15-minute

SITE NAME: 1.5-Acre Parcel
 ADDRESS: Huber Street
 Grover Beach, CA 93433
 CLIENT: Rincon





1.5-Acre Parcel

Huber Street

Grover Beach, CA 93433

Inquiry Number: 5674764.8

June 06, 2019

The EDR Aerial Photo Decade Package



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

EDR Aerial Photo Decade Package

06/06/19

Site Name:

1.5-Acre Parcel
Huber Street
Grover Beach, CA 93433
EDR Inquiry # 5674764.8

Client Name:

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Sarah Larese



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Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
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
1994	1"=500'	Acquisition Date: September 03, 1994	USGS/DOQQ
1981	1"=500'	Flight Date: October 19, 1981	USDA
1978	1"=500'	Flight Date: September 22, 1978	USGS
1976	1"=500'	Flight Date: June 28, 1976	USGS
1963	1"=500'	Flight Date: July 02, 1963	USGS
1960	1"=500'	Flight Date: April 02, 1960	USGS
1956	1"=500'	Flight Date: September 10, 1956	USDA
1949	1"=500'	Flight Date: March 31, 1949	USDA
1939	1"=500'	Flight Date: January 01, 1939	USDA

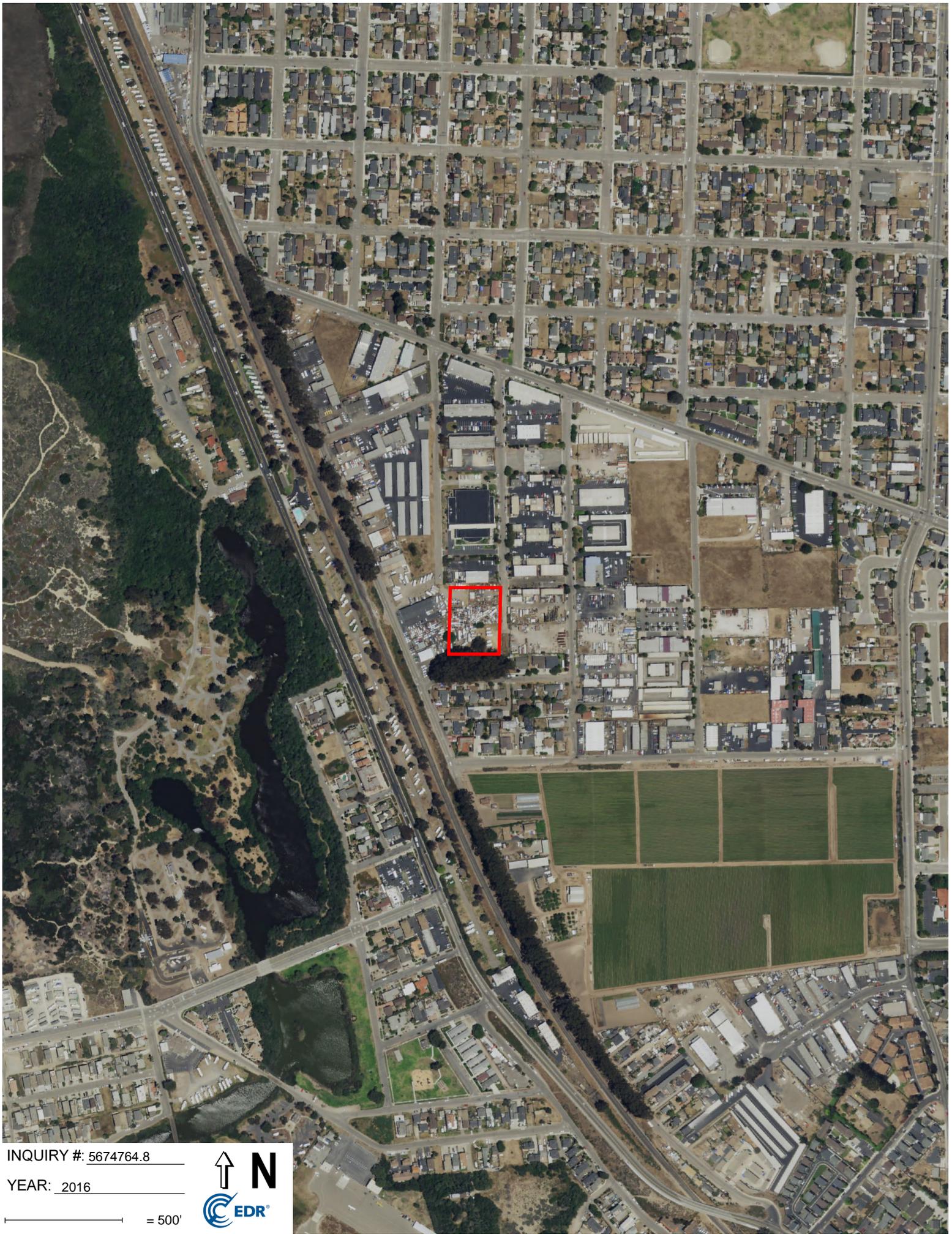
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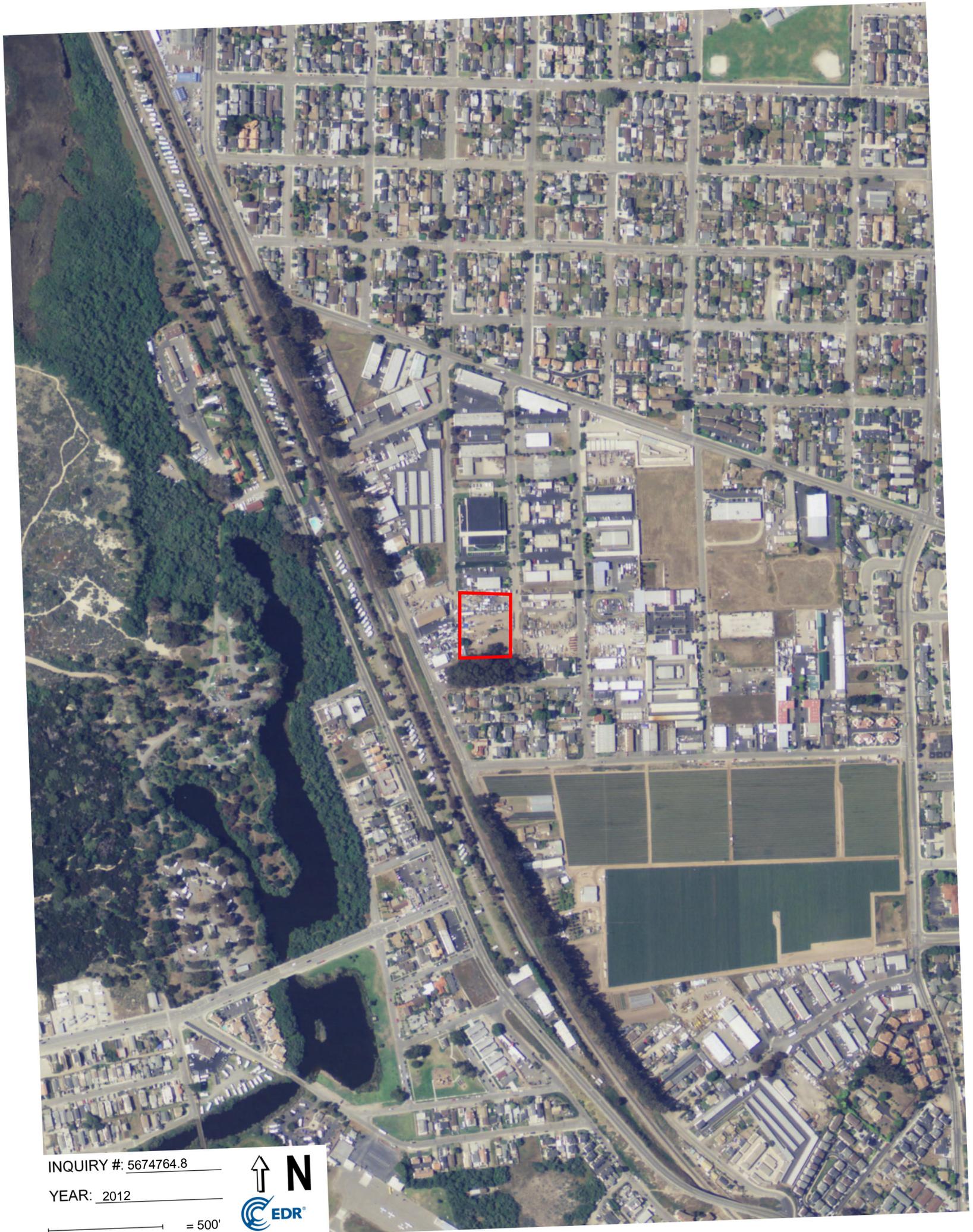


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YEAR: 2016

— = 500'





INQUIRY #: 5674764.8

YEAR: 2012

_____ = 500'





INQUIRY #: 5674764.8

YEAR: 2009

 = 500'





INQUIRY #: 5674764.8

YEAR: 2006

— = 500'



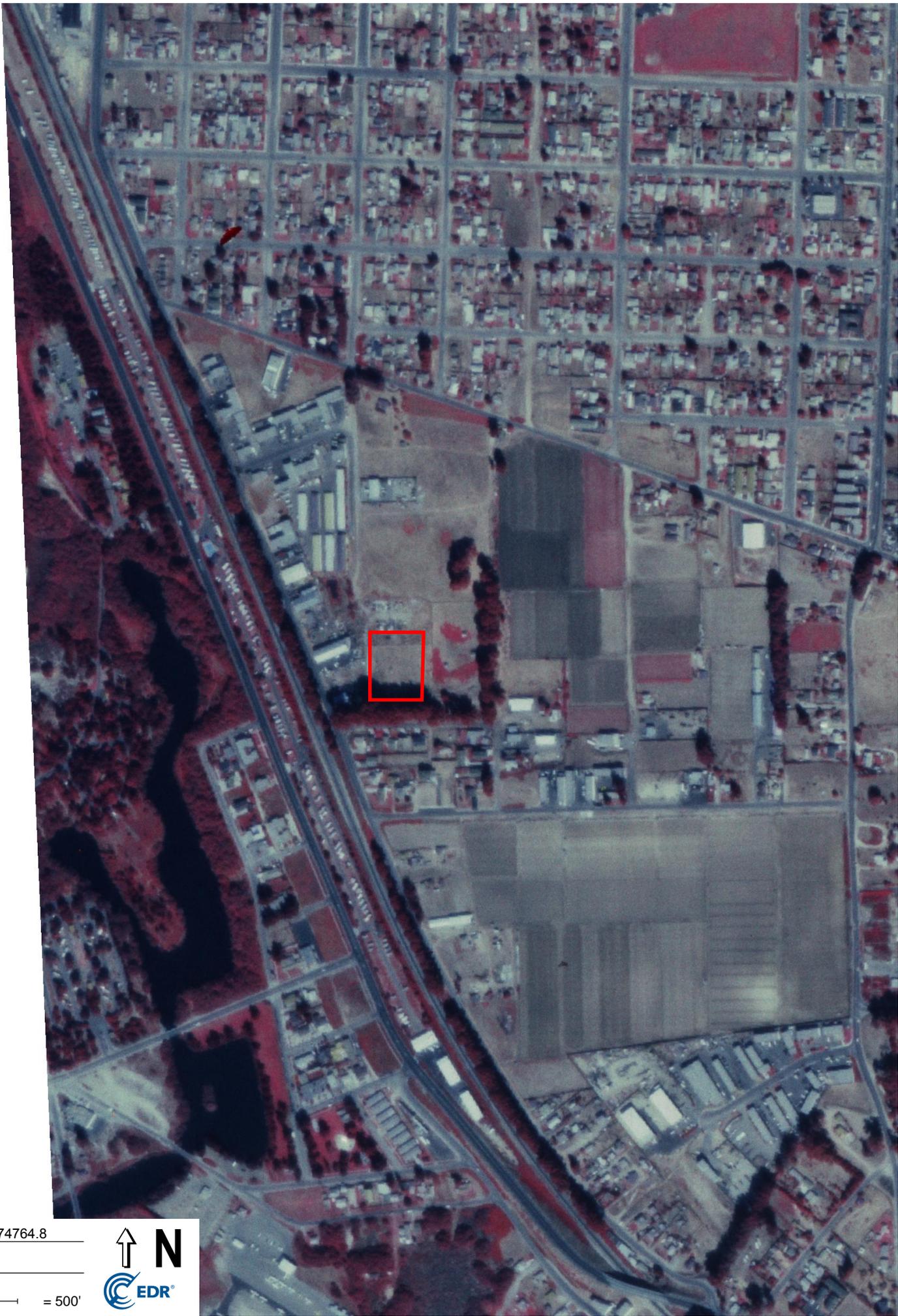


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YEAR: 1994

— = 500'



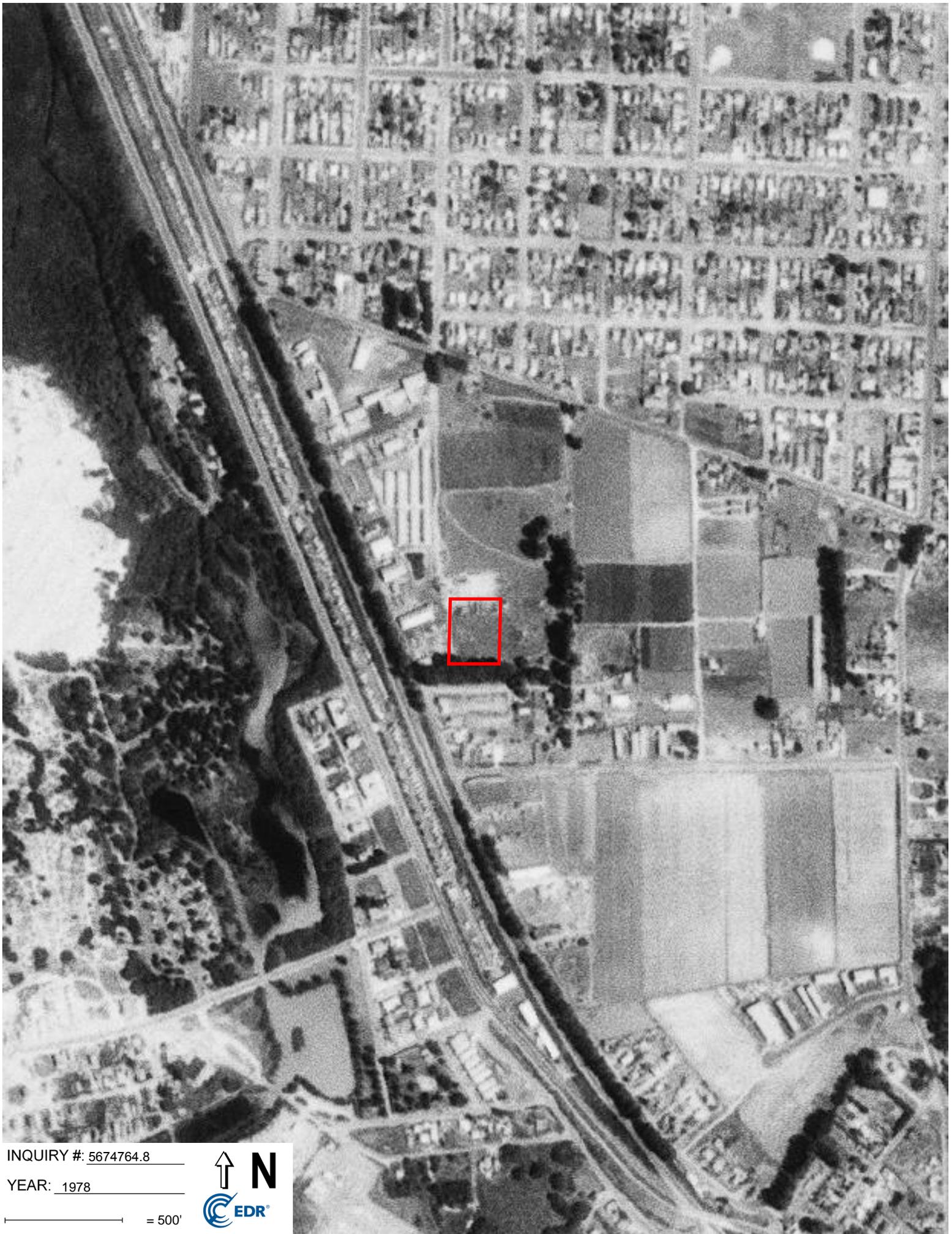


INQUIRY #: 5674764.8

YEAR: 1981

— = 500'





INQUIRY #: 5674764.8

YEAR: 1978

— = 500'





INQUIRY #: 5674764.8

YEAR: 1976

 = 500'





INQUIRY #: 5674764.8

YEAR: 1963

— = 500'



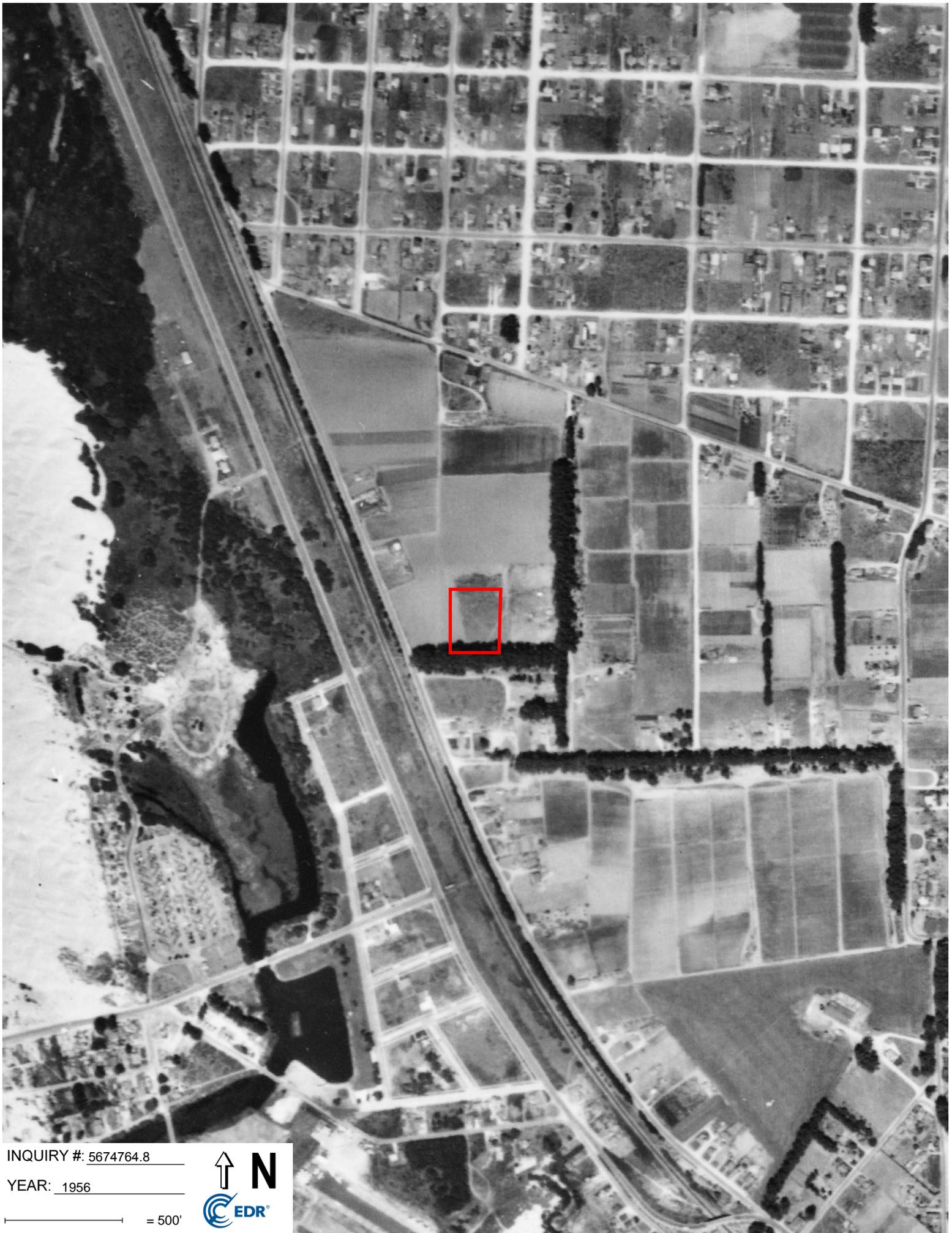


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YEAR: 1960

— = 500'



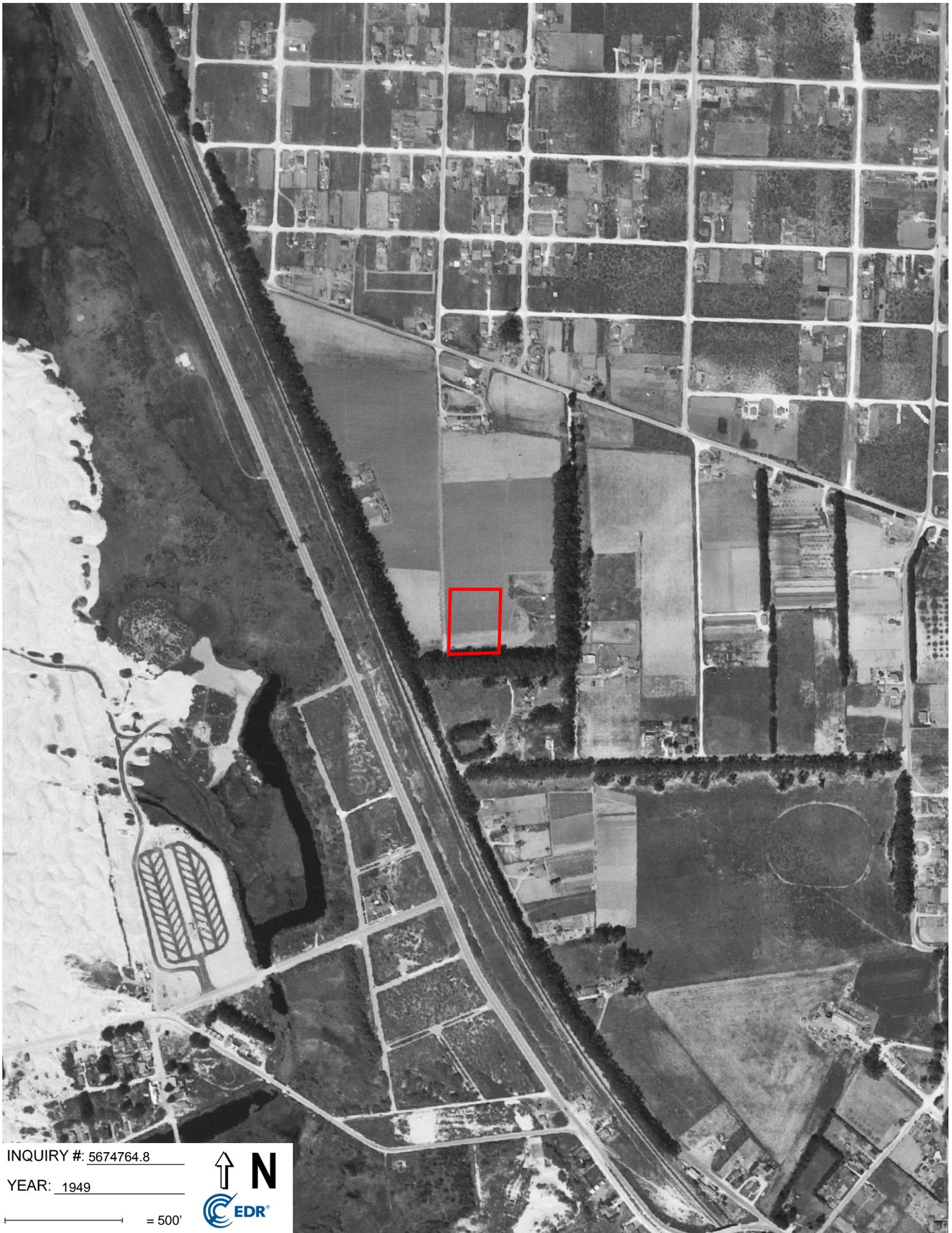


INQUIRY #: 5674764.8

YEAR: 1956

— = 500'





INQUIRY #: 5674764.8

YEAR: 1949

— = 500'





INQUIRY #: 5674764.8

YEAR: 1939

— = 500'



1.5-Acre Parcel

Huber Street
Grover Beach, CA 93433

Inquiry Number: 5674764.5
June 10, 2019

The EDR-City Directory Image Report

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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DESCRIPTION

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RECORD SOURCES

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Data by

infoUSA[®]

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RESEARCH SUMMARY

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<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1987	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1984	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1980	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1975	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

Huber Street
Grover Beach, CA 93433

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

GRIFFIN ST

2014	pg A1	EDR Digital Archive
2010	pg A3	EDR Digital Archive
2005	pg A5	EDR Digital Archive
2000	pg A7	EDR Digital Archive
1995	pg A9	EDR Digital Archive
1992	pg A11	EDR Digital Archive
1987	pg A13	EDR Digital Archive
1984	pg A15	Haines Criss-Cross Directory
1980	pg A16	Haines Criss-Cross Directory
1975	pg A17	Haines Criss-Cross Directory

HUBER ST

2014	pg A2	EDR Digital Archive	
2010	pg A4	EDR Digital Archive	
2005	pg A6	EDR Digital Archive	
2000	pg A8	EDR Digital Archive	
1995	pg A10	EDR Digital Archive	
1992	pg A12	EDR Digital Archive	
1987	pg A14	EDR Digital Archive	
1984	-	Haines Criss-Cross Directory	Street not listed in Source
1980	-	Haines Criss-Cross Directory	Street not listed in Source
1975	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

GRIFFIN ST**2014**

946	SE TECH INC
952	DIANAS DISTRIBUTORS
954	LOUIES AUTO CLINIC
956	DEANS MUFFLER AND PERFORMANCE
958	COASTAL DEMO INC
964	PACIFIC WEST ROOFING SUPPLY
966	HOTLIX CANDY
971	DEBLAUW, DAVID
	POWDER PROS LLC
	RC PLUMBING INC
	SNS SOLUTIONS INC
	SUPERIOR MDF
974	TOPCO INC
1021	MORENO, ALFRED A
1050	BILL DEBLAUW CONSTRUCTION CO
	PISMO COAST INDL
1080	FITZWATER, KRISTI
1081	OCCUPANT UNKNOWN,
1083	AGUILAR, RANE D
1085	SELF, MARVIN M
1087	MIKOLATCHER, TERRY L

HUBER ST 2014

920	LARRY RODKEY RODKEY, LARRY
923	SUPREME AUTO OF THE CNTL COAST
930	RICK W BREWER
945	DECKTECH INC DIVERSE PEST MANAGEMENT HUNTER JAMES INC LAS OLAS VILLA
947	AVILA ELECTRONIC BETSY MACY
966	CENTRAL COAST WATER TREATMENT

GRIFFIN ST 2010

946 COAST WOODWORKS
LOGO SHOP
954 LOUIES AUTO CLINIC
955 JONES, DANNY L
964 PACIFIC WEST ROOFING SUPPLY
966 HOTLIX CANDY
968 MIZE FLOYD DRYWALL INC
971 MALDONADO SHAWN J
RC PLUMBING INC
U -FIND IT
974 TOPCO INC
1021 RIOS, JAVIER R
1050 AJ ENTERPRISES
BILL DEBLAUW CONSTRUCTION CO
RASORI, BRIAN
1081 INGAN, EMILIO Y
1083 SULLIVAN, TIM A
1085 SELF, MARVIN M
1087 MIKOLATCHER, TERRY L

HUBER ST 2010

923	SUPREME AUTO OF THE CNTL COAST
930	RICK W BREWER
945	DECKTECH INC
	DIVERSE PEST MANAGEMENT
	HUNTER JAMES INC
947	AVILA ELECTRONIC
	BETSY MACY
	ZZYZX CO
953	BOBCAT RAIN GUTTERS INC
955	JONES JANITORIAL
966	CENTRAL COAST WATER TREATMENT
967	PHILS OL BUTCHER SHOP

GRIFFIN ST 2005

946 COAST WOODWORKS
MILLER CANDLE CO INC

954 LOUIES AUTO CLINIC

955 JONES, DANNY L

958 CARLSONS AUTOMOTIVE
COSTA JAVA COFFEE CO

964 PACIFIC WEST ROOFING SUPPLY

966 HOTLIX CANDY

968 MIZE FLOYD DRYWALL INC

971 PACIFIC COAST CABINETS
RONS HEATING & AC
WOLF WORKS

974 TOPCO INC A DE CORPORATION

1021 RIOS, JAVIER R

1050 ARROW CABINET
DEBLAUW BILL CONSTRUCTION CO
R&B AUTO BODY
RASORI, BRIAN

1060 PLANT ONS INC

1080 BRANZUELA, GREGORY F

1081 INGAN, EMILIO Y

1083 OCCUPANT UNKNOWN,

1085 OCCUPANT UNKNOWN,

1087 MIKOLATCHER, TERRY L

HUBER ST 2005

900 BAILEY CURT J MASONRY INC
920 KNOWLTON, CHRISTOPHER
923 SUPREME AUTO OF THE CNTL COAST
930 RICK W BREWER
943 EARTHORN DESIGNS
945 DECKTECH INC
DIVERSE PEST MANAGEMENT
HUNTER JAMES INC
947 Z HARNESS SYSTEMS
ZZYZX CO
948 PC LANDING CORP DEBTOR IN
953 BOBCAT RAIN GUTTERS INC
966 CENTRAL COAST WATER TREATMENT
967 PHILS CATERING SERVICE
PHILS OL BUTCHER SHOP

GRIFFIN ST

2000

946 MILLER CANDLE CO INC
955 LOUIES AUTO CLINIC
958 CARLSONS AUTOMOTIVE
964 PACIFIC WEST ROOFING SUPPLY
966 HOTLIX INC
968 MIZE FLOYD DRYWALL INC
971 GROSSINIS PAINT & BODY
PACIFIC COAST CABINETS
974 TOPCO INC A DE CORPORATION
1050 ARROW CABINET
CROOKS JAMES TRUCKING INC
DEBLAUW BILL CONSTRUCTION CO
R&B AUTO BODY
1060 PLANT ONS INC
1081 ROBERTSON, STEPHEN C

HUBER ST 2000

900	BAILEY CURT J MASONRY INC
923	SUPREME AUTO OF THE CNTL COAST
928	U-HAUL
945	MCKENNA RONALD
948	GLOBAL CROSSING TELECOM
953	BOBCAT RAIN GUTTERS INC
955	JONES FLOOD & FIRE RESTORTION
	JONES JANITORIAL
966	CENTRAL COAST WATER TREATMENT
967	PHILS OL BUTCHER SHOP
969	BRADSHAW J H CONSTRUCTION

GRIFFIN ST 1995

941	TOSTE, JOSEPH
952	AATCO CENTRAL COAST SUPPLY
954	OCCUPANT UNKNOWNN
955	LOUIES AUTO CLINIC
958	KENNYS HEATING & AC
962	ESKAY, ROBTERT
966	HOT LIX INC HOTLIX
968	MIZE FLOYD DRYWALL
971	BRITISH SPORTS CARS CABINET SPECIALISTS SIPES CLIFF
1021	RIOS, JAVIER
1050	ARROW CABINET CROOKS JAMES TRUCKING INC DEBLAUW BILL CONSTRUCTION CO PAINT BOOTH RENTAL PISMO COAST
1081	SCHMIERER, ADOLF

HUBER ST 1995

900 BAILEY CURT J MASONRY INC
920 KNOWLTON BROTHERS INC
923 SUPREME AUTO OF THE CNTL COAST
U HAUL INTERNATIONAL
930 CREATIVE CAKES & CO
936 ARROYO WATER WELL SUPPLY INC
945 PESTMASTER SVCS
953 BOBCAT RAIN GUTTERS INC
955 JONES FLOOD & FIRE RESTORTION
JONES JANITORIAL
967 PHILS OL BUTCHER SHOP
969 CENTRAL COAST UPHOLSTERY

GRIFFIN ST 1992

- 946 E P AERATIONS
- 952 AATCO
- 966 SS LOLLIPOP
- 968 MIZE FLOYD DRYWALL
- 971 CABINET SPECIALISTS
PELICAN HI PERFORMANCE
- 1050 F & L ENTERPRISES
JACKS PERFORMANCE SERVICE
JOHN D EVANS MASTER AUTOT
- 1060 CLASSIC RESTORATIONS LTD



-

HUBER ST 1992

- 920 KNOWLTON BROTHERS INC
- 930 AVILA SIGN & DESIGN
GROVER CITY DOOR & SUPPLY
- 936 ARROYO WATER WELL SUPPLY INC
- 953 BOBCAT RAIN GUTTERS INC
- 967 PHILS OL BUTCHER SHOP

GRIFFIN ST

1987

971 STATEWIDE SAFETY SIGNS INC
1050 EMERALD CITY RECORDING
1060 METAL SHOP THE INC



-

HUBER ST 1987

930 P M CABINETS
936 ARROYO WATER WELL SUPPLY INC

GRIFFIN ST 1984

**GRIFFIN RD 93433
GROVER CITY**

1021	XXXX	00	
1050	DEBLAUW B CONSTR CO	489-2826	+4
	EMERALD CTY RECORDG	489-9455	3
	ILLUSION RECORDS	489-9455	+4
1060	METAL SHOP THE	481-3492	3
1080	XXXX	00	
1081	XXXX	00	
1083	XXXX	00	
1085	GORDON HERMAN	489-1711	0
1087	LACEY PAUL W	481-1626	9
1090	XXXX	00	
★	4 BUS	7 RES	2 NEW

GRIFFIN ST 1980

GRIFFIN RD 93433
GROVER CITY

1021	KORNEGAY MARK	481-2105+0
1060	XXXX	00
1080	XXXX	00
1081	WILSON JOE	481-2967+0
1085	GORDON HERMAN	489-1711+0
1087	LACEY PAUL	481-1626 9
1090	DEBLAUW DAVID	489-8496+0
★	0 BUS	7 RES XXXX 4 NEW

GRIFFIN ST 1975

GRIFFIN RD 93433		GROVER CITY	
1080	MACHAJ A	489-8251	4
1090	HUVEN KENNETH	489-1526	4
*	0 BUS	2 RES	0 NEW

1.5-Acre Parcel

Huber Street

Grover Beach, CA 93433

Inquiry Number: 5674764.3

June 05, 2019

Certified Sanborn® Map Report



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

Certified Sanborn® Map Report

06/05/19

Site Name:

1.5-Acre Parcel
Huber Street
Grover Beach, CA 93433
EDR Inquiry # 5674764.3

Client Name:

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Sarah Larese



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Phase II Environmental Site Assessment

Approximately 1.5 Acre Parcel, Huber Street
Grover Beach, California

prepared for
City of Pismo Beach, Public Works Department
760 Mattie Road
Pismo Beach, California, 93449

prepared by
Rincon Consultants, Inc.

July 22, 2019



Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003

805 644 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

July 22, 2019
Project No: 19-07931

Benjamin Fine, Public Works Director
City of Pismo Beach, Public Works Department
760 Mattie Road
Pismo Beach, CA 93449

**Subject: Phase II Environmental Site Assessment
Approximately 1.5-Acre Parcel, Huber Street
Grover Beach, California**

Dear Mr. Fine:

This report presents the results of a Phase II Environmental Site Assessment (ESA) for the approximately 1.5-acre parcel located west of Huber Street and north of Calvin Court in Grover Beach, California. The property consists of several storage yards which are separated with chain link fencing. The yards are used for the storage of automobiles, trucks, recreational vehicles (RVs), storage containers, boats, trailers and miscellaneous equipment storage. The purpose of this assessment was to assess potential recognized environmental conditions in connection with the current and past uses of the subject property as identified in our Phase I ESA report dated June 21, 2019.

Thank you for selecting Rincon for this project. If you have any questions, or if we can be of any future assistance, please contact us.

Sincerely,
RINCON CONSULTANTS, INC.

A handwritten signature in blue ink, appearing to read "Sarah A. Larese".

Sarah A. Larese
Senior Environmental Scientist

A handwritten signature in blue ink, appearing to read "Walt Hamann".

Walt Hamann, PG, CEG, CHG
Vice President, Environmental Services



Table of Contents

Executive Summary	1
Pesticides	1
Metals	1
Total Petroleum Hydrocarbons	2
Polynuclear Aromatic Hydrocarbons.....	2
Introduction.....	3
Project History	3
Physical Setting.....	5
Purpose and Scope	6
Methodology	7
Soil Sampling.....	7
Sample Analysis	7
Results	8
Pesticides.....	8
Metals.....	8
Total Petroleum Hydrocarbons	8
Polynuclear Aromatic Hydrocarbons.....	9
Conclusions.....	10
Recommendations.....	10
Limitations	11

Tables

Table 1	Soil Analytical Summary – Organochlorine Pesticides
Table 2	Soil Analytical Summary – Metals
Table 3	Soil Analytical Summary – Total Petroleum Hydrocarbons
Table 4	Soil Analytical Summary – Polynuclear Aromatic Compounds

Figures

Figure 1	Vicinity Map
Figure 2	Site Map
Figure 3	Soil Boring Location Map

Appendices

Appendix A	Laboratory Analytical Reports
Appendix B	Boring Logs



Executive Summary

This report presents the results of a Phase II Environmental Site Assessment (ESA) for the 1.5-acre parcel located west of Huber Street and north of Calvin Court in Grover Beach, California (Figure 1, Vicinity Map). The Phase II ESA was performed for the City of Pismo Beach, Public Works Department by Rincon Consultants, Inc. (Rincon). The subject property consists of several storage yards which are separated with chain link fencing. The yards are used for the storage of automobiles, trucks, recreational vehicles (RVs), storage containers, boats, trailers and miscellaneous equipment storage. The northwestern portion is occupied by American Roof Removal/ American Roofing Co. The yards are unpaved.

Rincon completed a Phase I ESA for the subject property on June 21, 2019. Based on the findings of the Phase I ESA, three potential recognized environmental conditions (RECs) in connection with the subject property were identified as follows:

1. Former agricultural use of the subject property.
2. Automobile, trucks, RV, boats, trailers and miscellaneous equipment storage on the subject property.
3. Western adjacent automobile repair facilities and towing/vehicle storage yard.

To determine if the above identified potential RECs have impacted soil beneath the subject property, a soil matrix assessment on the subject property was conducted. On June 26, 2019, Rincon Consultants collected soil samples from 20 locations on the subject property (Figure 3, Soil Boring Location Map). At each of the soil boring locations, discrete soil samples were collected at 0.5 to 1.0 feet below ground surface (bgs), and 2.5 to 3 feet bgs. The shallow (0.5 to 1.0 feet bgs) samples were analyzed and yielded the following results:

Pesticides

Dichlorodiphenyldichloroethylene or 4,4-DDE was detected in 10 of the 20 soil samples, results ranged from 0.0067 milligrams per kilogram (mg/kg) to 0.18 mg/kg.

Dichlorodiphenyltrichloroethane or 4,4-DDT was detected in 5 soil samples, results ranged from 0.0029 mg/kg to 0.049 mg/kg.

Methoxychlor was detected in RB14-1 at a concentration of 0.0041 mg/kg.

None of the soil sample results were above environmental screening levels (ESLs) for pesticides in residential or commercial soils. All other samples were below the method detection limit (MDL) for pesticides.

Metals

Concentrations of arsenic in 17 of the 20 soil samples analyzed were reported above the residential and commercial ESL for arsenic of 0.067 and 0.31 mg/kg, respectively. However, all 17 concentrations, which ranged from 0.96 mg/kg to 2.1 mg/kg, were within the naturally occurring background range for California soils for arsenic (0.6 mg/kg to 11 mg/kg). Naturally occurring arsenic in soil at California sites often exceeds the screening levels.



Thallium was detected in all samples, results ranged from 0.67 mg/kg to 1.5 mg/kg. However, the laboratory has indicated that the analytical method used for thallium (6010B) occasionally has issues meeting the low threshold for thallium due to interference during the analytical process. Therefore, the detected thallium may be considered “false positives”. In addition, the detected concentrations of thallium were generally within the naturally occurring background range for thallium in California soil (0.17 to 1.1 mg/kg). None of the detections of thallium exceeded the commercial screening level of 12 mg/kg. 16 samples exceeded the residential screening level of 0.78 mg/kg. However, since the subject property is not proposed for residential land use, the residential screening level is not necessarily applicable for this site.

All other results for metals that were detected above the MDL were below residential ESLs and appeared to be naturally occurring background concentrations.

Total Petroleum Hydrocarbons

Diesel range hydrocarbons were detected in 4 of the 20 soil samples analyzed, ranging from 9 mg/kg to 60 mg/kg. Results for diesel range hydrocarbons did not exceed the residential ESL of 260 mg/kg. Motor oil range hydrocarbons were detected in 7 of the 20 soil samples analyzed and ranged from 47 mg/kg to 890 mg/kg. Results for motor oil range hydrocarbons did not exceed the residential ESL of 12,000 mg/kg. Gasoline range hydrocarbons did not exceed the MDL in any of the analyzed soil samples.

Polynuclear Aromatic Hydrocarbons

As summarized on Table 4, varying concentrations of polynuclear aromatic hydrocarbons (PAHs) were detected in the soil matrix samples. 10 of the 20 soil samples analyzed had results above the MDL for one or more of the following compounds; Acenaphthylene, Anthracene, Benz (a) anthracene, Benzo (a) Pyrene, Benzo (b) fluoranthene, Benzo (g,h,i) Perylene, Benzo (k) Fluoranthene, Chrysene, Dibenz (a,h) anthracene, Fluoranthene, Fluorene, Indeno (1,2,3-cd) pyrene, Naphthalene, Phenanthrene, Pyrene. None of the soil sample results exceeded the residential or commercial ESLs for human health direct exposures.

Conclusions and Recommendations

Varying concentrations of TPH, PAHs, pesticides and metals were detected in soil samples collected and analyzed from the subject property. None of the soil sample results exceeded environmental screening levels for residential or commercial soil, except for arsenic and thallium, as described above. The detected concentrations appear to be naturally occurring background concentrations. The detected concentrations of thallium may be “false positives” due to laboratory interference or may be naturally occurring background concentrations.

If future land use of the subject property includes residential land use, then additional analyses to determine if the detected thallium was due to laboratory interference (or “false positives”) is recommended.



Introduction

This report presents the results of a Phase II Environmental Site Assessment (ESA) for the 1.5-acre parcel located west of Huber Street and north of Calvin Court in Grover Beach, California (Figure 1). The property consists of several storage yards which are separated with chain link fencing. The yards are used for the storage of automobiles, trucks, recreational vehicles (RVs), storage containers, boats, trailers and miscellaneous equipment storage. The northwestern portion is occupied by American Roof Removal/ American Roofing Co. The yards are unpaved.

Project History

Rincon completed a Phase I ESA for the subject property (report dated June 21, 2019).

The subject property is located in an area that is primarily composed of industrial, commercial and residential land uses. Properties in the vicinity of the subject property include a water treatment facility, automobile repair shops, a towing company, storage yards and single-family residences. The current adjacent land uses as follows:

- Northern Properties: Central Coast Water Treatment, Inc. - a commercial and industrial water treatment system company (966 Huber Street)
- Eastern Properties: Huber Street followed by storage yards (964 and 978 Griffin Street) and 974 Griffin Street (Topco, Inc.) an American retail food GPO (Group Purchasing Organization).
- Southern Properties: Undeveloped land (Eucalyptus tree grove) followed by Calvin Court and then residential homes
- Western Properties: Toyworx Automotive (983 S. 4th Street), Kautz Towing (985 S. 4th Street) and Harrys Radiator Service (989 S 4th Street)

The subject property is currently used for the storage of automobiles, trucks, RVs, storage containers, boats, trailers and miscellaneous equipment storage. The subject property is unpaved.

A regulatory database search was conducted for sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The search was conducted for the subject property and included data from surrounding sites within a specified radius of the property. The subject property was not listed in any of the databases searched by EDR. Four adjacent properties were listed in databases searched by EDR. None of the EDR database-listed sites were interpreted to be of potential environmental concern to the subject property.

Historical sources reviewed as part of the Phase I ESA include aerial photographs and topographic maps. The photos and maps reviewed indicate the following historical uses of the subject property have the potential to impact the subject property:

- Agricultural land: 1939 to 1976
- Vehicle, boat, trailer, miscellaneous equipment storage: 1994 to present day

Based on the findings of this Phase I ESA, three potential recognized environmental conditions (RECs) in connection with the subject property were identified as follows:



Potential Recognized Environmental Conditions

1. Former agricultural use of the subject property.
2. Automobile, truck, RV, boat, trailer and miscellaneous equipment storage on the subject property.
3. Western adjacent automobile repair facilities and towing/vehicle storage yard.

To determine if the above identified potential RECs have impacted soil beneath the subject property, a soil matrix assessment on the subject property was conducted.



Physical Setting

Topography

The current USGS topographic map (Oceano Quadrangle, 2012) indicates that the subject property is situated at an elevation of about 25 feet above mean sea level with topography sloping down to the west. The adjacent topography consists of relatively flat land gradually sloping to the west.

Geology and Hydrogeology

According to the California Geological Survey (CGS), *California Geomorphic Provinces, Note 36*¹, the subject property is located within the Coast Ranges Geomorphic Province. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevation above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Strata dip beneath alluvium of the Great Valley. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata.

Site Geology

According to the current United States Geological Survey Geologic Map of the Oceano Quadrangle (Dibblee, 2006), the subject property is underlain by Quaternary Older surficial deposits, described as older dissected alluvium.

Regional Groundwater Occurrence and Quality

The subject property is located within the Santa Maria River Valley groundwater basin.

The Santa Maria River Valley basin is bound on the north by the San Luis and Santa Lucia Ranges, on the east by the San Rafael Mountains, on the south by the Solomon Hills and the San Antonio Creek Valley Groundwater Basin, and on the west by the Pacific Ocean. Throughout most of the basin, groundwater is unconfined, except in the coastal portions where it is confined. The principal water-bearing units in this basin are alluvium (Holocene aged), dune sands (Pleistocene and Holocene aged), and the Orcutt (Pleistocene aged), Paso Robles (Pliocene – Pleistocene aged), Pismo (Pliocene aged), and Careaga (late Pliocene aged) Formations.

During the preparation of the Phase I ESA, we reviewed the California State Water Resources Control Board's (SWRCB's) online GeoTracker database to determine groundwater flow direction in the vicinity of the subject property. According to the *Case Closure Summary for the Former Jackpot Service Station* prepared by the Regional Water Quality Control Board (RWQCB) – Central Coast Region and dated August 1996, groundwater is reported to be between 4 and 14 feet below surface

¹ https://www.conservation.ca.gov/cgs/Documents/Publications/Note_36.pdf



grade and flows toward the west-southwest. This Former Jackpot Service Station property is located approximately 0.85 miles to the northwest of the subject property.

Purpose and Scope

The Purpose of the Phase II ESA was to determine if the potential RECs identified in the Phase I ESA have adversely impacted the soil or groundwater beneath the subject property. Our scope of work included the following:

- **Health and Safety Plan.** Prepared a site health and safety plan in accordance with OSHA requirements. The plan contains safety provisions for routine response activities as well as unexpected emergencies. The plan also contains information on chemical and physical hazards, personal protective equipment, decontamination procedures, personnel responsibilities, and emergency response protocols.
- **Utility Notification.** Prior to the commencement of any subsurface borings, we notified Underground Service Alert (USA) utility marking service. California law requires this notification. The utility marking service identifies known utility locations in the public right of way.
- **Soil Sampling.** On June 26, 2019, Rincon Consultants collected soil samples from 20 locations at the subject property at the locations depicted on Figure 3. At each of the soil boring locations, discrete soil samples were collected at 0.5 to 1.0 feet bgs, and 2.5 to 3 feet bgs.
- **Laboratory Analysis.** The 0.5 to 1.0 feet bgs soil samples were analyzed for Total Petroleum Hydrocarbons (EPA 8015M), Title 22 metals (EPA 6010B/7471A), Polycyclic Aromatic Hydrocarbons (EPA 8270C SIMS), and Pesticides (EPA 8081A). The 3-foot-deep samples were placed on hold pending the results of the shallower (0.5 to 1.0 feet bgs) soil samples.
- **Reporting.** Preparation of this report documenting our findings.



Methodology

Soil Sampling

On June 27, 2019, hand auger tools were used to advance a total of 20 soil borings (RB1 through RB20) at the subject property at the locations depicted on Figure 3. Soil borings were advanced to a total depth of 3 feet bgs. Two soil samples were collected from each boring at 0.5-1.0 feet bgs and from the bottom of each boring at 2.5-3.0 feet bgs. Soil samples were collected in glass jars and were capped, labeled and stored in a cooler with ice (pending delivery to the analytical laboratory).

Sample Analysis

The soil samples were transported under chain-of-custody documentation to OEC Laboratories in Santa Maria, California. The shallow (0.5-1.0 feet bgs) soil samples were analyzed for Total Petroleum Hydrocarbons (EPA 8015M), Title 22 metals (EPA 6010B/7471A), Polycyclic Aromatic Hydrocarbons (EPA 8270C SIMS), and Pesticides (EPA 8081A). The 2.5-3.0 feet bgs samples were placed on hold.



Results

Pesticides

Dichlorodiphenyldichloroethylene or 4,4-DDE was detected in 10 of the 20 soil samples, results ranged from 0.0067 mg/kg to 0.18 mg/kg.

Dichlorodiphenyltrichloroethane or 4,4-DDT was detected in 5 soil samples, results ranged from 0.0029 mg/kg to 0.049 mg/kg.

Methoxychlor was detected in RB14-1 at a concentration of 0.0041 mg/kg.

None of the soil sample results were above environmental screening levels (ESLs) for pesticides in residential or commercial soils. All other samples were below the method detection limit (MDL) for pesticides.

Metals

Concentrations of arsenic in 17 of the 20 soil samples analyzed were reported above the residential and commercial ESL for arsenic of 0.067 and 0.31 mg/kg, respectively. However, all 17 concentrations, which ranged from 0.96 mg/kg to 2.1 mg/kg, were within the naturally occurring background range for California soils for arsenic (0.6 mg/kg to 11 mg/kg). Naturally occurring arsenic in soil at California sites often exceeds the screening levels.

Thallium was detected in all soil samples, results ranged from 0.67 mg/kg to 1.5 mg/kg. However, the laboratory has indicated that the analytical method used for thallium (6010B) occasionally has issues meeting the low threshold for thallium due to interference during the analytical process. Therefore, the detected thallium may be considered “false positives”. In addition, the detected concentrations of thallium were generally within the naturally occurring background range for thallium in California soil (0.17 to 1.1 mg/kg). None of the detections of thallium exceeded the commercial screening level of 12 mg/kg. 16 samples exceeded the residential screening level of 0.78 mg/kg. However, since the subject property is not proposed for residential land use, the residential screening level is not necessarily applicable for this site.

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Conclusions

Varying concentrations of TPH, PAHs, pesticides and metals were detected in soil samples collected and analyzed from the subject property. None of the soil sample results exceeded environmental screening levels for residential or commercial soil, except for arsenic and thallium, as follows:

- **Arsenic:** Concentrations of arsenic in 17 of the 20 soil samples analyzed were reported above the residential and commercial ESL for arsenic of 0.067 and 0.31 mg/kg, respectively. However, all 17 concentrations, which ranged from 0.96 mg/kg to 2.1 mg/kg, were within the naturally occurring background range for California soils for arsenic (0.6 mg/kg to 11 mg/kg). Naturally occurring arsenic in soil at California sites often exceeds the screening levels.
- **Thallium:** Thallium was detected in all soil samples, results ranged from 0.67 mg/kg to 1.5 mg/kg. However, the laboratory has indicated that the analytical method used for thallium (6010B) occasionally has issues meeting the low threshold for thallium due to interference during the analytical process. Therefore, the detected thallium may be considered “false positives”. In addition, the detected concentrations of thallium were generally within the naturally occurring background range for thallium in California soil (0.17 to 1.1 mg/kg). None of the detections of thallium exceeded the commercial screening level of 12 mg/kg. 16 samples exceeded the residential screening level of 0.78 mg/kg. However, since the subject property is not proposed for residential land use, the residential screening level is not necessarily applicable for this site.

Recommendations

If future land use of the subject property includes residential land use, then additional analyses to determine if the detected thallium was due to laboratory interference (or “false positives”) is recommended.



Limitations

This report has been prepared for and is intended for the exclusive use of the City of Pismo Beach, Public Works Department. The contents of this report should not be relied upon by any other party without the written consent of Rincon Consultants, Inc.

Our conclusions regarding the site are based on the results of a limited subsurface sampling program. The results of this evaluation are qualified by the fact that only limited sampling and analytical testing was conducted during this assessment.

This scope was not intended to completely establish the quantities and distribution of contaminants present at the site or to determine the cost to remediate the site. The concentrations of contaminants measured at any given location may not be representative of conditions at other locations. Further, conditions may change at any location as a function of time in response to natural conditions, chemical reactions and other events. Conclusions regarding the condition of the site do not represent a warranty that all areas within the site are similar to those sampled.



References

The following reference materials were used in preparation of this Phase II ESA:

Geology and Groundwater

California Geologic Survey (CGS), *California Geomorphic Provinces Note 36*, December 2002.

California Department of Water Resources (DWR), *California's Groundwater Bulletin 118*, 2003, <http://www.water.ca.gov/groundwater/bulletin118/publications.cfm>. Accessed June 6, 2019.

RWQCB online database (GeoTracker), <http://geotracker.waterboards.ca.gov/>. Accessed June 6, 2019.

Topography

USGS topographic map (Oceano Quadrangle, 2012).

Other

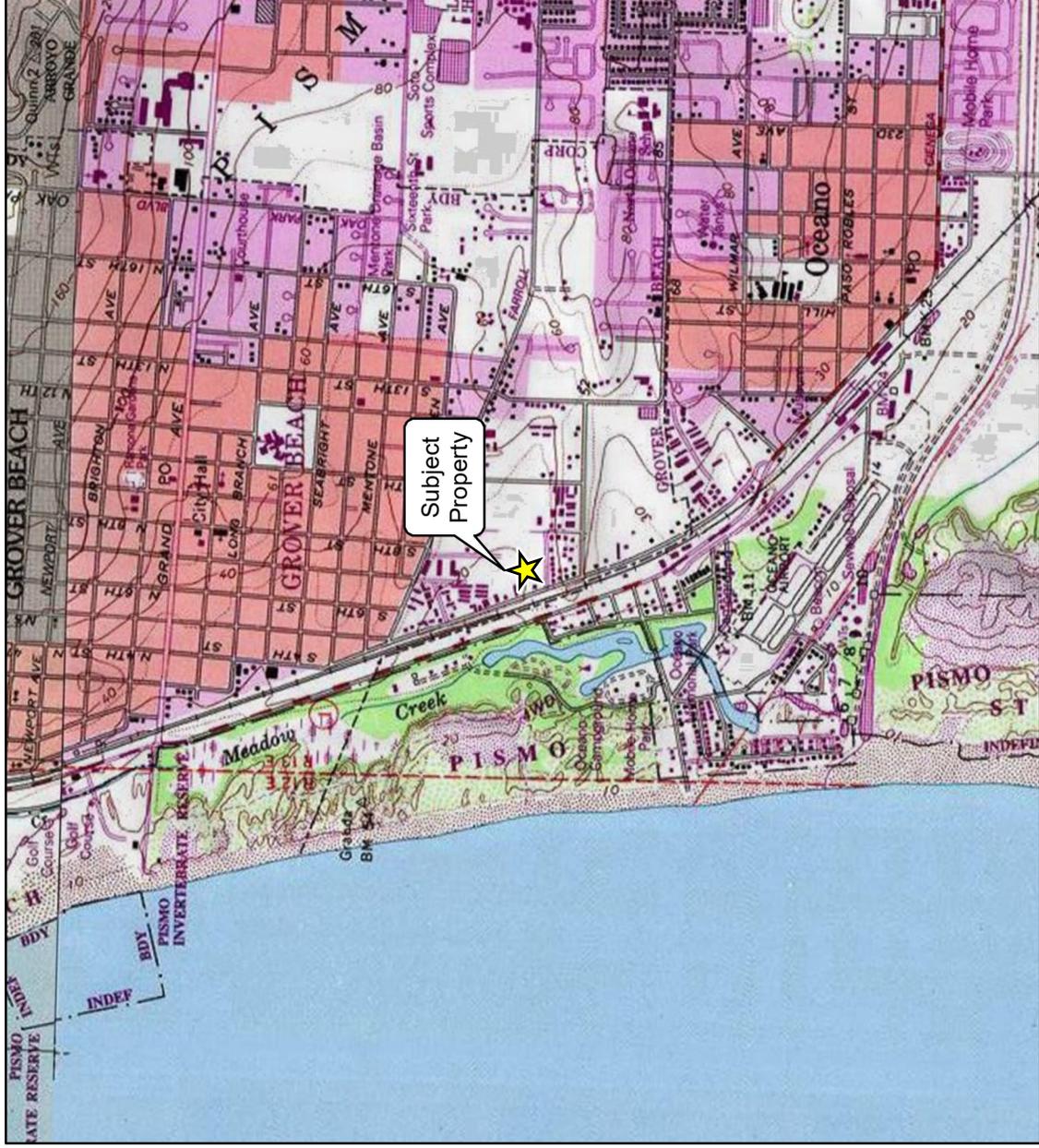
Kearney, Background Concentrations of Trace and Major Elements in California Soils, University of California, 1996.

San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) (revised January 2019); Summary of Soil ESLs table for human health direct exposures.



Figures

Approximately 1.5 Acre Parcel, Huber Street, Grover Beach, California
Phase II Environmental Site Assessment



Imagery provided by National Geographic Society, Esri and its licensors © 2019. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



Vicinity Map

Figure 1
Rincon Consultants, Inc.

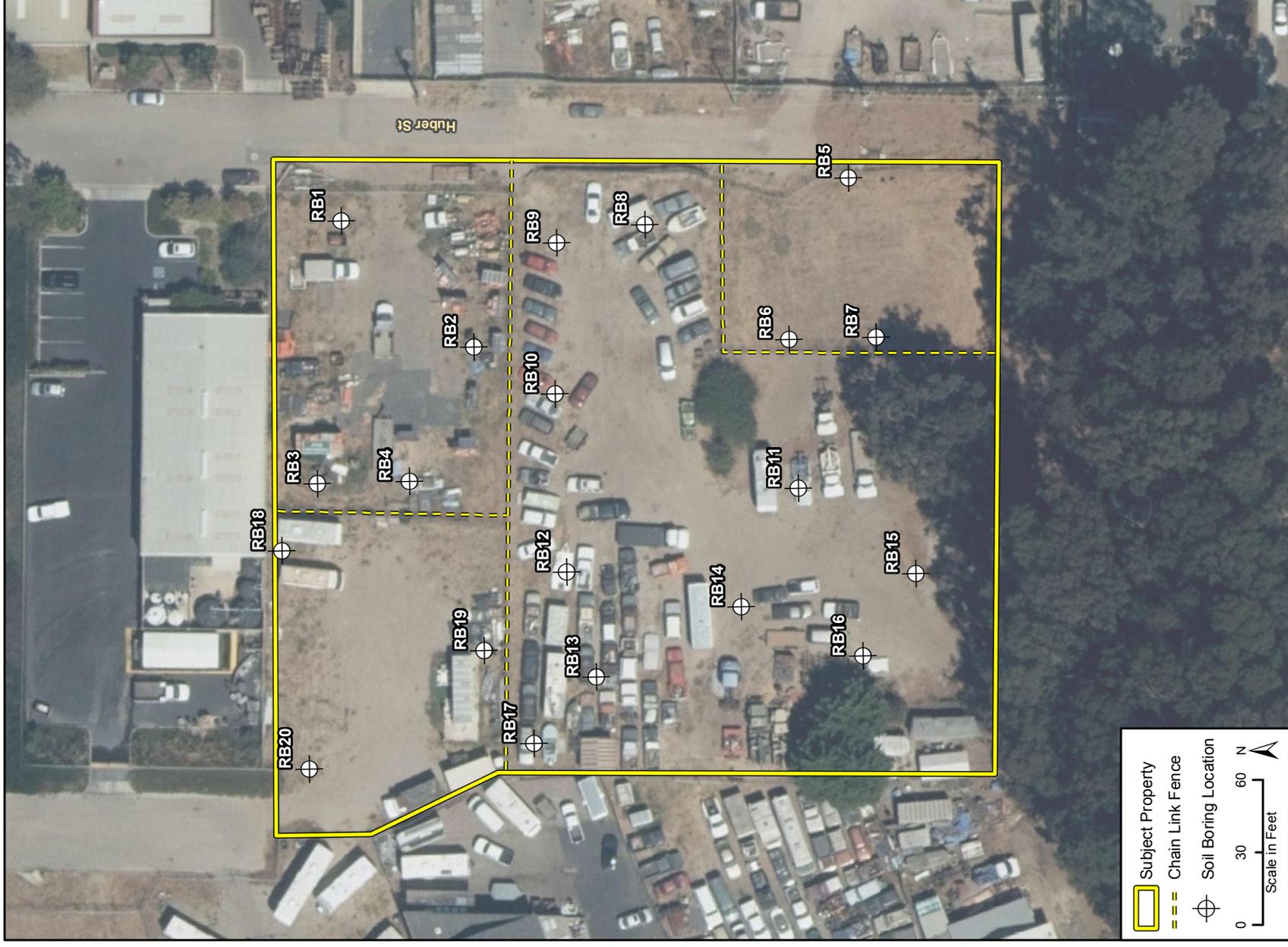


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Site Map

Figure 2

Approximately 1.5 Acre Parcel, Huber Street, Grover Beach, California
Phase II Environmental Site Assessment



Soil Boring Location Map

Figure 3

Tables

Table 1 – Soil Analytical Summary - OCPs
Huber Street Parcel, Grover Beach, California
Results in milligrams per kilogram (mg/kg) Sampled June 26, 2019

Sample Location	Aldrin	Chlordane (Technical)	Dieldrin	4,4'-DDE	4,4'-DDT	Heptachlor epoxide	Methoxychlor	Toxaphene	Other OCPs
RB1-1	ND<0.0075	ND<0.050	ND<0.0075	0.039	ND<0.0075	ND<0.0075	ND<0.0075	ND<0.080	ND
RB2-1	ND<0.015	ND<0.10	ND<0.015	ND<0.015	ND<0.015	ND<0.015	ND<0.015	ND<0.16	ND
RB3-1	ND<0.015	ND<0.10	ND<0.015	0.085	0.034	ND<0.015	ND<0.015	ND<0.16	ND
RB4-1	ND<0.015	ND<0.10	ND<0.015	ND<0.015	ND<0.016	ND<0.015	ND<0.015	ND<0.16	ND
RB5-1	ND<0.0060	ND<0.040	ND<0.0060	ND<0.0060	ND<0.0064	ND<0.0060	ND<0.0060	ND<0.064	ND
RB6-1	ND<0.0015	ND<0.010	ND<0.0015	0.0067	ND<0.016	ND<0.0015	ND<0.0015	ND<0.016	ND
RB7-1	ND<0.015	ND<0.10	ND<0.015	ND<0.015	ND<0.016	ND<0.015	ND<0.015	ND<0.16	ND
RB8-1	ND<0.0015	ND<0.010	ND<0.0015	ND<0.015	ND<0.016	ND<0.0015	ND<0.0015	ND<0.016	ND
RB9-1	ND<0.0015	ND<0.010	ND<0.0015	ND<0.015	ND<0.016	ND<0.0015	ND<0.0015	ND<0.016	ND
RB10-1	ND<0.0015	ND<0.010	ND<0.0015	0.0078	ND<0.016	ND<0.0015	ND<0.0015	ND<0.016	ND
RB11-1	ND<0.0060	ND<0.040	ND<0.0060	ND<0.0060	ND<0.0064	ND<0.0060	ND<0.0060	ND<0.064	ND
RB12-1	ND<0.0015	ND<0.010	ND<0.0015	0.025	ND<0.016	ND<0.0015	ND<0.0015	ND<0.016	ND
RB13-1	ND<0.015	ND<0.10	ND<0.015	0.041	ND<0.016	ND<0.015	ND<0.015	ND<0.16	ND
RB14-1	ND<0.0015	ND<0.010	ND<0.0015	0.056	0.0029	ND<0.0015	0.0041	ND<0.016	ND
RB15-1	ND<0.30	ND<2.0	ND<0.30	ND<0.30	ND<0.32	ND<0.30	ND<0.30	ND<3.2	ND
RB16-1	ND<0.060	ND<0.40	ND<0.060	ND<0.060	ND<0.064	ND<0.060	ND<0.060	ND<0.64	ND
RB17-1	ND<0.0075	ND<0.050	ND<0.0075	0.15	0.016	ND<0.0075	ND<0.0075	ND<0.080	ND
RB18-1	ND<0.0075	ND<0.050	ND<0.0075	0.058	0.019	ND<0.0075	ND<0.0075	ND<0.080	ND
RB19-1	ND<0.015	ND<0.10	ND<0.015	ND<0.015	ND<0.16	ND<0.015	ND<0.015	ND<0.16	ND
RB20-1	ND<0.0060	ND<0.040	ND<0.0060	0.18	0.049	ND<0.0060	ND<0.0060	ND<0.064	ND
ESL - Residential	2.1	36	3.5	1.8	1.9	0.91	350	0.51	Varies
ESL - Commercial	29	500	48	8.3	8.5	13	4,800	2.2	Varies

All samples collected between 0.5 - 1.0 feet below ground surface

OCPs = Organochlorine Pesticides

ND = Not detected above the method detection limit

ESL = San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (revised January 2019); Summary of Soil ESLs table for human health direct exposures.

Samples analyzed for OCPs by EPA Method 8081A

Samples analyzed by OEC Laboratories, Santa Maria, California

Note: For a complete list of OCPs tested, see laboratory analytical report

Table 2 – Soil Analytical Summary - Metals
Huber Street Parcel, Grover Beach, California
Results in milligrams per kilogram (mg/kg), Sampled June 26, 2019

Sample Location	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
RB1-1	ND<0.93	<i>1.6</i>	42	ND<0.23	ND<0.14	12	2	3.4	6.2	0.019	0.33	5.7	ND<0.93	ND<0.19	0.93	10	11
RB2-1	ND<0.99	<i>1.3</i>	38	ND<0.25	ND<0.15	12	1.8	2.8	2.6	0.0099	ND<0.25	5.8	ND<0.99	ND<0.20	1.2	9.7	7.5
RB3-1	ND<0.97	<i>1.5</i>	37	ND<0.24	ND<0.15	13	1.7	5.1	10	0.027	ND<0.24	6.7	ND<0.97	ND<0.19	0.8	9.8	21
RB4-1	ND<0.93	<i>1.6</i>	34	ND<0.23	ND<0.14	16	1.8	3.3	3	0.016	ND<0.23	8	ND<0.93	ND<0.19	1.2	13	11
RB5-1	ND<0.93	<i>0.96</i>	38	ND<0.23	ND<0.14	14	1.5	2.6	3.8	ND<0.0085	ND<0.23	5.5	ND<0.93	ND<0.19	0.76	9.3	10
RB6-1	ND<1.0	ND<1.0	37	ND<0.25	ND<0.15	12	1.5	3	3.1	0.014	ND<0.25	5.4	ND<1.0	ND<0.20	0.8	9.1	12
RB7-1	ND<0.94	<i>1.8</i>	41	ND<0.23	ND<0.14	13	2	6.4	14	0.039	ND<0.23	7.9	ND<0.94	ND<0.19	1.1	11	27
RB8-1	ND<0.99	ND<0.99	38	ND<0.25	ND<0.15	12	1.5	2.5	1.9	ND<0.0098	ND<0.25	5.4	ND<0.99	ND<0.20	0.71	9.2	6.8
RB9-1	ND<0.95	ND<0.95	40	ND<0.24	ND<0.14	13	1.6	2.3	2	ND<0.0084	ND<0.24	5.6	ND<0.95	ND<0.19	0.89	9.5	6.6
RB10-1	ND<0.96	<i>1.4</i>	40	ND<0.24	ND<0.14	14	1.7	2.5	2.1	ND<0.010	ND<0.24	5.6	ND<0.96	ND<0.19	0.89	9.5	7.8
RB11-1	ND<0.95	<i>1</i>	39	ND<0.24	ND<0.14	15	1.7	3.4	6.1	0.015	ND<0.24	5.8	ND<0.95	ND<0.19	0.73	9.6	13
RB12-1	ND<0.97	<i>1.3</i>	44	ND<0.24	ND<0.14	16	1.8	3.1	3.2	0.023	ND<0.24	6	ND<0.97	ND<0.19	1.4	10	10
RB13-1	ND<0.97	<i>1.2</i>	43	ND<0.24	ND<0.15	15	1.8	3.4	5.7	0.018	ND<0.24	6.7	ND<0.97	ND<0.19	1.1	11	11
RB14-1	ND<0.98	<i>1.3</i>	41	ND<0.25	ND<0.15	17	1.6	3.4	4	0.02	ND<0.25	5.6	ND<0.98	ND<0.20	0.94	9.8	13
RB15-1	ND<0.99	<i>1.8</i>	43	ND<0.25	ND<0.15	17	2.8	13	21	0.039	0.41	10	ND<0.99	ND<0.20	0.67	16	90
RB16-1	ND<0.99	<i>1.1</i>	37	ND<0.25	ND<0.15	23	3.4	9.3	10	0.033	ND<0.25	22	ND<0.99	ND<0.20	1.5	18	23
RB17-1	ND<0.98	<i>1.9</i>	45	ND<0.24	ND<0.15	16	1.9	4.6	6.7	0.028	0.27	6.4	ND<0.98	ND<0.20	0.96	11	15
RB18-1	ND<0.94	<i>1.4</i>	46	ND<0.24	ND<0.14	16	2.1	3.6	7	0.02	ND<0.24	6.1	ND<0.94	ND<0.19	0.9	10	13
RB19-1	ND<0.94	<i>1.1</i>	40	ND<0.23	ND<0.14	15	1.9	3.1	3.1	0.038	ND<0.23	5.7	ND<0.94	ND<0.19	1.2	10	10
RB20-1	ND<0.92	<i>2.1</i>	48	ND<0.23	ND<0.14	17	2.3	4.8	9.6	0.036	ND<0.23	6.6	ND<0.92	ND<0.18	1.1	12	15
Background Concentration	0.15 - 1.95	0.6 - 11	133 - 1,400	0.25 - 2.70	0.05 - 1.70	23 - 1,579	2.7 - 46.9	9.1 - 96.4	12.4 - 97.1	0.05 - 0.90	0.1 - 9.6	9.0 - 509	0.015 - 0.430	0.10 - 8.3	0.17 - 1.1	39 - 288	88 - 236
ESLs - Residential	11	0.067	15,000	16	78	NE	23	3,100	80	13	390	820	390	390	0.78	390	23,000
ESLs - Commercial	160	0.31	220,000	230	1,100	NE	350	47,000	320	190	5,800	11,000	5,800	5,800	12	5,800	350,000

All samples collected between 0.5 - 1.0 feet below ground surface

ESL = San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (revised January 2019); Summary of Soil ESLs table for human health direct exposures.

Background Concentration = Kearney, *Background Concentrations of Trace and Major Elements in California Soils*, University of California, 1996

NE = ESL not established

ND = Not detected above the method detection limit

Samples analyzed for Metals by EPA Method 6010B and 7471A

Samples analyzed by OEC Laboratories, Santa Maria, California

Results in **bold** exceed residential ESL

Results in *italic* exceed commercial ESL

**Table 3 – Soil Analytical Summary - Total Petroleum Hydrocarbons
Huber Street Parcel, Grover Beach, California
Results in milligrams per kilogram (mg/kg) Sampled June 26, 2019**

Sample Location	TPH - Gas	TPH - Diesel	TPH - Oil
RB1-1	ND<0.10	ND<7.6	ND<40
RB2-1	ND<0.10	ND<7.6	51
RB3-1	ND<0.10	60	160
RB4-1	ND<0.10	ND<7.6	ND<40
RB5-1	ND<0.10	ND<7.6	ND<40
RB6-1	ND<0.10	ND<7.6	ND<40
RB7-1	ND<0.10	9	110
RB8-1	ND<0.099	ND<7.6	ND<40
RB9-1	ND<0.10	ND<7.6	ND<40
RB10-1	ND<0.10	ND<7.6	ND<40
RB11-1	ND<0.10	ND<7.6	ND<40
RB12-1	ND<0.10	ND<7.6	ND<40
RB13-1	ND<0.10	ND<7.6	71
RB14-1	ND<0.10	ND<7.6	ND<40
RB15-1	ND<0.10	25	320
RB16-1	ND<0.099	ND<76	890
RB17-1	ND<0.10	12	47
RB18-1	ND<0.099	ND<7.6	ND<40
RB19-1	ND<0.10	ND<7.6	ND<40
RB20-1	ND<0.10	ND<7.6	ND<40
ESLs - Residential	430	260	12,000
ESLs - Commercial	2,000	1,200	180,000

All samples collected between 0.5 - 1.0 feet below ground surface

TPH = Total Petroleum Hydrocarbons

ND = Not detected above the method detection limit

Samples analyzed for TPH by EPA Method 8015M FFP

Samples analyzed by OEC Laboratories, Santa Maria, California

ESL = San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (revised January 2019); Summary of Soil ESLs table for human health direct exposures.

Table 4 – Soil Analytical Summary - Polynuclear Aromatic Hydrocarbons
Huber Street Parcel, Grover Beach, California
Results in milligrams per kilogram (mg/kg) Sampled June 26, 2019

Sample Location	Acenaphthene	Acenaphthylene	Anthracene	Benz (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
RB1-1	ND<0.0060	ND<0.0060	ND<0.0060	ND<0.0060	ND<0.0060	ND<0.0060	ND<0.010	ND<0.0060	ND<0.0060	ND<0.010	0.0073	ND<0.0060	ND<0.0060	ND<0.010	ND<0.0060	0.0073
RB2-1	ND<0.015	ND<0.015	ND<0.015	ND<0.015	ND<0.015	ND<0.015	ND<0.025	ND<0.015	ND<0.015	ND<0.025	ND<0.015	ND<0.015	ND<0.015	ND<0.025	ND<0.015	ND<0.015
RB3-1	ND<0.0060	ND<0.0060	ND<0.0060	0.022	0.024	0.02	ND<0.010	0.026	0.03	ND<0.010	0.047	0.0067	0.0073	ND<0.010	0.031	0.044
RB4-1	ND<0.015	ND<0.015	ND<0.015	ND<0.015	ND<0.015	ND<0.015	ND<0.025	ND<0.015	ND<0.015	ND<0.025	ND<0.015	ND<0.015	ND<0.015	ND<0.025	ND<0.015	ND<0.015
RB5-1	ND<0.012	ND<0.012	0.015	0.032	0.032	0.031	ND<0.020	0.027	0.04	ND<0.020	0.063	ND<0.012	ND<0.012	ND<0.020	0.049	0.059
RB6-1	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030
RB7-1	ND<0.012	ND<0.012	0.029	0.12	0.088	0.086	0.032	0.089	0.14	ND<0.020	0.22	ND<0.012	0.031	ND<0.020	0.11	0.21
RB8-1	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030
RB9-1	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030
RB10-1	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030
RB11-1	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030
RB12-1	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030
RB13-1	ND<0.0030	ND<0.0030	ND<0.0030	0.009	0.011	0.0097	0.006	0.01	0.012	ND<0.0050	0.015	ND<0.0030	0.0053	ND<0.0050	0.0073	0.015
RB14-1	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0050	ND<0.0030	ND<0.0030
RB15-1	ND<0.036	ND<0.036	ND<0.036	0.048	0.064	0.088	ND<0.060	0.076	0.076	ND<0.060	0.092	ND<0.036	ND<0.036	ND<0.060	0.044	0.084
RB16-1	ND<0.090	ND<0.090	ND<0.090	ND<0.090	ND<0.090	ND<0.090	ND<0.15	ND<0.090	ND<0.090	ND<0.15	ND<0.090	ND<0.090	ND<0.090	ND<0.15	ND<0.090	ND<0.090
RB17-1	ND<0.0060	ND<0.0060	ND<0.0060	0.011	0.013	0.014	ND<0.010	0.017	0.019	ND<0.010	0.029	ND<0.0060	ND<0.0060	ND<0.010	0.023	0.027
RB18-1	ND<0.0030	ND<0.0030	0.0057	0.035	0.039	0.03	0.015	0.036	0.046	ND<0.0050	0.065	ND<0.0030	0.015	ND<0.0050	0.037	0.064
RB19-1	ND<0.0060	0.019	ND<0.0060	ND<0.0060	ND<0.0060	ND<0.0060	ND<0.010	ND<0.0060	0.0067	ND<0.010	0.008	0.012	ND<0.0060	0.31	0.011	0.0073
RB20-1	ND<0.0030	0.006	0.0057	0.025	0.028	0.026	0.0096	0.03	0.034	ND<0.0050	0.049	0.0053	0.0096	0.042	0.037	0.047
ESLs - Residential	3,600	NE	18,000	1.1	18	1.1	NE	11	NE	0.11	2,400	2,400	1.1	3.8	NE	1,800
ESLs - Commercial	45,000	NE	230,000	20	220	21	NE	210	NE	2.1	30,000	30,000	21	17	NE	23,000

All samples collected between 0.5 - 1.0 feet below ground surface

NE = ESL not established

ND = Not detected above the method detection limit

Samples analyzed for PAHs by EPA Method 8270 SIM

Samples analyzed by OEC Laboratories, Santa Maria, California

ESL = San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (revised January 2019); Summary of Soil ESLs table for human health direct exposures.

Appendix A

Laboratory Analytical Reports



Oilfield Environmental & Compliance, Inc.

Scott English
Rincon Consultants
180 N. Ashwood Ave.
Ventura, CA 93003

Report: July 9, 2019 15:30

Work Order: 1903173

Project: Huber Street
Number: 19-07931

Dear Client:

Enclosed is an analytical report for the above referenced project. The samples included in this report were received on June 27, 2019 14:55 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alyssa', with a long horizontal line extending to the right.

Alyssa Zuniga, Project Manager

azuniga@oecusa.com



Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

SAMPLE SUMMARY

Sample ID	Laboratory ID	Client Matrix	Lab Matrix	Date Sampled	Date Received
RB1-1	1903173-01	Solid	Solid	06/27/19 09:20	06/27/19 14:55
RB2-1	1903173-03	Solid	Solid	06/27/19 09:20	06/27/19 14:55
RB3-1	1903173-05	Solid	Solid	06/27/19 09:30	06/27/19 14:55
RB4-1	1903173-07	Solid	Solid	06/27/19 09:35	06/27/19 14:55
RB5-1	1903173-09	Solid	Solid	06/27/19 10:00	06/27/19 14:55
RB6-1	1903173-11	Solid	Solid	06/27/19 10:00	06/27/19 14:55
RB7-1	1903173-13	Solid	Solid	06/27/19 10:05	06/27/19 14:55
RB8-1	1903173-15	Solid	Solid	06/27/19 10:45	06/27/19 14:55
RB9-1	1903173-17	Solid	Solid	06/27/19 10:50	06/27/19 14:55
RB10-1	1903173-19	Solid	Solid	06/27/19 11:05	06/27/19 14:55
RB11-1	1903173-21	Solid	Solid	06/27/19 11:05	06/27/19 14:55
RB12-1	1903173-23	Solid	Solid	06/27/19 11:20	06/27/19 14:55
RB13-1	1903173-25	Solid	Solid	06/27/19 11:40	06/27/19 14:55
RB14-1	1903173-27	Solid	Solid	06/27/19 11:15	06/27/19 14:55
RB15-1	1903173-29	Solid	Solid	06/27/19 11:40	06/27/19 14:55
RB16-1	1903173-31	Solid	Solid	06/27/19 12:00	06/27/19 14:55
RB17-1	1903173-33	Solid	Solid	06/27/19 11:50	06/27/19 14:55
RB18-1	1903173-35	Solid	Solid	06/27/19 12:30	06/27/19 14:55
RB19-1	1903173-37	Solid	Solid	06/27/19 12:40	06/27/19 14:55
RB20-1	1903173-39	Solid	Solid	06/27/19 12:35	06/27/19 14:55

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

ANALYTICAL REPORT FOR SAMPLES 1903173-01 (Solid) RB1-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.019	0.0091	0.084	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.93	2.3	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.6	0.93	1.9	"	"	"	"	"	"	J
Barium	42	0.47	0.93	"	"	"	"	"	"	
Beryllium	ND	0.23	0.47	"	"	"	"	"	"	
Cadmium	ND	0.14	0.23	"	"	"	"	"	"	
Chromium	12	0.23	0.47	"	"	"	"	"	"	
Cobalt	2.0	0.23	0.47	"	"	"	"	"	"	
Copper	3.4	0.47	0.93	"	"	"	"	"	"	
Lead	6.2	0.28	0.47	"	"	"	"	"	"	
Molybdenum	0.33	0.23	0.47	"	"	"	"	"	"	J
Nickel	5.7	0.093	0.23	"	"	"	"	"	"	
Selenium	ND	0.93	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.47	"	"	"	"	"	"	
Thallium	0.93	0.47	0.93	"	"	"	"	"	"	
Vanadium	10	0.47	0.93	"	"	"	"	"	"	
Zinc	11	0.47	0.93	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			105 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			94.8 %	(67 - 134)		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-01 (Solid) RB1-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

C-06, R-05

alpha-BHC	ND	0.0075	0.015	mg/kg	5	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0075	0.015	"	"	"	"	"	"	
Aldrin	ND	0.0075	0.015	"	"	"	"	"	"	
beta-BHC	ND	0.0075	0.015	"	"	"	"	"	"	
delta-BHC	ND	0.0075	0.015	"	"	"	"	"	"	
4,4'-DDD	ND	0.0075	0.015	"	"	"	"	"	"	CCHI
4,4'-DDE	0.039	0.0075	0.015	"	"	"	"	"	"	
4,4'-DDT	ND	0.0080	0.015	"	"	"	"	"	"	CCFL 8081
Dieldrin	ND	0.0075	0.015	"	"	"	"	"	"	
Endosulfan I	ND	0.0085	0.015	"	"	"	"	"	"	
Endosulfan II	ND	0.0075	0.015	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0075	0.015	"	"	"	"	"	"	
Endrin	ND	0.0075	0.015	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0075	0.015	"	"	"	"	"	"	
Endrin ketone	ND	0.0080	0.015	"	"	"	"	"	"	
gamma-BHC	ND	0.0075	0.015	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0075	0.015	"	"	"	"	"	"	
Heptachlor	ND	0.0075	0.015	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0075	0.015	"	"	"	"	"	"	
Methoxychlor	ND	0.0075	0.015	"	"	"	"	"	"	CCFL 8081
Chlordane (tech)	ND	0.050	0.10	"	"	"	"	"	"	
Toxaphene	ND	0.080	0.10	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			114 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			68.3 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-01 (Solid) RB1-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

R-05

Acenaphthene	ND	0.0060	0.010	mg/kg	2	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0060	0.010	"	"	"	"	"	"	
Anthracene	ND	0.0060	0.010	"	"	"	"	"	"	
Benz (a) anthracene	ND	0.0060	0.010	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0060	0.010	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0060	0.010	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0060	0.010	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.010	0.020	"	"	"	"	"	"	
Chrysene	ND	0.0060	0.010	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.010	0.020	"	"	"	"	"	"	
Fluoranthene	0.0073	0.0060	0.010	"	"	"	"	"	"	J
Fluorene	ND	0.0060	0.010	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0060	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.010	0.020	"	"	"	"	"	"	
Phenanthrene	ND	0.0060	0.010	"	"	"	"	"	"	
Pyrene	0.0073	0.0060	0.010	"	"	"	"	"	"	J
Surrogate: p-Terphenyl-d14			92.5 %	(10 - 185)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-03 (Solid) RB2-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.0099	0.0091	0.084	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.99	2.5	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.3	0.99	2.0	"	"	"	"	"	"	J
Barium	38	0.50	0.99	"	"	"	"	"	"	
Beryllium	ND	0.25	0.50	"	"	"	"	"	"	
Cadmium	ND	0.15	0.25	"	"	"	"	"	"	
Chromium	12	0.25	0.50	"	"	"	"	"	"	
Cobalt	1.8	0.25	0.50	"	"	"	"	"	"	
Copper	2.8	0.50	0.99	"	"	"	"	"	"	
Lead	2.6	0.30	0.50	"	"	"	"	"	"	
Molybdenum	ND	0.25	0.50	"	"	"	"	"	"	
Nickel	5.8	0.099	0.25	"	"	"	"	"	"	
Selenium	ND	0.99	2.0	"	"	"	"	"	"	
Silver	ND	0.20	0.50	"	"	"	"	"	"	
Thallium	1.2	0.50	0.99	"	"	"	"	"	"	
Vanadium	9.7	0.50	0.99	"	"	"	"	"	"	
Zinc	7.5	0.50	0.99	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			109 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	06/28/19	EPA 8015M	
TPH Motor Oil (C23-C40)	51	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			89.0 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-03 (Solid) RB2-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

C-06, R-05

alpha-BHC	ND	0.015	0.030	mg/kg	10	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Aldrin	ND	0.015	0.030	"	"	"	"	"	"	
beta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
delta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
4,4'-DDD	ND	0.015	0.030	"	"	"	"	"	"	CCHI
4,4'-DDE	ND	0.015	0.030	"	"	"	"	"	"	
4,4'-DDT	ND	0.016	0.030	"	"	"	"	"	"	CCFL 8081
Dieldrin	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan I	ND	0.017	0.030	"	"	"	"	"	"	
Endosulfan II	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.015	0.030	"	"	"	"	"	"	
Endrin	ND	0.015	0.030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.015	0.030	"	"	"	"	"	"	
Endrin ketone	ND	0.016	0.030	"	"	"	"	"	"	
gamma-BHC	ND	0.015	0.030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.015	0.030	"	"	"	"	"	"	
Methoxychlor	ND	0.015	0.030	"	"	"	"	"	"	CCFL 8081
Chlordane (tech)	ND	0.10	0.20	"	"	"	"	"	"	
Toxaphene	ND	0.16	0.20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			111 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			73.0 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-03 (Solid)
RB2-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

R-05

Acenaphthene	ND	0.015	0.025	mg/kg	5	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.015	0.025	"	"	"	"	"	"	
Anthracene	ND	0.015	0.025	"	"	"	"	"	"	
Benz (a) anthracene	ND	0.015	0.025	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.015	0.025	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.015	0.025	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.015	0.025	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.025	0.050	"	"	"	"	"	"	
Chrysene	ND	0.015	0.025	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.025	0.050	"	"	"	"	"	"	
Fluoranthene	ND	0.015	0.025	"	"	"	"	"	"	
Fluorene	ND	0.015	0.025	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.015	0.025	"	"	"	"	"	"	
Naphthalene	ND	0.025	0.050	"	"	"	"	"	"	
Phenanthrene	ND	0.015	0.025	"	"	"	"	"	"	
Pyrene	ND	0.015	0.025	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			87.5 %	(10 - 185)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-05 (Solid) RB3-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.027	0.0087	0.080	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.97	2.4	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.5	0.97	1.9	"	"	"	"	"	"	J
Barium	37	0.49	0.97	"	"	"	"	"	"	
Beryllium	ND	0.24	0.49	"	"	"	"	"	"	
Cadmium	ND	0.15	0.24	"	"	"	"	"	"	
Chromium	13	0.24	0.49	"	"	"	"	"	"	
Cobalt	1.7	0.24	0.49	"	"	"	"	"	"	
Copper	5.1	0.49	0.97	"	"	"	"	"	"	
Lead	10	0.29	0.49	"	"	"	"	"	"	
Molybdenum	ND	0.24	0.49	"	"	"	"	"	"	
Nickel	6.7	0.097	0.24	"	"	"	"	"	"	
Selenium	ND	0.97	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.49	"	"	"	"	"	"	
Thallium	0.80	0.49	0.97	"	"	"	"	"	"	J
Vanadium	9.8	0.49	0.97	"	"	"	"	"	"	
Zinc	21	0.49	0.97	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			102 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	60	7.6	10	mg/kg	1	B9F0814	06/28/19	06/28/19	EPA 8015M	
TPH Motor Oil (C23-C40)	160	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			91.4 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-05 (Solid) RB3-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

C-06, R-05

alpha-BHC	ND	0.015	0.030	mg/kg	10	B9G0041	07/01/19	07/03/19	EPA 8081A	
alpha-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Aldrin	ND	0.015	0.030	"	"	"	"	"	"	
beta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
delta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
4,4'-DDD	ND	0.015	0.030	"	"	"	"	"	"	CCHI
4,4'-DDE	0.085	0.015	0.030	"	"	"	"	"	"	
4,4'-DDT	0.034	0.016	0.030	"	"	"	"	"	"	CCFL 8081
Dieldrin	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan I	ND	0.017	0.030	"	"	"	"	"	"	
Endosulfan II	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.015	0.030	"	"	"	"	"	"	
Endrin	ND	0.015	0.030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.015	0.030	"	"	"	"	"	"	
Endrin ketone	ND	0.016	0.030	"	"	"	"	"	"	
gamma-BHC	ND	0.015	0.030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.015	0.030	"	"	"	"	"	"	
Methoxychlor	ND	0.015	0.030	"	"	"	"	"	"	CCFL 8081
Chlordane (tech)	ND	0.10	0.20	"	"	"	"	"	"	
Toxaphene	ND	0.16	0.20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			397 %	(10 - 202)		"	"	"	"	S-03
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			78.8 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-05 (Solid)
RB3-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

R-05

Acenaphthene	ND	0.0060	0.010	mg/kg	2	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0060	0.010	"	"	"	"	"	"	
Anthracene	ND	0.0060	0.010	"	"	"	"	"	"	
Benz (a) anthracene	0.022	0.0060	0.010	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.020	0.0060	0.010	"	"	"	"	"	"	ISlowA
Benzo (k) fluoranthene	0.026	0.0060	0.010	"	"	"	"	"	"	ISlowA
Benzo (a) pyrene	0.024	0.0060	0.010	"	"	"	"	"	"	ISlowA
Benzo (g,h,i) perylene	ND	0.010	0.020	"	"	"	"	"	"	
Chrysene	0.030	0.0060	0.010	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.010	0.020	"	"	"	"	"	"	
Fluoranthene	0.047	0.0060	0.010	"	"	"	"	"	"	
Fluorene	0.0067	0.0060	0.010	"	"	"	"	"	"	J
Indeno (1,2,3-cd) pyrene	0.0073	0.0060	0.010	"	"	"	"	"	"	ISlowA, J
Naphthalene	ND	0.010	0.020	"	"	"	"	"	"	
Phenanthrene	0.031	0.0060	0.010	"	"	"	"	"	"	
Pyrene	0.044	0.0060	0.010	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			80.0 %	(10 - 185)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-07 (Solid) RB4-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.016	0.0096	0.089	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.93	2.3	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.6	0.93	1.9	"	"	"	"	"	"	J
Barium	34	0.46	0.93	"	"	"	"	"	"	
Beryllium	ND	0.23	0.46	"	"	"	"	"	"	
Cadmium	ND	0.14	0.23	"	"	"	"	"	"	
Chromium	16	0.23	0.46	"	"	"	"	"	"	
Cobalt	1.8	0.23	0.46	"	"	"	"	"	"	
Copper	3.3	0.46	0.93	"	"	"	"	"	"	
Lead	3.0	0.28	0.46	"	"	"	"	"	"	
Molybdenum	ND	0.23	0.46	"	"	"	"	"	"	
Nickel	8.0	0.093	0.23	"	"	"	"	"	"	
Selenium	ND	0.93	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.46	"	"	"	"	"	"	
Thallium	1.2	0.46	0.93	"	"	"	"	"	"	
Vanadium	13	0.46	0.93	"	"	"	"	"	"	
Zinc	11	0.46	0.93	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			110 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	06/28/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			90.0 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-07 (Solid)
RB4-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

C-06, R-05

alpha-BHC	ND	0.015	0.030	mg/kg	10	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Aldrin	ND	0.015	0.030	"	"	"	"	"	"	
beta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
delta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
4,4'-DDD	ND	0.015	0.030	"	"	"	"	"	"	CCHI
4,4'-DDE	ND	0.015	0.030	"	"	"	"	"	"	
4,4'-DDT	ND	0.016	0.030	"	"	"	"	"	"	CCFL 8081
Dieldrin	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan I	ND	0.017	0.030	"	"	"	"	"	"	
Endosulfan II	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.015	0.030	"	"	"	"	"	"	
Endrin	ND	0.015	0.030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.015	0.030	"	"	"	"	"	"	
Endrin ketone	ND	0.016	0.030	"	"	"	"	"	"	
gamma-BHC	ND	0.015	0.030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.015	0.030	"	"	"	"	"	"	
Methoxychlor	ND	0.015	0.030	"	"	"	"	"	"	CCFL 8081
Chlordane (tech)	ND	0.10	0.20	"	"	"	"	"	"	
Toxaphene	ND	0.16	0.20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			112 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			67.6 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

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180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-07 (Solid)
RB4-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

R-05

Acenaphthene	ND	0.015	0.025	mg/kg	5	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.015	0.025	"	"	"	"	"	"	
Anthracene	ND	0.015	0.025	"	"	"	"	"	"	
Benz (a) anthracene	ND	0.015	0.025	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.015	0.025	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.015	0.025	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.015	0.025	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.025	0.050	"	"	"	"	"	"	
Chrysene	ND	0.015	0.025	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.025	0.050	"	"	"	"	"	"	
Fluoranthene	ND	0.015	0.025	"	"	"	"	"	"	
Fluorene	ND	0.015	0.025	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.015	0.025	"	"	"	"	"	"	
Naphthalene	ND	0.025	0.050	"	"	"	"	"	"	
Phenanthrene	ND	0.015	0.025	"	"	"	"	"	"	
Pyrene	ND	0.015	0.025	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			93.7 %	(10 - 185)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-09 (Solid) RB5-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	ND	0.0085	0.078	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	
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Total Metals by ICP

Antimony	ND	0.93	2.3	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	0.96	0.93	1.9	"	"	"	"	"	"	J
Barium	38	0.47	0.93	"	"	"	"	"	"	
Beryllium	ND	0.23	0.47	"	"	"	"	"	"	
Cadmium	ND	0.14	0.23	"	"	"	"	"	"	
Chromium	14	0.23	0.47	"	"	"	"	"	"	
Cobalt	1.5	0.23	0.47	"	"	"	"	"	"	
Copper	2.6	0.47	0.93	"	"	"	"	"	"	
Lead	3.8	0.28	0.47	"	"	"	"	"	"	
Molybdenum	ND	0.23	0.47	"	"	"	"	"	"	
Nickel	5.5	0.093	0.23	"	"	"	"	"	"	
Selenium	ND	0.93	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.47	"	"	"	"	"	"	
Thallium	0.76	0.47	0.93	"	"	"	"	"	"	J
Vanadium	9.3	0.47	0.93	"	"	"	"	"	"	
Zinc	10	0.47	0.93	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			104 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	06/28/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			88.9 %	(67 - 134)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-09 (Solid)
RB5-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

R-05

alpha-BHC	ND	0.0060	0.012	mg/kg	4	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0060	0.012	"	"	"	"	"	"	
Aldrin	ND	0.0060	0.012	"	"	"	"	"	"	
beta-BHC	ND	0.0060	0.012	"	"	"	"	"	"	
delta-BHC	ND	0.0060	0.012	"	"	"	"	"	"	
4,4'-DDD	ND	0.0060	0.012	"	"	"	"	"	"	
4,4'-DDE	ND	0.0060	0.012	"	"	"	"	"	"	
4,4'-DDT	ND	0.0064	0.012	"	"	"	"	"	"	
Dieldrin	ND	0.0060	0.012	"	"	"	"	"	"	
Endosulfan I	ND	0.0068	0.012	"	"	"	"	"	"	
Endosulfan II	ND	0.0060	0.012	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0060	0.012	"	"	"	"	"	"	
Endrin	ND	0.0060	0.012	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0060	0.012	"	"	"	"	"	"	
Endrin ketone	ND	0.0064	0.012	"	"	"	"	"	"	
gamma-BHC	ND	0.0060	0.012	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0060	0.012	"	"	"	"	"	"	
Heptachlor	ND	0.0060	0.012	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0060	0.012	"	"	"	"	"	"	
Methoxychlor	ND	0.0060	0.012	"	"	"	"	"	"	
Chlordane (tech)	ND	0.040	0.080	"	"	"	"	"	"	
Toxaphene	ND	0.064	0.080	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			102 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			77.2 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-09 (Solid)
RB5-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

R-05

Acenaphthene	ND	0.012	0.020	mg/kg	4	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.012	0.020	"	"	"	"	"	"	
Anthracene	0.015	0.012	0.020	"	"	"	"	"	"	J
Benz (a) anthracene	0.032	0.012	0.020	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.031	0.012	0.020	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.027	0.012	0.020	"	"	"	"	"	"	
Benzo (a) pyrene	0.032	0.012	0.020	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.020	0.040	"	"	"	"	"	"	
Chrysene	0.040	0.012	0.020	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.020	0.040	"	"	"	"	"	"	
Fluoranthene	0.063	0.012	0.020	"	"	"	"	"	"	
Fluorene	ND	0.012	0.020	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.012	0.020	"	"	"	"	"	"	
Naphthalene	ND	0.020	0.040	"	"	"	"	"	"	
Phenanthrene	0.049	0.012	0.020	"	"	"	"	"	"	
Pyrene	0.059	0.012	0.020	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			100 %	(10 - 185)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

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180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-11 (Solid) RB6-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.014	0.0085	0.079	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	1.0	2.5	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	ND	1.0	2.0	"	"	"	"	"	"	
Barium	37	0.50	1.0	"	"	"	"	"	"	
Beryllium	ND	0.25	0.50	"	"	"	"	"	"	
Cadmium	ND	0.15	0.25	"	"	"	"	"	"	
Chromium	12	0.25	0.50	"	"	"	"	"	"	
Cobalt	1.5	0.25	0.50	"	"	"	"	"	"	
Copper	3.0	0.50	1.0	"	"	"	"	"	"	
Lead	3.1	0.30	0.50	"	"	"	"	"	"	
Molybdenum	ND	0.25	0.50	"	"	"	"	"	"	
Nickel	5.4	0.10	0.25	"	"	"	"	"	"	
Selenium	ND	1.0	2.0	"	"	"	"	"	"	
Silver	ND	0.20	0.50	"	"	"	"	"	"	
Thallium	0.80	0.50	1.0	"	"	"	"	"	"	J
Vanadium	9.1	0.50	1.0	"	"	"	"	"	"	
Zinc	12	0.50	1.0	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			106 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			100 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

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180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-11 (Solid) RB6-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

alpha-BHC	ND	0.0015	0.0030	mg/kg	1	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Aldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
beta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
delta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDD	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDE	0.0067	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDT	ND	0.0016	0.0030	"	"	"	"	"	"	
Dieldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan I	ND	0.0017	0.0030	"	"	"	"	"	"	
Endosulfan II	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin ketone	ND	0.0016	0.0030	"	"	"	"	"	"	
gamma-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0015	0.0030	"	"	"	"	"	"	
Methoxychlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Chlordane (tech)	ND	0.010	0.020	"	"	"	"	"	"	
Toxaphene	ND	0.016	0.020	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			91.9 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			75.7 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-11 (Solid) RB6-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Acenaphthene	ND	0.0030	0.0050	mg/kg	1	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benz (a) anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (b) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (k) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (a) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (g,h,i) perylene	ND	0.0050	0.010	"	"	"	"	"	"	"
Chrysene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	"	"	"	"	"	"
Fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Fluorene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Naphthalene	ND	0.0050	0.010	"	"	"	"	"	"	"
Phenanthrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
<i>Surrogate: p-Terphenyl-d14</i>			82.5 %	(10 - 185)		"	"	"	"	"

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-13 (Solid) RB7-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.039	0.0091	0.084	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.94	2.3	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.8	0.94	1.9	"	"	"	"	"	"	J
Barium	41	0.47	0.94	"	"	"	"	"	"	
Beryllium	ND	0.23	0.47	"	"	"	"	"	"	
Cadmium	ND	0.14	0.23	"	"	"	"	"	"	
Chromium	13	0.23	0.47	"	"	"	"	"	"	
Cobalt	2.0	0.23	0.47	"	"	"	"	"	"	
Copper	6.4	0.47	0.94	"	"	"	"	"	"	
Lead	14	0.28	0.47	"	"	"	"	"	"	
Molybdenum	ND	0.23	0.47	"	"	"	"	"	"	
Nickel	7.9	0.094	0.23	"	"	"	"	"	"	
Selenium	ND	0.94	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.47	"	"	"	"	"	"	
Thallium	1.1	0.47	0.94	"	"	"	"	"	"	
Vanadium	11	0.47	0.94	"	"	"	"	"	"	
Zinc	27	0.47	0.94	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0093	07/03/19	07/03/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			81.0 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	9.0	7.6	10	mg/kg	1	B9F0814	06/28/19	06/28/19	EPA 8015M	J
TPH Motor Oil (C23-C40)	110	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			89.1 %	(67 - 134)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-13 (Solid) RB7-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

C-06, R-05

alpha-BHC	ND	0.015	0.030	mg/kg	10	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Aldrin	ND	0.015	0.030	"	"	"	"	"	"	
beta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
delta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
4,4'-DDD	ND	0.015	0.030	"	"	"	"	"	"	CCHI
4,4'-DDE	ND	0.015	0.030	"	"	"	"	"	"	
4,4'-DDT	ND	0.016	0.030	"	"	"	"	"	"	CCFL 8081
Dieldrin	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan I	ND	0.017	0.030	"	"	"	"	"	"	
Endosulfan II	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.015	0.030	"	"	"	"	"	"	
Endrin	ND	0.015	0.030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.015	0.030	"	"	"	"	"	"	
Endrin ketone	ND	0.016	0.030	"	"	"	"	"	"	
gamma-BHC	ND	0.015	0.030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.015	0.030	"	"	"	"	"	"	
Methoxychlor	ND	0.015	0.030	"	"	"	"	"	"	CCFL 8081
Chlordane (tech)	ND	0.10	0.20	"	"	"	"	"	"	
Toxaphene	ND	0.16	0.20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			136 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			71.7 %	(10 - 169)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-13 (Solid)
RB7-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

R-05

Acenaphthene	ND	0.012	0.020	mg/kg	4	B9G0051	07/02/19	07/05/19	EPA 8270-SIM	
Acenaphthylene	ND	0.012	0.020	"	"	"	"	"	"	
Anthracene	0.029	0.012	0.020	"	"	"	"	"	"	
Benz (a) anthracene	0.12	0.012	0.020	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.086	0.012	0.020	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.089	0.012	0.020	"	"	"	"	"	"	
Benzo (a) pyrene	0.088	0.012	0.020	"	"	"	"	"	"	
Benzo (g,h,i) perylene	0.032	0.020	0.040	"	"	"	"	"	"	J
Chrysene	0.14	0.012	0.020	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.020	0.040	"	"	"	"	"	"	
Fluoranthene	0.22	0.012	0.020	"	"	"	"	"	"	
Fluorene	ND	0.012	0.020	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.031	0.012	0.020	"	"	"	"	"	"	
Naphthalene	ND	0.020	0.040	"	"	"	"	"	"	
Phenanthrene	0.11	0.012	0.020	"	"	"	"	"	"	
Pyrene	0.21	0.012	0.020	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			95.0 %	(10 - 185)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-15 (Solid) RB8-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	ND	0.0098	0.090	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	
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Total Metals by ICP

Antimony	ND	0.99	2.5	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	ND	0.99	2.0	"	"	"	"	"	"	
Barium	38	0.50	0.99	"	"	"	"	"	"	
Beryllium	ND	0.25	0.50	"	"	"	"	"	"	
Cadmium	ND	0.15	0.25	"	"	"	"	"	"	
Chromium	12	0.25	0.50	"	"	"	"	"	"	
Cobalt	1.5	0.25	0.50	"	"	"	"	"	"	
Copper	2.5	0.50	0.99	"	"	"	"	"	"	
Lead	1.9	0.30	0.50	"	"	"	"	"	"	
Molybdenum	ND	0.25	0.50	"	"	"	"	"	"	
Nickel	5.4	0.099	0.25	"	"	"	"	"	"	
Selenium	ND	0.99	2.0	"	"	"	"	"	"	
Silver	ND	0.20	0.50	"	"	"	"	"	"	
Thallium	0.71	0.50	0.99	"	"	"	"	"	"	J
Vanadium	9.2	0.50	0.99	"	"	"	"	"	"	
Zinc	6.8	0.50	0.99	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.099	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			106 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			99.3 %	(67 - 134)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-15 (Solid) RB8-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

alpha-BHC	ND	0.0015	0.0030	mg/kg	1	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Aldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
beta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
delta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDD	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDE	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDT	ND	0.0016	0.0030	"	"	"	"	"	"	
Dieldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan I	ND	0.0017	0.0030	"	"	"	"	"	"	
Endosulfan II	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin ketone	ND	0.0016	0.0030	"	"	"	"	"	"	
gamma-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0015	0.0030	"	"	"	"	"	"	
Methoxychlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Chlordane (tech)	ND	0.010	0.020	"	"	"	"	"	"	
Toxaphene	ND	0.016	0.020	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			83.7 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			62.0 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-15 (Solid)
RB8-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Acenaphthene	ND	0.0030	0.0050	mg/kg	1	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benz (a) anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (b) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (k) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (a) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (g,h,i) perylene	ND	0.0050	0.010	"	"	"	"	"	"	"
Chrysene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	"	"	"	"	"	"
Fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Fluorene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Naphthalene	ND	0.0050	0.010	"	"	"	"	"	"	"
Phenanthrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
<i>Surrogate: p-Terphenyl-d14</i>			76.3 %	(10 - 185)		"	"	"	"	"

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-17 (Solid) RB9-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	ND	0.0084	0.078	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	
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Total Metals by ICP

Antimony	ND	0.95	2.4	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	ND	0.95	1.9	"	"	"	"	"	"	
Barium	40	0.48	0.95	"	"	"	"	"	"	
Beryllium	ND	0.24	0.48	"	"	"	"	"	"	
Cadmium	ND	0.14	0.24	"	"	"	"	"	"	
Chromium	13	0.24	0.48	"	"	"	"	"	"	
Cobalt	1.6	0.24	0.48	"	"	"	"	"	"	
Copper	2.3	0.48	0.95	"	"	"	"	"	"	
Lead	2.0	0.29	0.48	"	"	"	"	"	"	
Molybdenum	ND	0.24	0.48	"	"	"	"	"	"	
Nickel	5.6	0.095	0.24	"	"	"	"	"	"	
Selenium	ND	0.95	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.48	"	"	"	"	"	"	
Thallium	0.89	0.48	0.95	"	"	"	"	"	"	J
Vanadium	9.5	0.48	0.95	"	"	"	"	"	"	
Zinc	6.6	0.48	0.95	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			110 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			102 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-17 (Solid) RB9-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

alpha-BHC	ND	0.0015	0.0030	mg/kg	1	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Aldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
beta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
delta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDD	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDE	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDT	ND	0.0016	0.0030	"	"	"	"	"	"	
Dieldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan I	ND	0.0017	0.0030	"	"	"	"	"	"	
Endosulfan II	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin ketone	ND	0.0016	0.0030	"	"	"	"	"	"	
gamma-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0015	0.0030	"	"	"	"	"	"	
Methoxychlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Chlordane (tech)	ND	0.010	0.020	"	"	"	"	"	"	
Toxaphene	ND	0.016	0.020	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			87.8 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			79.5 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-17 (Solid) RB9-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Acenaphthene	ND	0.0030	0.0050	mg/kg	1	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0030	0.0050	"	"	"	"	"	"	
Anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benz (a) anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.0050	0.010	"	"	"	"	"	"	
Chrysene	ND	0.0030	0.0050	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	"	"	"	"	"	
Fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	
Fluorene	ND	0.0030	0.0050	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0050	0.010	"	"	"	"	"	"	
Phenanthrene	ND	0.0030	0.0050	"	"	"	"	"	"	
Pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			78.7 %	(10 - 185)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-19 (Solid) RB10-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	ND	0.010	0.096	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	
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Total Metals by ICP

Antimony	ND	0.96	2.4	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.4	0.96	1.9	"	"	"	"	"	"	J
Barium	40	0.48	0.96	"	"	"	"	"	"	
Beryllium	ND	0.24	0.48	"	"	"	"	"	"	
Cadmium	ND	0.14	0.24	"	"	"	"	"	"	
Chromium	14	0.24	0.48	"	"	"	"	"	"	
Cobalt	1.7	0.24	0.48	"	"	"	"	"	"	
Copper	2.5	0.48	0.96	"	"	"	"	"	"	
Lead	2.1	0.29	0.48	"	"	"	"	"	"	
Molybdenum	ND	0.24	0.48	"	"	"	"	"	"	
Nickel	5.6	0.096	0.24	"	"	"	"	"	"	
Selenium	ND	0.96	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.48	"	"	"	"	"	"	
Thallium	0.89	0.48	0.96	"	"	"	"	"	"	J
Vanadium	9.5	0.48	0.96	"	"	"	"	"	"	
Zinc	7.8	0.48	0.96	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			107 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			98.8 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-19 (Solid)
RB10-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

alpha-BHC	ND	0.0015	0.0030	mg/kg	1	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Aldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
beta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
delta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDD	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDE	0.0078	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDT	ND	0.0016	0.0030	"	"	"	"	"	"	
Dieldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan I	ND	0.0017	0.0030	"	"	"	"	"	"	
Endosulfan II	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin ketone	ND	0.0016	0.0030	"	"	"	"	"	"	
gamma-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0015	0.0030	"	"	"	"	"	"	
Methoxychlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Chlordane (tech)	ND	0.010	0.020	"	"	"	"	"	"	
Toxaphene	ND	0.016	0.020	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			91.2 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			64.6 %	(10 - 169)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-19 (Solid) RB10-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Acenaphthene	ND	0.0030	0.0050	mg/kg	1	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benz (a) anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (b) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (k) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (a) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (g,h,i) perylene	ND	0.0050	0.010	"	"	"	"	"	"	"
Chrysene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	"	"	"	"	"	"
Fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Fluorene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Naphthalene	ND	0.0050	0.010	"	"	"	"	"	"	"
Phenanthrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
<i>Surrogate: p-Terphenyl-d14</i>			78.7 %	(10 - 185)		"	"	"	"	"

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-21 (Solid) RB11-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.015	0.0087	0.080	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.95	2.4	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.0	0.95	1.9	"	"	"	"	"	"	J
Barium	39	0.48	0.95	"	"	"	"	"	"	
Beryllium	ND	0.24	0.48	"	"	"	"	"	"	
Cadmium	ND	0.14	0.24	"	"	"	"	"	"	
Chromium	15	0.24	0.48	"	"	"	"	"	"	
Cobalt	1.7	0.24	0.48	"	"	"	"	"	"	
Copper	3.4	0.48	0.95	"	"	"	"	"	"	
Lead	6.1	0.29	0.48	"	"	"	"	"	"	
Molybdenum	ND	0.24	0.48	"	"	"	"	"	"	
Nickel	5.8	0.095	0.24	"	"	"	"	"	"	
Selenium	ND	0.95	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.48	"	"	"	"	"	"	
Thallium	0.73	0.48	0.95	"	"	"	"	"	"	J
Vanadium	9.6	0.48	0.95	"	"	"	"	"	"	
Zinc	13	0.48	0.95	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			101 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			99.2 %	(67 - 134)		"	"	"	"	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-21 (Solid)
RB11-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

R-05

alpha-BHC	ND	0.0060	0.012	mg/kg	4	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0060	0.012	"	"	"	"	"	"	
Aldrin	ND	0.0060	0.012	"	"	"	"	"	"	
beta-BHC	ND	0.0060	0.012	"	"	"	"	"	"	
delta-BHC	ND	0.0060	0.012	"	"	"	"	"	"	
4,4'-DDD	ND	0.0060	0.012	"	"	"	"	"	"	
4,4'-DDE	ND	0.0060	0.012	"	"	"	"	"	"	
4,4'-DDT	ND	0.0064	0.012	"	"	"	"	"	"	
Dieldrin	ND	0.0060	0.012	"	"	"	"	"	"	
Endosulfan I	ND	0.0068	0.012	"	"	"	"	"	"	
Endosulfan II	ND	0.0060	0.012	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0060	0.012	"	"	"	"	"	"	
Endrin	ND	0.0060	0.012	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0060	0.012	"	"	"	"	"	"	
Endrin ketone	ND	0.0064	0.012	"	"	"	"	"	"	
gamma-BHC	ND	0.0060	0.012	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0060	0.012	"	"	"	"	"	"	
Heptachlor	ND	0.0060	0.012	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0060	0.012	"	"	"	"	"	"	
Methoxychlor	ND	0.0060	0.012	"	"	"	"	"	"	
Chlordane (tech)	ND	0.040	0.080	"	"	"	"	"	"	
Toxaphene	ND	0.064	0.080	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			90.7 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			69.0 %	(10 - 169)		"	"	"	"	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-21 (Solid) RB11-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Acenaphthene	ND	0.0030	0.0050	mg/kg	1	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0030	0.0050	"	"	"	"	"	"	
Anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benz (a) anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.0050	0.010	"	"	"	"	"	"	
Chrysene	ND	0.0030	0.0050	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	"	"	"	"	"	
Fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	
Fluorene	ND	0.0030	0.0050	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0050	0.010	"	"	"	"	"	"	
Phenanthrene	ND	0.0030	0.0050	"	"	"	"	"	"	
Pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			50.0 %	(10 - 185)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-23 (Solid) RB12-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.023	0.010	0.096	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.97	2.4	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.3	0.97	1.9	"	"	"	"	"	"	J
Barium	44	0.48	0.97	"	"	"	"	"	"	
Beryllium	ND	0.24	0.48	"	"	"	"	"	"	
Cadmium	ND	0.14	0.24	"	"	"	"	"	"	
Chromium	16	0.24	0.48	"	"	"	"	"	"	
Cobalt	1.8	0.24	0.48	"	"	"	"	"	"	
Copper	3.1	0.48	0.97	"	"	"	"	"	"	
Lead	3.2	0.29	0.48	"	"	"	"	"	"	
Molybdenum	ND	0.24	0.48	"	"	"	"	"	"	
Nickel	6.0	0.097	0.24	"	"	"	"	"	"	
Selenium	ND	0.97	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.48	"	"	"	"	"	"	
Thallium	1.4	0.48	0.97	"	"	"	"	"	"	
Vanadium	10	0.48	0.97	"	"	"	"	"	"	
Zinc	10	0.48	0.97	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			103 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			99.0 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-23 (Solid) RB12-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

alpha-BHC	ND	0.0015	0.0030	mg/kg	1	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Aldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
beta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
delta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDD	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDE	0.025	0.0060	0.012	"	4	"	"	07/04/19	"	
4,4'-DDT	ND	0.0016	0.0030	"	1	"	"	07/02/19	"	
Dieldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan I	ND	0.0017	0.0030	"	"	"	"	"	"	
Endosulfan II	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin ketone	ND	0.0016	0.0030	"	"	"	"	"	"	
gamma-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0015	0.0030	"	"	"	"	"	"	
Methoxychlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Chlordane (tech)	ND	0.010	0.020	"	"	"	"	"	"	
Toxaphene	ND	0.016	0.020	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			92.0 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			65.3 %	(10 - 169)		"	"	"	"	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-23 (Solid)
RB12-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Acenaphthene	ND	0.0030	0.0050	mg/kg	1	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benz (a) anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (b) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (k) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (a) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (g,h,i) perylene	ND	0.0050	0.010	"	"	"	"	"	"	"
Chrysene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	"	"	"	"	"	"
Fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Fluorene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Naphthalene	ND	0.0050	0.010	"	"	"	"	"	"	"
Phenanthrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
<i>Surrogate: p-Terphenyl-d14</i>			78.8 %	(10 - 185)		"	"	"	"	"

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180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-25 (Solid) RB13-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.018	0.0083	0.077	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.97	2.4	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.2	0.97	1.9	"	"	"	"	"	"	J
Barium	43	0.49	0.97	"	"	"	"	"	"	
Beryllium	ND	0.24	0.49	"	"	"	"	"	"	
Cadmium	ND	0.15	0.24	"	"	"	"	"	"	
Chromium	15	0.24	0.49	"	"	"	"	"	"	
Cobalt	1.8	0.24	0.49	"	"	"	"	"	"	
Copper	3.4	0.49	0.97	"	"	"	"	"	"	
Lead	5.7	0.29	0.49	"	"	"	"	"	"	
Molybdenum	ND	0.24	0.49	"	"	"	"	"	"	
Nickel	6.7	0.097	0.24	"	"	"	"	"	"	
Selenium	ND	0.97	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.49	"	"	"	"	"	"	
Thallium	1.1	0.49	0.97	"	"	"	"	"	"	
Vanadium	11	0.49	0.97	"	"	"	"	"	"	
Zinc	11	0.49	0.97	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			108 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	06/28/19	EPA 8015M	
TPH Motor Oil (C23-C40)	71	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			90.3 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

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180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-25 (Solid) RB13-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

C-06, R-05

alpha-BHC	ND	0.015	0.030	mg/kg	10	B9G0041	07/01/19	07/03/19	EPA 8081A	
alpha-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Aldrin	ND	0.015	0.030	"	"	"	"	"	"	
beta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
delta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
4,4'-DDD	ND	0.015	0.030	"	"	"	"	"	"	CCHI
4,4'-DDE	0.041	0.015	0.030	"	"	"	"	"	"	
4,4'-DDT	ND	0.016	0.030	"	"	"	"	"	"	CCFL 8081
Dieldrin	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan I	ND	0.017	0.030	"	"	"	"	"	"	
Endosulfan II	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.015	0.030	"	"	"	"	"	"	
Endrin	ND	0.015	0.030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.015	0.030	"	"	"	"	"	"	
Endrin ketone	ND	0.016	0.030	"	"	"	"	"	"	
gamma-BHC	ND	0.015	0.030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.015	0.030	"	"	"	"	"	"	
Methoxychlor	ND	0.015	0.030	"	"	"	"	"	"	CCFL 8081
Chlordane (tech)	ND	0.10	0.20	"	"	"	"	"	"	
Toxaphene	ND	0.16	0.20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			128 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			82.1 %	(10 - 169)		"	"	"	"	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-25 (Solid)
RB13-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Acenaphthene	ND	0.0030	0.0050	mg/kg	1	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0030	0.0050	"	"	"	"	"	"	
Anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	
Benz (a) anthracene	0.0090	0.0030	0.0050	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0097	0.0030	0.0050	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.010	0.0030	0.0050	"	"	"	"	"	"	
Benzo (a) pyrene	0.011	0.0030	0.0050	"	"	"	"	"	"	
Benzo (g,h,i) perylene	0.0060	0.0050	0.010	"	"	"	"	"	"	J
Chrysene	0.012	0.0030	0.0050	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	"	"	"	"	"	
Fluoranthene	0.015	0.0030	0.0050	"	"	"	"	"	"	
Fluorene	ND	0.0030	0.0050	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.0053	0.0030	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0050	0.010	"	"	"	"	"	"	
Phenanthrene	0.0073	0.0030	0.0050	"	"	"	"	"	"	
Pyrene	0.015	0.0030	0.0050	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			83.8 %	(10 - 185)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-27 (Solid) RB14-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.020	0.0086	0.079	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.98	2.5	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.3	0.98	2.0	"	"	"	"	"	"	J
Barium	41	0.49	0.98	"	"	"	"	"	"	
Beryllium	ND	0.25	0.49	"	"	"	"	"	"	
Cadmium	ND	0.15	0.25	"	"	"	"	"	"	
Chromium	17	0.25	0.49	"	"	"	"	"	"	
Cobalt	1.6	0.25	0.49	"	"	"	"	"	"	
Copper	3.4	0.49	0.98	"	"	"	"	"	"	
Lead	4.0	0.29	0.49	"	"	"	"	"	"	
Molybdenum	ND	0.25	0.49	"	"	"	"	"	"	
Nickel	5.6	0.098	0.25	"	"	"	"	"	"	
Selenium	ND	0.98	2.0	"	"	"	"	"	"	
Silver	ND	0.20	0.49	"	"	"	"	"	"	
Thallium	0.94	0.49	0.98	"	"	"	"	"	"	J
Vanadium	9.8	0.49	0.98	"	"	"	"	"	"	
Zinc	13	0.49	0.98	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			104 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9F0814	06/28/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			99.6 %	(67 - 134)		"	"	"	"	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-27 (Solid) RB14-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

alpha-BHC	ND	0.0015	0.0030	mg/kg	1	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Aldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
beta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
delta-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDD	ND	0.0015	0.0030	"	"	"	"	"	"	
4,4'-DDE	0.056	0.0075	0.015	"	5	"	"	07/04/19	"	
4,4'-DDT	0.0029	0.0016	0.0030	"	1	"	"	07/02/19	"	J
Dieldrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan I	ND	0.0017	0.0030	"	"	"	"	"	"	
Endosulfan II	ND	0.0015	0.0030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0015	0.0030	"	"	"	"	"	"	
Endrin ketone	ND	0.0016	0.0030	"	"	"	"	"	"	
gamma-BHC	ND	0.0015	0.0030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor	ND	0.0015	0.0030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0015	0.0030	"	"	"	"	"	"	
Methoxychlor	0.0041	0.0015	0.0030	"	"	"	"	"	"	
Chlordane (tech)	ND	0.010	0.020	"	"	"	"	"	"	
Toxaphene	ND	0.016	0.020	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			98.5 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			70.4 %	(10 - 169)		"	"	"	"	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

**1903173-27 (Solid)
RB14-1**

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Acenaphthene	ND	0.0030	0.0050	mg/kg	1	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benz (a) anthracene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (b) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (k) fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (a) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Benzo (g,h,i) perylene	ND	0.0050	0.010	"	"	"	"	"	"	"
Chrysene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	"	"	"	"	"	"
Fluoranthene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Fluorene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Naphthalene	ND	0.0050	0.010	"	"	"	"	"	"	"
Phenanthrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
Pyrene	ND	0.0030	0.0050	"	"	"	"	"	"	"
<i>Surrogate: p-Terphenyl-d14</i>			72.5 %	(10 - 185)		"	"	"	"	"

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-29 (Solid) RB15-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.039	0.011	0.098	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.99	2.5	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.8	0.99	2.0	"	"	"	"	"	"	J
Barium	43	0.49	0.99	"	"	"	"	"	"	
Beryllium	ND	0.25	0.49	"	"	"	"	"	"	
Cadmium	ND	0.15	0.25	"	"	"	"	"	"	
Chromium	17	0.25	0.49	"	"	"	"	"	"	
Cobalt	2.8	0.25	0.49	"	"	"	"	"	"	
Copper	13	0.49	0.99	"	"	"	"	"	"	
Lead	21	0.30	0.49	"	"	"	"	"	"	
Molybdenum	0.41	0.25	0.49	"	"	"	"	"	"	J
Nickel	10	0.099	0.25	"	"	"	"	"	"	
Selenium	ND	0.99	2.0	"	"	"	"	"	"	
Silver	ND	0.20	0.49	"	"	"	"	"	"	
Thallium	0.67	0.49	0.99	"	"	"	"	"	"	J
Vanadium	16	0.49	0.99	"	"	"	"	"	"	
Zinc	90	0.49	0.99	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			101 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	25	15	20	mg/kg	2	B9F0814	06/28/19	06/28/19	EPA 8015M	
TPH Motor Oil (C23-C40)	320	80	100	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			91.6 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-29 (Solid) RB15-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

R-01

alpha-BHC	ND	0.30	0.60	mg/kg	100	B9G0041	07/01/19	07/04/19	EPA 8081A	
alpha-Chlordane	ND	0.30	0.60	"	"	"	"	"	"	
Aldrin	ND	0.30	0.60	"	"	"	"	"	"	
beta-BHC	ND	0.30	0.60	"	"	"	"	"	"	
delta-BHC	ND	0.30	0.60	"	"	"	"	"	"	
4,4'-DDD	ND	0.30	0.60	"	"	"	"	"	"	CCHI
4,4'-DDE	ND	0.30	0.60	"	"	"	"	"	"	
4,4'-DDT	ND	0.32	0.60	"	"	"	"	"	"	CCHI
Dieldrin	ND	0.30	0.60	"	"	"	"	"	"	
Endosulfan I	ND	0.34	0.60	"	"	"	"	"	"	
Endosulfan II	ND	0.30	0.60	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.30	0.60	"	"	"	"	"	"	
Endrin	ND	0.30	0.60	"	"	"	"	"	"	CCHI
Endrin aldehyde	ND	0.30	0.60	"	"	"	"	"	"	CCHI
Endrin ketone	ND	0.32	0.60	"	"	"	"	"	"	CCHI
gamma-BHC	ND	0.30	0.60	"	"	"	"	"	"	CCHI
gamma-Chlordane	ND	0.30	0.60	"	"	"	"	"	"	
Heptachlor	ND	0.30	0.60	"	"	"	"	"	"	CCHI
Heptachlor epoxide	ND	0.30	0.60	"	"	"	"	"	"	
Methoxychlor	ND	0.30	0.60	"	"	"	"	"	"	CCHI
Chlordane (tech)	ND	2.0	4.0	"	"	"	"	"	"	
Toxaphene	ND	3.2	4.0	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			684 %	(10 - 202)		"	"	"	"	S-04
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			116 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-29 (Solid) RB15-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

R-05

Acenaphthene	ND	0.036	0.060	mg/kg	4	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.036	0.060	"	"	"	"	"	"	
Anthracene	ND	0.036	0.060	"	"	"	"	"	"	
Benz (a) anthracene	0.048	0.036	0.060	"	"	"	"	"	"	J
Benzo (b) fluoranthene	0.088	0.036	0.060	"	"	"	"	"	"	ISlowA
Benzo (k) fluoranthene	0.076	0.036	0.060	"	"	"	"	"	"	ISlowA
Benzo (a) pyrene	0.064	0.036	0.060	"	"	"	"	"	"	ISlowA
Benzo (g,h,i) perylene	ND	0.060	0.12	"	"	"	"	"	"	
Chrysene	0.076	0.036	0.060	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.060	0.12	"	"	"	"	"	"	
Fluoranthene	0.092	0.036	0.060	"	"	"	"	"	"	
Fluorene	ND	0.036	0.060	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.036	0.060	"	"	"	"	"	"	
Naphthalene	ND	0.060	0.12	"	"	"	"	"	"	
Phenanthrene	0.044	0.036	0.060	"	"	"	"	"	"	J
Pyrene	0.084	0.036	0.060	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			105 %	(10 - 185)		"	"	"	"	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-31 (Solid) RB16-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.033	0.0084	0.077	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.99	2.5	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.1	0.99	2.0	"	"	"	"	"	"	J
Barium	37	0.49	0.99	"	"	"	"	"	"	
Beryllium	ND	0.25	0.49	"	"	"	"	"	"	
Cadmium	ND	0.15	0.25	"	"	"	"	"	"	
Chromium	23	0.25	0.49	"	"	"	"	"	"	
Cobalt	3.4	0.25	0.49	"	"	"	"	"	"	
Copper	9.3	0.49	0.99	"	"	"	"	"	"	
Lead	10	0.30	0.49	"	"	"	"	"	"	
Molybdenum	ND	0.25	0.49	"	"	"	"	"	"	
Nickel	22	0.099	0.25	"	"	"	"	"	"	
Selenium	ND	0.99	2.0	"	"	"	"	"	"	
Silver	ND	0.20	0.49	"	"	"	"	"	"	
Thallium	1.5	0.49	0.99	"	"	"	"	"	"	
Vanadium	18	0.49	0.99	"	"	"	"	"	"	
Zinc	23	0.49	0.99	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.099	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			97.5 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	76	100	mg/kg	10	B9F0814	06/28/19	06/28/19	EPA 8015M	R-06
TPH Motor Oil (C23-C40)	890	400	500	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			94.6 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-31 (Solid) RB16-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

R-01

alpha-BHC	ND	0.060	0.12	mg/kg	20	B9G0041	07/01/19	07/04/19	EPA 8081A	
alpha-Chlordane	ND	0.060	0.12	"	"	"	"	"	"	
Aldrin	ND	0.060	0.12	"	"	"	"	"	"	
beta-BHC	ND	0.060	0.12	"	"	"	"	"	"	
delta-BHC	ND	0.060	0.12	"	"	"	"	"	"	
4,4'-DDD	ND	0.060	0.12	"	"	"	"	"	"	CCHI
4,4'-DDE	ND	0.060	0.12	"	"	"	"	"	"	
4,4'-DDT	ND	0.064	0.12	"	"	"	"	"	"	CCHI
Dieldrin	ND	0.060	0.12	"	"	"	"	"	"	
Endosulfan I	ND	0.068	0.12	"	"	"	"	"	"	
Endosulfan II	ND	0.060	0.12	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.060	0.12	"	"	"	"	"	"	
Endrin	ND	0.060	0.12	"	"	"	"	"	"	CCHI
Endrin aldehyde	ND	0.060	0.12	"	"	"	"	"	"	CCHI
Endrin ketone	ND	0.064	0.12	"	"	"	"	"	"	CCHI
gamma-BHC	ND	0.060	0.12	"	"	"	"	"	"	CCHI
gamma-Chlordane	ND	0.060	0.12	"	"	"	"	"	"	
Heptachlor	ND	0.060	0.12	"	"	"	"	"	"	CCHI
Heptachlor epoxide	ND	0.060	0.12	"	"	"	"	"	"	
Methoxychlor	ND	0.060	0.12	"	"	"	"	"	"	CCHI
Chlordane (tech)	ND	0.40	0.80	"	"	"	"	"	"	
Toxaphene	ND	0.64	0.80	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			206 %	(10 - 202)		"	"	"	"	S-04
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			97.5 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-31 (Solid) RB16-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

R-05

Acenaphthene	ND	0.090	0.15	mg/kg	10	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.090	0.15	"	"	"	"	"	"	
Anthracene	ND	0.090	0.15	"	"	"	"	"	"	
Benz (a) anthracene	ND	0.090	0.15	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.090	0.15	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.090	0.15	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.090	0.15	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.15	0.30	"	"	"	"	"	"	
Chrysene	ND	0.090	0.15	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.15	0.30	"	"	"	"	"	"	
Fluoranthene	ND	0.090	0.15	"	"	"	"	"	"	
Fluorene	ND	0.090	0.15	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.090	0.15	"	"	"	"	"	"	
Naphthalene	ND	0.15	0.30	"	"	"	"	"	"	
Phenanthrene	ND	0.090	0.15	"	"	"	"	"	"	
Pyrene	ND	0.090	0.15	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			112 %	(10 - 185)		"	"	"	"	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-33 (Solid) RB17-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.028	0.010	0.096	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.98	2.4	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.9	0.98	2.0	"	"	"	"	"	"	J
Barium	45	0.49	0.98	"	"	"	"	"	"	
Beryllium	ND	0.24	0.49	"	"	"	"	"	"	
Cadmium	ND	0.15	0.24	"	"	"	"	"	"	
Chromium	16	0.24	0.49	"	"	"	"	"	"	
Cobalt	1.9	0.24	0.49	"	"	"	"	"	"	
Copper	4.6	0.49	0.98	"	"	"	"	"	"	
Lead	6.7	0.29	0.49	"	"	"	"	"	"	
Molybdenum	0.27	0.24	0.49	"	"	"	"	"	"	J
Nickel	6.4	0.098	0.24	"	"	"	"	"	"	
Selenium	ND	0.98	2.0	"	"	"	"	"	"	
Silver	ND	0.20	0.49	"	"	"	"	"	"	
Thallium	0.96	0.49	0.98	"	"	"	"	"	"	J
Vanadium	11	0.49	0.98	"	"	"	"	"	"	
Zinc	15	0.49	0.98	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			109 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	12	7.6	10	mg/kg	1	B9F0814	06/28/19	06/28/19	EPA 8015M	
TPH Motor Oil (C23-C40)	47	40	50	"	"	"	"	"	"	J
<i>Surrogate: o-Terphenyl</i>			91.2 %	(67 - 134)		"	"	"	"	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-33 (Solid)
RB17-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

R-05

alpha-BHC	ND	0.0075	0.015	mg/kg	5	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0075	0.015	"	"	"	"	"	"	
Aldrin	ND	0.0075	0.015	"	"	"	"	"	"	
beta-BHC	ND	0.0075	0.015	"	"	"	"	"	"	
delta-BHC	ND	0.0075	0.015	"	"	"	"	"	"	
4,4'-DDD	ND	0.0075	0.015	"	"	"	"	"	"	CCHI
4,4'-DDE	0.15	0.030	0.060	"	20	"	"	07/03/19	"	
4,4'-DDT	0.016	0.0080	0.015	"	5	"	"	07/02/19	"	CCFL 8081
Dieldrin	ND	0.0075	0.015	"	"	"	"	"	"	
Endosulfan I	ND	0.0085	0.015	"	"	"	"	"	"	
Endosulfan II	ND	0.0075	0.015	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0075	0.015	"	"	"	"	"	"	
Endrin	ND	0.0075	0.015	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0075	0.015	"	"	"	"	"	"	
Endrin ketone	ND	0.0080	0.015	"	"	"	"	"	"	
gamma-BHC	ND	0.0075	0.015	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0075	0.015	"	"	"	"	"	"	
Heptachlor	ND	0.0075	0.015	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0075	0.015	"	"	"	"	"	"	
Methoxychlor	ND	0.0075	0.015	"	"	"	"	"	"	CCFL 8081
Chlordane (tech)	ND	0.050	0.10	"	"	"	"	"	"	
Toxaphene	ND	0.080	0.10	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			106 %	(10 - 202)		"	"	"	"	
Surrogate: Decachlorobiphenyl			138 %	(10 - 202)		"	"	07/03/19	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			83.4 %	(10 - 169)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			78.5 %	(10 - 169)		"	"	07/02/19	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-33 (Solid)
RB17-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

R-05

Acenaphthene	ND	0.0060	0.010	mg/kg	2	B9G0051	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0060	0.010	"	"	"	"	"	"	
Anthracene	ND	0.0060	0.010	"	"	"	"	"	"	
Benz (a) anthracene	0.011	0.0060	0.010	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.014	0.0060	0.010	"	"	"	"	"	"	ISlowA
Benzo (k) fluoranthene	0.017	0.0060	0.010	"	"	"	"	"	"	ISlowA
Benzo (a) pyrene	0.013	0.0060	0.010	"	"	"	"	"	"	ISlowA
Benzo (g,h,i) perylene	ND	0.010	0.020	"	"	"	"	"	"	
Chrysene	0.019	0.0060	0.010	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.010	0.020	"	"	"	"	"	"	
Fluoranthene	0.029	0.0060	0.010	"	"	"	"	"	"	
Fluorene	ND	0.0060	0.010	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0060	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.010	0.020	"	"	"	"	"	"	
Phenanthrene	0.023	0.0060	0.010	"	"	"	"	"	"	
Pyrene	0.027	0.0060	0.010	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			80.0 %	(10 - 185)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-35 (Solid) RB18-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.020	0.0097	0.090	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.94	2.4	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.4	0.94	1.9	"	"	"	"	"	"	J
Barium	46	0.47	0.94	"	"	"	"	"	"	
Beryllium	ND	0.24	0.47	"	"	"	"	"	"	
Cadmium	ND	0.14	0.24	"	"	"	"	"	"	
Chromium	16	0.24	0.47	"	"	"	"	"	"	
Cobalt	2.1	0.24	0.47	"	"	"	"	"	"	
Copper	3.6	0.47	0.94	"	"	"	"	"	"	
Lead	7.0	0.28	0.47	"	"	"	"	"	"	
Molybdenum	ND	0.24	0.47	"	"	"	"	"	"	
Nickel	6.1	0.094	0.24	"	"	"	"	"	"	
Selenium	ND	0.94	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.47	"	"	"	"	"	"	
Thallium	0.90	0.47	0.94	"	"	"	"	"	"	J
Vanadium	10	0.47	0.94	"	"	"	"	"	"	
Zinc	13	0.47	0.94	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.099	0.50	mg/kg	1	B9G0093	07/03/19	07/03/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			86.3 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9G0013	06/28/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			97.9 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-35 (Solid)
RB18-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

R-05

alpha-BHC	ND	0.0075	0.015	mg/kg	5	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0075	0.015	"	"	"	"	"	"	
Aldrin	ND	0.0075	0.015	"	"	"	"	"	"	
beta-BHC	ND	0.0075	0.015	"	"	"	"	"	"	
delta-BHC	ND	0.0075	0.015	"	"	"	"	"	"	
4,4'-DDD	ND	0.0075	0.015	"	"	"	"	"	"	CCHI
4,4'-DDE	0.058	0.0075	0.015	"	"	"	"	"	"	
4,4'-DDT	0.019	0.0080	0.015	"	"	"	"	"	"	CCFL 8081
Dieldrin	ND	0.0075	0.015	"	"	"	"	"	"	
Endosulfan I	ND	0.0085	0.015	"	"	"	"	"	"	
Endosulfan II	ND	0.0075	0.015	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0075	0.015	"	"	"	"	"	"	
Endrin	ND	0.0075	0.015	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0075	0.015	"	"	"	"	"	"	
Endrin ketone	ND	0.0080	0.015	"	"	"	"	"	"	
gamma-BHC	ND	0.0075	0.015	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0075	0.015	"	"	"	"	"	"	
Heptachlor	ND	0.0075	0.015	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0075	0.015	"	"	"	"	"	"	
Methoxychlor	ND	0.0075	0.015	"	"	"	"	"	"	CCFL 8081
Chlordane (tech)	ND	0.050	0.10	"	"	"	"	"	"	
Toxaphene	ND	0.080	0.10	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			99.2 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			64.4 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-35 (Solid) RB18-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Acenaphthene	ND	0.0030	0.0050	mg/kg	1	B9G0080	07/02/19	07/02/19	EPA 8270-SIM	
Acenaphthylene	ND	0.0030	0.0050	"	"	"	"	"	"	
Anthracene	0.0057	0.0030	0.0050	"	"	"	"	"	"	
Benz (a) anthracene	0.035	0.0030	0.0050	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.030	0.0030	0.0050	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.036	0.0030	0.0050	"	"	"	"	"	"	
Benzo (a) pyrene	0.039	0.0030	0.0050	"	"	"	"	"	"	
Benzo (g,h,i) perylene	0.015	0.0050	0.010	"	"	"	"	"	"	
Chrysene	0.046	0.0030	0.0050	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	"	"	"	"	"	
Fluoranthene	0.065	0.0030	0.0050	"	"	"	"	"	"	
Fluorene	ND	0.0030	0.0050	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.015	0.0030	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0050	0.010	"	"	"	"	"	"	
Phenanthrene	0.037	0.0030	0.0050	"	"	"	"	"	"	
Pyrene	0.064	0.0030	0.0050	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			91.2 %	(10 - 185)		"	"	"	"	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-37 (Solid) RB19-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.038	0.0089	0.082	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.94	2.3	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	1.1	0.94	1.9	"	"	"	"	"	"	J
Barium	40	0.47	0.94	"	"	"	"	"	"	
Beryllium	ND	0.23	0.47	"	"	"	"	"	"	
Cadmium	ND	0.14	0.23	"	"	"	"	"	"	
Chromium	15	0.23	0.47	"	"	"	"	"	"	
Cobalt	1.9	0.23	0.47	"	"	"	"	"	"	
Copper	3.1	0.47	0.94	"	"	"	"	"	"	
Lead	3.1	0.28	0.47	"	"	"	"	"	"	
Molybdenum	ND	0.23	0.47	"	"	"	"	"	"	
Nickel	5.7	0.094	0.23	"	"	"	"	"	"	
Selenium	ND	0.94	1.9	"	"	"	"	"	"	
Silver	ND	0.19	0.47	"	"	"	"	"	"	
Thallium	1.2	0.47	0.94	"	"	"	"	"	"	
Vanadium	10	0.47	0.94	"	"	"	"	"	"	
Zinc	10	0.47	0.94	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0093	07/03/19	07/03/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			89.4 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9G0013	07/01/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			101 %	(67 - 134)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-37 (Solid)
RB19-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

R-05

alpha-BHC	ND	0.015	0.030	mg/kg	10	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Aldrin	ND	0.015	0.030	"	"	"	"	"	"	
beta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
delta-BHC	ND	0.015	0.030	"	"	"	"	"	"	
4,4'-DDD	ND	0.015	0.030	"	"	"	"	"	"	CCHI
4,4'-DDE	ND	0.015	0.030	"	"	"	"	"	"	
4,4'-DDT	ND	0.016	0.030	"	"	"	"	"	"	CCFL 8081
Dieldrin	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan I	ND	0.017	0.030	"	"	"	"	"	"	
Endosulfan II	ND	0.015	0.030	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.015	0.030	"	"	"	"	"	"	
Endrin	ND	0.015	0.030	"	"	"	"	"	"	
Endrin aldehyde	ND	0.015	0.030	"	"	"	"	"	"	
Endrin ketone	ND	0.016	0.030	"	"	"	"	"	"	
gamma-BHC	ND	0.015	0.030	"	"	"	"	"	"	
gamma-Chlordane	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor	ND	0.015	0.030	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.015	0.030	"	"	"	"	"	"	
Methoxychlor	ND	0.015	0.030	"	"	"	"	"	"	CCFL 8081
Chlordane (tech)	ND	0.10	0.20	"	"	"	"	"	"	
Toxaphene	ND	0.16	0.20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			114 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			66.9 %	(10 - 169)		"	"	"	"	

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180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-37 (Solid) RB19-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

R-05

Acenaphthene	ND	0.0060	0.010	mg/kg	2	B9G0080	07/03/19	07/03/19	EPA 8270-SIM	
Acenaphthylene	0.019	0.0060	0.010	"	"	"	"	"	"	
Anthracene	ND	0.0060	0.010	"	"	"	"	"	"	
Benz (a) anthracene	ND	0.0060	0.010	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0060	0.010	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0060	0.010	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0060	0.010	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.010	0.020	"	"	"	"	"	"	
Chrysene	0.0067	0.0060	0.010	"	"	"	"	"	"	J
Dibenz (a,h) anthracene	ND	0.010	0.020	"	"	"	"	"	"	
Fluoranthene	0.0080	0.0060	0.010	"	"	"	"	"	"	J
Fluorene	0.012	0.0060	0.010	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0060	0.010	"	"	"	"	"	"	
Naphthalene	0.31	0.025	0.050	"	5	"	"	07/05/19	"	
Phenanthrene	0.011	0.0060	0.010	"	2	"	"	07/03/19	"	
Pyrene	0.0073	0.0060	0.010	"	"	"	"	"	"	J
<i>Surrogate: p-Terphenyl-d14</i>			85.0 %	(10 - 185)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-39 (Solid) RB20-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by CVAA

Mercury	0.036	0.0082	0.076	mg/kg	1	B9F0827	06/28/19	07/01/19	EPA 7471A	J
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Total Metals by ICP

Antimony	ND	0.92	2.3	mg/kg	1	B9F0822	06/27/19	06/28/19	EPA 6010B	B-02
Arsenic	2.1	0.92	1.8	"	"	"	"	"	"	
Barium	48	0.46	0.92	"	"	"	"	"	"	
Beryllium	ND	0.23	0.46	"	"	"	"	"	"	
Cadmium	ND	0.14	0.23	"	"	"	"	"	"	
Chromium	17	0.23	0.46	"	"	"	"	"	"	
Cobalt	2.3	0.23	0.46	"	"	"	"	"	"	
Copper	4.8	0.46	0.92	"	"	"	"	"	"	
Lead	9.6	0.28	0.46	"	"	"	"	"	"	
Molybdenum	ND	0.23	0.46	"	"	"	"	"	"	
Nickel	6.6	0.092	0.23	"	"	"	"	"	"	
Selenium	ND	0.92	1.8	"	"	"	"	"	"	
Silver	ND	0.18	0.46	"	"	"	"	"	"	
Thallium	1.1	0.46	0.92	"	"	"	"	"	"	
Vanadium	12	0.46	0.92	"	"	"	"	"	"	
Zinc	15	0.46	0.92	"	"	"	"	"	"	

Volatile Organic TPH by GC/FID

TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg	1	B9G0018	07/01/19	07/01/19	EPA 8015M	
<i>Surrogate: 4-Bromofluorobenzene</i>			109 %	(36 - 163)		"	"	"	"	

Semi-Volatile Organic TPH by GC/FID

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg	1	B9G0013	07/01/19	07/01/19	EPA 8015M	
TPH Motor Oil (C23-C40)	ND	40	50	"	"	"	"	"	"	
<i>Surrogate: o-Terphenyl</i>			97.7 %	(67 - 134)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-39 (Solid)
RB20-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Organochlorine Pesticides by GC/ECD/ECD

R-05

alpha-BHC	ND	0.0060	0.012	mg/kg	4	B9G0041	07/01/19	07/02/19	EPA 8081A	
alpha-Chlordane	ND	0.0060	0.012	"	"	"	"	"	"	
Aldrin	ND	0.0060	0.012	"	"	"	"	"	"	
beta-BHC	ND	0.0060	0.012	"	"	"	"	"	"	
delta-BHC	ND	0.0060	0.012	"	"	"	"	"	"	
4,4'-DDD	ND	0.0060	0.012	"	"	"	"	"	"	
4,4'-DDE	0.18	0.030	0.060	"	20	"	"	07/04/19	"	
4,4'-DDT	0.049	0.0064	0.012	"	4	"	"	07/02/19	"	
Dieldrin	ND	0.0060	0.012	"	"	"	"	"	"	
Endosulfan I	ND	0.0068	0.012	"	"	"	"	"	"	
Endosulfan II	ND	0.0060	0.012	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0060	0.012	"	"	"	"	"	"	
Endrin	ND	0.0060	0.012	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0060	0.012	"	"	"	"	"	"	
Endrin ketone	ND	0.0064	0.012	"	"	"	"	"	"	
gamma-BHC	ND	0.0060	0.012	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0060	0.012	"	"	"	"	"	"	
Heptachlor	ND	0.0060	0.012	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0060	0.012	"	"	"	"	"	"	
Methoxychlor	ND	0.0060	0.012	"	"	"	"	"	"	
Chlordane (tech)	ND	0.040	0.080	"	"	"	"	"	"	
Toxaphene	ND	0.064	0.080	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl			119 %	(10 - 202)		"	"	"	"	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			62.5 %	(10 - 169)		"	"	"	"	

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

1903173-39 (Solid) RB20-1

Analyte	Result	MDL	RL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Acenaphthene	ND	0.0030	0.0050	mg/kg	1	B9G0080	07/03/19	07/03/19	EPA 8270-SIM	
Acenaphthylene	0.0060	0.0030	0.0050	"	"	"	"	"	"	
Anthracene	0.0057	0.0030	0.0050	"	"	"	"	"	"	
Benz (a) anthracene	0.025	0.0030	0.0050	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.026	0.0030	0.0050	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.030	0.0030	0.0050	"	"	"	"	"	"	
Benzo (a) pyrene	0.028	0.0030	0.0050	"	"	"	"	"	"	
Benzo (g,h,i) perylene	0.0096	0.0050	0.010	"	"	"	"	"	"	J
Chrysene	0.034	0.0030	0.0050	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	"	"	"	"	"	
Fluoranthene	0.049	0.0030	0.0050	"	"	"	"	"	"	
Fluorene	0.0053	0.0030	0.0050	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.0096	0.0030	0.0050	"	"	"	"	"	"	
Naphthalene	0.042	0.0050	0.010	"	"	"	"	"	"	
Phenanthrene	0.037	0.0030	0.0050	"	"	"	"	"	"	
Pyrene	0.047	0.0030	0.0050	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>			88.8 %	(10 - 185)		"	"	"	"	

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Total Metals by CVAA - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9F0827 - EPA 7471A Preparation: EPA 7471A Prep 06/28/19 08:22											
Blank (B9F0827-BLK1) Analyzed: 07/01/19 14:21											
Mercury	ND	0.011	0.10	mg/kg							
LCS (B9F0827-BS1) Analyzed: 07/01/19 14:16											
Mercury	0.846	0.011	0.10	mg/kg	0.833		101	85-115			
LCS Dup (B9F0827-BSD1) Analyzed: 07/01/19 14:18											
Mercury	0.843	0.011	0.10	mg/kg	0.833		101	85-115	0.237	20	
Duplicate (B9F0827-DUP1) Source: 1903173-01 Analyzed: 07/01/19 14:25											
Mercury	0.0178	0.0096	0.088	mg/kg		0.0190			6.51	20	J
Matrix Spike (B9F0827-MS1) Source: 1903173-01 Analyzed: 07/01/19 14:27											
Mercury	0.838	0.010	0.096	mg/kg	0.799	0.0190	103	75-125			
Matrix Spike Dup (B9F0827-MSD1) Source: 1903173-01 Analyzed: 07/01/19 14:29											
Mercury	0.827	0.010	0.093	mg/kg	0.776	0.0190	104	75-125	1.38	20	
Post Spike (B9F0827-PS1) Source: 1903173-01 Analyzed: 07/01/19 14:31											
Mercury	5.43			ug/L	5.00	0.114	106	85-115			

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Total Metals by ICP - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9F0822 - EPA 6010B Preparation: EPA 3050B 06/27/19 16:11

Blank (B9F0822-BLK1)

Analyzed: 06/28/19 13:31

Antimony	1.16	1.0	2.5	mg/kg							B-02, J
Arsenic	ND	1.0	2.0	"							
Barium	ND	0.50	1.0	"							
Beryllium	ND	0.25	0.50	"							
Cadmium	ND	0.15	0.25	"							
Chromium	ND	0.25	0.50	"							
Cobalt	ND	0.25	0.50	"							
Copper	ND	0.50	1.0	"							
Lead	ND	0.30	0.50	"							
Molybdenum	ND	0.25	0.50	"							
Nickel	ND	0.10	0.25	"							
Selenium	ND	1.0	2.0	"							
Silver	ND	0.20	0.50	"							
Thallium	ND	0.50	1.0	"							
Vanadium	ND	0.50	1.0	"							
Zinc	ND	0.50	1.0	"							

LCS (B9F0822-BS1)

Analyzed: 06/28/19 13:13

Antimony	80.5	1.0	2.5	mg/kg	100		80.5	80-120
Arsenic	98.4	1.0	2.0	"	100		98.4	80-120
Barium	101	0.50	1.0	"	100		101	80-120
Beryllium	102	0.25	0.50	"	100		102	80-120
Cadmium	100	0.15	0.25	"	100		100	80-120
Chromium	102	0.25	0.50	"	100		102	80-120
Cobalt	102	0.25	0.50	"	100		102	80-120
Copper	98.6	0.50	1.0	"	100		98.6	80-120
Lead	103	0.30	0.50	"	100		103	80-120
Molybdenum	100	0.25	0.50	"	100		100	80-120
Nickel	101	0.10	0.25	"	100		101	80-120
Selenium	97.6	1.0	2.0	"	100		97.6	80-120
Silver	4.84	0.20	0.50	"	5.00		96.7	80-120
Thallium	103	0.50	1.0	"	100		103	80-120
Vanadium	103	0.50	1.0	"	100		103	80-120
Zinc	101	0.50	1.0	"	100		101	80-120

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180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Total Metals by ICP - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9F0822 - EPA 6010B Preparation: EPA 3050B 06/27/19 16:11

LCS Dup (B9F0822-bsd1)

Analyzed: 06/28/19 13:16

Antimony	85.8	1.0	2.5	mg/kg	100		85.8	80-120	6.32	20	
Arsenic	102	1.0	2.0	"	100		102	80-120	3.35	20	
Barium	103	0.50	1.0	"	100		103	80-120	2.46	20	
Beryllium	105	0.25	0.50	"	100		105	80-120	2.42	20	
Cadmium	102	0.15	0.25	"	100		102	80-120	2.02	20	
Chromium	105	0.25	0.50	"	100		105	80-120	3.14	20	
Cobalt	104	0.25	0.50	"	100		104	80-120	2.04	20	
Copper	102	0.50	1.0	"	100		102	80-120	2.90	20	
Lead	105	0.30	0.50	"	100		105	80-120	2.22	20	
Molybdenum	103	0.25	0.50	"	100		103	80-120	3.30	20	
Nickel	103	0.10	0.25	"	100		103	80-120	2.01	20	
Selenium	101	1.0	2.0	"	100		101	80-120	3.18	20	
Silver	5.03	0.20	0.50	"	5.00		101	80-120	3.95	20	
Thallium	105	0.50	1.0	"	100		105	80-120	1.25	20	
Vanadium	106	0.50	1.0	"	100		106	80-120	2.97	20	
Zinc	103	0.50	1.0	"	100		103	80-120	1.96	20	

Duplicate (B9F0822-DUP1)

Source: 1903173-01

Analyzed: 06/28/19 14:30

Antimony	ND	1.0	2.5	mg/kg	ND						
Arsenic	1.97	1.0	2.0	"	1.61				20.2	20	QR-04, J
Barium	41.6	0.50	1.0	"	42.4				1.74	20	
Beryllium	ND	0.25	0.50	"	ND					20	
Cadmium	ND	0.15	0.25	"	ND					20	
Chromium	12.6	0.25	0.50	"	12.4				2.20	20	
Cobalt	1.93	0.25	0.50	"	1.99				3.08	20	
Copper	3.31	0.50	1.0	"	3.35				1.21	20	
Lead	6.15	0.30	0.50	"	6.20				0.820	20	
Molybdenum	ND	0.25	0.50	"	0.326					20	
Nickel	5.76	0.10	0.25	"	5.69				1.36	20	
Selenium	ND	1.0	2.0	"	ND					20	
Silver	ND	0.20	0.50	"	ND					20	
Thallium	0.644	0.50	1.0	"	0.928				36.2	20	QR-04, J
Vanadium	9.74	0.50	1.0	"	10.0				2.95	20	
Zinc	10.7	0.50	1.0	"	10.8				0.738	20	

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Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Total Metals by ICP - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9F0822 - EPA 6010B Preparation: EPA 3050B 06/27/19 16:11

Matrix Spike (B9F0822-MS1)

Source: 1903173-01

Analyzed: 06/28/19 13:18

Antimony	54.4	0.95	2.4	mg/kg	95.0	ND	57.2	10-103			
Arsenic	93.2	0.95	1.9	"	95.0	1.61	96.5	74-123			
Barium	135	0.47	0.95	"	95.0	42.4	97.7	26-183			
Beryllium	95.3	0.24	0.47	"	95.0	ND	100	79-119			
Cadmium	92.0	0.14	0.24	"	95.0	ND	96.9	76-117			
Chromium	112	0.24	0.47	"	95.0	12.4	105	55-151			
Cobalt	94.7	0.24	0.47	"	95.0	1.99	97.7	73-120			
Copper	100	0.47	0.95	"	95.0	3.35	102	64-143			
Lead	99.8	0.28	0.47	"	95.0	6.20	98.6	59-132			
Molybdenum	91.5	0.24	0.47	"	95.0	0.326	96.0	66-116			
Nickel	101	0.095	0.24	"	95.0	5.69	101	49-146			
Selenium	88.7	0.95	1.9	"	95.0	ND	93.4	65-122			
Silver	4.67	0.19	0.47	"	4.75	ND	98.3	40-134			
Thallium	92.6	0.47	0.95	"	95.0	0.928	96.5	65-120			
Vanadium	106	0.47	0.95	"	95.0	10.0	101	70-135			
Zinc	105	0.47	0.95	"	95.0	10.8	99.0	51-146			

Matrix Spike Dup (B9F0822-MSD1)

Source: 1903173-01

Analyzed: 06/28/19 13:21

Antimony	54.8	0.93	2.3	mg/kg	93.3	ND	58.7	10-103	0.713	20	
Arsenic	95.7	0.93	1.9	"	93.3	1.61	101	74-123	2.60	20	
Barium	143	0.47	0.93	"	93.3	42.4	108	26-183	5.82	20	
Beryllium	97.2	0.23	0.47	"	93.3	ND	104	79-119	2.07	20	
Cadmium	94.0	0.14	0.23	"	93.3	ND	101	76-117	2.21	20	
Chromium	122	0.23	0.47	"	93.3	12.4	117	55-151	8.11	20	
Cobalt	96.9	0.23	0.47	"	93.3	1.99	102	73-120	2.24	20	
Copper	102	0.47	0.93	"	93.3	3.35	106	64-143	2.16	20	
Lead	101	0.28	0.47	"	93.3	6.20	102	59-132	1.63	20	
Molybdenum	94.4	0.23	0.47	"	93.3	0.326	101	66-116	3.17	20	
Nickel	104	0.093	0.23	"	93.3	5.69	106	49-146	3.06	20	
Selenium	90.2	0.93	1.9	"	93.3	ND	96.7	65-122	1.68	20	
Silver	4.66	0.19	0.47	"	4.66	ND	99.9	40-134	0.174	20	
Thallium	94.7	0.47	0.93	"	93.3	0.928	101	65-120	2.28	20	
Vanadium	111	0.47	0.93	"	93.3	10.0	108	70-135	4.34	20	
Zinc	108	0.47	0.93	"	93.3	10.8	104	51-146	2.99	20	

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Total Metals by ICP - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9F0822 - EPA 6010B Preparation: EPA 3050B 06/27/19 16:11

Post Spike (B9F0822-PS1)	Source: 1903173-01	Analyzed: 06/28/19 14:22									
Antimony	1.94			mg/L	2.00	-0.00274	97.2	75-125			
Arsenic	1.99			"	2.00	0.0337	97.9	75-125			
Barium	2.87			"	2.00	0.888	99.1	75-125			
Beryllium	2.00			"	2.00	0.00293	100	75-125			
Cadmium	1.95			"	2.00	0.000782	97.7	75-125			
Chromium	2.28			"	2.00	0.259	101	75-125			
Cobalt	2.02			"	2.00	0.0418	99.2	75-125			
Copper	2.11			"	2.00	0.0703	102	75-125			
Lead	2.12			"	2.00	0.130	99.7	75-125			
Molybdenum	1.96			"	2.00	0.00685	97.5	75-125			
Nickel	2.08			"	2.00	0.119	97.9	75-125			
Selenium	1.93			"	2.00	-0.0235	96.4	75-125			
Silver	0.0995			"	0.100	-0.00127	99.5	75-125			
Thallium	1.99			"	2.00	0.0195	98.6	75-125			
Vanadium	2.26			"	2.00	0.210	102	75-125			
Zinc	2.19			"	2.00	0.226	98.0	75-125			

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Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Volatile Organic TPH by GC/FID - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0018 - EPA 8015M Preparation: EPA 5035/5030B MEOH GC 07/01/19 08:25

Blank (B9G0018-BLK1)											
Analyzed: 07/01/19 11:25											
TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg							
Surrogate: 4-Bromofluorobenzene			0.137	"	0.125		110	36-163			
LCS (B9G0018-BS1)											
Analyzed: 07/01/19 10:04											
TPH Gasoline (C4-C12)	0.597	0.10	0.50	mg/kg	0.499		120	64-161			
Surrogate: 4-Bromofluorobenzene			0.130	"	0.125		104	36-163			
LCS Dup (B9G0018-BSD1)											
Analyzed: 07/01/19 10:31											
TPH Gasoline (C4-C12)	0.583	0.10	0.50	mg/kg	0.499		117	64-161	2.46	20	
Surrogate: 4-Bromofluorobenzene			0.130	"	0.125		104	36-163			
Duplicate (B9G0018-DUP1) Source: 1903173-07											
Analyzed: 07/01/19 12:19											
TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg		ND					20
Surrogate: 4-Bromofluorobenzene			0.138	"	0.126		110	36-163			
Matrix Spike (B9G0018-MS1) Source: 1903173-17											
Analyzed: 07/01/19 22:27											
TPH Gasoline (C4-C12)	0.490	0.099	0.50	mg/kg	0.496	ND	98.7	10-161			J
Surrogate: 4-Bromofluorobenzene			0.125	"	0.124		101	36-163			
Matrix Spike Dup (B9G0018-MSD1) Source: 1903173-17											
Analyzed: 07/01/19 22:54											
TPH Gasoline (C4-C12)	0.445	0.10	0.50	mg/kg	0.499	ND	89.3	10-161	9.45	20	J
Surrogate: 4-Bromofluorobenzene			0.130	"	0.125		104	36-163			

Batch B9G0093 - EPA 8015M Preparation: EPA 5035/5030B MEOH GC 07/03/19 08:33

Blank (B9G0093-BLK1)											
Analyzed: 07/03/19 11:07											
TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg							
Surrogate: 4-Bromofluorobenzene			0.116	"	0.125		93.2	36-163			
LCS (B9G0093-BS1)											
Analyzed: 07/03/19 10:13											
TPH Gasoline (C4-C12)	0.503	0.099	0.50	mg/kg	0.496		101	64-161			
Surrogate: 4-Bromofluorobenzene			0.110	"	0.124		89.0	36-163			
LCS Dup (B9G0093-BSD1)											
Analyzed: 07/03/19 10:40											
TPH Gasoline (C4-C12)	0.493	0.10	0.50	mg/kg	0.499		98.8	64-161	1.98	20	J
Surrogate: 4-Bromofluorobenzene			0.111	"	0.125		89.3	36-163			

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants 180 N. Ashwood Ave. Ventura CA, 93003	Project: Huber Street Project Number: 19-07931 Project Manager: Scott English	WO & Reported: 1903173 07/09/2019 15:30
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Volatile Organic TPH by GC/FID - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9G0093 - EPA 8015M Preparation: EPA 5035/5030B MEOH GC 07/03/19 08:33											
Duplicate (B9G0093-DUP1) Source: 1903173-13RE1 Analyzed: 07/03/19 14:39											
TPH Gasoline (C4-C12)	ND	0.10	0.50	mg/kg		ND				20	
Surrogate: 4-Bromofluorobenzene			0.106	"	0.125		85.4	36-163			
Matrix Spike (B9G0093-MS1) Source: 1903173-35 Analyzed: 07/03/19 15:07											
TPH Gasoline (C4-C12)	0.465	0.10	0.50	mg/kg	0.499	ND	93.2	10-161			J
Surrogate: 4-Bromofluorobenzene			0.105	"	0.125		84.1	36-163			
Matrix Spike Dup (B9G0093-MSD1) Source: 1903173-35 Analyzed: 07/03/19 15:34											
TPH Gasoline (C4-C12)	0.434	0.10	0.50	mg/kg	0.500	ND	86.8	10-161	6.87	20	J
Surrogate: 4-Bromofluorobenzene			0.111	"	0.125		88.7	36-163			

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Semi-Volatile Organic TPH by GC/FID - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9F0814 - EPA 8015M Preparation: EPA 3550C 06/28/19 09:40

Blank (B9F0814-BLK1)

Analyzed: 06/28/19 14:24

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg							
TPH Motor Oil (C23-C40)	ND	40	50	"							
Surrogate: o-Terphenyl			48.0	"	50.0		95.9	67-134			

LCS (B9F0814-BS1)

Analyzed: 06/28/19 13:52

TPH Diesel (C13-C22)	455	7.6	10	mg/kg	500		91.0	74-125			
TPH Motor Oil (C23-C40)	503	40	50	"	500		101	84-125			
Surrogate: o-Terphenyl			42.0	"	50.0		84.2	67-134			

LCS Dup (B9F0814-BSD1)

Analyzed: 06/28/19 14:08

TPH Diesel (C13-C22)	453	7.6	10	mg/kg	500		90.6	74-125	0.346	20	
TPH Motor Oil (C23-C40)	511	40	50	"	500		102	84-125	1.39	20	
Surrogate: o-Terphenyl			40.7	"	50.0		81.5	67-134			

Duplicate (B9F0814-DUP1)

Source: 1903173-09

Analyzed: 06/28/19 14:14

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg		ND					20
TPH Motor Oil (C23-C40)	ND	40	50	"		ND					20
Surrogate: o-Terphenyl			44.3	"	50.0		88.6	67-134			

Matrix Spike (B9F0814-MS1)

Source: 1903173-09

Analyzed: 06/28/19 14:28

TPH Diesel (C13-C22)	350	7.6	10	mg/kg	500	ND	70.0	48-150			
TPH Motor Oil (C23-C40)	393	40	50	"	500	ND	78.7	78-136			
Surrogate: o-Terphenyl			46.1	"	50.0		92.1	67-134			

Matrix Spike Dup (B9F0814-MSD1)

Source: 1903173-09

Analyzed: 06/28/19 14:42

TPH Diesel (C13-C22)	363	7.6	10	mg/kg	499	ND	72.8	48-150	3.76	20	
TPH Motor Oil (C23-C40)	554	40	50	"	499	ND	111	78-136	34.0	20	QR-02
Surrogate: o-Terphenyl			43.1	"	49.9		86.4	67-134			

Batch B9G0013 - EPA 8015M Preparation: EPA 3550C 07/01/19 10:33

Blank (B9G0013-BLK1)

Analyzed: 07/01/19 17:04

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg							
TPH Motor Oil (C23-C40)	ND	40	50	"							
Surrogate: o-Terphenyl			46.5	"	49.9		93.2	67-134			

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WO & Reported:
1903173
07/09/2019 15:30

Semi-Volatile Organic TPH by GC/FID - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0013 - EPA 8015M Preparation: EPA 3550C 07/01/19 10:33

LCS (B9G0013-BS1)

Analyzed: 07/01/19 15:13

TPH Diesel (C13-C22)	494	7.6	10	mg/kg	499		98.9	74-125			
TPH Motor Oil (C23-C40)	525	40	50	"	499		105	84-125			
Surrogate: <i>o</i> -Terphenyl			45.0	"	49.9		90.2	67-134			

LCS Dup (B9G0013-BSD1)

Analyzed: 07/01/19 16:00

TPH Diesel (C13-C22)	472	7.6	10	mg/kg	500		94.5	74-125	4.41	20	
TPH Motor Oil (C23-C40)	529	40	50	"	500		106	84-125	0.716	20	
Surrogate: <i>o</i> -Terphenyl			42.9	"	50.0		85.9	67-134			

Duplicate (B9G0013-DUP1)

Source: 1903173-39

Analyzed: 07/01/19 17:53

TPH Diesel (C13-C22)	ND	7.6	10	mg/kg		ND					20
TPH Motor Oil (C23-C40)	ND	40	50	"		ND					20
Surrogate: <i>o</i> -Terphenyl			50.0	"	49.9		100	67-134			

Matrix Spike (B9G0013-MS1)

Source: 1903173-39

Analyzed: 07/01/19 16:16

TPH Diesel (C13-C22)	467	7.6	10	mg/kg	500	ND	93.6	48-150			
TPH Motor Oil (C23-C40)	539	40	50	"	500	ND	108	78-136			
Surrogate: <i>o</i> -Terphenyl			42.9	"	50.0		85.9	67-134			

Matrix Spike Dup (B9G0013-MSD1)

Source: 1903173-39

Analyzed: 07/01/19 16:32

TPH Diesel (C13-C22)	480	7.6	10	mg/kg	500	ND	96.1	48-150	2.60	20	
TPH Motor Oil (C23-C40)	571	40	50	"	500	ND	114	78-136	5.93	20	
Surrogate: <i>o</i> -Terphenyl			44.6	"	50.0		89.4	67-134			

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Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Organochlorine Pesticides by GC/ECD/ECD - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0041 - EPA 8081A Preparation: EPA 3550C 07/01/19 15:44

Blank (B9G0041-BLK1)

Analyzed: 07/02/19 15:12

alpha-BHC	ND	0.0015	0.0030	mg/kg							
alpha-Chlordane	ND	0.0015	0.0030	"							
Aldrin	ND	0.0015	0.0030	"							
beta-BHC	ND	0.0015	0.0030	"							
delta-BHC	ND	0.0015	0.0030	"							
4,4'-DDD	ND	0.0015	0.0030	"							
4,4'-DDE	ND	0.0015	0.0030	"							
4,4'-DDT	ND	0.0016	0.0030	"							
Dieldrin	ND	0.0015	0.0030	"							
Endosulfan I	ND	0.0017	0.0030	"							
Endosulfan II	ND	0.0015	0.0030	"							
Endosulfan sulfate	ND	0.0015	0.0030	"							
Endrin	ND	0.0015	0.0030	"							
Endrin aldehyde	ND	0.0015	0.0030	"							
Endrin ketone	ND	0.0016	0.0030	"							
gamma-BHC	ND	0.0015	0.0030	"							
gamma-Chlordane	ND	0.0015	0.0030	"							
Heptachlor	ND	0.0015	0.0030	"							
Heptachlor epoxide	ND	0.0015	0.0030	"							
Methoxychlor	ND	0.0015	0.0030	"							
Chlordane (tech)	ND	0.010	0.020	"							
Toxaphene	ND	0.016	0.020	"							
Surrogate: Decachlorobiphenyl			0.00634	"	0.00833		76.1	10-202			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			0.00564	"	0.00833		67.7	10-169			

LCS (B9G0041-BS1)

Analyzed: 07/02/19 14:12

alpha-BHC	0.00467	0.0015	0.0030	mg/kg	0.00667		70.0	34-104			
alpha-Chlordane	0.00502	0.0015	0.0030	"	0.00667		75.2	44-109			
Aldrin	0.00449	0.0015	0.0030	"	0.00667		67.4	32-107			
beta-BHC	0.00632	0.0015	0.0030	"	0.00667		94.9	42-120			
delta-BHC	0.00521	0.0015	0.0030	"	0.00667		78.2	41-119			
4,4'-DDD	0.00524	0.0015	0.0030	"	0.00667		78.6	49-127			
4,4'-DDE	0.00526	0.0015	0.0030	"	0.00667		78.9	49-121			
4,4'-DDT	0.00602	0.0016	0.0030	"	0.00667		90.3	55-137			
Dieldrin	0.00533	0.0015	0.0030	"	0.00667		79.9	46-116			
Endosulfan I	0.00528	0.0017	0.0030	"	0.00667		79.2	43-120			
Endosulfan II	0.00525	0.0015	0.0030	"	0.00667		78.8	52-121			
Endosulfan sulfate	0.00602	0.0015	0.0030	"	0.00667		90.3	57-123			
Endrin	0.00588	0.0015	0.0030	"	0.00667		88.2	51-127			
Endrin aldehyde	0.00481	0.0015	0.0030	"	0.00667		72.1	47-115			
Endrin ketone	0.00540	0.0016	0.0030	"	0.00667		81.0	55-118			
gamma-BHC	0.00493	0.0015	0.0030	"	0.00667		73.9	38-105			

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Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Organochlorine Pesticides by GC/ECD/ECD - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0041 - EPA 8081A Preparation: EPA 3550C 07/01/19 15:44

LCS (B9G0041-BS1)

Analyzed: 07/02/19 14:12

gamma-Chlordane	0.00506	0.0015	0.0030	mg/kg	0.00667		75.9	46-107			
Heptachlor	0.00542	0.0015	0.0030	"	0.00667		81.4	40-114			
Heptachlor epoxide	0.00511	0.0015	0.0030	"	0.00667		76.6	47-108			
Methoxychlor	0.00673	0.0015	0.0030	"	0.00667		101	54-149			
Surrogate: Decachlorobiphenyl			0.00768	"	0.00833		92.2	10-202			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			0.00613	"	0.00833		73.6	10-169			

LCS Dup (B9G0041-BSD1)

Analyzed: 07/02/19 14:32

alpha-BHC	0.00452	0.0015	0.0030	mg/kg	0.00667		67.8	34-104	3.33	25	
alpha-Chlordane	0.00547	0.0015	0.0030	"	0.00667		82.1	44-109	8.65	25	
Aldrin	0.00479	0.0015	0.0030	"	0.00667		71.8	32-107	6.30	25	
beta-BHC	0.00682	0.0015	0.0030	"	0.00667		102	42-120	7.62	25	
delta-BHC	0.00567	0.0015	0.0030	"	0.00667		85.0	41-119	8.41	25	
4,4'-DDD	0.00607	0.0015	0.0030	"	0.00667		91.0	49-127	14.7	25	
4,4'-DDE	0.00595	0.0015	0.0030	"	0.00667		89.2	49-121	12.3	25	
4,4'-DDT	0.00703	0.0016	0.0030	"	0.00667		105	55-137	15.4	25	
Dieldrin	0.00586	0.0015	0.0030	"	0.00667		88.0	46-116	9.55	25	
Endosulfan I	0.00571	0.0017	0.0030	"	0.00667		85.6	43-120	7.72	25	
Endosulfan II	0.00585	0.0015	0.0030	"	0.00667		87.7	52-121	10.7	25	
Endosulfan sulfate	0.00673	0.0015	0.0030	"	0.00667		101	57-123	11.1	25	
Endrin	0.00665	0.0015	0.0030	"	0.00667		99.8	51-127	12.4	25	
Endrin aldehyde	0.00594	0.0015	0.0030	"	0.00667		89.1	47-115	21.1	25	
Endrin ketone	0.00608	0.0016	0.0030	"	0.00667		91.2	55-118	11.8	25	
gamma-BHC	0.00514	0.0015	0.0030	"	0.00667		77.0	38-105	4.16	25	
gamma-Chlordane	0.00553	0.0015	0.0030	"	0.00667		82.9	46-107	8.85	25	
Heptachlor	0.00573	0.0015	0.0030	"	0.00667		86.0	40-114	5.53	25	
Heptachlor epoxide	0.00553	0.0015	0.0030	"	0.00667		82.9	47-108	7.91	25	
Methoxychlor	0.00774	0.0015	0.0030	"	0.00667		116	54-149	14.0	25	
Surrogate: Decachlorobiphenyl			0.00762	"	0.00833		91.5	10-202			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			0.00557	"	0.00833		66.8	10-169			

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Organochlorine Pesticides by GC/ECD/ECD - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0041 - EPA 8081A Preparation: EPA 3550C 07/01/19 15:44

Duplicate (B9G0041-DUP1)	Source: 1903173-15			Analyzed: 07/02/19 17:36							
alpha-BHC	ND	0.0015	0.0030	mg/kg		ND					25
alpha-Chlordane	ND	0.0015	0.0030	"		ND					25
Aldrin	ND	0.0015	0.0030	"		ND					25
beta-BHC	ND	0.0015	0.0030	"		ND					25
delta-BHC	ND	0.0015	0.0030	"		ND					25
4,4'-DDD	ND	0.0015	0.0030	"		ND					25
4,4'-DDE	ND	0.0015	0.0030	"		ND					25
4,4'-DDT	ND	0.0016	0.0030	"		ND					25
Dieldrin	ND	0.0015	0.0030	"		ND					25
Endosulfan I	ND	0.0017	0.0030	"		ND					25
Endosulfan II	ND	0.0015	0.0030	"		ND					25
Endosulfan sulfate	ND	0.0015	0.0030	"		ND					25
Endrin	ND	0.0015	0.0030	"		ND					25
Endrin aldehyde	ND	0.0015	0.0030	"		ND					25
Endrin ketone	ND	0.0016	0.0030	"		ND					25
gamma-BHC	ND	0.0015	0.0030	"		ND					25
gamma-Chlordane	ND	0.0015	0.0030	"		ND					25
Heptachlor	ND	0.0015	0.0030	"		ND					25
Heptachlor epoxide	ND	0.0015	0.0030	"		ND					25
Methoxychlor	ND	0.0015	0.0030	"		ND					25
Surrogate: Decachlorobiphenyl			0.00721	"	0.00833		86.6	10-202			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene			0.00559	"	0.00833		67.2	10-169			

Matrix Spike (B9G0041-MS2)	Source: 1903173-15			Analyzed: 07/04/19 01:44							
alpha-BHC	0.00642	0.0015	0.0030	mg/kg	0.00667	ND	96.2	15-133			
alpha-Chlordane	0.00624	0.0015	0.0030	"	0.00667	ND	93.5	21-141			
Aldrin	0.00560	0.0015	0.0030	"	0.00667	ND	84.0	13-138			
beta-BHC	0.00782	0.0015	0.0030	"	0.00667	ND	117	23-149			
delta-BHC	0.00696	0.0015	0.0030	"	0.00667	ND	104	25-146			
4,4'-DDD	0.00705	0.0015	0.0030	"	0.00667	ND	106	25-163			CCHI 8081
4,4'-DDE	0.00800	0.0015	0.0030	"	0.00667	ND	120	26-152			
4,4'-DDT	0.0107	0.0016	0.0030	"	0.00667	ND	160	31-156			QM-07
Dieldrin	0.00697	0.0015	0.0030	"	0.00667	ND	105	26-138			
Endosulfan I	0.00634	0.0017	0.0030	"	0.00667	ND	95.1	26-138			
Endosulfan II	0.00657	0.0015	0.0030	"	0.00667	ND	98.6	30-142			
Endosulfan sulfate	0.00733	0.0015	0.0030	"	0.00667	ND	110	29-145			
Endrin	0.00851	0.0015	0.0030	"	0.00667	ND	128	32-159			CCHI 8081
Endrin aldehyde	0.00821	0.0015	0.0030	"	0.00667	ND	123	21-141			CCHI 8081

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Ventura CA, 93003

Project: Huber Street
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Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Organochlorine Pesticides by GC/ECD/ECD - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0041 - EPA 8081A Preparation: EPA 3550C 07/01/19 15:44

Matrix Spike (B9G0041-MS2)		Source: 1903173-15			Analyzed: 07/04/19 01:44						
Endrin ketone	0.00872	0.0016	0.0030	mg/kg	0.00667	ND	131	25-139			CCHI 8081
gamma-BHC	0.00754	0.0015	0.0030	"	0.00667	ND	113	17-137			CCHI 8081
gamma-Chlordane	0.00619	0.0015	0.0030	"	0.00667	ND	92.8	22-133			
Heptachlor	0.0111	0.0015	0.0030	"	0.00667	ND	167	11-158			CCHI 8081, QM-07
Heptachlor epoxide	0.00666	0.0015	0.0030	"	0.00667	ND	99.9	10-162			
Methoxychlor	0.0117	0.0015	0.0030	"	0.00667	ND	175	35-167			CCHI 8081, QM-07
<i>Surrogate: Decachlorobiphenyl</i>			0.00662	"	0.00833		79.5	10-202			
<i>Surrogate: 2,4,5,6 Tetrachloro-m-xylene</i>			0.00749	"	0.00833		89.9	10-169			
Matrix Spike Dup (B9G0041-MSD2)		Source: 1903173-15			Analyzed: 07/04/19 02:04						
alpha-BHC	0.00574	0.0015	0.0030	mg/kg	0.00667	ND	86.2	15-133	11.1	25	
alpha-Chlordane	0.00583	0.0015	0.0030	"	0.00667	ND	87.5	21-141	6.71	25	
Aldrin	0.00508	0.0015	0.0030	"	0.00667	ND	76.2	13-138	9.75	25	
beta-BHC	0.00742	0.0015	0.0030	"	0.00667	ND	111	23-149	5.27	25	
delta-BHC	0.00646	0.0015	0.0030	"	0.00667	ND	96.9	25-146	7.53	25	
4,4'-DDD	0.00683	0.0015	0.0030	"	0.00667	ND	103	25-163	3.11	25	CCHI 8081
4,4'-DDE	0.00675	0.0015	0.0030	"	0.00667	ND	101	26-152	16.9	25	
4,4'-DDT	0.00970	0.0016	0.0030	"	0.00667	ND	146	31-156	9.72	25	
Dieldrin	0.00664	0.0015	0.0030	"	0.00667	ND	99.6	26-138	4.89	25	
Endosulfan I	0.00618	0.0017	0.0030	"	0.00667	ND	92.7	26-138	2.60	25	
Endosulfan II	0.00639	0.0015	0.0030	"	0.00667	ND	95.9	30-142	2.82	25	
Endosulfan sulfate	0.00726	0.0015	0.0030	"	0.00667	ND	109	29-145	0.990	25	
Endrin	0.00810	0.0015	0.0030	"	0.00667	ND	122	32-159	4.96	25	CCHI 8081
Endrin aldehyde	0.00777	0.0015	0.0030	"	0.00667	ND	117	21-141	5.49	25	CCHI 8081
Endrin ketone	0.00853	0.0016	0.0030	"	0.00667	ND	128	25-139	2.18	25	CCHI 8081
gamma-BHC	0.00690	0.0015	0.0030	"	0.00667	ND	103	17-137	8.93	25	CCHI 8081
gamma-Chlordane	0.00585	0.0015	0.0030	"	0.00667	ND	87.7	22-133	5.66	25	
Heptachlor	0.0104	0.0015	0.0030	"	0.00667	ND	156	11-158	6.92	25	CCHI 8081
Heptachlor epoxide	0.00624	0.0015	0.0030	"	0.00667	ND	93.6	10-162	6.42	25	
Methoxychlor	0.0115	0.0015	0.0030	"	0.00667	ND	173	35-167	1.24	25	CCHI 8081, QM-07
<i>Surrogate: Decachlorobiphenyl</i>			0.00683	"	0.00833		82.0	10-202			
<i>Surrogate: 2,4,5,6 Tetrachloro-m-xylene</i>			0.00657	"	0.00833		78.9	10-169			

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Oilfield Environmental & Compliance, Inc.

Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0051 - EPA 8270-SIM Preparation: EPA 3550C MS 07/02/19 08:57

Blank (B9G0051-BLK1)

Analyzed: 07/02/19 15:14

Acenaphthene	ND	0.0030	0.0050	mg/kg							
Acenaphthylene	ND	0.0030	0.0050	"							
Anthracene	ND	0.0030	0.0050	"							
Benz (a) anthracene	ND	0.0030	0.0050	"							
Benzo (b) fluoranthene	ND	0.0030	0.0050	"							
Benzo (k) fluoranthene	ND	0.0030	0.0050	"							
Benzo (a) pyrene	ND	0.0030	0.0050	"							
Benzo (g,h,i) perylene	ND	0.0050	0.010	"							
Chrysene	ND	0.0030	0.0050	"							
Dibenz (a,h) anthracene	ND	0.0050	0.010	"							
Fluoranthene	ND	0.0030	0.0050	"							
Fluorene	ND	0.0030	0.0050	"							
Indeno (1,2,3-cd) pyrene	ND	0.0030	0.0050	"							
Naphthalene	ND	0.0050	0.010	"							
Phenanthrene	ND	0.0030	0.0050	"							
Pyrene	ND	0.0030	0.0050	"							
Surrogate: <i>p</i> -Terphenyl-d14			0.0213	"	0.0266		80.0	10-185			

LCS (B9G0051-BS1)

Analyzed: 07/02/19 13:45

Acenaphthene	0.0163	0.0030	0.0050	mg/kg	0.0266		61.2	26-116			
Acenaphthylene	0.0167	0.0030	0.0050	"	0.0266		62.5	24-118			
Anthracene	0.0163	0.0030	0.0050	"	0.0266		61.2	33-137			
Benz (a) anthracene	0.0293	0.0030	0.0050	"	0.0266		110	65-138			
Benzo (b) fluoranthene	0.0306	0.0030	0.0050	"	0.0266		115	56-146			
Benzo (k) fluoranthene	0.0280	0.0030	0.0050	"	0.0266		105	61-156			
Benzo (a) pyrene	0.0293	0.0030	0.0050	"	0.0266		110	60-148			
Benzo (g,h,i) perylene	0.0266	0.0050	0.010	"	0.0266		100	42-163			
Chrysene	0.0313	0.0030	0.0050	"	0.0266		118	66-148			
Dibenz (a,h) anthracene	0.0276	0.0050	0.010	"	0.0266		104	41-161			
Fluoranthene	0.0217	0.0030	0.0050	"	0.0266		81.2	57-133			
Fluorene	0.0167	0.0030	0.0050	"	0.0266		62.5	29-120			
Indeno (1,2,3-cd) pyrene	0.0266	0.0030	0.0050	"	0.0266		100	39-165			
Naphthalene	0.0120	0.0050	0.010	"	0.0266		45.0	18-112			
Phenanthrene	0.0170	0.0030	0.0050	"	0.0266		63.7	32-124			
Pyrene	0.0220	0.0030	0.0050	"	0.0266		82.5	59-133			
Surrogate: <i>p</i> -Terphenyl-d14			0.0217	"	0.0266		81.2	10-185			

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0051 - EPA 8270-SIM Preparation: EPA 3550C MS 07/02/19 08:57

LCS Dup (B9G0051-BSD1)

Analyzed: 07/02/19 14:07

Acenaphthene	0.0163	0.0030	0.0050	mg/kg	0.0267		61.2	26-116	0.0333	30	
Acenaphthylene	0.0170	0.0030	0.0050	"	0.0267		63.7	24-118	2.01	30	
Anthracene	0.0167	0.0030	0.0050	"	0.0267		62.5	33-137	2.05	30	
Benz (a) anthracene	0.0303	0.0030	0.0050	"	0.0267		114	65-138	3.39	30	
Benzo (b) fluoranthene	0.0270	0.0030	0.0050	"	0.0267		101	56-146	12.7	30	
Benzo (k) fluoranthene	0.0300	0.0030	0.0050	"	0.0267		112	61-156	6.93	30	
Benzo (a) pyrene	0.0303	0.0030	0.0050	"	0.0267		114	60-148	3.39	30	
Benzo (g,h,i) perylene	0.0223	0.0050	0.010	"	0.0267		83.8	42-163	17.7	30	
Chrysene	0.0323	0.0030	0.0050	"	0.0267		121	66-148	3.17	30	
Dibenz (a,h) anthracene	0.0227	0.0050	0.010	"	0.0267		85.0	41-161	19.8	30	
Fluoranthene	0.0203	0.0030	0.0050	"	0.0267		76.3	57-133	6.32	30	
Fluorene	0.0167	0.0030	0.0050	"	0.0267		62.5	29-120	0.0333	30	
Indeno (1,2,3-cd) pyrene	0.0220	0.0030	0.0050	"	0.0267		82.5	39-165	19.1	30	
Naphthalene	0.0117	0.0050	0.010	"	0.0267		43.8	18-112	2.78	30	
Phenanthrene	0.0170	0.0030	0.0050	"	0.0267		63.7	32-124	0.0333	30	
Pyrene	0.0207	0.0030	0.0050	"	0.0267		77.5	59-133	6.22	30	
<i>Surrogate: p-Terphenyl-d14</i>			0.0207	"	0.0267		77.5	10-185			

Duplicate (B9G0051-DUP1)

Source: 1903202-01

Analyzed: 07/02/19 16:01

Acenaphthene	ND	0.0030	0.0050	mg/kg		ND				30	
Acenaphthylene	ND	0.0030	0.0050	"		ND				30	
Anthracene	ND	0.0030	0.0050	"		ND				30	
Benz (a) anthracene	ND	0.0030	0.0050	"		ND				30	
Benzo (b) fluoranthene	ND	0.0030	0.0050	"		ND				30	
Benzo (k) fluoranthene	ND	0.0030	0.0050	"		ND				30	
Benzo (a) pyrene	ND	0.0030	0.0050	"		ND				30	
Benzo (g,h,i) perylene	ND	0.0050	0.010	"		ND				30	
Chrysene	ND	0.0030	0.0050	"		ND				30	
Dibenz (a,h) anthracene	ND	0.0050	0.010	"		ND				30	
Fluoranthene	ND	0.0030	0.0050	"		ND				30	
Fluorene	ND	0.0030	0.0050	"		ND				30	
Indeno (1,2,3-cd) pyrene	ND	0.0030	0.0050	"		ND				30	
Naphthalene	ND	0.0050	0.010	"		ND				30	
Phenanthrene	ND	0.0030	0.0050	"		ND				30	
Pyrene	ND	0.0030	0.0050	"		ND				30	
<i>Surrogate: p-Terphenyl-d14</i>			0.0213	"	0.0267		80.0	10-185			

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Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0051 - EPA 8270-SIM Preparation: EPA 3550C MS 07/02/19 08:57

Matrix Spike (B9G0051-MS1)

Source: 1903202-01

Analyzed: 07/02/19 14:30

Acenaphthene	0.0200	0.0030	0.0050	mg/kg	0.0266	ND	75.0	24-121		
Acenaphthylene	0.0213	0.0030	0.0050	"	0.0266	ND	80.0	23-121		
Anthracene	0.0213	0.0030	0.0050	"	0.0266	ND	80.0	29-149		
Benz (a) anthracene	0.0299	0.0030	0.0050	"	0.0266	ND	112	44-154		
Benzo (b) fluoranthene	0.0303	0.0030	0.0050	"	0.0266	ND	114	34-177		
Benzo (k) fluoranthene	0.0289	0.0030	0.0050	"	0.0266	ND	109	41-181		
Benzo (a) pyrene	0.0293	0.0030	0.0050	"	0.0266	ND	110	45-155		
Benzo (g,h,i) perylene	0.0269	0.0050	0.010	"	0.0266	ND	101	10-171		
Chrysene	0.0313	0.0030	0.0050	"	0.0266	ND	118	42-161		
Dibenz (a,h) anthracene	0.0273	0.0050	0.010	"	0.0266	ND	102	12-159		
Fluoranthene	0.0243	0.0030	0.0050	"	0.0266	ND	91.2	41-150		
Fluorene	0.0213	0.0030	0.0050	"	0.0266	ND	80.0	28-129		
Indeno (1,2,3-cd) pyrene	0.0263	0.0030	0.0050	"	0.0266	ND	98.7	10-167		
Naphthalene	0.0153	0.0050	0.010	"	0.0266	ND	57.5	10-117		
Phenanthrene	0.0230	0.0030	0.0050	"	0.0266	ND	86.2	32-138		
Pyrene	0.0250	0.0030	0.0050	"	0.0266	ND	93.8	36-153		
<i>Surrogate: p-Terphenyl-d14</i>			0.0220	"	0.0266		82.5	10-185		

Matrix Spike Dup (B9G0051-MSD1)

Source: 1903202-01

Analyzed: 07/02/19 14:52

Acenaphthene	0.0176	0.0030	0.0050	mg/kg	0.0266	ND	66.2	24-121	12.3	30
Acenaphthylene	0.0183	0.0030	0.0050	"	0.0266	ND	68.8	23-121	15.0	30
Anthracene	0.0193	0.0030	0.0050	"	0.0266	ND	72.5	29-149	9.74	30
Benz (a) anthracene	0.0300	0.0030	0.0050	"	0.0266	ND	112	44-154	0.0998	30
Benzo (b) fluoranthene	0.0306	0.0030	0.0050	"	0.0266	ND	115	34-177	1.19	30
Benzo (k) fluoranthene	0.0290	0.0030	0.0050	"	0.0266	ND	109	41-181	0.0998	30
Benzo (a) pyrene	0.0293	0.0030	0.0050	"	0.0266	ND	110	45-155	0.0999	30
Benzo (g,h,i) perylene	0.0270	0.0050	0.010	"	0.0266	ND	101	10-171	0.0998	30
Chrysene	0.0323	0.0030	0.0050	"	0.0266	ND	121	42-161	3.24	30
Dibenz (a,h) anthracene	0.0276	0.0050	0.010	"	0.0266	ND	104	12-159	1.31	30
Fluoranthene	0.0240	0.0030	0.0050	"	0.0266	ND	90.0	41-150	1.28	30
Fluorene	0.0190	0.0030	0.0050	"	0.0266	ND	71.2	28-129	11.5	30
Indeno (1,2,3-cd) pyrene	0.0266	0.0030	0.0050	"	0.0266	ND	100	10-167	1.36	30
Naphthalene	0.0133	0.0050	0.010	"	0.0266	ND	50.0	10-117	13.9	30
Phenanthrene	0.0203	0.0030	0.0050	"	0.0266	ND	76.2	32-138	12.2	30
Pyrene	0.0240	0.0030	0.0050	"	0.0266	ND	90.0	36-153	3.98	30
<i>Surrogate: p-Terphenyl-d14</i>			0.0186	"	0.0266		70.0	10-185		

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Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0080 - EPA 8270-SIM Preparation: EPA 3550C MS 07/03/19 08:08

Blank (B9G0080-BLK1)

Analyzed: 07/03/19 15:43

Acenaphthene	ND	0.0030	0.0050	mg/kg							
Acenaphthylene	ND	0.0030	0.0050	"							
Anthracene	ND	0.0030	0.0050	"							
Benz (a) anthracene	ND	0.0030	0.0050	"							
Benzo (b) fluoranthene	ND	0.0030	0.0050	"							
Benzo (k) fluoranthene	ND	0.0030	0.0050	"							
Benzo (a) pyrene	ND	0.0030	0.0050	"							
Benzo (g,h,i) perylene	ND	0.0050	0.010	"							
Chrysene	ND	0.0030	0.0050	"							
Dibenz (a,h) anthracene	ND	0.0050	0.010	"							
Fluoranthene	ND	0.0030	0.0050	"							
Fluorene	ND	0.0030	0.0050	"							
Indeno (1,2,3-cd) pyrene	ND	0.0030	0.0050	"							
Naphthalene	ND	0.0050	0.010	"							
Phenanthrene	ND	0.0030	0.0050	"							
Pyrene	ND	0.0030	0.0050	"							
Surrogate: <i>p</i> -Terphenyl-d14			0.0249	"	0.0266		93.8	10-185			

LCS (B9G0080-BS1)

Analyzed: 07/03/19 14:36

Acenaphthene	0.0173	0.0030	0.0050	mg/kg	0.0266		65.0	26-116			
Acenaphthylene	0.0180	0.0030	0.0050	"	0.0266		67.5	24-118			
Anthracene	0.0206	0.0030	0.0050	"	0.0266		77.5	33-137			
Benz (a) anthracene	0.0326	0.0030	0.0050	"	0.0266		122	65-138			
Benzo (b) fluoranthene	0.0313	0.0030	0.0050	"	0.0266		118	56-146			
Benzo (k) fluoranthene	0.0326	0.0030	0.0050	"	0.0266		122	61-156			
Benzo (a) pyrene	0.0320	0.0030	0.0050	"	0.0266		120	60-148			
Benzo (g,h,i) perylene	0.0253	0.0050	0.010	"	0.0266		95.0	42-163			
Chrysene	0.0350	0.0030	0.0050	"	0.0266		131	66-148			
Dibenz (a,h) anthracene	0.0246	0.0050	0.010	"	0.0266		92.5	41-161			
Fluoranthene	0.0253	0.0030	0.0050	"	0.0266		95.0	57-133			
Fluorene	0.0183	0.0030	0.0050	"	0.0266		68.7	29-120			
Indeno (1,2,3-cd) pyrene	0.0260	0.0030	0.0050	"	0.0266		97.5	39-165			
Naphthalene	0.0136	0.0050	0.010	"	0.0266		51.2	18-112			
Phenanthrene	0.0213	0.0030	0.0050	"	0.0266		80.0	32-124			
Pyrene	0.0260	0.0030	0.0050	"	0.0266		97.5	59-133			
Surrogate: <i>p</i> -Terphenyl-d14			0.0230	"	0.0266		86.2	10-185			

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Project: Huber Street
Project Number: 19-07931
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07/09/2019 15:30

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0080 - EPA 8270-SIM Preparation: EPA 3550C MS 07/03/19 08:08

LCS Dup (B9G0080-BSD1)

Analyzed: 07/03/19 14:58

Acenaphthene	0.0220	0.0030	0.0050	mg/kg	0.0266		82.5	26-116	23.8	30	
Acenaphthylene	0.0220	0.0030	0.0050	"	0.0266		82.5	24-118	20.0	30	
Anthracene	0.0233	0.0030	0.0050	"	0.0266		87.5	33-137	12.2	30	
Benz (a) anthracene	0.0313	0.0030	0.0050	"	0.0266		118	65-138	4.13	30	
Benzo (b) fluoranthene	0.0296	0.0030	0.0050	"	0.0266		111	56-146	5.43	30	
Benzo (k) fluoranthene	0.0310	0.0030	0.0050	"	0.0266		116	61-156	5.20	30	
Benzo (a) pyrene	0.0303	0.0030	0.0050	"	0.0266		114	60-148	5.31	30	
Benzo (g,h,i) perylene	0.0240	0.0050	0.010	"	0.0266		90.0	42-163	5.37	30	
Chrysene	0.0330	0.0030	0.0050	"	0.0266		124	66-148	5.85	30	
Dibenz (a,h) anthracene	0.0233	0.0050	0.010	"	0.0266		87.5	41-161	5.52	30	
Fluoranthene	0.0253	0.0030	0.0050	"	0.0266		95.0	57-133	0.0333	30	
Fluorene	0.0230	0.0030	0.0050	"	0.0266		86.2	29-120	22.6	30	
Indeno (1,2,3-cd) pyrene	0.0243	0.0030	0.0050	"	0.0266		91.2	39-165	6.59	30	
Naphthalene	0.0180	0.0050	0.010	"	0.0266		67.5	18-112	27.4	30	
Phenanthrene	0.0243	0.0030	0.0050	"	0.0266		91.2	32-124	13.2	30	
Pyrene	0.0256	0.0030	0.0050	"	0.0266		96.2	59-133	1.26	30	

Duplicate (B9G0080-DUP1)

Source: 1903173-39

Analyzed: 07/03/19 16:05

Acenaphthene	ND	0.0030	0.0050	mg/kg	ND					30	
Acenaphthylene	0.00300	0.0030	0.0050	"	0.00599					30	J
Anthracene	0.00300	0.0030	0.0050	"	0.00566					30	J
Benz (a) anthracene	0.0183	0.0030	0.0050	"	0.0246				29.4	30	
Benzo (b) fluoranthene	0.0180	0.0030	0.0050	"	0.0259				36.3	30	QM-04
Benzo (k) fluoranthene	0.0220	0.0030	0.0050	"	0.0299				30.7	30	QM-04
Benzo (a) pyrene	0.0213	0.0030	0.0050	"	0.0279				27.0	30	
Benzo (g,h,i) perylene	0.00899	0.0050	0.010	"	0.00965				7.08	30	J
Chrysene	0.0263	0.0030	0.0050	"	0.0336				24.4	30	
Dibenz (a,h) anthracene	ND	0.0050	0.010	"	ND					30	
Fluoranthene	0.0356	0.0030	0.0050	"	0.0486				30.8	30	QM-04
Fluorene	ND	0.0030	0.0050	"	0.00532					30	
Indeno (1,2,3-cd) pyrene	0.00866	0.0030	0.0050	"	0.00965				10.8	30	
Naphthalene	0.0200	0.0050	0.010	"	0.0422				71.6	30	QM-04
Phenanthrene	0.0213	0.0030	0.0050	"	0.0369				53.7	30	QM-04
Pyrene	0.0350	0.0030	0.0050	"	0.0472				29.9	30	
<i>Surrogate: p-Terphenyl-d14</i>			0.0213	"	0.0266		80.0	10-185			

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Project: Huber Street
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Project Manager: Scott English

WO & Reported:
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07/09/2019 15:30

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9G0080 - EPA 8270-SIM Preparation: EPA 3550C MS 07/03/19 08:08

Matrix Spike (B9G0080-MS1)

Source: 1903173-39

Analyzed: 07/03/19 16:53

Acenaphthene	0.0190	0.0030	0.0050	mg/kg	0.0266	ND	71.2	24-121			
Acenaphthylene	0.0223	0.0030	0.0050	"	0.0266	0.00599	61.2	23-121			
Anthracene	0.0309	0.0030	0.0050	"	0.0266	0.00566	95.0	29-149			
Benz (a) anthracene	0.0489	0.0030	0.0050	"	0.0266	0.0246	91.2	44-154			
Benzo (b) fluoranthene	0.0535	0.0030	0.0050	"	0.0266	0.0259	104	34-177			
Benzo (k) fluoranthene	0.0529	0.0030	0.0050	"	0.0266	0.0299	86.2	41-181			
Benzo (a) pyrene	0.0492	0.0030	0.0050	"	0.0266	0.0279	80.0	45-155			
Benzo (g,h,i) perylene	0.0190	0.0050	0.010	"	0.0266	0.00965	35.0	10-171			
Chrysene	0.0542	0.0030	0.0050	"	0.0266	0.0336	77.5	42-161			
Dibenz (a,h) anthracene	0.0166	0.0050	0.010	"	0.0266	ND	62.5	12-159			
Fluoranthene	0.0599	0.0030	0.0050	"	0.0266	0.0486	42.4	41-150			
Fluorene	0.0249	0.0030	0.0050	"	0.0266	0.00532	73.7	28-129			
Indeno (1,2,3-cd) pyrene	0.0210	0.0030	0.0050	"	0.0266	0.00965	42.5	10-167			
Naphthalene	0.0479	0.0050	0.010	"	0.0266	0.0422	21.2	10-117			
Phenanthrene	0.0529	0.0030	0.0050	"	0.0266	0.0369	60.0	32-138			
Pyrene	0.0585	0.0030	0.0050	"	0.0266	0.0472	42.4	36-153			
Surrogate: <i>p</i> -Terphenyl-d14			0.0236	"	0.0266		88.7	10-185			

Matrix Spike Dup (B9G0080-MSD1)

Source: 1903173-39

Analyzed: 07/03/19 17:16

Acenaphthene	0.0293	0.0030	0.0050	mg/kg	0.0266	ND	110	24-121	42.9	30	QR-03
Acenaphthylene	0.0446	0.0030	0.0050	"	0.0266	0.00599	145	23-121	66.8	30	QM-07, QR-03
Anthracene	0.0330	0.0030	0.0050	"	0.0266	0.00566	103	29-149	6.42	30	
Benz (a) anthracene	0.0490	0.0030	0.0050	"	0.0266	0.0246	91.4	44-154	0.166	30	
Benzo (b) fluoranthene	0.0576	0.0030	0.0050	"	0.0266	0.0259	119	34-177	7.35	30	
Benzo (k) fluoranthene	0.0566	0.0030	0.0050	"	0.0266	0.0299	100	41-181	6.85	30	
Benzo (a) pyrene	0.0510	0.0030	0.0050	"	0.0266	0.0279	86.4	45-155	3.49	30	
Benzo (g,h,i) perylene	0.0190	0.0050	0.010	"	0.0266	0.00965	35.0	10-171	0.166	30	
Chrysene	0.0553	0.0030	0.0050	"	0.0266	0.0336	81.4	42-161	1.99	30	
Dibenz (a,h) anthracene	0.0163	0.0050	0.010	"	0.0266	ND	61.2	12-159	1.85	30	
Fluoranthene	0.0600	0.0030	0.0050	"	0.0266	0.0486	42.7	41-150	0.166	30	
Fluorene	0.0413	0.0030	0.0050	"	0.0266	0.00532	135	28-129	49.4	30	QM-07, QR-03
Indeno (1,2,3-cd) pyrene	0.0207	0.0030	0.0050	"	0.0266	0.00965	41.3	10-167	1.43	30	
Naphthalene	0.243	0.0050	0.010	"	0.0266	0.0422	754	10-117	134	30	QM-07, QR-03
Phenanthrene	0.0583	0.0030	0.0050	"	0.0266	0.0369	80.2	32-138	9.75	30	
Pyrene	0.0590	0.0030	0.0050	"	0.0266	0.0472	44.0	36-153	0.733	30	
Surrogate: <i>p</i> -Terphenyl-d14			0.0240	"	0.0266		90.0	10-185			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Rincon Consultants
180 N. Ashwood Ave.
Ventura CA, 93003

Project: Huber Street
Project Number: 19-07931
Project Manager: Scott English

WO & Reported:
1903173
07/09/2019 15:30

Notes and Definitions

- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- C-06 To reduce matrix interference, the sample extract has undergone pentane clean-up, which is specific to contamination from high molecular weight material (asphaltenes).
- CCFL 8081 Target analyte exceeded 15% deviation in bracketing CCV. Per EPA 8081A, calibration was verified by <15% average deviation for all targets. The CCV response for this analyte was low.
- CCHI The CCV for this analyte failed high. Analyte result is ND. Data is not impacted.
- CCHI 8081 Target analyte exceeded 15% deviation in bracketing CCV. Per EPA 8081A, calibration was verified by <15% average deviation for all targets. The CCV response for this analyte was high.
- ISlowA The internal standard associated with this analyte fails the method criteria on the low side. Results may be biased high.
- J Detected but below the RL/PQL; therefore, result is an estimated concentration.
- B-02 The method blank contains analyte at a J-flag concentration.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS and/or LCSD recovery and/or RPD values.
- TMP3 Temperature [Out-Acceptable] Direct from Field
- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QR-04 The RPD exceeded the QC control limits.
- R-01 The Reporting Limit has been raised to account for matrix interference.
- R-05 The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.
- R-06 The Reporting Limit has been raised to account for the presence of high levels of analytes.
- S-03 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- S-04 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference(s).
- QM-04 Visual evaluation of the sample indicates the RPD is above the control limit due to a non-homogeneous sample matrix.
- MDL Method Detection Limit
- RL Reporting Limit (Quantitation Limit)
- ND Analyte NOT DETECTED at or above the method limit (MDL)
- RPD Relative Percent Difference

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Oilfield Environmental & Compliance, Inc.

307 Roemer Way Suite 300, Santa Maria, CA 93454

Phone: (805) 922-4772 Fax: (805) 925-3376 www.oecusa.com

CHAIN OF CUSTODY

101 Adkisson Way, Taft, CA 93268

Phone: (661) 762-9143

Page **2** of **4**

Company: Rincon Consultants				Project Name/ #: 19-07931																			
Address: 180 N Ashwood ave				Site: Huber Street, Grover Beach, CA																			
City/State/ZIP: Ventura, CA, 93003				Analysis Requested								Special Instructions:											
Phone: 8056444455 Fax: E-mail: senglish@rinconconsultants.com				TPH-G-D-IMO By 8015M	Title 22 Metals By 6010B/7471A	PAHs By 8270C SIMS	Pesticides By 8081																
Report To: Scott English Sampler: Peter D. Nico N.																							
Report Format(s): FAX- <input type="checkbox"/> PDF (std)- <input type="checkbox"/> Colt/LUFT EDF- <input type="checkbox"/> EDD- <input type="checkbox"/>																							
Turnaround Time: 10 Days- <input type="checkbox"/> 5 Days (std)- <input checked="" type="checkbox"/> 3 Days- <input type="checkbox"/> 2 Days- <input type="checkbox"/> 1 Day- <input type="checkbox"/> ASAP- <input type="checkbox"/>				NOTES: Samples received after 4:00PM will be considered as received the next business day. No Bac-T samples will be accepted after 12:00PM (noon) on Fridays.																			
OEC Sample ID	Date/Time Sampled	Matrix** (see key)	# of Cont.	Client Sample ID																			
103173-13	6-27-19/1005	S	1	RB7-1	X	X	X	X															
14	1010			RB7-3	X	X	X	X												Hold			
15	1045			RB8-1	X	X	X	X															
16	1050			RB8-3	X	X	X	X												Hold			
17	1050			RB9-1	X	X	X	X															
18	1055			RB9-3	X	X	X	X												Hold			
19	1105			RB10-1	X	X	X	X															
20	1110			RB10-3	X	X	X	X												Hold			
21	1105			RB11-1	X	X	X	X															
22	1110			RB11-3	X	X	X	X												Hold			
23	1120			RB12-1	X	X	X	X															
24	1125			RB12-3	X	X	X	X												Hold			
Relinquished By: <i>[Signature]</i> Date: 6-27-19 Time: 1455				Matrix Key**: A = air / vapor AQ = aqueous DW = drinking water F = filter GW = ground water P = product / oil PW = product water S = solid / sediment SW = surface water WP = wipe WW = waste water				Comments/PO#:															
Received By: <i>[Signature]</i> Date: 06/27/19 Time: 1455																							
Relinquished By: Date: Time:																							
Received By: Date: Time:																							
Relinquished By: Date: Time:																							
Received By: Date: Time:																							



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CHAIN OF CUSTODY

Page **3** of **4**

Company: Rincon Consultants				Project Name/ #: 19-07931																				
Address: 180 N Ashwood ave				Site: Huber Street, Grover Beach, CA																				
City/State/ZIP: Ventura, CA, 93003				Analysis Requested								Special Instructions:												
Phone: 8056444455 Fax: E-mail: senglish@rinconconsultants.com				TPH-G-D-MO By 8015M	Title 22 Metals By 6010B/7471A	PAHs By 8270C SIMS	Pesticides By 8081																	
Report To: Scott English Sampler: Peter D. Nico N.																								
Report Format(s): FAX- <input type="checkbox"/> PDF (std)- <input type="checkbox"/> Col/LUFT EDF- <input type="checkbox"/> EDD- <input type="checkbox"/>																								
Turnaround Time: 10 Days- <input type="checkbox"/> 5 Days (std)- <input checked="" type="checkbox"/> 3 Days- <input type="checkbox"/> 2 Days- <input type="checkbox"/> 1 Day- <input type="checkbox"/> ASAP- <input type="checkbox"/>																								
NOTES: Samples received after 4:00PM will be considered as received the next business day. No Bac-T samples will be accepted after 12:00PM (noon) on Fridays.																								
OEC Sample ID	Date/Time Sampled	Matrix** (see key)	# of Cont.	Client Sample ID																				
25	6-27-19/1140	S	1	RB13-1	X	X	X	X																
26	1145			RB13-3	X	X	X	X												Hold				
27	1115			RB14-1	X	X	X	X																
28	1120			RB14-3	X	X	X	X												Hold				
29	1140			RB15-1	X	X	X	X																
30	1145			RB15-3	X	X	X	X												Hold				
31	1200			RB16-1	X	X	X	X																
32	1205			RB16-3	X	X	X	X												Hold				
33	1150			RB17-1	X	X	X	X																
34	1155			RB17-3	X	X	X	X												Hold				
35	1230			RB18-1	X	X	X	X																
36	1235			RB18-3	X	X	X	X												Hold				
Relinquished By: <i>[Signature]</i> Date: 6-27-19 Time: 1455				Matrix Key**: A = air / vapor AQ = aqueous DW = drinking water F = filter GW = ground water P = product / oil PW = product water S = solid / sediment SW = surface water WP = wipe WW = waste water				Comments/PO#:																
Received By: <i>[Signature]</i> Date: 6/27/19 Time: 1455																								
Relinquished By: Date: Time:																								
Received By: Date: Time:																								
Relinquished By: Date: Time:																								
Received By: Date: Time:																								



CLIENT: RINCON

WORK ORDER: 1903173

TEMPERATURE: 29.6 °C **SAMPLE RECEIPT**

Recorded Corrected; Acceptable Range: 0°C to 6°C [see exception notes below]

COC RECEIVED DATE/TIME: 06/27/19 @ 1455

LOGIN DATE/TIME: 06/27/19 1550

REFRIGERATOR(S): B, VOA-1

SAMPLE TRANSPORT

- OEC Courier/Sampler
- Delivery (Other than OEC)
- After-Hours Outside Drop-Off [Brought Inside]
- Initials/Date/Time: _____
- Shipment Carrier: _____
- Tracking #: _____

CUSTODY SEALS

None Present

- Cooler(s): Present, Intact Present, Not Intact None
- Sample(s): Present, Intact Present, Not Intact None

SAMPLE RECEIPT, CONDITION, PRESERVATION

- Samples Received on Ice Within Temperature Range [Acceptable]
- Samples Received Outside Temperature Range [Acceptable]
 - Direct from Field, on Ice
 - Ambient: Air or Filter Matrix
 - Received Ambient, Placed on Ice for Transport
 - Sample Temperature Acceptable for Analysis Requested
- Samples Received Outside Temperature Range [Exception] *
 - Insufficient Ice or Unknown Cause
 - Excessive Free Liquid in Sample Bags or Cooler

(*) Narration Comment Required

- Completed COC(s) Received With Samples
- Correct Container(s)/Preserve for Analysis
- Container(s) Intact and in Good Condition
- Container Label(s) Consistent with COC
- OEC Preservation Added **
- Sample Quantity Sufficient & Appropriate
- VOA Containers Free of Headpace
- Tedlar Bag(s) Free of Condensation

- | YES | NO | N/A |
|-------------------------------------|-------------------------------------|-----|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | * |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | * |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | * |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | * |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | * |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | * |
| <input type="checkbox"/> | <input type="checkbox"/> | * |
| <input type="checkbox"/> | <input type="checkbox"/> | * |

See attached **PROBLEM CHAIN** for additional narration comments

(**) OEC Presrv. ID

CONTAINERS, COC CHANGES, AND/OR CORRECTIONS

OEC CONTAINER ID	CONTAINER DESCRIPTION	PRESERVATIVE	CHECKS: Cl, S ⁻ &/or pH	MATRIX	COMMENTS	INITIALS (Narration Comments Only)
01-40A	1-16oz GLASS VM EA.	-	-	S	(8)	
01-40B	1-20ml VOA EA.	-	-	S	(VI)	

Rev. 02/25/2019

RECEIPT LOGIN BY: [Signature]

RECEIPT REVIEWED BY: CKC

Appendix B

Boring Logs



LOG OF BORING RB1 THROUGH RB20

(Page 1 of 1)

Approximately 1.5 Acre Parcel
 Huber Street, Grover Beach, California
 Phase II Environmental Site Assessment
 Project # 19-07931

Date Completed : June 26, 2019
 Method : Hand Auger
 Drilled By : Rincon Consultants
 Logged By : Peter Doran
 Location : Throughout the Subject Property (see Figure 3 for Location)

Depth in Feet	Samples	USCS	GRAPHIC	DESCRIPTION	PID
0.0				SILTY SAND, fine to medium grained, brown, dry, loose, no odor.	0.0
0.5	[Sample]				
1.0					
1.5		SM	[Graphic]		
2.0					
2.5	[Sample]				
3.0				Extent of Boring = 3 feet; No groundwater encountered; Backfilled with soil cuttings.	0.0
3.5					
4.0					
4.5					
5.0					

07-30-2019 L:\ESAC\City of Pismo Beach\19-07931 Hbr. St 1.5 Acr Prcl Du Dignc\Graphics\BL - 1-20.bor