Appendix I-1

2020 Phase I Environmental Site Assessment

PARTNER

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Lockhart Solar II (aka SEGS 10)

APNs: 0490-223-33-0000, 0490-101-54-0000, and 0490-101-56-0000
Hinkley, CA 92347

Report Date: September 10, 2020
Partner Project No. 20-289338.1

Prepared for:

Terra-Gen, LLC
437 Madison Avenue
22nd Floor, Suite A
New York, New York 10022

PARTNER

September 10, 2020

Mr. Mark Casper
Terra-Gen, LLC
437 Madison Avenue
22nd Floor, Suite A
New York, New York 10022

Subject: Phase I Environmental Site Assessment
Lockhart Solar II (aka SEGS 10)
APNs: 0490-223-33-0000, 0490-101-54-0000, and 0490-101-56-0000
Hinkley, CA 92347
Partner Project No. 20-289338.1

Dear Mr. Casper:

Partner Assessment Corporation (Partner) is pleased to provide the results of the *Phase I Environmental Site Assessment* (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in conformance with the scope and limitations as detailed in the ASTM Practice E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (619) 925-9672.

Sincerely,

Mark Lambson
Principal

EXECUTIVE SUMMARY

Partner Assessment Corporation (Partner) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the scope of work and limitations of ASTM Standard Practice E1527-13, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and set forth by Terra-Gen, LLC for the property located at APNs: 0490-223-33-0000, 0490-101-54-0000, and 0490-101-56-0000 in the unincorporated area of Hinkley, San Bernardino County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide Terra-Gen, LLC with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

Property Description

The subject property is located approximately 10 miles north of the intersection of California Highway 58 and Harper Lake Road within a mixed commercial and rural residential area of San Bernardino County. Please refer to the table below for further description of the subject property:

Subject Property Data	
Address:	APNs: 0490-223-33-0000, 0490-101-54-0000, and 0490-101-56-0000, Hinkley, California
Property Use:	Vacant
Land Acreage (Ac):	Parent parcels total approximately 2025.67 Ac
Number of Buildings:	None; partially built concrete foundations and walls on central area
Number of Floors:	N/A
Gross Building Area (SF):	N/A
Net Rentable Area (SF):	N/A
Date of Construction:	N/A
Assessor's Parcel Numbers (APNs):	Portion of 0490-223-33-0000 0490-101-54-0000 Portion of 0490-101-56-0000
Type of Construction:	Concrete and steel bars
Current Tenants:	Unoccupied
Site Assessment Performed By:	Jeremy Russell of Partner
Site Assessment Conducted On:	August 24, 2020

The subject property is currently unoccupied and includes APN 0490-101-54-0000 and portions of APNs 0490-223-33-0000 and 0490-101-56-0000 as depicted in Figure 2. Partially constructed concrete foundations and walls of structures are located in the center of the subject property. Numerous circular concrete foundation pads are located on the southcentral side of the subject property. According to Mr. Roberto Fimbres, Key Site Manager, the structures were to be for an additional thermal solar plant called a Solar Energy Generating Station (SEGS), identical to the existing SEGSs located on the property adjacent south. The central main structure was the early construction of the power block, the turbine and generator foundations. The circular concrete pads were for support structure pylons for solar panel arrays. The

subject property is surrounded by a chain-link fence and locked gates. Miscellaneous construction debris was also observed.

According to available historical sources, the subject property was developed for what appeared to be undeveloped in 1947; agricultural uses from 1953 to circa 1994; development of the SEGS structures began to the south in the early 1990s and the subject property remained undeveloped to the present.

The immediately surrounding properties consist of undeveloped land and three water evaporation ponds to the north; Solar Energy Generating Station (SEGS) Harper Lake Terra-Gen Operating Company (43880 Harper Lake Road), electricity substations, and undeveloped land to the south; and undeveloped land to the east and west.

According to data obtained from the State Water Resources Control Board's GeoTracker database for the south adjacent property, perched groundwater is reported to be present approximately 54 to 57 feet below ground surface (bgs). Groundwater is reported to flow toward the northeast. Groundwater occurs in the regional aquifer system at a depth of approximately 170 to 180 feet bgs.

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- Partner did not identify any recognized environmental conditions during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- Partner did not identify any environmental issues during the course of this assessment.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of APNs: 0490-223-33-0000, 0490-101-54-0000, and 0490-101-56-0000 in the unincorporated area of Hinkley, San Bernardino County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions and/or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends no further assessment at this time.

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1.0 INTRODUCTION

Partner Assessment Corporation (Partner) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property identified as APNs: 0490-223-33-0000, 0490-101-54-0000, and 0490-101-56-0000 in the unincorporated area of Hinkley, San Bernardino County, California (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-13) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the *User* to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"). ASTM Standard E1527-13 constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

1.2 Scope of Work

The scope of work for this ESA is in accordance with the requirements of ASTM Standard E1527-13. This assessment included: 1) a property and adjacent site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments and building departments in order to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the subject property. Additionally, Partner researched information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-13, AULs are the legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential

exposure to hazardous substances or petroleum products in the soil or groundwater on the subject property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

1.3 Limitations

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

1.4 User Reliance

Terra-Gen, LLC engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Terra-Gen, LLC. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted Partner's standard Terms and Conditions, a copy of which can be found at http: / www.partneresi.com/terms-and-conditions.php.

1.5 Limiting Conditions

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM E1527-13.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources (as discussed in Section 3.0), this data gap is not expected to alter the findings of this assessment.
- Partner requested information relative to deed restrictions and environmental liens, a title search, and completion of a pre-survey questionnaire from the Report User. This information was not provided at the time of the assessment.
- Partner was not able to document the historical use of the subject property prior to 1947. The following sources were reviewed during the course of this assessment and found to be limited: aerial photographs were not available prior to 1953; city directories were not available prior to 1964; topographic maps prior to 1947 were not reasonably ascertainable from local agencies; and other historical sources such as fire insurance maps did not provide coverage of the subject property. This data failure is not considered critical and does not change the conclusions of this report, as the 1947 topographic map revealed the subject property to be undeveloped. In addition, the adjacent and surrounding areas are also shown mostly as undeveloped or limited farmland.

Due to time constraints associated with this report, the Client has requested the report despite the above-listed limitations.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The subject property at APNs 0490-223-33-0000; 0490-101-54-0000; and 0490-101-56-0000 in unincorporated Hinkley, California are located approximately 10 miles north of the intersection of Harper Lake Road and California Highway 58. According to the San Bernardino County Assessor, the subject property's APNs are legally described as "PARCEL MAP 12194 PARCEL NO 5 TOGETHER WITH NW 1/4 SEC 13 TP 11N R 5W; PARCEL MAP 12194 PARCEL 6; and PARCEL MAP 12194 PARCEL 1" and ownership is currently vested in High Desert Land Acquisition LLC and All American Ventures Inc.

Please refer to Figure 1: Site Location Map, Figure 2: Site Plan, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

2.2 Current Property Use

The subject property is currently unoccupied. Partially constructed concrete foundations and walls of structures are located in the center of the subject property. Numerous circular concrete foundation pads are located on the southcentral side of the subject property. According to Mr. Roberto Fimbres, Key Site Manager, the structures were to be for an additional thermal solar plant called a Solar Energy Generating Station (SEGS), identical to the existing SEGSs located on the property adjacent south. The central main structure was the early construction of the power block, the turbine and generator foundations. The circular concrete pads were for support structure pylons for solar panel arrays. The subject property is surrounded by a chain link fence and locked gates. Miscellaneous construction debris was also observed.

The subject property is designated for rural land use by the County of San Bernardino.

The subject property was not identified in the regulatory database discussed in Section 4.2.

2.3 Current Use of Adjacent Properties

The subject property is located within a mixed commercial and rural residential area of San Bernardino County. During the vicinity reconnaissance, Partner observed the following land use on properties in the immediate vicinity of the subject property:

Immediately Surrounding Properties

North: Undeveloped land
South: Solar Energy Generation Station - Harper Lake (43880 Harper Lake Road)
East: Undeveloped land
West: Water evaporation ponds for the adjacent south solar energy property, and undeveloped land

The south adjacent property was identified as a CHIMRS site in the regulatory database report. A former address for the south adjacent property, 42524 Lockhart Road, was identified as a LUST, SWEEPS UST, CORTESE, HIST CORESTE and CERS site in the regulatory database report, also discussed in Section 4.2.

2.4 Physical Setting Sources

2.4.1 Topography

The United States Geological Survey (USGS) *Lockhart, California* Quadrangle 7.5-minute series topographic map was reviewed for this ESA. According to the contour lines on the topographic map, the subject property is located at approximately 2,030 to 2,055 feet above mean sea level (MSL). The contour lines in the area of the subject property indicate the area is sloping gently downward toward the northeast. The subject property is depicted on the 1986 map as developed with unimproved roads.

A copy of the most recent topographic map is included as Figure 3 of this report.

2.4.2 Hydrology

According to topographic map interpretation, the direction of groundwater in the vicinity of the subject property is inferred to flow toward the northeast. The nearest surface water in the vicinity of the subject property is the dry lakebed of Harper Lake located approximately one mile northeast of the subject property. No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed at the subject property during this assessment.

According to available information, a public water system is not operated on the subject property. Water for domestic waste disposal and non-potable activities is supplied by onsite water wells. Drinking water is provided by a bottled water service.

In addition, Partner observed four water supply wells located on the subject property, designated as Wells PW-34, PW-35, PW-36, and PW-40. The wells are located on central and southeastern areas of the south adjacent property. According to Mr. Robert Fimbres, these wells were installed in 1989 and provide non-potable water for domestic sanitary purposes and for supplying water for steam generation to produce electricity. According to well data, the depth to groundwater measured in the wells in August 2018 ranged from 134 to 165 feet bgs.

2.4.3 Geology/Soils

The subject property is situated within the Mojave Desert geomorphic province of the State of California. The uppermost geologic formation underlying the soils at the subject property is the Quaternary Alluvium. The alluvium comprises the underlying stratigraphy and consists mostly of clay, silt and sand deposited in alluvial fans. The thickness of the alluvium is estimated to be over 300 feet. The alluvium is underlain by older Quaternary volcanic rocks and basement rocks.

Based on information obtained from the USDA Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Cajon Sand, Cajon Loamy Sand, Loamy Substratum, Kimberlina Loamy Fine Sand, Norob-Halloran Complex, and Victorville Variant Sand. These soils consist of deep soils, comprised of sand, gravelly sand, stratified sand to loamy fine sand; loamy fine sand, sandy loam to fine sandy loam, and loam; and loamy sand, sandy clay loam, clay loam, stratified gravelly loamy sand to sandy clay loam. These soils are well drained to somewhat excessively drained and have moderately low to very high permeability. These soils are formed on alluvial fans and fan remnants from granite sources. Slopes range from 0 to 5 percent.

2.4.4 Flood Zone Information

Partner performed a review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency. According to Community Panel Number 06071C3250H, undated, the area of the subject property is an unprinted panel with undetermined flood hazard.

A copy of the reviewed flood map is not included in Appendix B of this report.

3.0 HISTORICAL INFORMATION

Partner obtained historical use information about the subject property from a variety of sources. A chronological listing of the historical data found is summarized in the table below:

Historical Use Information		
Period/Date	**Source**	**Description/Use**
1947-1985	Aerial Photographs, Topographic Maps	Agricultural
1989-Present	Aerial Photographs, Building Records, City Directories, Interviews, Onsite Observations	Commercial

The subject property parcels were historically used for agricultural purposes. There is a potential that agricultural related chemicals such as pesticides, herbicides, and fertilizers, may have been used and stored onsite. Specific areas of concern such as structures or mixing areas were not noted in available historical records. Based on the proposed use for energy generation, the possible former use of agricultural chemicals is not expected to represent a significant environmental concern at this time.

No other potential environmental concerns were identified in association with the current or former use of the subject property.

3.1 Aerial Photograph Review

Partner obtained available aerial photographs of the subject property and surrounding area from Environmental Data Resources (EDR) on August 11, 2020. The following observations were noted to be visible on the subject property and adjacent properties during the aerial photograph review:

Date: 1953	***Scale: 1" = 500'***
Subject Property:	Developed on the western portion for what appears to be primarily agricultural uses. Eastern portion appeared undeveloped. Approximately 12 small identical objects or structures were visible on the north central side.
North:	Appeared to be developed for agricultural use
South:	Appeared to be developed for agricultural use and related residential structures
East:	Appeared to be developed for agricultural use and related residential structures
West:	Appeared to be developed for agricultural use

Date: 1968, 1973, 1984	***Scale: 1" = 500'***
Subject Property:	No significant changes visible other than crops appear planted in circles.
North:	No significant changes visible
South:	No significant changes visible
East:	No significant changes visible
West:	No significant changes visible

Date: 1994	***Scale: 1" = 500'***
Subject Property:	Appeared no longer used for agriculture. Central portion developed with what appeared to be structures. Remainder of property appeared graded.
North:	No significant changes visible
South:	Redeveloped with what appeared to be the existing solar facility.
East:	No significant changes visible

Date: 1994	*Scale: 1" = 500'*
West:	Developed adjacent to the southwest corner of the subject property appeared to be the existing water evaporation ponds. No other significant changes visible

Date: 2005, 2010, 2016	*Scale: 1" = 500'*
Subject Property:	No significant changes visible
North:	No significant changes visible
South:	No significant changes visible
East:	No significant changes visible
West:	No significant changes visible

Copies of select aerial photographs are included in Appendix B of this report.

3.2 Fire Insurance Maps

Partner reviewed the collection of Sanborn Fire insurance maps from EDR on August 10, 2020. Sanborn map coverage was not available for the subject property.

3.3 City Directories

Partner reviewed historical city directories from EDR dated August 12, 2020, for past names and businesses that were listed for the subject property and adjacent properties. The findings are presented in the following table:

City Directory Search (Subject Property)	
Year(s)	**Occupant Listed**
1971, 1976, 1980, 1992, 1995, 2000, 2005, 2010, 2014, 2017	No listings

According to the city directory review, the subject property was not listed.

City Directory Search for Adjacent Properties	
Year(s)	**Occupant Listed**
1971, 1976, 1980, 1992, 1995	No listings (43880 Harper Lake Road)
2000	UCOS
2005	IONICS ULTRA PURE WATER, LUZ SOLAR PARTNERS IX, UCOS
2010	GE WATER & PROCESS TECHNOLOGY, UCOS
2014, 2017	UCOS

Based on the city directory review, the adjacent property was listed with commercial tenants.

Copies of reviewed city directories are included in Appendix B of this report.

3.4 Historical Topographic Maps

Partner obtained historical topographic maps from EDR on August 10, 2020. The following observations were noted to be depicted on the subject property and adjacent properties during the topographic map review:

Date: 1956	
Subject Property:	Depicted with unimproved roads
North:	Depicted undeveloped
South:	Depicted developed with unimproved roads
East:	Depicted developed with unimproved roads
West:	Depicted developed with unimproved roads

Date: 1986	
Subject Property:	Depicted with unimproved roads and a small square retention pond
North:	Depicted undeveloped
South:	Depicted developed with roads and structures, and wells
East:	Depicted developed with roads and structures, landing strips, and a water retention basin
West:	Depicted developed with roads and structures and a mine

Date: 2012	
Subject Property:	Depicted undeveloped
North:	Depicted with roads and no structures
South:	Depicted with roads and no structures
East:	Depicted with roads and no structures
West:	Depicted with roads and no structures

Copies of reviewed topographic maps are included in Appendix B of this report.

4.0 REGULATORY RECORDS REVIEW

4.1 Regulatory Agencies

4.1.1 State Department

Regulatory Agency Data	
Name of Agency:	California Environmental Protection Agency (CalEPA)
Point of Contact:	Not Provided
Agency Address:	1001 I Street, Sacramento, California
Agency Phone Number:	926 323 2514
Date of Contact:	August 14, 2020
Method of Communication:	Online
Summary of Communication:	The CalEPA manages the following State agencies: *Air Resources Board (ARB), Department of Resources Recycling and Recovery (CalRecycle), Department of Pesticide Regulation (DPR), Department of Toxic Substances Control (DTSC), Office of Environmental Health Hazard Assessment (OEHHA), and the State Water Resources Control Board (SWRCB)*. These agencies are discussed individually, where applicable, in the following sections. The subject property was not identified on the other state agency databases.

A copy of pertinent documents is not included in Appendix B of this report.

4.1.2 Fire Department

Regulatory Agency Data	
Name of Agency:	San Bernardino County Fire Department Hazardous Materials Division (HMD) Certified Unified Program Agency (CUPA) Program
Point of Contact:	Not provided
Agency Address:	620 South "E" Street San Bernardino, CA 92415
Agency Phone Number:	909.386.8401
Date of Contact:	August 14, 2020
Method of Communication:	Email
Summary of Communication:	As of the date of this report, Partner has not received a response from the SBCFD for inclusion in this report.

A copy of pertinent documents is not included in Appendix B of this report.

4.1.3 Air Pollution Control Agency

Regulatory Agency Data	
Name of Agency:	Mojave Desert Air Quality Management District (MDAQMD)
Point of Contact:	N/A
Agency Address:	14306 Park Ave, Victorville, CA 92392
Agency Phone Number:	760 245 1661
Date of Contact:	August 17, 2020
Method of Communication:	Telephone
Summary of Communication:	No Permits to Operate (PTO), Notices of Violation (NOV), or Notices to Comply (NTC) or the presence of AULs were on file for the subject property with the MDAQMD.

A copy of pertinent documents is not included in Appendix B of this report.

4.1.4 Regional Water Quality Agency

Regulatory Agency Data	
Name of Agency:	Lahontan Regional Water Quality Control Board (LRWQCB)
Point of Contact:	Mr. John Steude
Agency Address:	2501 LAKE TAHOE BOULEVARD, SOUTH LAKE TAHOE, CA 96150
Agency Phone Number:	(530) 542-5571
Date of Contact:	August 14, 2020
Method of Communication:	http://geotracker.waterboards.ca.gov/
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the LRWQCB. The south adjacent property is listed as an open Land Disposal Site with the RWQCB. Three evaporation ponds and a land treatment unit are located on the adjacent property. The three surface impoundments are used for the evaporation of water leading from cooling tower blow-downs, condensate pits, and water treatment sumps. A series of groundwater monitoring wells are sampled semiannually to detect potential releases from the waste impoundments. The land treatment unit (LTU or Landfarm) was constructed to provide onsite treatment of soils impacted by the heat transfer fluid (HTF) Therminol VP-1 at low to moderate concentrations of less than 10,000 milligrams per kilogram (mg/kg) using bioremediation. Currently, the LTU relies on monitored natural attenuation for treatment.

Regulatory Agency Data	
	The LTU was approved by the RWQCB and was included as part of Board Order No. 6-98-74. In accordance with the MRP, the soil beneath the LTU is sampled on an annual basis to verify that HTF and soil treatment nutrients (if used) have not migrated beyond the five-foot "vertical treatment" zone. The most recent document in the records indicates a leak was reported in pond 9 N. A June 22, 2020 email indicates that a workplan was submitted to address the release. However, based on the reported contents and the ongoing coordination by the responsible party with the RWQCB to address the leak, this does not appear to represent a significant environmental concern for the subject property.

A copy of pertinent documents is not included in Appendix B of this report.

4.1.5 Department of Toxic Substances Control

Regulatory Agency Data	
Name of Agency:	California Department of Toxic Substances Control (DTSC)
Point of Contact:	N/A
Agency Address:	5796 Corporate Avenue, Cypress, California
Agency Phone Number:	714 484 5300
Date of Contact:	August 24, 2020
Method of Communication:	http://hwts.dtsc.ca.gov/report_search.cfm?id=5
Summary of Communication:	The subject property was not listed for disposal of hazardous wastes on the DTSC's Hazardous Waste Tracking System online database.

A copy of pertinent documents is included in Appendix B of this report.

4.1.6 Building Department

Regulatory Agency Data	
Name of Agency:	County of San Bernardino Land Use Services Department
Point of Contact:	Ms. Rosie Griffith
Agency Address:	385 N. Arrowhead Avenue, San Bernardino, CA 92415
Agency Phone Number:	(909) 387-8311
Date of Contact:	August 17, 2020
Method of Communication:	Email/Online Records Portal
Summary of Communication:	Partner submitted a request for records pertaining to the three subject property APNs. On September 4, 2020, the San Bernardino County Land Use Services Department responded that they identified no building records for the subject property APNs.

4.1.7 Planning Department

Regulatory Agency Data	
Name of Agency:	San Bernardino County Planning Department (SBCPD)
Point of Contact:	Not Provided
Agency Address:	385 N. Arrowhead Ave., San Bernardino, CA 92415
Agency Phone Number:	(909) 387-8311
Date of Contact:	August 17, 2020
Method of Communication:	Online
Summary of Communication:	The subject property is zoned RL Rural Living by the County of San Bernardino.

A copy of pertinent documents is not included in Appendix B of this report.

4.1.8 Oil & Gas Exploration

Regulatory Agency Data	
Name of Agency:	California Geologic Energy Management Division (CalGEM)
Point of Contact:	N/A
Agency Address:	5816 Corporate Avenue, Sacramento, CA
Agency Phone Number:	(714) 816-6847
Date of Contact:	August 17, 2020
Method of Communication:	https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx
Summary of Communication:	According to the DOGGR interactive website, no oil gas, or geothermal wells were identified on or adjoining to the subject property.

A copy of pertinent documents is not included in Appendix B of this report.

4.1.9 Assessor's Office

Regulatory Agency Data	
Name of Agency:	San Bernardino County Assessor (SBCA)
Point of Contact:	N/A
Agency Address:	172 W. Third Street, San Bernardino, CA 92415
Agency Phone Number:	N/A
Date of Contact:	August 17, 2020
Method of Communication:	Online
Summary of Communication:	According to records reviewed, the subject property is identified by San Bernardino County APNs APNs: 0490-223-33-0000, 0490-101-54-0000, and 0490-101-56-0000 comprised of approximately 700 acres. No records regarding utility information for the subject property was on file with the Assessor.

A copy of pertinent documents is included in Appendix B of this report.

4.2 Mapped Database Records Search

Information from standard federal, state, county, and city environmental record sources was provided by EDR. Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. The information contained in this report was compiled from publicly available sources and the locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

4.2.1 Regulatory Database Summary

Radius Report Data				
Database	**Search Radius (mile)**	**Subject Property**	**Adjacent Properties**	**Sites of Concern**
Federal NPL or Delisted NPL Site	1.00	N	N	N
Federal CERCLIS Site	0.50	N	N	N
Federal CERCLIS-NFRAP Site	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, CESQG)	0.25	N	N	N
Federal IC/EC Registries	0.50	N	N	N
Federal ERNS Site	Subject Property	N	N	N
State/Tribal Equivalent NPL	1.00	N	N	N
State/Tribal Equivalent CERCLIS	1.00	N	N	N
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site	0.50	N	**Y**	N
State/Tribal Registered Storage Tank Sites (UST/AST)	0.25	N	**Y**	N
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
State/Tribal Spills	0.50	N	N	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
EDR MGP	Varies	N	N	N
EDR US Hist Auto Station	Varies	N	N	N
EDR US Hist Cleaners	Varies	N	N	N

4.2.2 Subject Property Listings

The subject property was not identified in the regulatory database report.

4.2.3 Adjacent Property Listings

The property adjacent south was identified as a CHIMRS site in the regulatory database report. A former address of the property, 42524 Lockhart Road, was identified as a LUST, SWEEPS UST, CORTESE, HIST CORESTE and CERS site in the regulatory database report, discussed below:

- The subject property, identified as 43880 Harper Lane Road and 43880 Harbor Lake Road, was listed as a CHIMRS site for a reported release in March 2 and August 25, 2002 described as: "a failure of the weld in piping which caused a leak of heat transfer fluid and resulted in a fire" and "A hose from the holding tank broke causing the spill". Both incidents were cleaned up by the responsible party, Luz Solar Partners. Based on the one-time incident and cleanup response, and the regulatory status, this listing is not expected to represent a significant environmental concern.
- The property, identified as SEGS 8 & 9: UNDERGROUND STORAGE TANKS (T0607138824), 43880 Harper Lake Road, was listed as a LUST site. The property reported a release of oil in 2007 which reportedly impacted soil and groundwater. Partner accessed the GeoTracker online database and reviewed available reports and regulatory agency documents pertaining to the case. In October 2007, two 1,000-gallon USTs, one each located at SEGS 8 and 9, that were used to collect and contain any spills or leaks of heat transfer fluid (HTF) were abandoned in place. Several subsurface environmental site assessments were conducted on the subject property in connection with the former USTs. The following is a summary of previous site assessments obtained from the report Assessment of Perched Groundwater Conditions, Abandoned UST Site, SEGS IX, prepared by AMEC Geomatrix, Inc. (AMEC), dated September 17, 2009:
    - "On April 16, 2007, before the in-place abandonment of the UST, Ocean Blue Engineers drilled and sampled soil boring B-2 adjacent to the 1,000-gallon UST at the SEGS IX facility to a depth of approximately 12 feet bgs. Laboratory analysis of the soil sample collected at a depth of approximately 12 feet bgs at B-2 detected diesel-ranged Total Petroleum Hydrocarbon (TPH) compounds. On September 25, 2007, the additional assessment activities included drilling and sampling soil boring B-3 to a depth of 55 feet bgs. Laboratory analysis of soil samples collected to a depth of approximately 50 feet bgs detected concentrations of diphenyl ether and biphenyl, which are components of the HTF used at the facility. Perched groundwater was encountered at a depth of approximately 37 feet bgs in B-3. An additional soil boring was drilled near B-3 at the SEGS IX facility, and a perched groundwater sample was collected and analyzed for constituents appropriate for the HTF. The soil sample results showed generally decreasing concentrations of TPHd, (TPH quantified as diesel), in soil samples collected between 10 and 25 feet bgs, non-detect concentrations of TPH in soil samples collected at depths of approximately 30 and 35 feet bgs, and a relatively low concentration of TPHd in the soil sample collected from a depth of 40 feet bgs. The laboratory analytical results for the perched groundwater sample collected from a depth of approximately 40 feet bgs reported concentrations of TPHd, benzene, biphenyl, and diphenyl ether".

- AMEC prepared a work plan for further assessment of the perched groundwater conditions on December 4, 2008. The work plan proposed advancing cone penetrometer testing (CPT) borings to confirm the litholgy beneath the former UST area and fine-grained unit anticipated at a depth of approximately 50 to 60 feet, and collecting and analyzing perched groundwater samples to further assess the extent of impacts at and in the vicinity of the SEGS IX UST area. Based on the results of the AMEC CPT borings and perched groundwater sampling conducted during the assessment activities in April and June 2009, AMEC concluded the following:
    - "The lithologic materials encountered at each of the CPT locations is generally consistent; however, the deeper finer-grained sediments at CPT-03 and CPT-4 were encountered approximately 8 to 10 feet shallower than at the other five CPT boring locations."
    - "The depth to perched groundwater as observed in the CPT borings was somewhat variable and ranged from approximately 30 to 46 feet bgs."
    - "The elevated concentrations of HTF-related compounds were detected in perched groundwater samples collected from CPT-01 and CPT-03."
    - "The lateral extent of HTF-related compounds detected in perched groundwater samples collected from CPT-01 and CPT-03 appears to be relatively well defined based on analytical results for perched groundwater samples collected from CPT-02 and CPT-04 through CPT-07."
    - "The deeper finer-grained sediments characterized as sandy silt to clayey silt to clay encountered at depths of between 36 and 56 feet bgs would appear to be facilitating the perched groundwater conditions observed at the facility and, as such, inhibit the downward vertical migration of perched groundwater beneath the facility."

AMEC recommended closure of the UST-related impacts to soil and perched groundwater in the vicinity of the in-place abandoned UST at the SEGS IX facility:

- "The lateral extent of perched groundwater containing HTF-related compounds appears to be fairly well defined at and in the vicinity of the former 1,000-gallon UST at the SEGS IX facility."
- "The SEGS IX UST was abandoned in-place in October 2007. Therefore, the former UST and its contents are no longer of potential concern for continuing or future impacts to soil and groundwater beneath the UST."
- "The deeper finer-grained sediments present at depths between approximately 36 and 56 feet bgs would appear to impede downward movement of perched groundwater beneath the facility. Based on information reported for water supply well PW-35 located approximately ½-mile west of the UST area, the finer-grained

sediments may be 90 feet or more in thickness, which would further inhibit the downward migration of perched groundwater beneath the facility."

- "From a health-based-risk perspective, site workers could come in contact with the HTF-impacted soils or perched groundwater from the former UST area if they are conducting (deep) excavation activities in the UST area. Potential dermal or respiratory contact could be addressed with appropriate personal protective equipment."
- "Based on the significant thickness of finer-grained sediments that separate the perched groundwater and the regional aquifer beneath the facility as described above, and the distance to the nearest water supply well (receptor) which is ½-mile or more from the impacted interval of perched groundwater, it appears unlikely that the impacts to perched groundwater at and in the vicinity of the SEGS IX UST will migrate downward and affect the water supply wells at the facility. It would appear likely that the HTF-related impacts to perched groundwater will attenuate with time."
- On May 27, 2014, regulatory closure was issued by the Lahontan Regional Water Quality Control Board. Based on the findings and conclusions of subsurface assessments discussed above, and the regulatory closure, these listings are not expected to represent a significant environmental concern.

A previous address for the south adjacent property identified as 42524 Lockhart Road was identified as a LUST, SWEEPS UST, CORTESE, HIST CORESTE and CERS site, as discussed below.

- The property, identified as Luz Harper Lake at 42524 Lockhart Road, reported a release of diesel on December 12, 1990, which reportedly impacted soil only. The release occurred as a result of a leaking 500-gallon diesel (used oil) UST (SWEEPS UST) and was reported to the lead agency (San Bernardino County CUPA). Partner accessed the GeoTracker online database and found no available reports or regulatory agency documents pertaining to the case. Regulatory closure was obtained on September 8, 1993. The CERS listing identified the property as a Leaking Underground Storage Tank Cleanup Site. Based on the impact to soil only, the duration of time since the reported release, and the regulatory closure, this listing is not expected to represent a significant environmental concern and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.

Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

4.2.4 Sites of Concern Listings

No sites of concern are identified in the regulatory database report.

4.2.5 Orphan Listings

No orphan listings are identified in the regulatory database report.

A copy of the regulatory database report is included in Appendix C of this report.

5.0 USER PROVIDED INFORMATION AND INTERVIEWS

In order 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 conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. The *User* should provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiries* is not complete. The *User* is asked to provide information or knowledge of the following:

- Review Title and Judicial Records for Environmental Liens and AULs
- Specialized Knowledge or Experience of the User
- Actual Knowledge of the User
- Reason for Significantly Lower Purchase Price
- Commonly Known or *Reasonably Ascertainable* information
- Degree of Obviousness
- Reason for Preparation of this Phase I ESA

Fulfillment of these user responsibilities is key to qualification for the identified defenses to CERCLA liability. Partner requested our Client to provide information to satisfy User Responsibilities as identified in Section 6 of the ASTM guidance.

Pursuant to ASTM E1527-13, Partner requested the following site information from Terra-Gen, LLC (User of this report).

User Responsibilities				
Item	**Provided By User**	**Not Provided By User**	**Discussed Below**	**Does Not Apply**
Environmental Pre-Survey Questionnaire		**X**		
Title Records, Environmental Liens, and AULs		**X**		
Specialized Knowledge			**X**	
Actual Knowledge			**X**	
Valuation Reduction for Environmental Issues			**X**	
Identification of Key Site Manager	**Section 5.1.3**			
Reason for Performing Phase I ESA	**Section 1.1**			
Prior Environmental Reports		**X**		
Other		**X**		

5.1 Interviews

5.1.1 Interview with Owner

The owners of the subject property, identified as High Desert Acquisition LLC and All American Ventures Inc, were not available to be interviewed at the time of the assessment.

5.1.2 Interview with Report User

Please refer to Section 5.2 below for information requested from the Report User. The information requested was not received prior to the issuance of this report. Because the Report User (Client) is a prospective lessee/purchaser, it is understood that the Report User would not have knowledge of the property that would significantly impact our ability to satisfy the objectives of this assessment. The lack of this information is not considered to represent a significant data gap.

5.1.3 Interview with Key Site Manager

Mr. Robert Fimbres, key site manager, indicated that they had no information pertaining to any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

According to the key site manager, the partially constructed structures on the central area of the subject property were to be a new SEGS facility. Prior to that, the subject property was undeveloped. The key site manager further stated that there are no ASTs, clarifiers, oil/water separators, groundwater monitoring wells, and hazardous substance use/storage/generation on the subject property.

5.1.4 Interviews with Past Owners, Operators and Occupants

Interviews with past owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap.

5.1.5 Interview with Others

As the subject property is not an abandoned property as defined in ASTM 1527-13, interview with others were not performed.

5.2 User Provided Information

5.2.1 Title Records, Environmental Liens, and AULs

Partner was not provided with title records or environmental lien and AUL information for review as part of this assessment.

5.2.2 Specialized Knowledge

No specialized knowledge of environmental conditions associated with the subject property was provided by the User at the time of the assessment.

5.2.3 Actual Knowledge of the User

No actual knowledge of any environmental lien or AULs encumbering the subject property or in connection with the subject property was provided by the User at the time of the assessment.

5.2.4 Valuation Reduction for Environmental Issues

No knowledge of valuation reductions associated with the subject property was provided by the User at the time of the assessment.

5.2.5 Commonly Known or Reasonably Ascertainable Information

The User did not provide information that is commonly known or *reasonably ascertainable* within the local community about the subject property at the time of the assessment.

5.2.6 Previous Reports and Other Provided Documentation

No previous reports or other pertinent documentation was provided to Partner for review during the course of this assessment.

6.0 SITE RECONNAISSANCE

The weather at the time of the site visit was sunny and clear. Refer to Section 1.5 for limitations encountered during the field reconnaissance and Sections 2.1 and 2.2 for subject property operations. The table below provides the site assessment details:

Site Assessment Data	
Site Assessment Performed By:	Jeremy Russell
Site Assessment Conducted On:	August 24, 2020

The table below provides the subject property personnel interviewed during the field reconnaissance:

Site Visit Personnel for APNs: 0490-223-33-0000, 0490-101-54-0000, and 0490-101-56-0000 (Subject Property)			
Name	**Title/Role**	**Contact Number**	**Site Walk* Yes/No**
Robert Fimbres	Key Site Manager	(760) 762-3100	No

* Accompanied Partner during the field reconnaissance activities and provided information pertaining to the current operations and maintenance of the subject property

No potential environmental concerns were identified during the onsite reconnaissance.

6.1 General Site Characteristics

6.1.1 Solid Waste Disposal

No solid waste was observed generated at the subject property.

No evidence of illegal dumping of solid waste was observed during the Partner site reconnaissance.

6.1.2 Sewage Discharge and Disposal

Since no habitable structures are present on the subject property, no sanitary discharges on the subject property were observed. No wastewater treatment facilities or septic systems are observed or reported on the subject property.

6.1.3 Surface Water Drainage

Storm water is removed from the subject property primarily by direct infiltration into the unpaved, natural ground surface.

The subject property does not appear to be a designated wetland area, based on information obtained from the United States Fish & Wildlife Service; however, a comprehensive wetlands survey would be required in order to formally determine actual wetlands on the subject property. No surface impoundments, wetlands, natural catch basins, settling ponds, or lagoons are located on the subject property. No drywells were identified on the subject property.

6.1.4 Source of Heating and Cooling

No heating or cooling systems or domestic hot water equipment are operated on the subject property.

6.1.5 Wells and Cisterns

No aboveground evidence of wells or cisterns was observed during the site reconnaissance.

6.1.6 Wastewater

Since no habitable structures are located on the subject property, no domestic wastewater is generated at the subject property. No industrial process is currently performed at the subject property.

6.1.7 Septic Systems

No septic systems were observed or reported on the subject property.

6.1.8 Additional Site Observations

No additional general site characteristics were observed during the site reconnaissance.

6.2 Potential Environmental Hazards

6.2.1 Hazardous Substances and Petroleum Products Used or Stored

No hazardous substances or petroleum products were observed on the subject property during the site reconnaissance.

6.2.2 Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)

No evidence of current or former ASTs or USTs was observed during the site reconnaissance.

6.2.3 Evidence of Releases

No spills, stains or other indications that a surficial release has occurred at the subject property were observed.

6.2.4 Polychlorinated Biphenyls (PCBs)

No potential PCB-containing equipment (transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, etc) was observed on the subject property during Partner's reconnaissance.

6.2.5 Strong, Pungent or Noxious Odors

No strong, pungent or noxious odors were evident during the site reconnaissance.

6.2.6 Pools of Liquid

No pools of liquid were observed on the subject property during the site reconnaissance.

6.2.7 Drains, Sumps and Clarifiers

No drains, sumps, or clarifiers were observed on the subject property during the site reconnaissance.

6.2.8 Pits, Ponds and Lagoons

No pits, ponds or lagoons were observed on the subject property.

6.2.9 Stressed Vegetation

No stressed vegetation was observed on the subject property.

6.2.10 Additional Potential Environmental Hazards

No additional environmental hazards, including landfill activities or radiological hazards, were observed.

6.3 Non-ASTM Services

6.3.1 Asbestos-Containing Materials (ACMs)

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be *presumed* to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building constructed prior to 1981 and have not been appropriately tested are "presumed asbestos-containing material" (PACM).

Due to the undeveloped nature of the subject property, ACMs were not considered within the scope of this assessment.

6.3.2 Lead-Based Paint (LBP)

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm^2 (or 5,000 ug/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X", to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

Due to the undeveloped nature of the subject property, LBP was not considered within the scope of this assessment.

6.3.3 Radon

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, according to the table below:

EPA Radon Zones		
EPA Zones	**Average Predicted Radon Levels**	**Potential**
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate

EPA Radon Zones		
EPA Zones	**Average Predicted Radon Levels**	**Potential**
Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Radon sampling was not conducted as part of this assessment. Review of the US EPA Map of Radon Zones places the subject property in Zone 2. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

6.3.4 Lead in Drinking Water

No public or private water system is operated on the subject property.

6.3.5 Mold

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g.in the form of very high humidity, condensation, or water from a leaking pipe, etc.) and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding).

Since no completed, usable structures are developed on the subject property, the evaluation for evidence of mold growth was not within the scope of work for this assessment.

6.4 Adjacent Property Reconnaissance

The adjacent property reconnaissance consisted of observing the adjacent properties from the subject property premises.

6.4.1 ASTs/USTs for Hazardous Substances or Petroleum Products

The adjacent property to the south was observed developed with several large aboveground storage tanks. The content of the ASTs was not readily observable. No observed environmental concerns were identified in connection with the ASTs.

6.4.2 Pools of Liquid

Surface water evaporation ponds are located adjacent to the southwest corner of the subject property.

7.0 FINDINGS AND CONCLUSIONS

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- Partner did not identify any recognized environmental conditions during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- Partner did not identify any environmental issues during the course of this assessment.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of APNs: 0490-223-33-0000, 0490-101-54-0000, and 0490-101-56-0000 in the unincorporated area of Hinkley, San Bernardino County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions and/or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends no further assessment at this time.

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Partner has performed a Phase I Environmental Site Assessment of the property located at APNs: 0490-223-33-0000, 0490-101-54-0000, and 0490-101-56-0000 in the unincorporated area of Hinkley, San Bernardino County, California in conformance with the scope and limitations of the protocol and the limitations stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

By signing below, Partner declares 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. Partner has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. Partner has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared By:

Jeremy Russell
Environmental Professional

Reviewed By:

Sarah Vosovic
Senior Author

9.0 REFERENCES

Reference Documents

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-13.

Environmental Data Resources (EDR), Radius Report, August 2020

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via internet, August 2020

United States Department of Agriculture, Natural Resources Conservation Service, accessed via internet, August 2020

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, August 2020

United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, August 2020

United States Geological Survey, accessed via the Internet, August 2020

United States Geological Survey Topographic Map 1986, 7.5 minute series, accessed via internet, August 2020

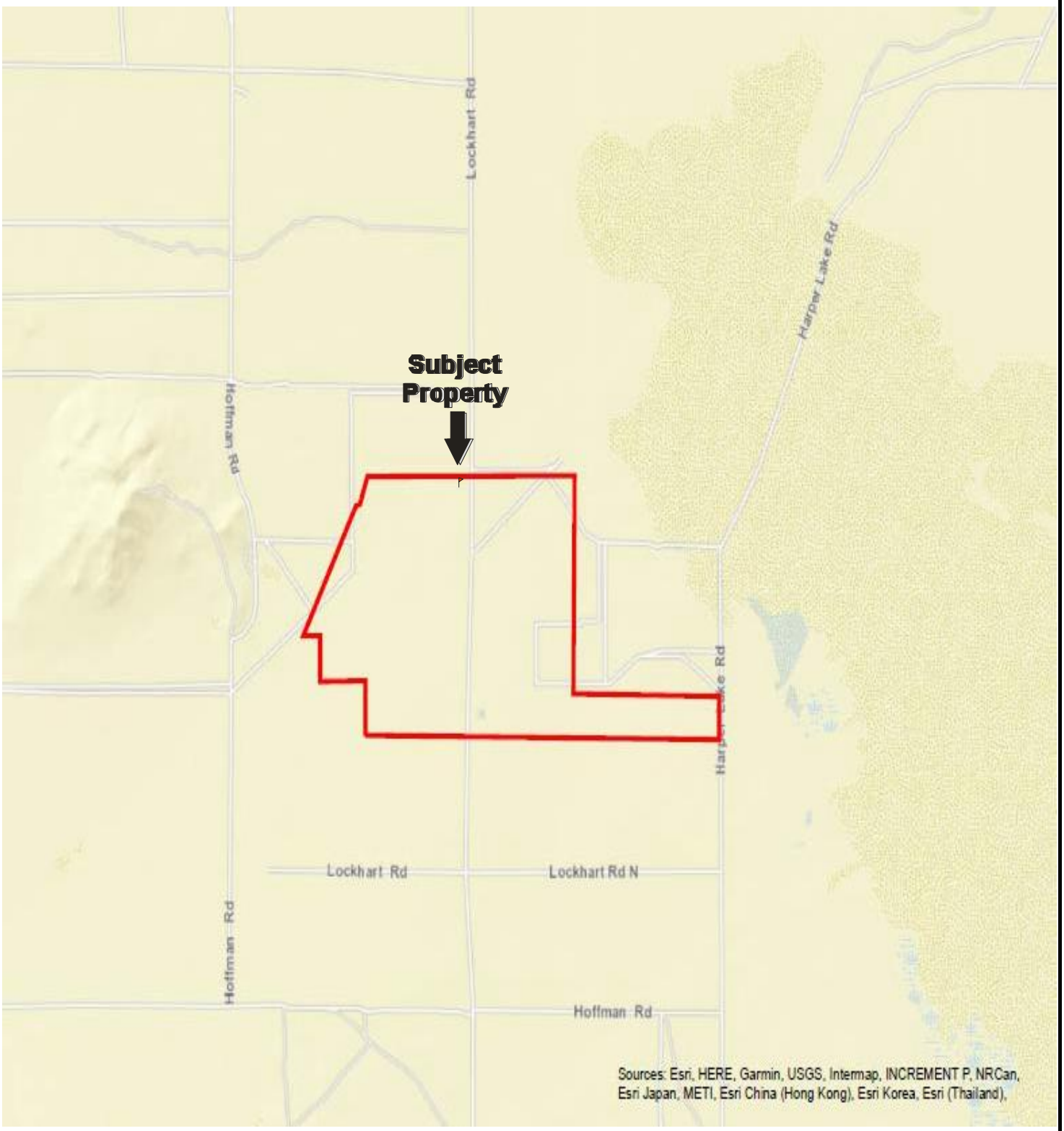
FIGURES

1 SITE LOCATION MAP

2 SITE PLAN

3 TOPOGRAPHIC MAP

PARTNER



N

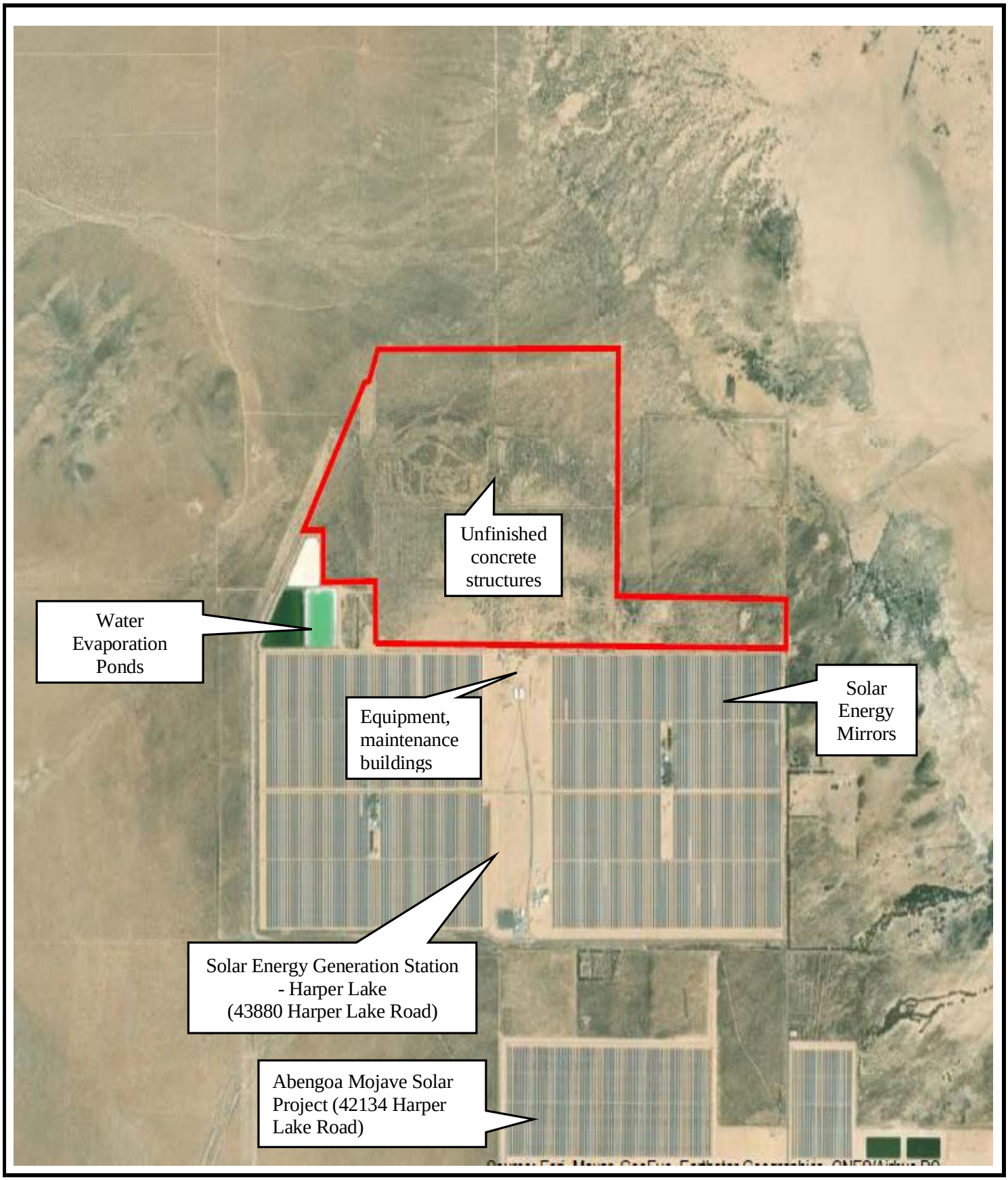
Drawing Not To Scale

KEY:
Subject Property

FIGURE 1: SITE LOCATION MAP

Project No. 20-289338.1

PARTNER



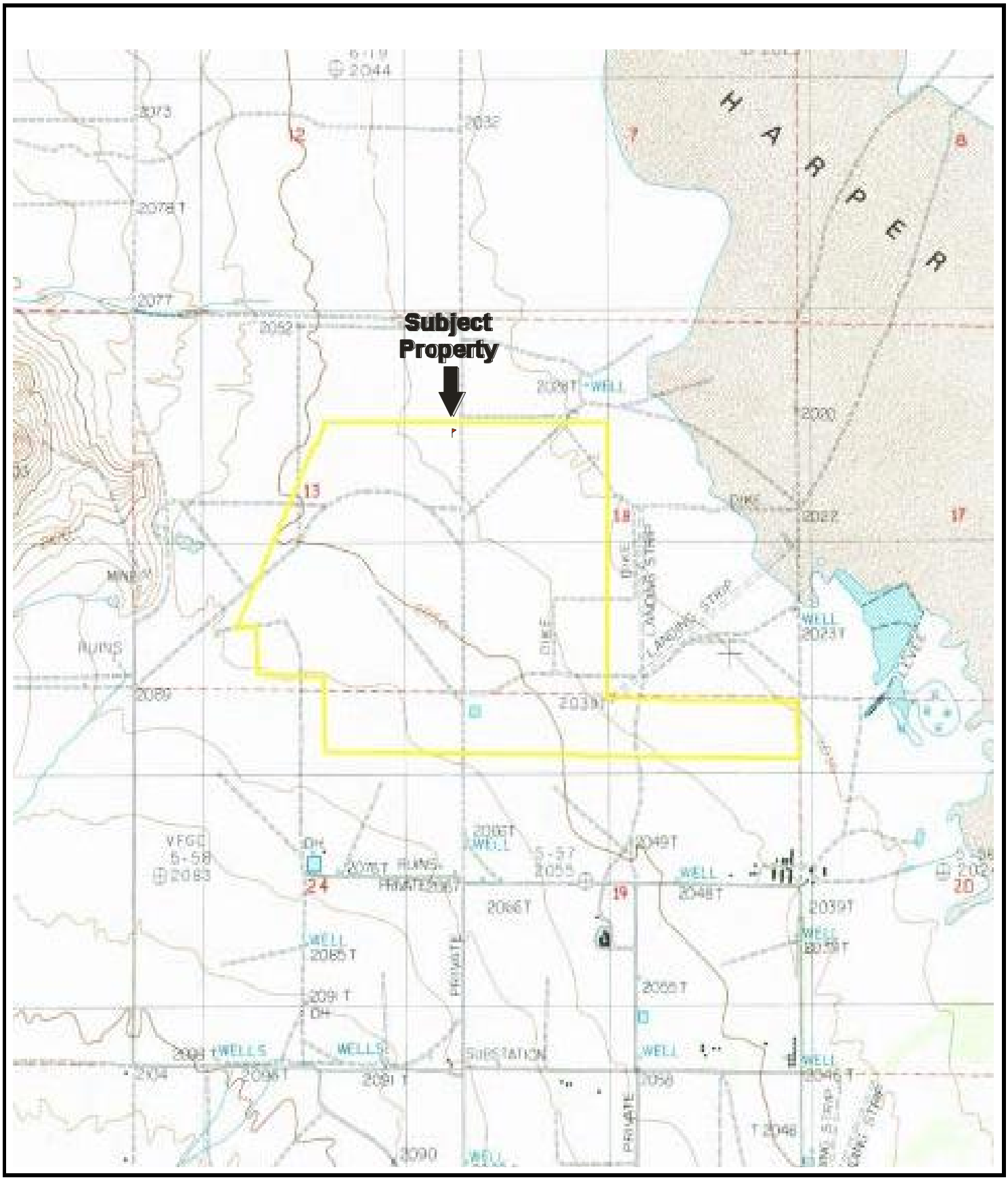
N

GROUNDWATER FLOW

KEY:
Subject Property

FIGURE 2: SITE PLAN
Project No. 20-289338.1

PARTNER



N

USGS 7.5 Minute *Lockhart, CA* Quadrangle
Created: 1956 / Revised 1986

KEY:
Subject Property

FIGURE 3: TOPOGRAPHIC MAP
Project No. 20-289338.1

PARTNER

APPENDIX A: SITE PHOTOGRAPHS

1. View looking east along the southern side of the subject property

2. View looking toward the north, northeast of subject property

3. View of solar panel arrays on the adjacent south property

4. View of circular concrete foundations intended for solar panel arrays on the southwest area.

5. View of maintenance yard for the adjacent south property

6. View of partially constructed structures on the central area of the subject property

7. View of structures

8. View of structure

9. View of structure foundation

10. View of structure

11. View looking at the northwest area of the subject property from the central area

12. View looking at the north area of the subject property from the central area

13. View looking at the northeast area of the subject property from the central area

14. View looking at the east area of the subject property from the central area

15. View of abandoned structure adjacent to the southwest corner of the subject property

16. View of water evaporation ponds adjacent southwest of the subject property

17. View of dry evaporation pond adjacent southwest of the subject property

18. View of southeastern area of the subject property

19. View solar panel arrays adjacent south of the subject property

20. View of land adjacent east of the subject property

21. View of land adjacent southeast of the subject property

22. View along the north side of the subject property

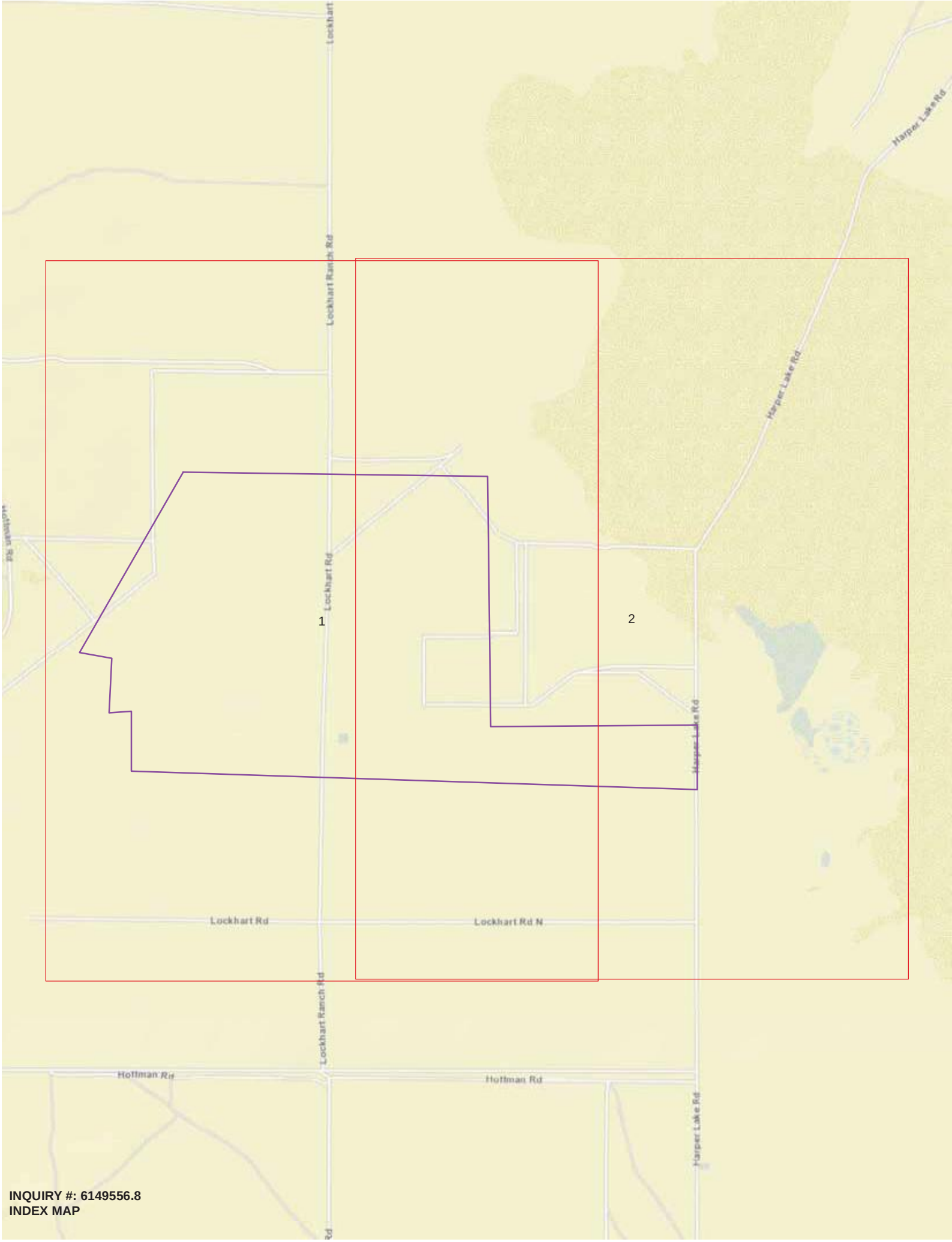
23. View of the northwestern area of subject property

24. View looking southeast from the northwest corner of the subject property

25. View of land adjacent east of the subject property

26. View of land adjacent southwest of the subject property

APPENDIX B: HISTORICAL/REGULATORY DOCUMENTATION



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INDEX MAP

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INQUIRY #: 6149556.8
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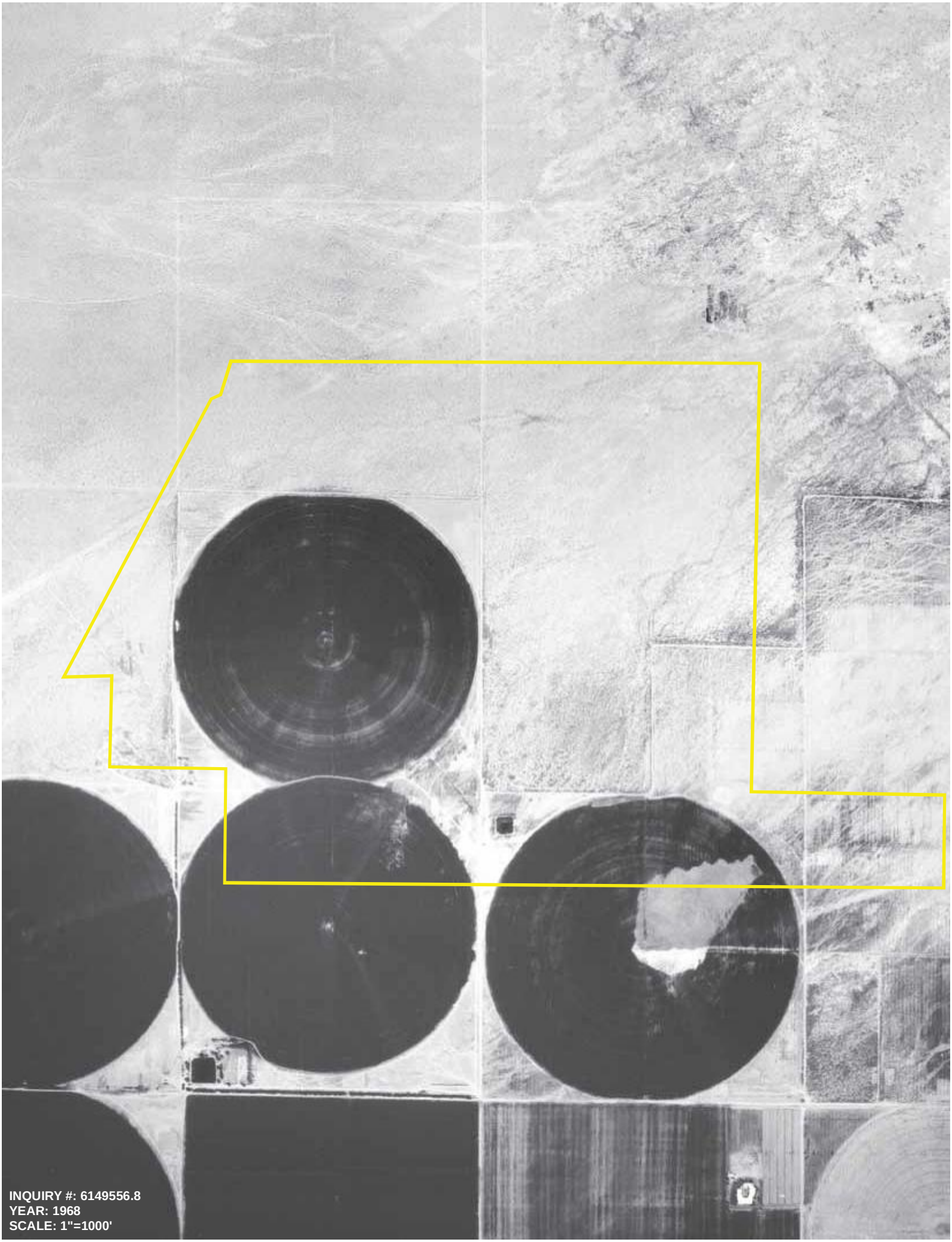
SCALE: 1"=1000'



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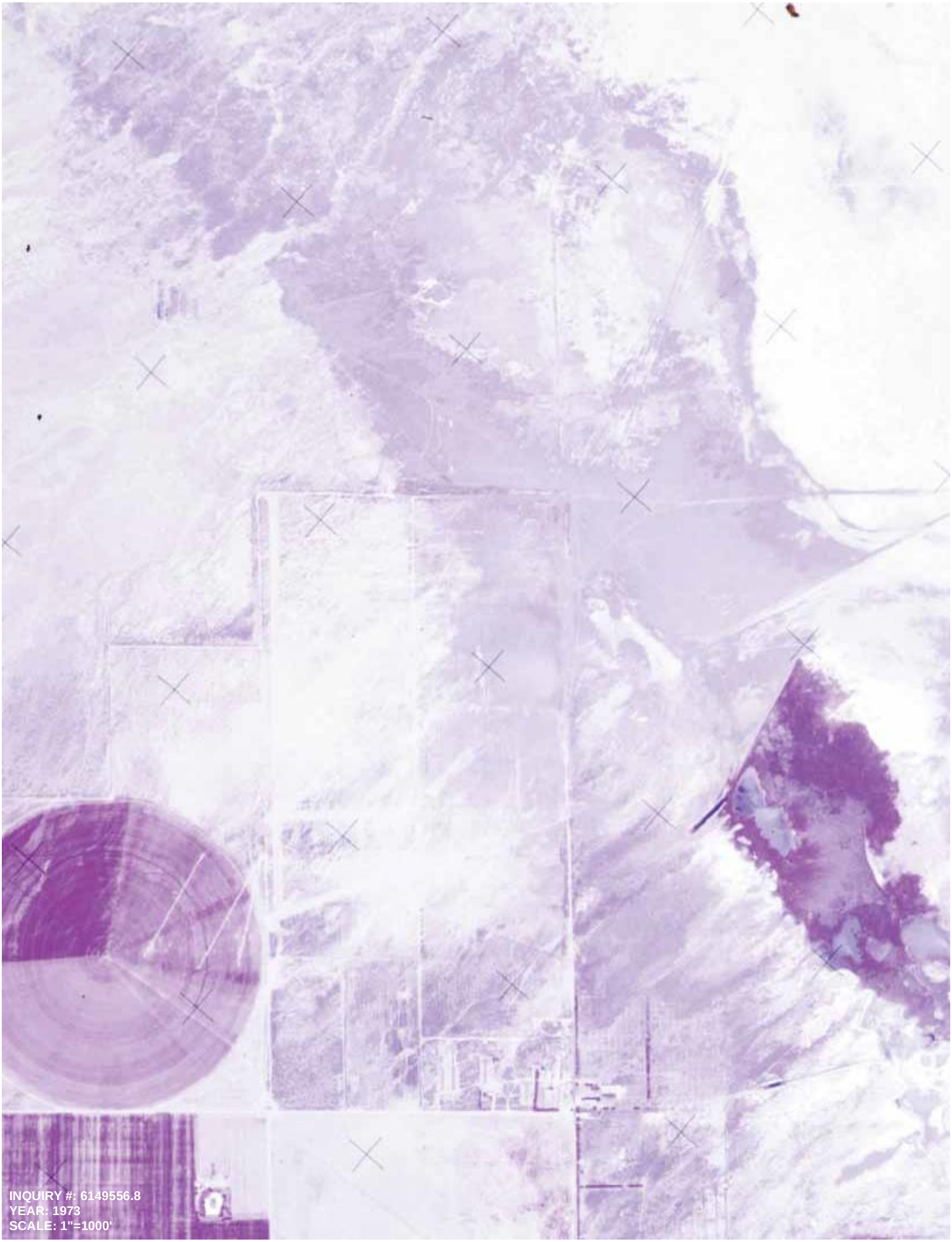
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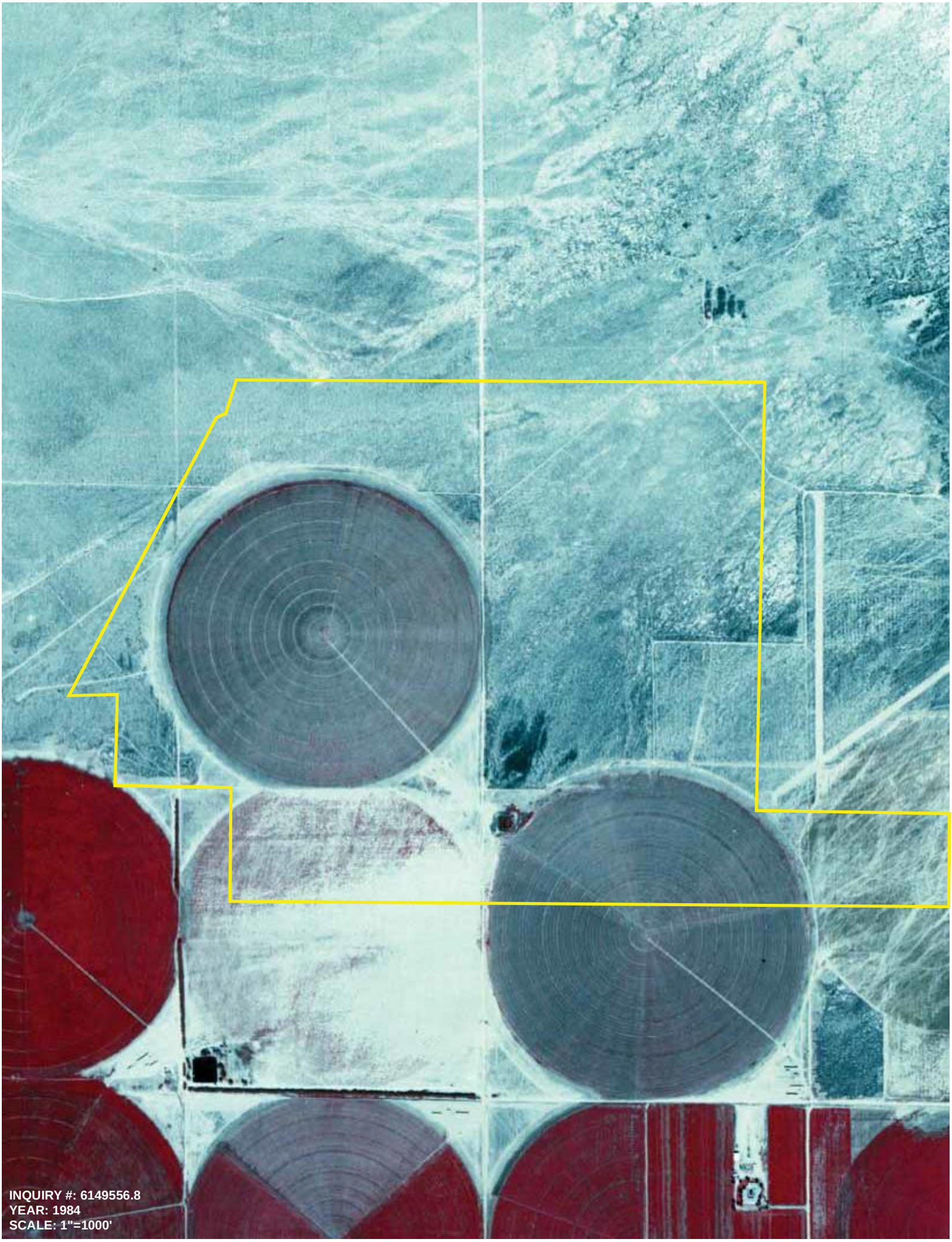
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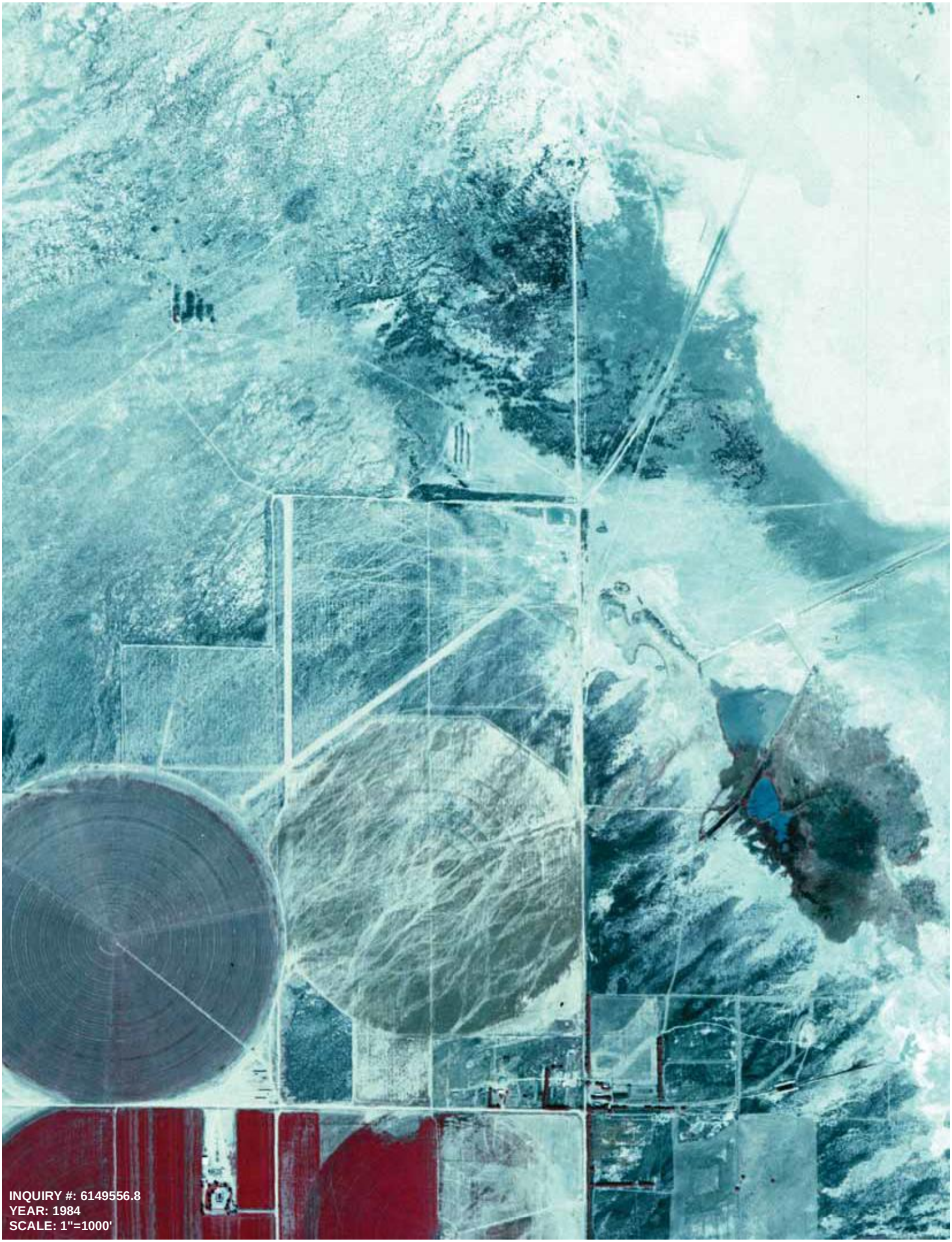

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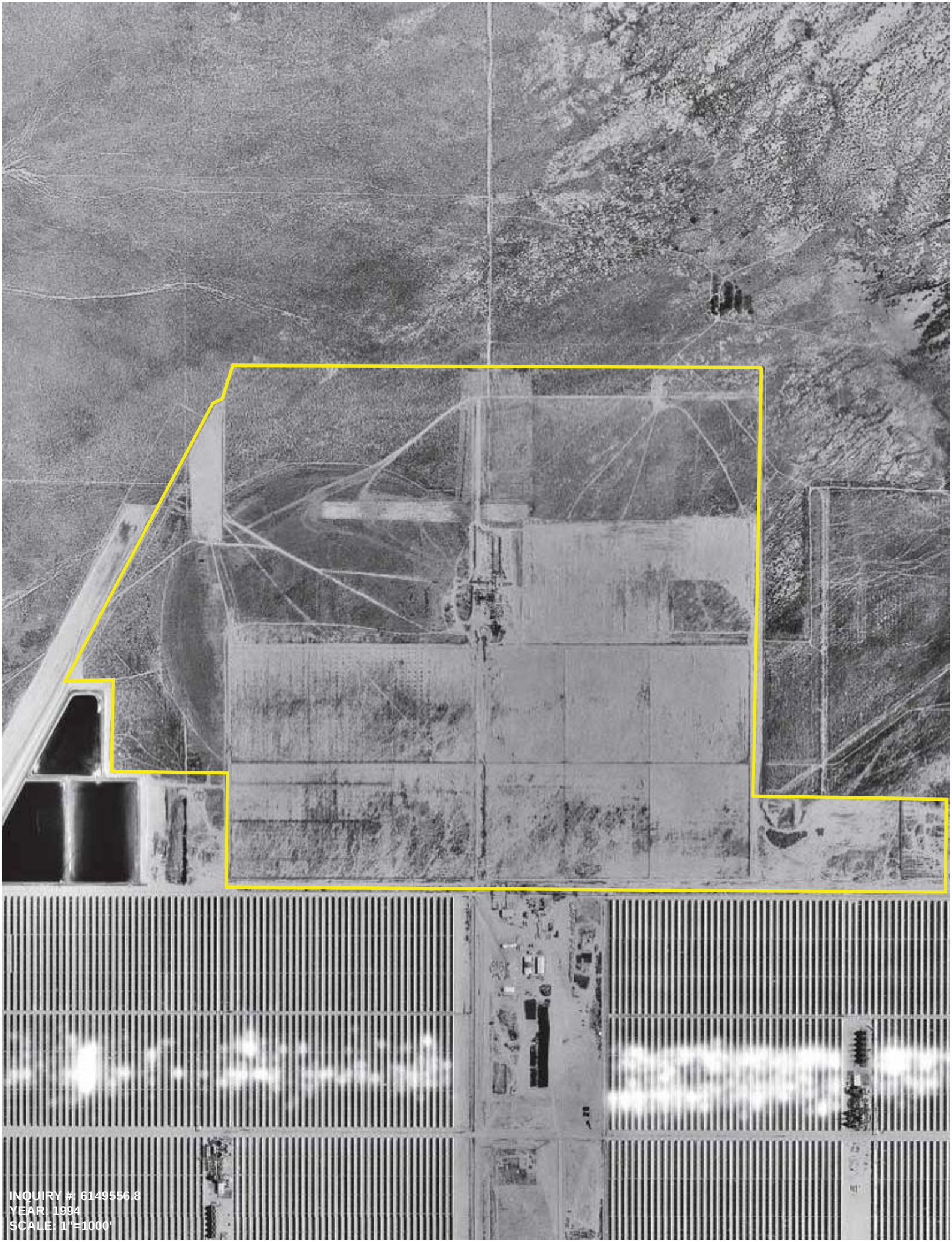
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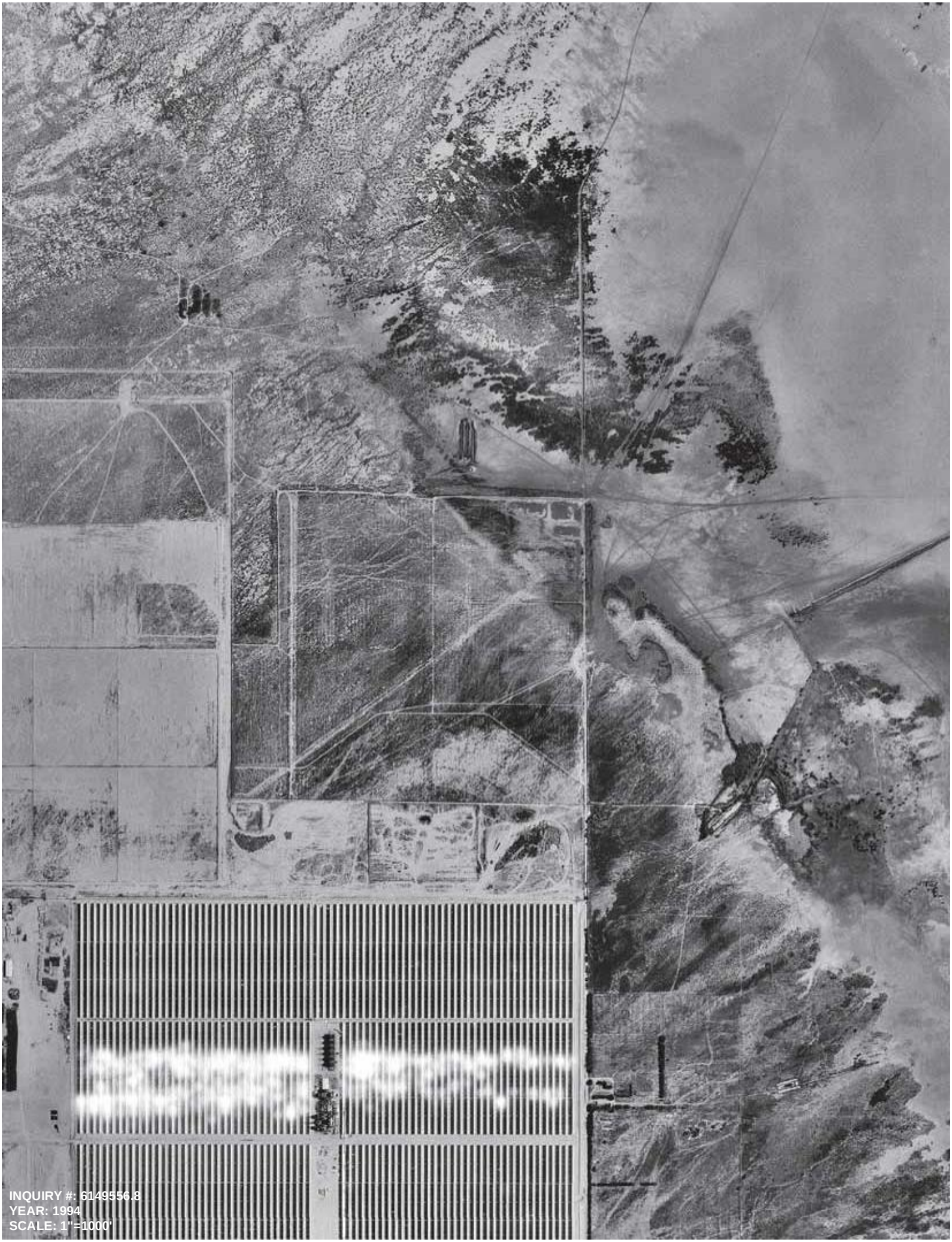

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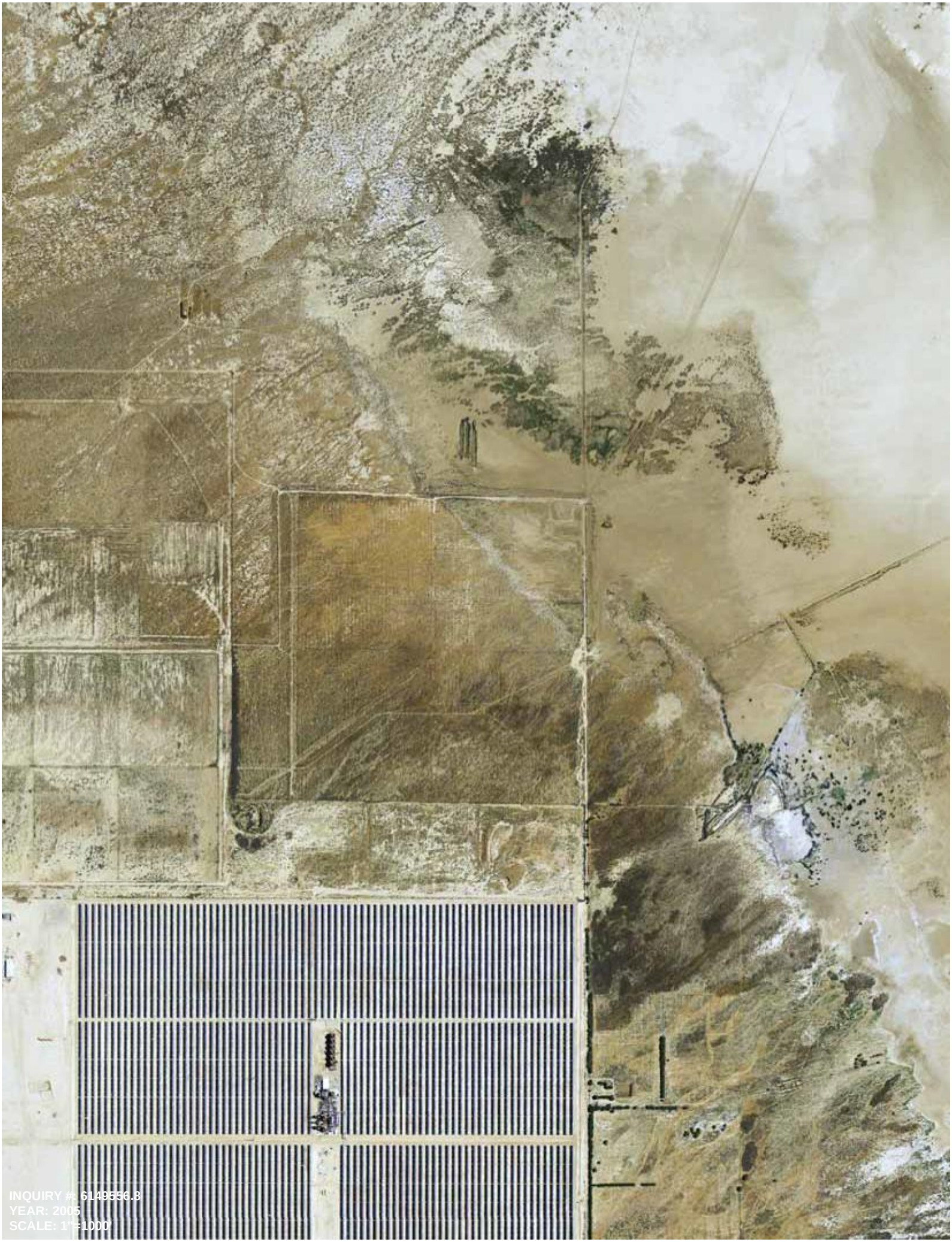
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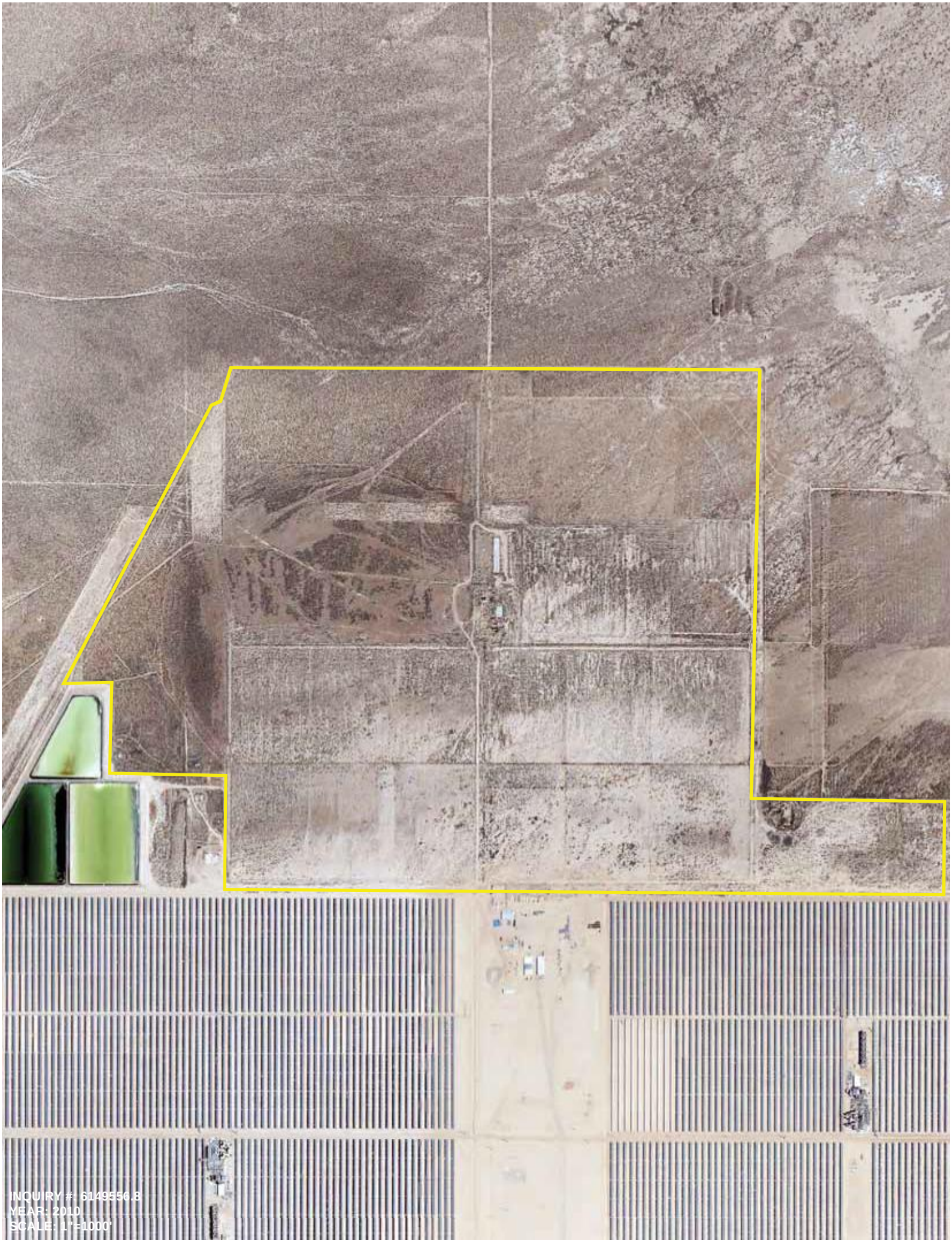
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YEAR: 2016
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INQUIRY #: 6149556.8
YEAR: 2016
SCALE: 1"=1000'

Lockhart Solar II aka SEGS 10

APNs 049-022-333, 049-010-154, 049-010-156

Hinkley, CA 92347

Inquiry Number: 6149556.3

August 10, 2020

Certified Sanborn® Map Report

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

Certified Sanborn® Map Report

08/10/20

Site Name:	Client Name:
Lockhart Solar II aka SEGS 10	Partner Engineering and Science, Inc.
APNs 049-022-333, 049-010-1	2154 Torrance Blvd, Suite 200
Hinkley, CA 92347	Torrance, CA 90501-0000
EDR Inquiry # 6149556.3	Contact: Roy Zamarripa

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Certified Sanborn Results:

Certification # B50A-430D-947A

PO # 20-289338.1

Project 20-289338.1

UNMAPPED PROPERTY

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Sanborn® Library search results

Certification #: B50A-430D-947A

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

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Lockhart Solar II aka SEGS 10
APNs 049-022-333, 049-010-154, 049-010-156
Hinkley, CA 92347

Inquiry Number: 6149556.5
August 12, 2020

The EDR-City Directory Image Report

Environmental Data Resources Inc

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

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City Directory Images

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

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

RECORD SOURCES

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

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RESEARCH SUMMARY

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

Year	Target Street	Cross Street	Source
2017	☑	☐	EDR Digital Archive
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☐	☐	EDR Digital Archive
1992	☐	☐	EDR Digital Archive
1980	☑	☐	Haines Criss-Cross Directory
1976	☑	☐	Haines Criss-Cross Directory
1971	☑	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

APNs 049-022-333, 049-010-154, 049-010-156
Hinkley, CA 92347

Year	*CD Image*	*Source*	

HARPER LAKE RD

2017	pg A1	EDR Digital Archive	
2014	pg A2	EDR Digital Archive	
2010	pg A3	EDR Digital Archive	
2005	pg A4	EDR Digital Archive	
2000	pg A5	EDR Digital Archive	
1995	-	EDR Digital Archive	Street not listed in Source
1992	-	EDR Digital Archive	Street not listed in Source
1980	pg A6	Haines Criss-Cross Directory	
1976	pg A7	Haines Criss-Cross Directory	
1971	pg A8	Haines Criss-Cross Directory	

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

HARPER LAKE RD 2017

40892 LUCIO, ROSA M
42134 TOLEDO, RICARDO
43880 UCOS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

HARPER LAKE RD 2014

40668	RICHARDSON, ROBERT
40892	LUCIO, ROSA M
41374	OCCUPANT UNKNOWN,
43880	UCOS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

HARPER LAKE RD 2010

40668	ULI, COSTANTINO
40892	BRAVO, GONZALO R
41246	OCCUPANT UNKNOWN,
41374	HOLMES, CONSTANCE M
41446	OCCUPANT UNKNOWN,
43880	GE WATER & PROCESS TECHNOLOGY
	UCOS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

HARPER LAKE RD 2005

40668	ULI, COSTANTINO
40892	OCCUPANT UNKNOWN,
41246	OCCUPANT UNKNOWN,
41374	HOLMES, CONSTANCE M
43880	IONICS ULTRA PURE WATER
	LUZ SOLAR PARTNERS IX
	UCOS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

HARPER LAKE RD 2000

41374 MOODY, ROBERT J
43880 UCOS

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

HARPER LAKE RD 1980

HARPER LK RD 92347
HINKLEY

NO #	CLARK TOM		245-8895
NO #★	TRIANGLE RANCH		245-8895 8
★	1 BUS	1 RES	0 NEW

HARRELL 91752 MIRA

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

HARPER LAKE RD 1976

HARPER LAKE RD 92342 HELENDALE

NO # BOSI ALDO 245-5215+6
NO # CLARK TOM 245-8895
NO #*TRIANGLE RANCH 245-8895
* 1 BUS 2 RES 1 NEW

HARRELL 91752 MIRA LOMA

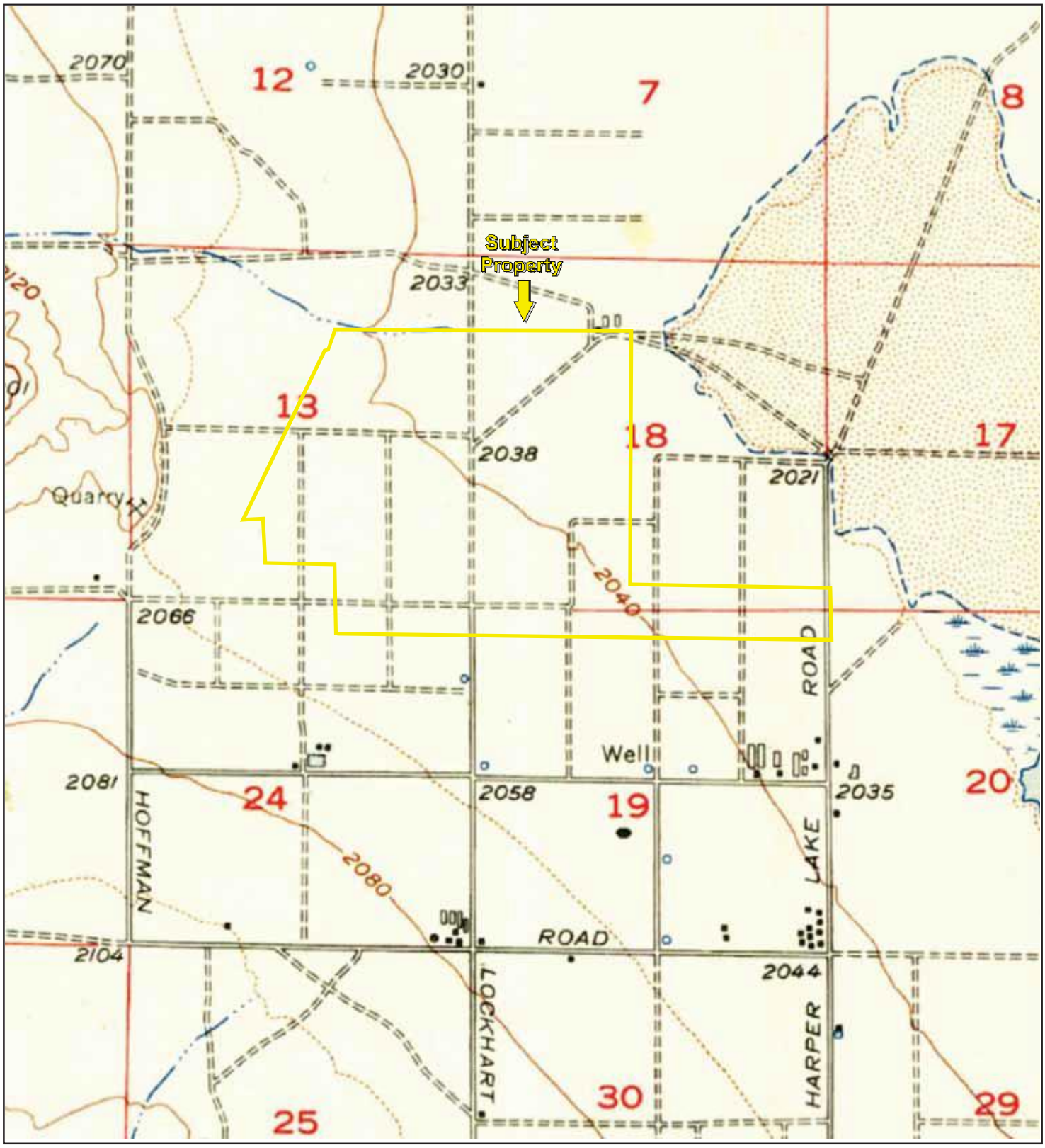
Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

HARPER LAKE RD 1971

HARPER LAKE RD 92342 HELENDALE

NO # GLARK TOM 245-8895
NO # RAMIREZ LLEMENTE 245-2409
NO # SWETT LANA L MRS 245-5573
NO #*TRIANGLE RANCH 245-8895
* 1 BUS 3 RES

HARRELL 91752 MIRA LOMA



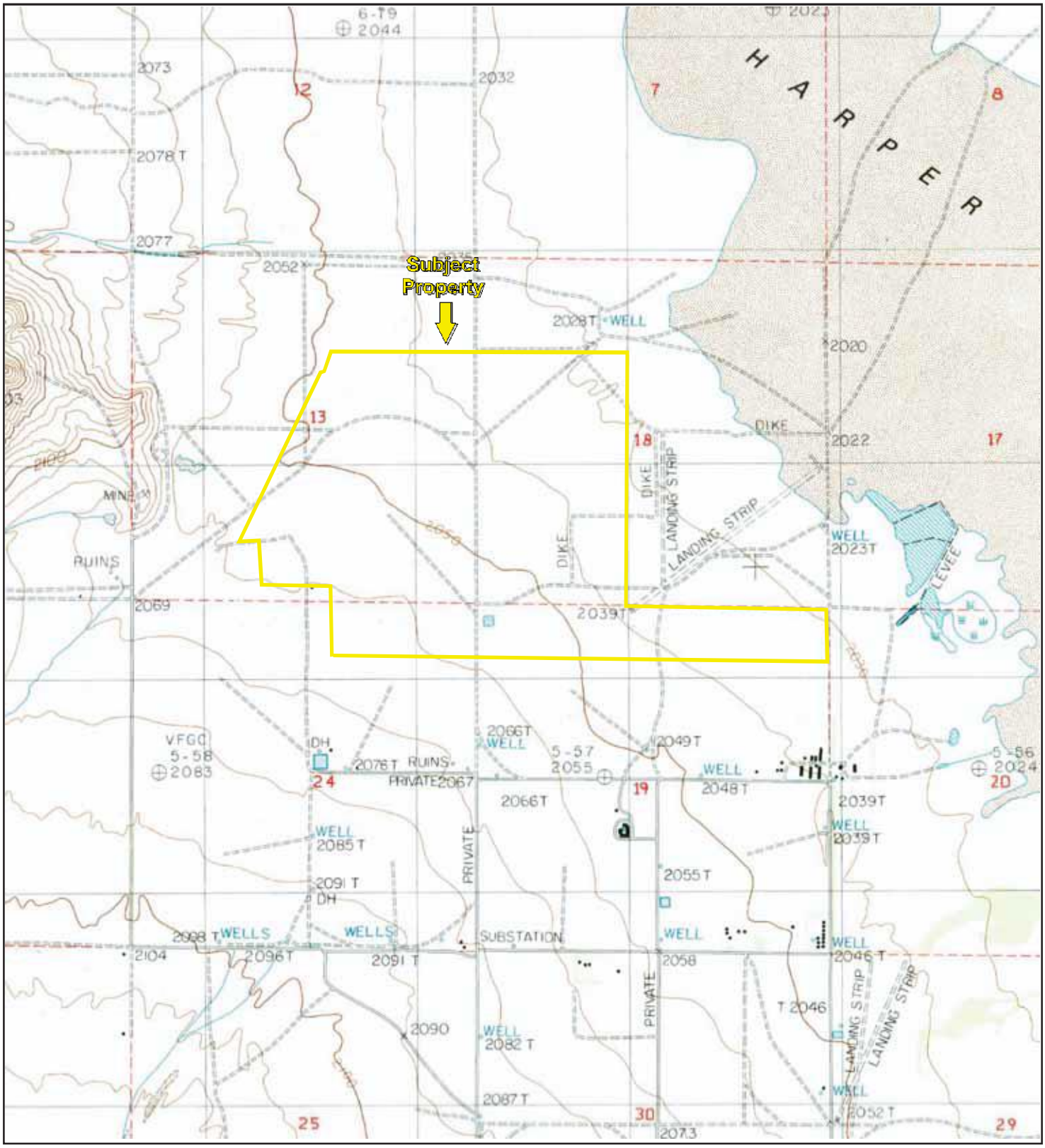
TP, Fremont Peak, 1956, 15-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property

Topographic Map Year: 1986



TP, Lockhart, 1986, 7.5-minute

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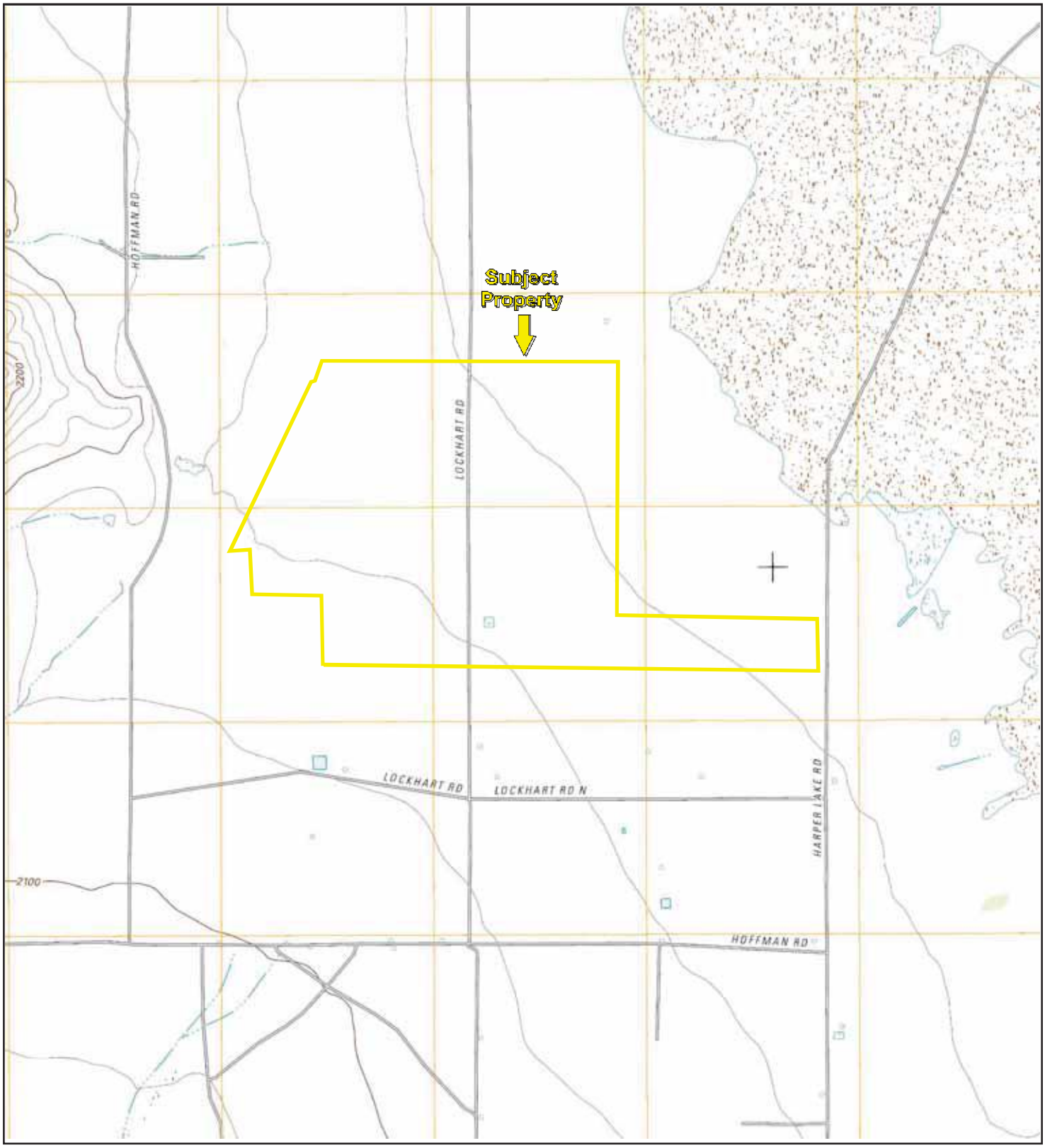
N

Key: Subject Property

APPENDIX B: Topographic Maps

Project No. 20-289338.1

PARTNER



TP, Lockhart, 2012, 7.5-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property

NextEra Energy Operating Services, 43880 Harper Lake Road, Hinkley, CA 92347
760-762-3100

January 17, 2020

Dear Mr. Steude,

Re: 88-AFC-1 WR6 VIII & 89-AFC-1 WR6 VIII
Second Semi-Annual 2018 Monitoring Report
Board Order No. 6-98-74
SEGS VIII & IX Facilities, Hinkley, California

Terra-Gen Operating Company, on behalf of Luz Solar Partners VIII & IX, Ltd., is pleased to present this Second Semi-Annual Monitoring Report for 2019. All operational activities with the exception of groundwater and vadose zone testing are performed by site personnel. Groundwater sampling and vadose zone testing is currently performed by Northstar Environmental Remediation (Northstar) of Lake Forest, California under direct contract to Luz Solar Partners VIII & IX Ltd. Chemical analyses are performed by an independent State of California-certified laboratory also under direct contract to Luz Solar Partners VIII & IX Ltd.

Based on the results of neutron vadose zone moisture detection monitoring and groundwater monitoring data, there are no indications of leakage through the secondary containment. Analysis of groundwater samples for constituents of concern did not reveal any concentrations above expected levels.

If you have any questions regarding this report, please feel free to call Neal Davies at (760) 762-3100 x 225.

Sincerely,
Terra-Gen Operating Company for
Luz Solar Partners VIII –IX Ltd.

Robert Fimbres
Site Manger
Luz Solar Partners VIII – IX Ltd.

Date: January 17, 2020

California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

Facility Name: **Luz Solar Partners VIII & IX**

Address: **43880 Harper Lake Road**
Hinkley, CA 92347

Contact Person: **Neal Davies**
Job Title: **Operations Specialist**
Phone: **760-762-3100x225**
Email: **NDavies@Terra-Gen.com**
WDR/NPDES Order Number: **6-98-74**
WDID Number: **6B368050006**
Type of Report (circle one)**:** **Monthly** **Quarterly** **Semi-Annual** **Annual** **Other**
Month(s) (circle applicable month(s)*)**:** **JAN** **FEB** **MAR** **APR** **MAY** **JUN** **JUL** **AUG** **SEP** **OCT** **NOV** **DEC**
***annual Reports** (circle the first month of the reporting period)
Year: **2019**
Violation(s)? (Please check one): x **NO** _____ **YES***

***If YES is marked complete a-g (Attach Additional information as necessary)**

a) Brief Description of Violation: _____

b) Section(s) of WDRs/NPDES Permit Violated: _____

c) Reported Value(s) or Volume: _____

d) WDRs/NPDES Limit/Condition:

e) Date(s) and Duration of Violation(s):

f) Explanation of Cause(s):

g) Corrective Action(s)
(Specify actions taken and a schedule for actions to be taken)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions or require additional information, please contact Neal Davies at the number provided above.

Sincerely,

Signature:

Name: Robert Fimbres

Title: Site Manager

2018 SECOND SEMIANNUAL and ANNUAL MONITORING REPORT
SEGS VIII – IX HARPER LAKE
Board Order No. 6-98-74

January 8, 2019

Prepared for:
Luz Solar Partners VIII and IX Ltd. c/o
Terra-Gen Operating Company
43880 Harper Lake Road
Hinkley, California 92347

Prepared By:
Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest, California 92630

SIGNATURE PAGE

2018 SECOND SEMIANNUAL and ANNUAL MONITORING REPORT

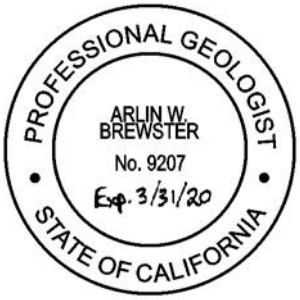
SEGS VIII – IX HARPER LAKE

HINKLEY, CALIFORNIA

PROFESSIONAL STATEMENT

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

The contents of this report are subject to the limitations of the available data.



Arlin W. Brewster

Professional Geologist 9207

January 8, 2019

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Appendix D – Letters of Financial Assurance

1.0 INTRODUCTION

Northstar Environmental Remediation (Northstar) of Lake Forest, California has prepared this 2018 Second Semiannual and Annual Monitoring Report for the Solar Electric Generating Station (SEGS) VIII – IX facility on behalf of Terra-Gen Operating Company (Terra-Gen) and Luz Solar Partners VIII-IX Ltd. This report presents environmental data required under California Regional Water Quality Control Board - Lahontan Region (RWQCB) Order No. 6-98-74 Waste Discharge Requirements and Monitoring and Reporting Program. This data includes, but is not limited to: groundwater sampling results, neutron probe data, evaporation pond data, spill summaries, land treatment unit (LTU) operations, and other information required under the Board Order. Northstar currently conducts the field work associated with groundwater and LTU sampling and neutron probe surveys. Other monitoring tasks are performed by onsite agents of Luz Solar Partners (Terra-Gen). A site vicinity map of SEGS VIII – IX is included in **Figure 1**.

1.1 Facility Information

Facility Name:
Solar Electric Generating Station (SEGS) VIII – IX

Facility Location:
43880 Harper Lake Road
Hinkley, California 92347

Facility Contact:
Mr. Joe Faubus
Senior PGD Environmental Technician
Terra-Gen Operating Company
(760) 762-3100 Ext. 231

SIC Code:
4911 – Electric Services

Monitoring and Reporting Program:
RWQCB Order No. 6-98-74

Waste Discharge Identification (WDID) Numbers:
SEGS VIII: WDID 6B368050006
SEGS IX: WDID 6B369004001

1.2 Monitoring Summary

Between January 1 and December 31, 2018, the following work was conducted:

- Evaporation Pond Flow Monitoring: Performed monthly by Terra-Gen
- Evaporation Pond Freeboard Measurements: Performed weekly by Terra-Gen
- Evaporation Pond Water Sampling: Performed on May 30 and December 7, 2018 by Northstar
- Effluent Water Sampling: Performed on December 7, 2018 by Northstar
- Evaporation Pond Sludge Sampling: Performed on December 7, 2018 by Northstar
- Groundwater Monitoring Well Sampling: Performed on May 30 and December 7, 2018 by Northstar
- Lysimeter Monitoring: Performed on May 30 and December 7, 2018 by Northstar
- Neutron Probe Logging: Performed on March 28, June 19, September 26, and December 13, 2018 by Northstar
- Land Treatment Unit Sampling: Performed on December 7, 2018 by Northstar

2.0 EVAPORATION POND MONITORING

2.1 Evaporation Pond Flow Monitoring

Process water outflow to the evaporation ponds from cooling tower blow-downs, condensate pits, and the water treatment sumps as part of normal operations is summarized in **Table 1**. Total outflow for the 2018 calendar year was approximately 77,646,900 gallons (238.3 acre-feet). Daily outflow averages ranged between 32,595 to 191,570 gallons per day. Totalizer data is collected monthly (at a minimum) by Terra-Gen technicians.

2.2 Evaporation Pond Freeboard Measurement Results

The freeboard is measured from the top of the lowest part of the evaporation pond dike to the surface of the pond water. Measurements are collected weekly by Terra-Gen technicians and summarized in **Table 2**. Freeboard measurements ranged between 2.00 to 4.92 feet in SEGS VIII East, 3.17 to 5.50 feet in SEGS VIII West, and 3.42 to 5.25 feet in SEGS IX North.

2.3 Evaporation Pond Water Sample Results

A set of representative water samples is collected semiannually from each active evaporation pond. These samples are submitted to the analytical laboratory, who then composite the sets into a single sample, which is reported as EP-(date of collection as mm-dd-yy).

The first semiannual sample is analyzed for the following:

- Chloride and sulfate by EPA Method 300.0;
- Selenium by EPA Method 6010B; and,
- Total dissolved solids, total residual chlorine, and pH by general chemistry methods.

The second semiannual (annual) sample is analyzed for the following:

- 1,1'-oxybis-benzene and 1,1'-biphenyl (HTF compounds) by EPA Method 8015B;
- Chloride, nitrate, fluoride, nitrite, phosphate, and sulfate by EPA Method 300.0;
- Boron, calcium, iron, magnesium, molybdenum, potassium, selenium, sodium, and strontium by EPA Method 6010B; and,
- Total dissolved solids, total residual chlorine, and total alkalinity by general chemistry methods.

For the 2018 calendar year, these samples were collected on May 30 and December 7, 2018 and are summarized in **Table 3a and 3b**. Monitoring data field sheets for the samples are included in **Appendix B**. Certified laboratory reports are included in **Appendix C**.

2.4 Evaporation Pond Sludge Sample Results

On an annual basis, representative samples of the pond sludge are collected and analyzed for the following:

- Title 22 Metals by EPA Method 6010B;
- Mercury by EPA Method 7471A; and,
- 1,1'-oxybis-benzene and 1,1'-biphenyl (HTF compounds) by EPA Method 8015B.

In 2018, samples were collected from each pond on December 7 and results are summarized in **Table 4**. Certified laboratory reports are included in **Appendix C**.

2.5 Effluent Water Sample Results

On an annual basis, a composite effluent water sample is collected from the wastewater stream prior to discharge into the evaporation ponds. This sample is reported as EM-(date of collection as mm-dd-yy).The source for this water includes the cooling tower blow-downs, condensate pits, and the water treatment sumps. The sample is analyzed for the following:

- Chloride and sulfate by EPA Method 300.0; and,
- Total dissolved solids by general chemistry methods.

In 2018, the sample was collected on December 7 and results are summarized in **Table 5**. Certified laboratory reports are included in **Appendix C**.

2.6 Cooling Tower Additive Summary

An annual inventory of all chemical additives introduced to the cooling system is required as part of the effluent monitoring program. The 2018 inventory is summarized in **Table 6** and includes the name and function of each additive, as well as the volume added to each active cooling tower.

2.7 Lysimeter Probe Monitoring Results

The lysimeter probes were monitored on May 30 and December 7, 2018. All probes were dry upon inspection. Field data sheets are included in **Appendix B**. Refer to **Figure 2** for approximate locations of lysimeter probes.

2.8 Neutron Probe Results

A neutron probe is used to measure soil moisture quarterly beneath the SEGS IX North pond (horizontally) and between the SEGS VIII East/West and SEGS IX North ponds (vertically). Refer to **Figure 2** for approximate locations of neutron probe wells. The MRP defines an action level of 30% moisture by volume as the criteria for verification and further testing. Data and calibration notes for the 2018 calendar year is summarized in **Table 7**. The neutron probe data does not indicate any signs of release in the 2018 calendar year.

3.0 GROUNDWATER MONITORING

3.1 Groundwater Sample Results

A series of groundwater monitoring wells are sampled semiannually to detect potential releases from the waste impoundments onsite. Groundwater monitoring wells MW-7 and MW-10 were monitored and sampled on May 30 and December 7, 2018. Groundwater monitoring wells MW-2, -4, -8, -9, and -11 were not sampled in 2018 because they were dry.

The first semiannual samples are analyzed for the following:

- Chloride and sulfate by EPA Method 300.0;
- Specific conductance, total dissolved solids, and pH by general chemistry methods; and,
- Temperature and depth to water by field measurement.

The second semiannual (annual) samples are analyzed for the following:

- 1,1'-oxybis-benzene and 1,1'-biphenyl (HTF compounds) by EPA Method 8015B;
- Chloride, nitrate, fluoride, nitrite, phosphate, and sulfate by EPA Method 300.0;

- Boron, calcium, iron, magnesium, molybdenum, potassium, selenium, sodium, and strontium by EPA Method 6010B;
- Total dissolved solids, specific conductance, temperature, pH, and total alkalinity by general chemistry methods; and,
- Temperature and depth to water by field measurement.

The analytical results of the first and second semiannual events are summarized in **Tables 8a and 8b**. The results of the 2018 annual sample results are displayed graphically in **Charts 1a and 1b** (MW-7) and **Charts 2a and 2b** (MW-10). Field data sheets are included in **Appendix B**. Certified laboratory reports are included in **Appendix C**. Refer to **Figure 2** for approximate monitoring well locations and **Figure 3 and 4** for the first and second semiannual groundwater elevations.

A duplicate sample is collected semiannually from one of the groundwater monitoring wells. This sample was collected from well MW-7 in both the first and second semiannual events of 2018. The duplicate samples were analyzed for the same constituents listed above, and reported as DUP-(date of collection as mm-dd-yy). Results are summarized in **Tables 8a and 8b** and certified laboratory reports are included in **Appendix C**.

3.2 Statistical Analysis

Statistical analysis is required by the RWQCB to further evaluate groundwater analytical data for signs of leakage from the evaporation ponds. An intra-well statistical analysis is utilized by performing the analysis on each active monitoring well, and by using all historical analytical data. This method calculates an Upper Tolerance Limit (UTL) for each analyte based upon the normal variance of the data for each well, such that an exceedance of the UTL may tentatively indicate a release.

The statistical analysis has only been applied to groundwater monitoring wells MW-7 and MW-10, as they have an unbroken history of data collection, and are currently the only monitoring wells that have not gone dry. A summary of calculations used in the statistical analysis is included in **Appendix A**. The statistical analysis did not indicate any signs of release during the 2018 calendar year.

3.3 Groundwater Elevation

Depth to groundwater readings were collected most recently on December 7, 2018. Corresponding elevations ranged from 2,005.01 to 2,007.78 feet above mean sea level (amsl) in wells MW-7 and MW-10. Wells MW-2, -4, -8, -9, and -11 were dry. The current groundwater gradient direction may range from north to northeast, but is difficult to assess without a third data point. Historically, the groundwater gradient was to the northeast, as shown on **Figure 3 and 4**. Groundwater velocity is unknown without a third data point.

4.0 LAND TREATMENT UNIT MONITORING

The land treatment unit (LTU or Landfarm) was constructed to provide onsite treatment of soils impacted by the heat transfer fluid (HTF) Therminol VP-1 at low to moderate concentrations of less than 10,000 milligrams per kilogram (mg/kg) using bioremediation. Currently, the LTU relies on monitored natural attenuation for treatment. A layout schematic of the LTU is included in **Figure 4**.

The LTU was approved by the RWQCB and was included as part of Board Order No. 6-98-74. In accordance with the MRP, the soil beneath the LTU is sampled on an annual basis to verify that HTF and soil treatment nutrients (if used) have not migrated beyond the five-foot "vertical treatment" zone. Nitrate as nitrogen and phosphorus are constituents in fertilizers used to enhance treatment and are also analyzed in soil samples collected from beneath the land treatment unit. The MRP also requires soil samples to be composited from every batch of treated soil prior to its removal from the LTU.

4.1 Heat Transfer Fluid Spill Summary

No spills of heat transfer fluid in excess of 25 gallons occurred during the 2018 calendar year at the SEGS VIII or SEGS IX facility.

4.2 Land Treatment Unit Sampling Methodology

The LTU consists of the main land treatment unit and a smaller auxiliary treatment unit. The main land treatment unit is divided into eight equal subdivisions (LTU-1 through LTU-8) using markers located around the perimeter (**Figure 5**). The auxiliary land treatment unit is divided into two equal subdivisions (LTU-9 and LTU-10) as above. Composite soil samples are collected from a depth of one foot inside three randomly selected units, and one from the auxiliary units. Samples are collected and composited in accordance with the EPA guidance document "Test Methods for Evaluating Solid Waste" (SW-846).

It has been statistically demonstrated and approved by the RWQCB that a set of three to five random samples within the LTU will yield an 87.5 to 96.9 percent confidence that the highest concentration is greater than the median concentration. The four soil samples collected (three in the main unit and one in the auxiliary unit) therefore provide a statistically representative sampling of the LTU.

4.3 Land Treatment Unit Sample Results

No soil was removed from the LTU during this reporting period, and therefore no samples were collected from the soil stockpiles.

The annual soil sampling beneath the LTU was performed on December 7, 2018 and summarized in **Table 9**. Soil samples were analyzed for the following:

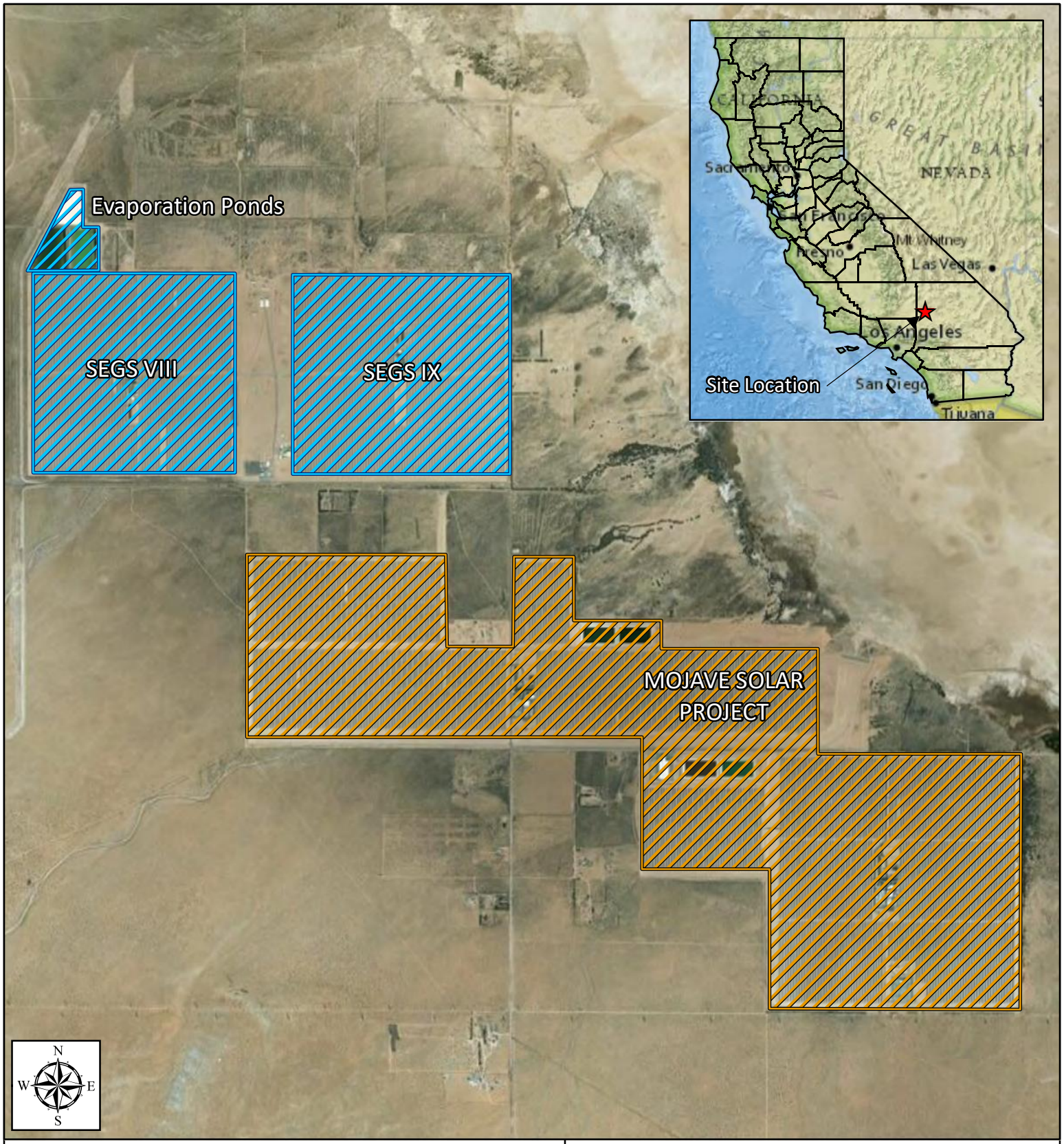
- 1,1'-oxybis-benzene and 1,1'-biphenyl (HTF compounds) by EPA Method 8015B;
- Nitrate as nitrogen by EPA Method 300.0; and,
- Phosphorus by EPA Method 6010B.

For 2018, the LTU units randomly chosen for annual sampling were LTU #1, 4, 6, and auxiliary 9. HTF constituents were not detected in any of the samples. Nitrate (as nitrogen) was detected at concentrations from 1.1 to 6.2 mg/kg. Phosphorus was detected at concentrations from 190 to 350 mg/kg. LTU locations are shown in **Figure 5**.

5.0 FINANCIAL ASSURANCE

Letters of financial assurance from Bank of America to the California Regional Water Quality Control Board – Lahontan Region are included in **Appendix D**.

FIGURES



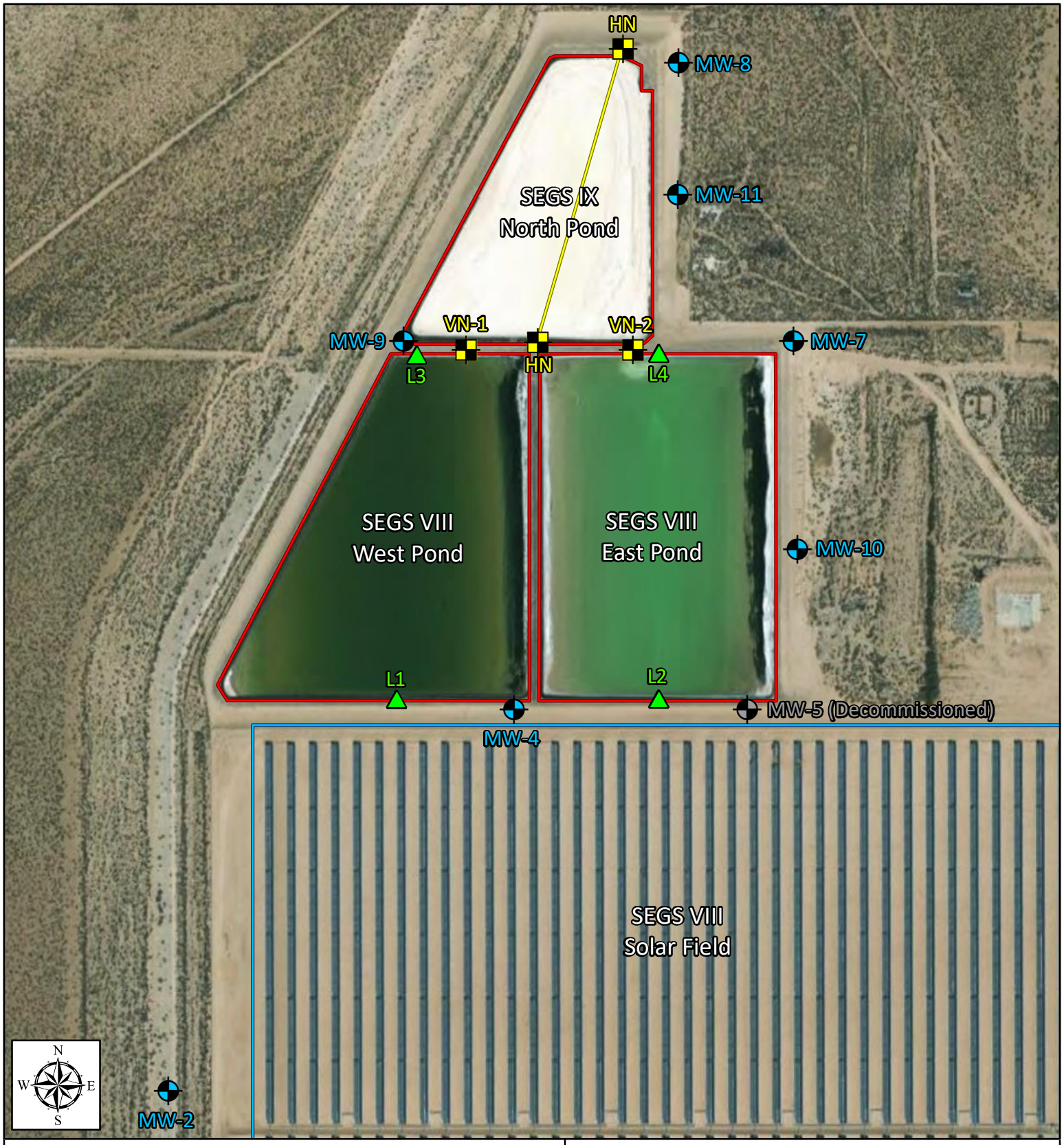
Legend

- SEGS VIII-IX Harper Lake Facility
- Mojave Solar Project

SEGS VIII - IX Harper Lake
Hinkley, California

Figure 1
Site Location
and Vicinity Map

NORTHSTAR	Scale: 1:40,000	Date: 21 Jun 2018
	Drawn By: AWB	Checked By: AWB



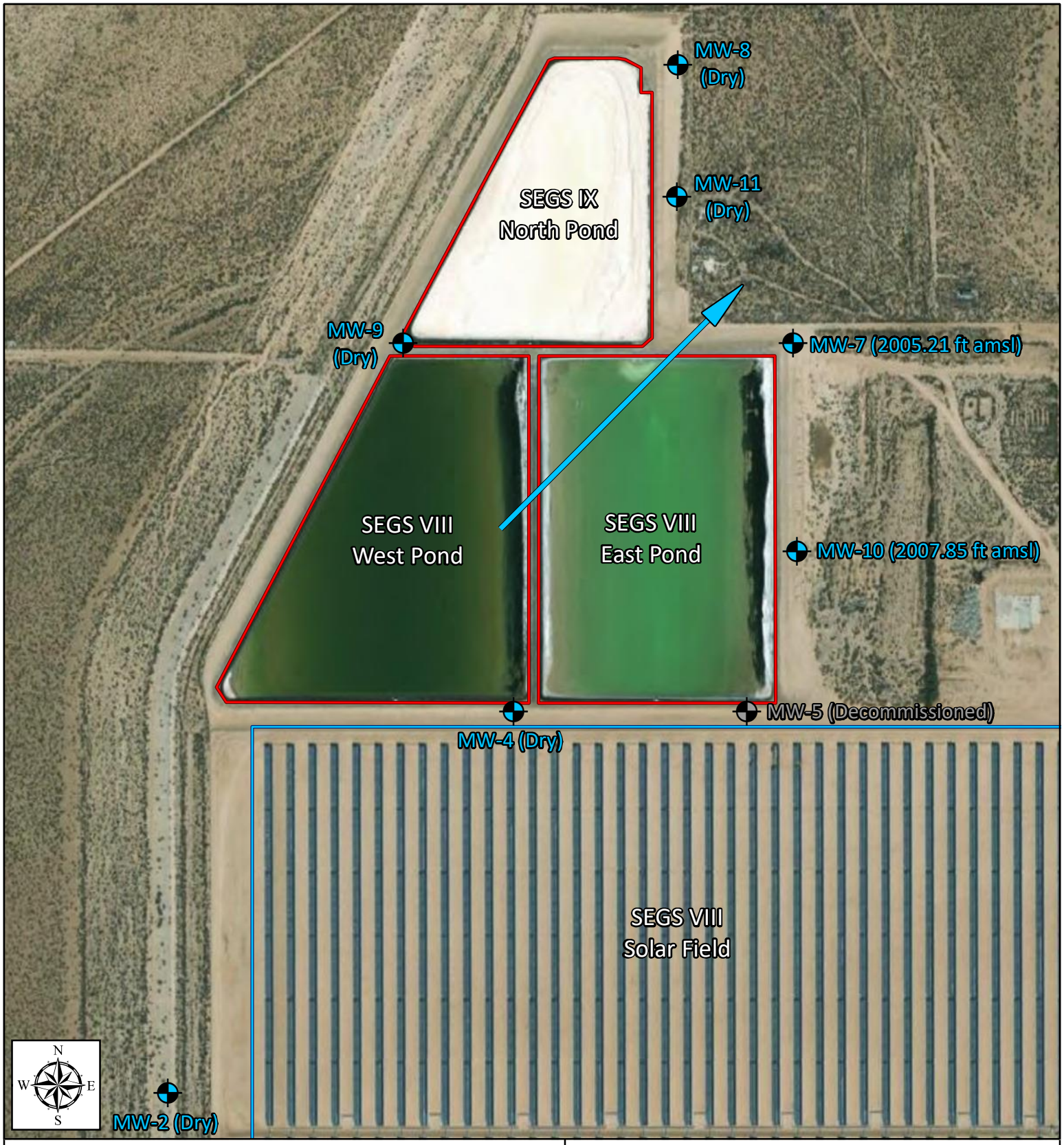
Legend

- Neutron Probe Wells
- Groundwater Monitoring Wells
- Lysimeter Probe Locations
- Evaporation Ponds
- SEGS VIII Solar Field

SEGS VIII - IX Harper Lake
Hinkley, California

Figure 2
Evaporation Pond
Monitoring Network

NORTHSTAR ENVIRONMENTAL INCORPORATED	Scale: 1:5,000	Date: 21 Jun 2018
	Drawn By: AWB	Checked By: AWB



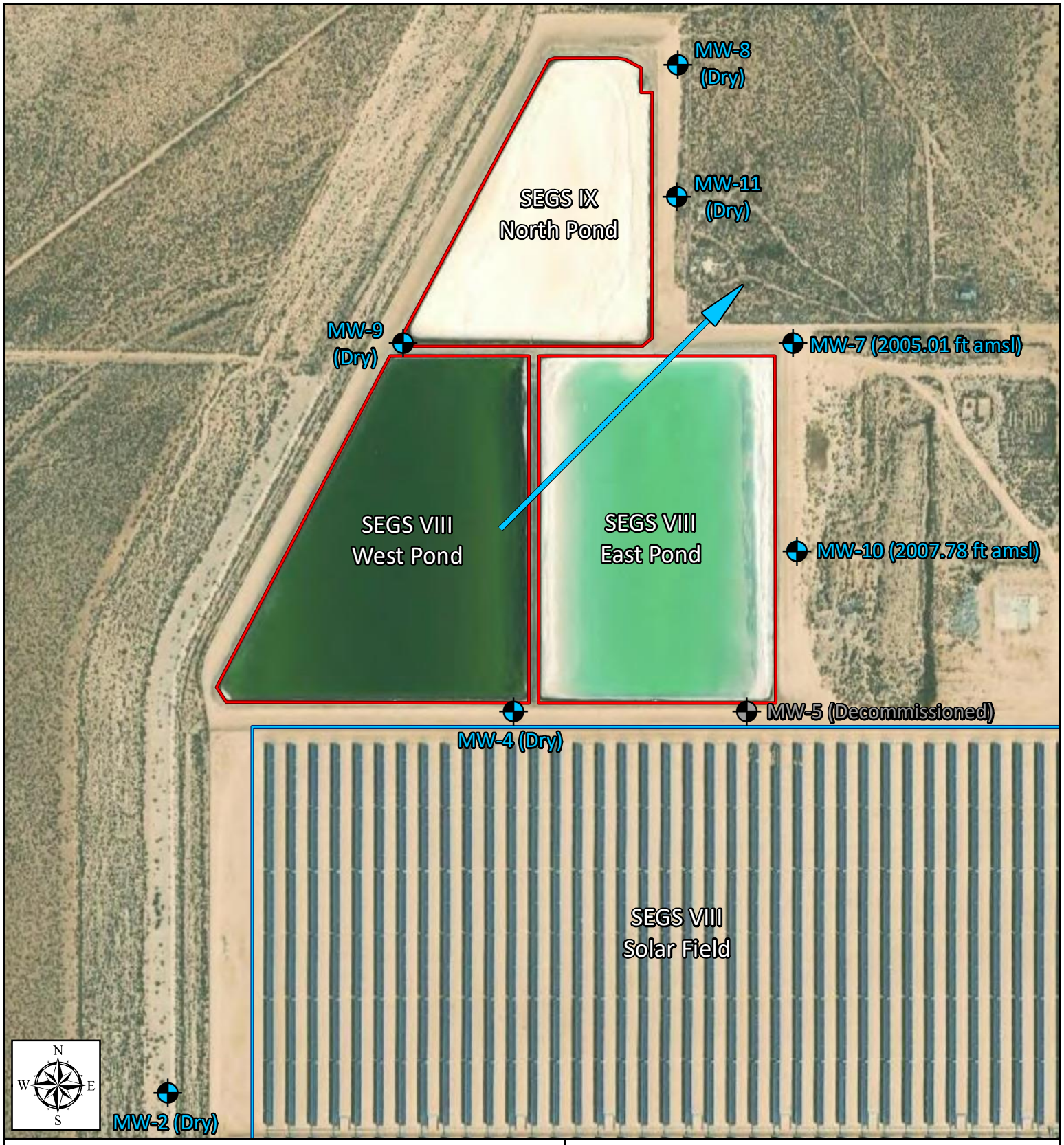
Legend

- Groundwater Monitoring Wells
- Historical Gradient Direction
- Evaporation Ponds
- SEGS VIII Solar Field

SEGS VIII - IX Harper Lake
Hinkley, California

Figure 3
Groundwater Elevations
May 30, 2018

NORTHSTAR ENVIRONMENTAL INCORPORATED	Scale: 1:5,000	Date: 21 Jun 2018
	Drawn By: AWB	Checked By: AWB



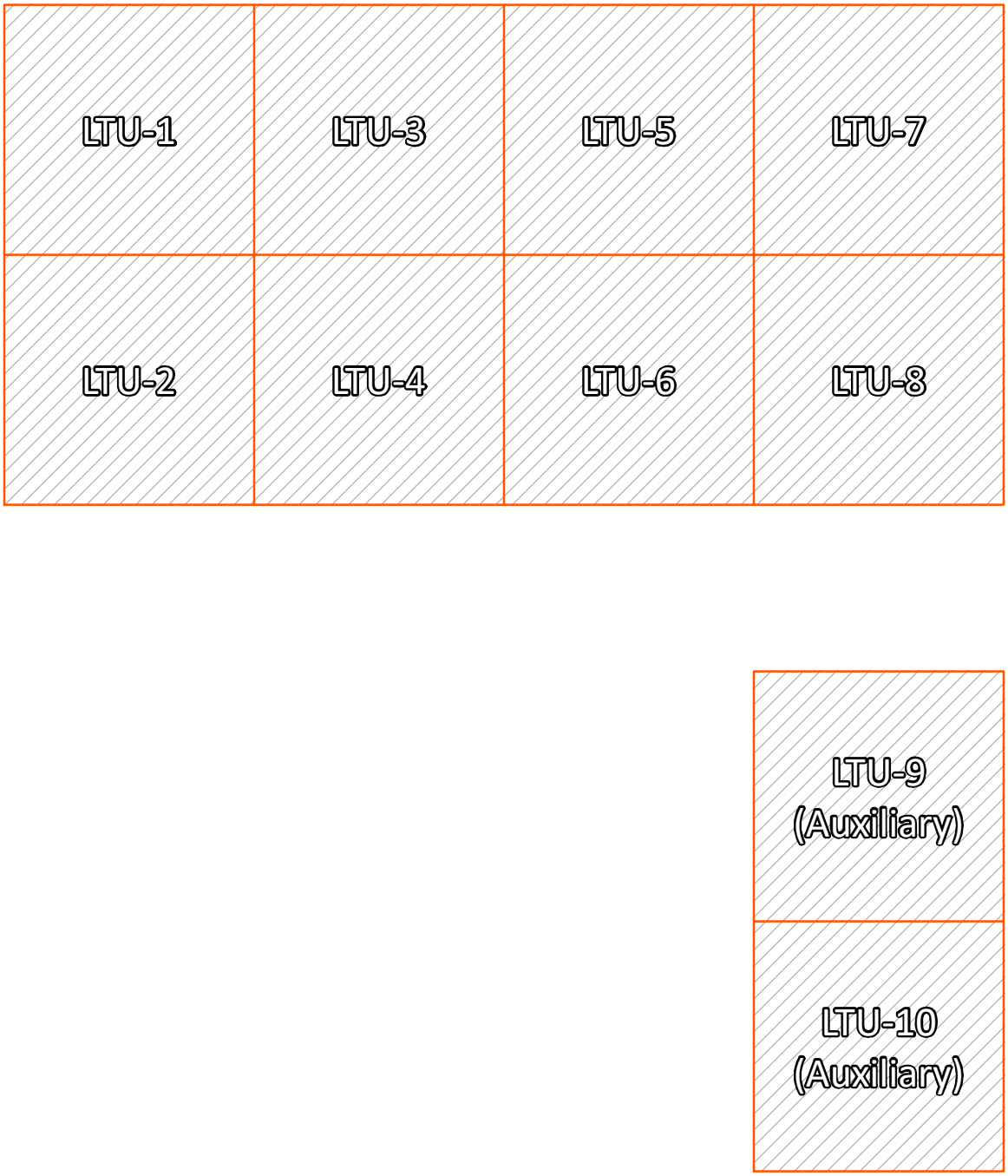
Legend

- Groundwater Monitoring Wells
- Historical Gradient Direction
- Evaporation Ponds
- SEGS VIII Solar Field

SEGS VIII - IX Harper Lake
Hinkley, California

Figure 4
Groundwater Elevations
December 7, 2018

NORTHSTAR ENVIRONMENTAL INCORPORATED	Scale: 1:5,000	Date: 8 Jan 2019
	Drawn By: AWB	Checked By: AWB



Legend

Land Treatment Unit

SEGS VIII - IX Harper Lake
Hinkley, California

Figure 5
Land Treatment Unit
Layout Schematic

	Scale: NTS	Date: 8 Jan 2019
	Drawn By: AWB	Checked By: AWB

TABLES

Table 1
2018 Annual Evaporation Pond Flow Monitoring Summary

Month	SEGS VIII CTBD (gallons)	SEGS IX CTBD (gallons)	SEGS VIII Cond. Pit (gallons)	SEGS IX Cond. Pit (gallons)	SEGS VIII WT Sump (gallons)	SEGS IX WT Sump (gallons)	Monthly Total (gallons)	Average (gal/day)
JAN	193,000	223,000	85,580	650,090	0	193,170	1,344,840	43,382
FEB	204,000	322,000	187,690	262,810	0	526,970	1,503,470	53,695
MAR	1,058,000	917,000	201,960	297,250	0	501,990	2,976,200	96,006
APR	1,186,000	763,000	162,720	209,860	0	571,770	2,893,350	96,445
MAY	1,092,000	1,331,000	329,530	237,090	0	1,255,010	4,244,630	136,924
JUN	1,647,000	1,806,000	466,210	311,860	0	1,516,030	5,747,100	191,570
JUL	1,513,000	1,420,000	543,980	287,310	0	1,302,550	5,066,840	163,446
AUG	1,485,000	1,485,000	267,420	266,880	0	1,541,020	5,045,320	162,752
SEP	1,451,000	1,519,000	218,880	310,870	0	1,419,130	4,918,880	163,963
OCT	529,000	577,000	253,480	215,290	0	1,223,980	2,798,750	90,282
NOV	151,000	233,000	128,000	76,970	0	684,640	1,273,610	42,454
DEC	52,000	123,000	117,650	117,830	0	599,980	1,010,460	32,595
Total	10,561,000	10,719,000	2,963,100	3,244,110	0	11,336,240	38,823,450	
Grand Total, All Sources: 77,646,900 gallons (238.3 acre-feet)								

Notes:

CTBD = Cooling Tower Blow-Down

Cond. Pit = Condensate Pit

WT Sump = Water Treatment Sump

Table 2
2018 Annual Freeboard Measurements

Date	SEGS VIII East	SEGS VIII West	SEGS IX North
1/7/2018	2.92	5.50	3.42
1/14/2018	3.00	5.25	3.42
1/21/2018	3.08	5.25	3.42
1/28/2018	2.67	5.25	3.50
2/4/2018	2.58	5.25	3.50
2/11/2018	2.50	5.33	3.50
2/18/2018	2.50	5.33	3.58
2/25/2018	2.67	5.50	3.50
3/4/2018	2.33	5.42	3.75
3/11/2018	2.17	5.50	3.75
3/18/2018	2.17	5.50	3.67
3/25/2018	2.00	5.42	3.75
4/1/2018	2.08	5.08	3.92
4/8/2018	2.25	5.08	4.00
4/15/2018	2.50	5.17	4.00
4/22/2018	2.58	5.08	4.00
4/29/2018	2.50	4.92	4.08
5/6/2018	2.83	4.58	4.42
5/13/2018	3.08	4.67	4.50
5/20/2018	3.17	4.50	4.50
5/27/2018	3.25	4.42	4.50
6/3/2018	3.50	4.42	4.50
6/10/2018	3.42	4.00	4.75
6/17/2018	3.58	3.92	4.83
6/24/2018	3.67	3.83	4.83
7/1/2018	4.00	3.67	4.83
7/8/2018	4.17	3.50	5.00
7/15/2018	4.50	3.42	5.00
7/22/2018	4.58	3.17	4.83
7/29/2018	4.92	3.17	5.00
8/5/2018	4.33	3.33	4.50
8/12/2018	4.00	3.50	4.67
8/19/2018	4.00	3.67	4.67
8/26/2018	3.75	3.83	4.83
9/2/2018	3.58	4.00	5.00
9/9/2018	3.33	4.17	4.83
9/16/2018	3.17	4.42	4.75
9/23/2018	2.92	4.50	4.75
9/30/2018	2.58	4.67	4.42
10/7/2018	2.50	4.75	4.42
10/14/2018	2.67	4.83	4.75
10/21/2018	2.33	4.92	5.00

Table 2
2018 Annual Freeboard Measurements

Date	SEGS VIII East	SEGS VIII West	SEGS IX North
10/28/2018	2.17	5.00	5.00
11/4/2018	2.17	5.00	5.00
11/11/2018	2.25	4.92	5.00
11/18/2018	2.33	4.75	5.00
11/25/2018	2.25	4.75	5.25
12/2/2018	2.33	4.67	5.25
12/9/2018	2.42	4.33	5.00
12/16/2018	2.42	4.58	5.00
12/23/2018	2.50	4.42	5.00
12/30/2018	2.50	4.42	5.00

Note: Measurements are in feet of freeboard

Table 3a

2018 First Semiannual Evaporation Pond Composite Water Sample Results

Analyte	EPA Method	Units	Reporting Limit	Analytical Result
Chloride	300.0	mg/L	20,000	140,000
Chlorine (residual)	SM4500-C1G	mg/L	0.10	ND
Sulfate	300.0	mg/L	1,000	19,000
Selenium	6010B	mg/L	0.10	ND
Total Dissolved Solids	SM2540C	mg/L	5,000	290,000
pH	SM4500-H,B	Standard Units	0.1	8.1
Temperature	Gen. Chemistry	Degrees Celsius	1.0	25.6
Specific Conductance	SM2510B	µmhos/cm	1.0	>20,000

Notes: First semiannual sample collected on May 30, 2018; composited as sample ID EP-5-30-18

Table 3b

2018 Second Semiannual Evaporation Pond Composite Water Sample Results

Analyte	EPA Method	Units	Reporting Limit	Analytical Result
1,1'-Biphenyl	8015B	mg/L	0.10	ND
1,1'-Oxybisbenzene	8015B	mg/L	0.10	ND
Boron	6010B	mg/L	0.50	79
Calcium	6010B	mg/L	1.0	340
Iron	6010B	mg/L	1.0	ND
Magnesium	6010B	mg/L	0.20	480
Molybdenum	6010B	mg/L	0.20	1.3
Potassium	6010B	mg/L	5.0	880
Selenium	6010B	mg/L	0.10	0.13
Sodium	6010B	mg/L	50	43,000
Strontium	6010B	mg/L	0.20	9.3
Alkalinity as CaCO3	SM2320B	mg/L	4.0	220
Chloride	300.0	mg/L	10,000	70,000
Fluoride	300.0	mg/L	50	ND
Nitrate as N	300.0	mg/L	11	32
Nitrite as N	300.0	mg/L	15	ND
Phosphate	300.0	mg/L	50	ND
Sulfate	300.0	mg/L	1,000	14,000
Total Dissolved Solids	SM2540C	mg/L	2,000	150,000
Chlorine (residual)	SM4500-C1G	mg/L	0.10	ND
pH	SM4500-H,B	Standard Units	0.1	7.9
Temperature	Gen. Chemistry	Degrees Celsius	1.0	22.2
Specific Conductance	SM2510B	µmhos/cm	1.0	7,600

Notes: Second semiannual sample collected on December 7, 2018; composited as sample ID EP-12-7-18

mg/L = milligrams per liter

µmhos/cm = micro mhos per centimeter

N/A = Not Applicable

ND = Not Detected at or above the reporting limit

Table 4
2018 Annual Evaporation Pond Sludge Sample Results

				Analytical Results		
Analyte	EPA Method	Units	Reporting Limits	EP-8E	EP-8W	EP-9N*
1,1'-Biphenyl	8015B	mg/kg	4.9 - 5.0	ND	ND	ND
1,1'-Oxybisbenzene	8015B	mg/kg	4.9 - 5.0	ND	ND	ND
Antimony	6010B	mg/kg	10 - 20	ND	ND	ND
Arsenic	6010B	mg/kg	3.0 - 6.0	ND	7.8	6.3
Barium	6010B	mg/kg	1.5 - 3.0	17	46	38
Beryllium	6010B	mg/kg	0.50 - 1.0	ND	ND	ND
Cadmium	6010B	mg/kg	0.50 - 1.0	ND	ND	ND
Chromium	6010B	mg/kg	1.0 - 2.0	1.1	ND	ND
Cobalt	6010B	mg/kg	1.0 - 2.0	ND	ND	ND
Copper	6010B	mg/kg	2.0 - 4.0	2.3	ND	ND
Lead	6010B	mg/kg	2.0 - 4.0	ND	ND	ND
Molybdenum	6010B	mg/kg	2.0 - 4.0	ND	ND	ND
Nickel	6010B	mg/kg	2.0 - 4.0	ND	ND	ND
Selenium	6010B	mg/kg	3.0 - 6.0	ND	ND	ND
Silver	6010B	mg/kg	1.5 - 3.0	ND	ND	ND
Thallium	6010B	mg/kg	10 - 20	ND	ND	ND
Vanadium	6010B	mg/kg	1.0 - 2.0	2.7	3.0	2.3
Zinc	6010B	mg/kg	5.0 - 10	6.9	ND	ND
Mercury	7471A	mg/kg	0.020	ND	ND	ND

Notes: Samples collected on December 7, 2018

* Reported as EP-9W-12-7-18 in laboratory report

mg/kg = milligrams per kilogram

ND = Not Detected at or above the reporting limit

Table 5
2018 Annual Effluent Water Sample Results

Analyte	EPA Method	Units	Reporting Limit	Analytical Result
Chloride	300.0	mg/L	1,000	11,000
Sulfate	300.0	mg/L	1,000	3,700
Total Dissolved Solids	SM2540C	mg/L	1,000	25,000

Notes: Sample collected on December 7, 2018 as sample ID EM-12-7-18

mg/L = milligrams per liter

The source of effluent to the evaporation ponds is from the water treatment plant, cooling tower blow-down, and from the power blocks.

Table 6
2018 Annual Cooling Tower Additive Summary

Additive	Purpose	Unit	SEGS VIII Cooling Tower	SEGS IX Cooling Tower
Sodium Hypochlorite	Microbiocide	gallons	7,307	7,307
Sulfuric Acid	Antiscalant, pH Balance	gallons	1,506	1,506
Gengard (GN8209)	Antiscalant, Corrosion Control	pounds	2,840	2,840

Table 7
2018 Annual Neutron Probe Monitoring Results

Probe Orientation	Distance in Feet from Point of Entry	Percent Moisture by Volume			
		1st Quarter Mar 28, 2018	2nd Quarter Jun 19, 2018	3rd Quarter Sep 26, 2018	4th Quarter Dec 13, 2018
Horizontal	25	12.59	13.32	13.17	12.75
Horizontal	50	14.52	14.19	14.61	14.72
Horizontal	75	13.90	13.93	14.19	14.19
Horizontal	175	9.24	10.61	12.39	9.17
Horizontal	275	10.36	10.50	10.30	10.58
Horizontal	300	9.45	9.58	10.97	9.43
Horizontal	375	9.61	9.82	10.39	10.47
Horizontal	450	7.72	7.68	7.81	8.55
Horizontal	475	10.46	10.60	10.71	10.77
Horizontal	575	7.83	8.09	8.12	7.73
Horizontal	675	9.85	10.31	10.35	10.02
Horizontal	700	9.75	9.88	9.95	9.98
Horizontal	725	12.04	12.68	12.76	12.66
Vertical (VN-1)	5	3.89	3.78	3.88	3.89
Vertical (VN-1)	10	2.91	2.84	2.82	2.98
Vertical (VN-1)	15	2.31	2.46	1.46	2.39
Vertical (VN-1)	20	1.54	1.41	2.56	1.45
Vertical (VN-1)	25	2.51	2.26	3.93	2.32
Vertical (VN-2)	5	2.87	2.88	3.03	3.16
Vertical (VN-2)	10	2.96	3.16	3.12	2.69
Vertical (VN-2)	15	2.49	2.46	2.76	2.59
Vertical (VN-2)	20	1.36	1.41	1.52	1.81
Vertical (VN-2)	25	2.48	2.40	2.30	2.66

Note: Data collected using a CPN Model 503 DR Hydro-Probe™ Neutron Moisture Gauge

Serial # H30019304

Horizontal Calibration stored in memory #1 w/ count time of 32 secs.

Vertical Calibration stored in memory #5 w/ count timeof 16 secs.

Table 8a
2018 First Semiannual Groundwater Monitoring Well Sample Results

Analyte	EPA Method	Units	Reporting Limit	MW-7	MW-10	DUP
Chloride	300.0	mg/L	100-250	1,800	1,400	1,900
Sulfate	300.0	mg/L	100-250	890	680	920
Total Dissolved Solids	SM2540C	mg/L	100	5,200	3,800	5,200
pH	SM4500-H,B	Standard Units	0.1	8.1	8.3	8.0
Specific Conductance	SM2510B	µmhos/cm	1.0	8,500	6,600	8,500
Temperature	Field Parameter	Degrees Celsius	N/A	23.0	25.1	23.0
Static Water Level	Field Parameter	Feet btoc	N/A	2,005.21	2,007.85	2,005.21

Notes: Samples collected on May 30, 2018
DUP = Duplicate sample of MW-7

Table 8b
2018 Second Semiannual Groundwater Monitoring Well Sample Results

Analyte	EPA Method	Units	Reporting Limit	MW-7	MW-10	DUP
1,1'-Biphenyl	8015B	mg/L	0.095 - 0.096	ND	ND	ND
1,1'-Oxybisbenzene	8015B	mg/L	0.095 - 0.096	ND	ND	ND
Boron	6010B	mg/L	0.050	5.9	4.7	6.0
Calcium	6010B	mg/L	0.10	160	32	160
Iron	6010B	mg/L	0.10	ND	ND	ND
Magnesium	6010B	mg/L	0.020	47	12	48
Molybdenum	6010B	mg/L	0.020	ND	ND	ND
Potassium	6010B	mg/L	0.50	5.8	3.6	6.4
Selenium	6010B	mg/L	0.010	0.021	0.022	0.021
Sodium	6010B	mg/L	5.0	1,400	1,100	1,400
Strontium	6010B	mg/L	0.020	6.1	1.9	6.1
Alkalinity as CaCO3	SM2320B	mg/L	4.0	370	330	370
Chloride	300.0	mg/L	250	1,800	1,200	1,800
Fluoride	300.0	mg/L	10	ND	ND	ND
Nitrate as N	300.0	mg/L	2.2	20	18	19
Nitrite as N	300.0	mg/L	3.0	ND	ND	ND
Phosphate	300.0	mg/L	10	ND	ND	ND
Sulfate	300.0	mg/L	250	910	590	920
Total Dissolved Solids	SM2540C	mg/L	100	5,100	3,500	5,400
pH	SM4500-H,B	Standard Units	0.1	8.0	8.2	7.9
Specific Conductance	SM2510B	µmhos/cm	1.0	7,300	5,500	7,600
Temperature	Field Parameter	Degrees Celsius	N/A	20.4	24.4	20.4
Static Water Level	Field Parameter	Feet btoc	N/A	2,005.01	2,007.78	2,005.01

Notes: Samples collected on December 7, 2018
mg/L = milligrams per liter
µmhos/cm = micro mhos per centimeter
btoc = below top of casing
N/A = Not Applicable
DUP = Duplicate sample of MW-7

Table 9
2018 Annual Land Treatment Unit Sample Results

Analyte	EPA Method	Units	Reporting Limit	LTU-1	LTU-4	LTU-6	LTU-9 (aux)
1,1'-Biphenyl	8015B	mg/kg	4.9 - 5.0	ND	ND	ND	ND
1,1'-Oxybis-benzene	8015B	mg/kg	4.9 - 5.0	ND	ND	ND	ND
Nitrate as Nitrogen	300.0	mg/kg	1.1	4.1	6.2	1.1	1.5
Phosphorus	6010B	mg/kg	4.9 - 5.0	270	190	220	350

Notes: Samples collected on December 7, 2018

mg/kg = milligrams per kilogram

CHARTS

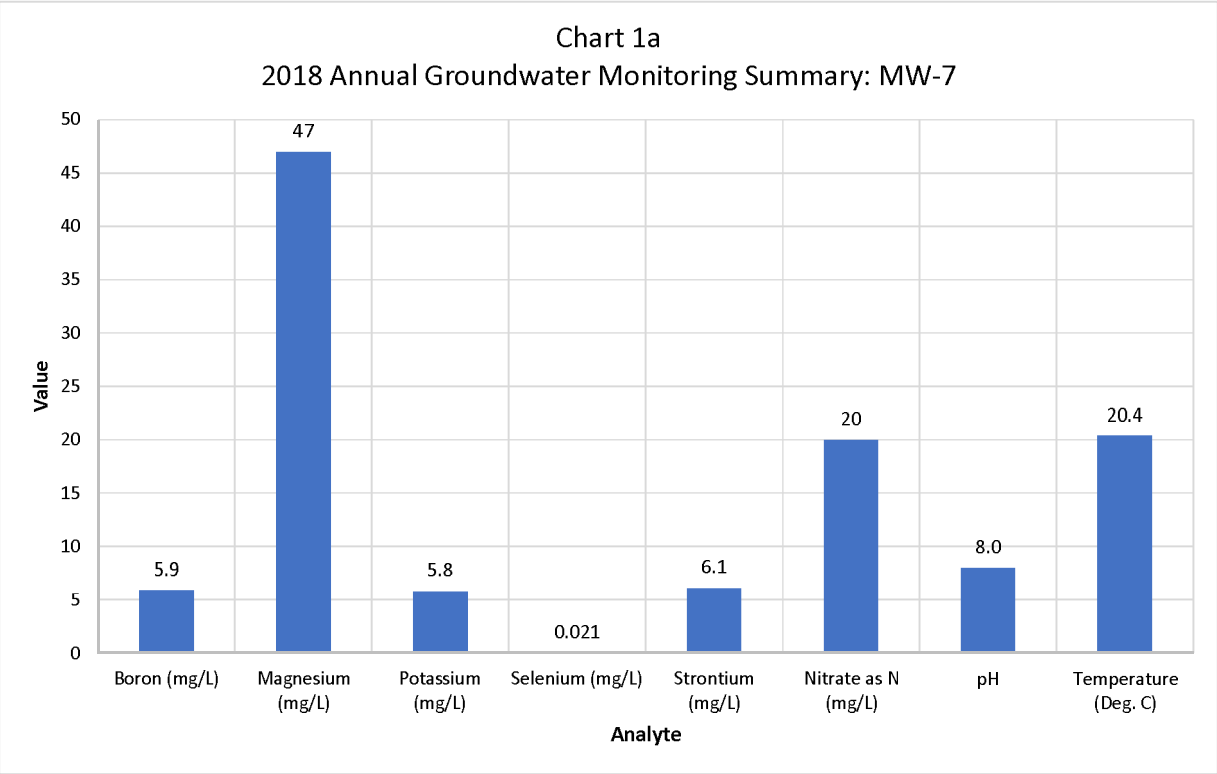


Chart 1a
2018 Annual Groundwater Monitoring Summary: MW-7
Value
50
45
40
35
30
25
20
15
10
5
0
5.9
47
5.8
0.021
6.1
20
8.0
20.4
Boron (mg/L)
Magnesium (mg/L)
Potassium (mg/L)
Selenium (mg/L)
Strontium (mg/L)
Nitrate as N (mg/L)
pH
Temperature (Deg. C)
Analyte

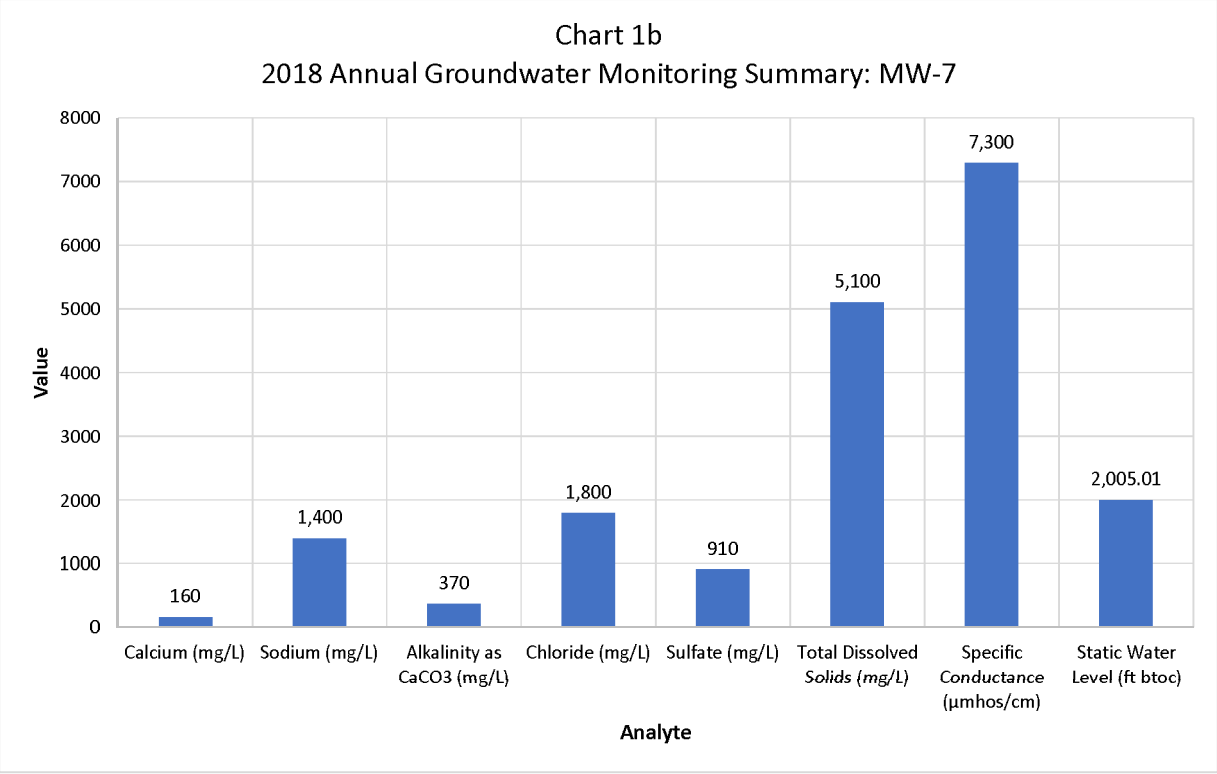


Chart 1b
2018 Annual Groundwater Monitoring Summary: MW-7
Value
8000
7000
6000
5000
4000
3000
2000
1000
0
160
1,400
370
1,800
910
5,100
7,300
2,005.01
Calcium (mg/L)
Sodium (mg/L)
Alkalinity as CaCO3 (mg/L)
Chloride (mg/L)
Sulfate (mg/L)
Total Dissolved Solids (mg/L)
Specific Conductance (µmhos/cm)
Static Water Level (ft btoc)
Analyte

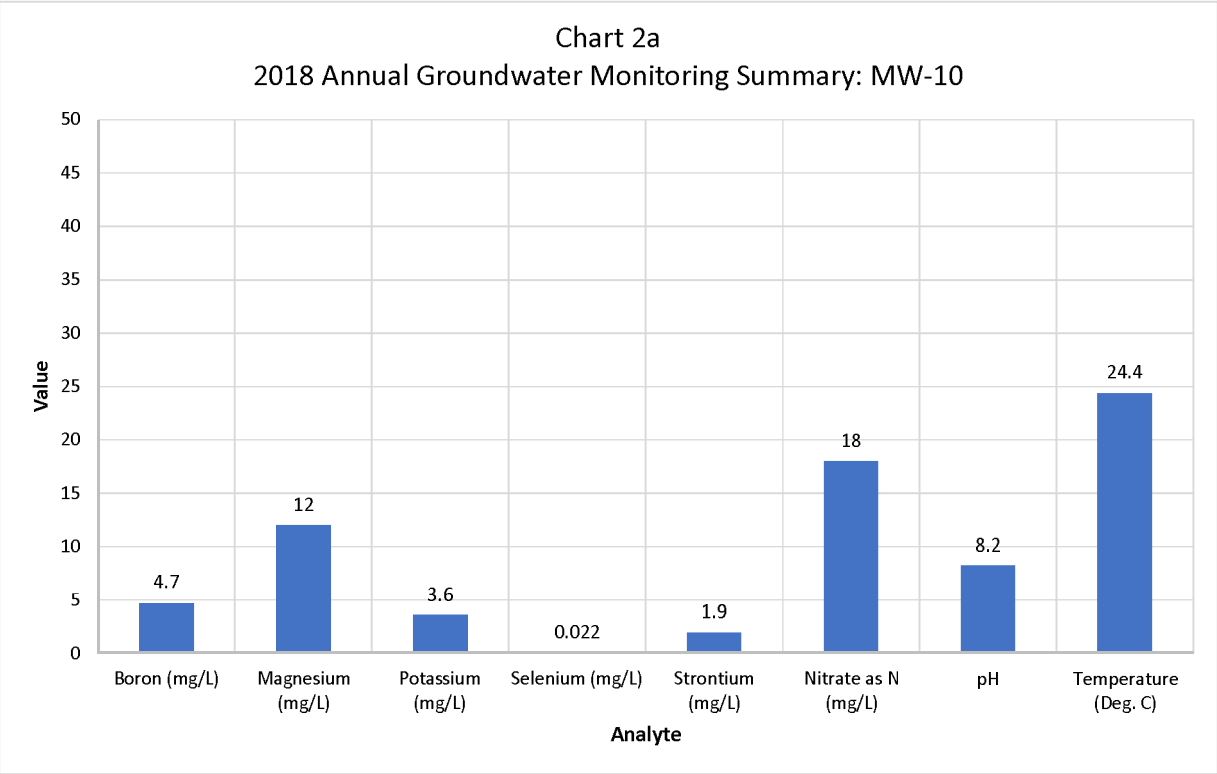


Chart 2a
2018 Annual Groundwater Monitoring Summary: MW-10
Value
50
45
40
35
30
25
20
15
10
5
0
4.7
12
3.6
0.022
1.9
18
8.2
24.4
Boron (mg/L)
Magnesium (mg/L)
Potassium (mg/L)
Selenium (mg/L)
Strontium (mg/L)
Nitrate as N (mg/L)
pH
Temperature (Deg. C)
Analyte

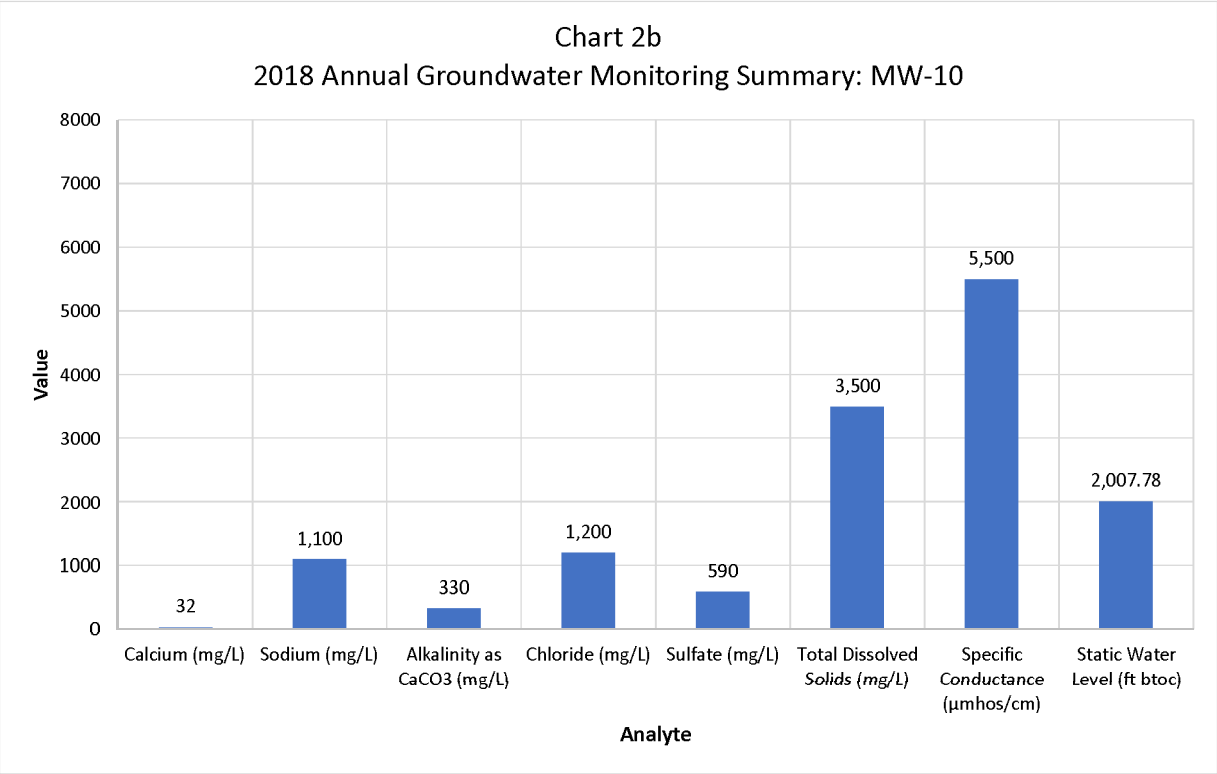


Chart 2b
2018 Annual Groundwater Monitoring Summary: MW-10
Value
8000
7000
6000
5000
4000
3000
2000
1000
0
32
1,100
330
1,200
590
3,500
5,500
2,007.78
Calcium (mg/L)
Sodium (mg/L)
Alkalinity as CaCO3 (mg/L)
Chloride (mg/L)
Sulfate (mg/L)
Total Dissolved Solids (mg/L)
Specific Conductance (µmhos/cm)
Static Water Level (ft btoc)
Analyte

APPENDIX A

UPPER TOLERANCE LIMIT STATISTICAL CALCULATIONS

Appendix A
2018 Second Semiannual Statistical Calculations for MW-7

	Total Dissolved Solids		Sulfate		Chloride	
Sampling Event	Analytical Result (mg/L)	Squared Difference from Mean	Analytical Result (mg/L)	Squared Difference from Mean	Analytical Result (mg/L)	Squared Difference from Mean
1991 Q1	4,500	792,351	1,400	181,164	1,900	71,613
1991 Q2	5,600	44,041	980	32	2,600	186,965
1991 Q3	6,700	1,715,731	860	13,080	2,200	1,049
1991 Q4	4,700	476,294	800	30,404	2,700	283,444
1992 Q2	5,600	44,041	830	20,842	3,000	692,880
1992 Q3	5,400	97	1,000	657	3,400	1,518,796
1992 Q4	5,300	8,125	780	37,778	2,600	186,965
1993 Q1	5,600	44,041	810	27,016	1,900	71,613
1993 Q2	5,600	44,041	830	20,842	3,000	692,880
1993 Q3	5,600	44,041	920	2,956	2,300	17,528
1993 Q4	5,400	97	810	27,016	2,300	17,528
1994 Q1	5,500	12,069	840	18,054	2,500	110,486
1994 Q2	5,500	12,069	880	8,905	2,100	4,571
1994 Q3	5,100	84,182	830	20,842	2,100	4,571
1994 Q4	5,400	97	970	19	2,100	4,571
1995 Q1	5,400	97	780	37,778	2,500	110,486
1995 Q2	5,700	96,013	800	30,404	2,200	1,049
1995 Q3	5,500	12,069	890	7,118	2,000	28,092
1995 Q4	5,700	96,013	950	594	2,100	4,571
1996 Q1	5,800	167,985	980	32	2,600	186,965
1996 Q2	5,800	167,985	1,100	15,784	2,400	54,007
1996 Q3	5,600	44,041	1,000	657	2,600	186,965
1996 Q4	5,800	167,985	1,100	15,784	2,400	54,007
1997 Q1	5,700	96,013	2,100	1,267,051	2,500	110,486
1997 Q2	5,600	44,041	970	19	2,100	4,571
1997 Q3	5,600	44,041	940	1,181	2,000	28,092
1997 Q4	5,500	12,069	1,100	15,784	2,100	4,571
1998 Q1	5,500	12,069	1,500	276,291	3,400	1,518,796
1998 Q2	5,500	12,069	1,000	657	2,100	4,571
1998 Q3	5,600	44,041	1,100	15,784	2,200	1,049
1998 Q4	5,600	44,041	1,000	657	2,300	17,528
1999 1S	5,500	12,069	990	244	2,100	4,571
1999 2S	5,400	97	1,000	657	2,400	54,007
2000 1S	5,400	97	940	1,181	1,900	71,613
2000 2S	5,500	12,069	930	1,968	2,200	1,049
2001 1S	5,400	97	1,100	15,784	2,300	17,528
2001 2S	5,300	8,125	1,000	657	2,200	1,049
2002 1S	5,400	97	960	206	2,200	1,049
2002 2S	5,400	97	930	1,968	2,100	4,571
2003 1S	5,300	8,125	950	594	2,000	28,092
2003 2S	5,200	36,154	1,000	657	1,900	71,613
2004 1S	5,200	36,154	950	594	2,000	28,092
2004 2S	5,400	97	1,000	657	2,000	28,092
2005 1S	5,200	36,154	980	32	1,900	71,613
2005 2S	6,600	1,463,759	930	1,968	1,900	71,613
2006 1S	5,600	44,041	880	8,905	1,800	135,134
2006 2S	5,400	97	870	10,892	1,900	71,613
2007 1S	5,000	152,210	1,200	50,911	2,000	28,092
2007 2S	5,600	44,041	880	8,905	1,800	135,134
2008 1S	5,000	152,210	1,000	657	2,000	28,092
2008 2S	5,000	152,210	900	5,530	2,000	28,092
2009 1S	5,100	84,182	970	19	1,800	135,134
2009 2S	5,200	36,154	960	206	2,000	28,092
2010 1S	4,900	240,238	1,000	657	2,100	4,571
2010 2S	4,900	240,238	840	18,054	1,800	135,134
2011 1S	5,000	152,210	930	1,968	1,800	135,134
2011 2S	5,300	8,125	1,000	657	1,900	71,613
2012 1S	5,200	36,154	910	4,143	2,000	28,092
2012 2S	5,100	84,182	880	8,905	1,900	71,613
2013 1S	5,400	97	860	13,080	1,900	71,613
2013 2S	4,800	348,266	970	19	1,900	71,613
2014 1S	5,300	8,125	1,100	15,784	2,100	4,571
2014 2S	5,300	8,125	890	7,118	1,800	135,134
2015 1S	5,800	167,985	960	206	2,100	4,571
2015 2S	5,300	8,125	950	594	2,000	28,092
2016 1S	5,300	8,125	1,100	15,784	2,300	17,528
2016 2S	4,900	240,238	1,000	657	2,100	4,571
2017 1S	5,200	36,154	880	8,905	1,900	71,613
2017 2S	5,200	36,154	940	1,181	2,100	4,571

Appendix A
2018 Second Semiannual Statistical Calculations for MW-7

	Total Dissolved Solids		Sulfate		Chloride	
Sampling Event	Analytical Result (mg/L)	Squared Difference from Mean	Analytical Result (mg/L)	Squared Difference from Mean	Analytical Result (mg/L)	Squared Difference from Mean
2018 1S	5,200	36,154	890	7,118	1,800	135,134
2018 2S	5,100	84,182	910	4,143	1,800	135,134
Number of Samples	71		71		71	
Mean	5,390		974		2,168	
Variance		118,354		32,639		117,683
Standard Deviation		344		181		343

Upper Tolerance Limit (UTL) Calculation

Constituent of Concern	Mean (x)	Std Dev (s)	# of samples (n)	student-t[a)] ($t_{(n-1,0.95)}$)	1 + 1/n	$(1 + 1/n)^{1/2}$	k[b)]	UTL[c)]
Total Dissolved Solids	5,390	344	71	1.696	1.0141	1.0070	1.708	**5,978**
Sulfate	974	181	71	1.696	1.0141	1.0070	1.708	**1,283**
Chloride	2,168	343	71	1.696	1.0141	1.0070	1.708	**2,754**

a) Student-t statistic values obtained from EPA guidance document, Interim Final Guidance, Table 6.
b) $k = t\,(1+1/n)^{1/2}$
c) UTL = x + ks

Comparison to Upper Tolerance Limit (UTL)

Constituent of Concern	Value this Event	UTL this Event	UTL Exceeded?
Total Dissolved Solids	5,100	5,978	**NO**
Sulfate	910	1,283	**NO**
Chloride	1,800	2,754	**NO**

Appendix A
2018 Second Semiannual Statistical Calculations for MW-10

	Total Dissolved Solids		Sulfate		Chloride	
Sampling Event	Analytical Result (mg/L)	Squared Difference from Mean	Analytical Result (mg/L)	Squared Difference from Mean	Analytical Result (mg/L)	Squared Difference from Mean
1995 Q3	3,700	9,273	690	0	1,200	28,649
1995 Q4	3,700	9,273	690	0	1,300	4,797
1996 Q1	3,700	9,273	630	3,534	1,100	72,501
1996 Q2	3,800	14	720	934	1,400	945
1996 Q3	3,700	9,273	790	10,111	1,600	53,241
1996 Q4	3,800	14	760	4,978	1,400	945
1997 Q1	3,700	9,273	1,700	1,021,223	1,600	53,241
1997 Q2	3,800	14	590	9,889	1,400	945
1997 Q3	3,900	10,754	620	4,823	1,600	53,241
1997 Q4	3,900	10,754	700	111	1,500	17,093
1998 Q1	4,300	253,717	550	19,445	1,200	28,649
1998 Q2	3,900	10,754	670	378	1,400	945
1998 Q3	4,000	41,495	670	378	1,600	53,241
1998 Q4	4,100	92,236	640	2,445	1,600	53,241
1999 1S	4,100	92,236	620	4,823	1,500	17,093
1999 2S	4,200	162,977	710	423	1,800	185,538
2000 1S	4,200	162,977	650	1,556	1,600	53,241
2000 2S	4,000	41,495	650	1,556	1,500	17,093
2001 1S	4,000	41,495	770	6,489	1,700	109,389
2001 2S	4,100	92,236	750	3,667	1,500	17,093
2002 1S	4,200	162,977	740	2,556	1,600	53,241
2002 2S	4,100	92,236	720	934	1,400	945
2003 1S	4,100	92,236	700	111	1,300	4,797
2003 2S	3,900	10,754	710	423	1,400	945
2004 1S	3,800	14	720	934	1,400	945
2004 2S	4,100	92,236	760	4,978	1,400	945
2005 1S	3,800	14	750	3,667	1,300	4,797
2005 2S	4,900	1,218,162	680	89	1,300	4,797
2006 1S	3,200	355,569	660	867	1,200	28,649
2006 2S	3,800	14	320	136,489	640	531,819
2007 1S	3,700	9,273	900	44,334	1,400	945
2007 2S	3,200	355,569	660	867	1,200	28,649
2008 1S	4,000	41,495	910	48,645	1,600	53,241
2008 2S	4,600	645,940	860	29,089	1,700	109,389
2009 1S	3,500	87,791	610	6,311	1,200	28,649
2009 2S	3,800	14	660	867	1,300	4,797
2010 1S	3,400	157,051	720	934	1,500	17,093
2010 2S	3,300	246,310	610	6,311	1,300	4,797
2011 1S	3,600	38,532	600	8,000	1,200	28,649
2011 2S	3,700	9,273	650	1,556	1,300	4,797
2012 1S	3,900	10,754	630	3,534	1,200	28,649
2012 2S	3,600	38,532	660	867	1,300	4,797
2013 1S	3,600	38,532	570	14,267	1,300	4,797
2013 2S	3,400	157,051	570	14,267	1,100	72,501
2014 1S	3,500	87,791	770	6,489	1,400	945
2014 2S	3,700	9,273	580	11,978	1,200	28,649
2015 1S	2,800	992,606	570	14,267	1,200	28,649
2015 2S	3,600	38,532	640	2,445	1,300	4,797
2016 1S	3,500	87,791	560	16,756	1,200	28,649
2016 2S	3,600	38,532	660	867	1,400	945
2017 1S	3,600	38,532	650	1,556	1,300	4,797
2017 2S	3,600	38,532	590	9,889	1,300	4,797
2018 1S	3,800	14	680	89	1,400	945
2018 2S	3,500	87,791	590	9,889	1,200	28,649
Number of Samples	54		54		54	
Mean	3,796		689		1,369	
Variance		117,394		27,813		36,603
Standard Deviation		343		167		191

Upper Tolerance Limit (UTL) Calculation

Constituent of Concern	Mean (x)	Std Dev (s)	# of samples (n)	student-t[a)] ($t_{(n-1,0.95)}$)	1 + 1/n	$(1 + 1/n)^{1/2}$	k[b)]	UTL[c)]
Total Dissolved Solids	3,796	343	54	1.696	1.0185	1.0092	1.712	**4,383**
Sulfate	689	167	54	1.696	1.0185	1.0092	1.712	**975**
Chloride	1,369	191	54	1.696	1.0185	1.0092	1.712	**1,697**

a) Student-t statistic values obtained from EPA guidance document, Interim Final Guidance, Table 6.
b) $k = t\,(1+1/n)^{1/2}$
c) UTL = x + ks

Comparison to Upper Tolerance Limit (UTL)

Constituent of Concern	Value this Event	UTL this Event	UTL Exceeded?
Total Dissolved Solids	3,500	4,383	**NO**
Sulfate	590	975	**NO**
Chloride	1,200	1,697	**NO**

APPENDIX B

FIELD DATA SHEETS

MONITORING WELL SAMPLING RECORD

Project:	SEGS VIII - IX Harper Lake	Technician:	Ralph De La Parra
Date:	May 30, 2018	Weather:	Clear, warm

Purge Volume Calculations

Monitoring Well ID:	**MW-7**		Depth to Water:	56.55 ft btoc	(b)
Elevation of Top of Casing:	2061.76 ft amsl	(a)	Water Elevation (a - b):	2005.21 ft amsl	(c)
Well Depth:	60.00 ft btoc		Water Thickness (c - d):	3.45 feet	(e)
Elevation of Bottom of Well:	2001.76 ft amsl	(d)	One Casing Volume (e * 0.66):	2.27 gallons	(f)
Casing Inside Diameter:	4.0 inches		Three Casing Volumes (f * 3):	6.83 gallons	

Monitoring Well Purge Data

Purging Apparatus: 2-inch Redi-Flo Grundfos Pump

Sampling Apparatus: Pump Discharge

Decon Methods: Alconox and potable water wash; double-rinse with distilled water

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1332	1	2	27.3	6.58	8.03	Clear, odorless
1334	1	4	24.7	6.69	7.95	Clear, odorless
1336	1	6	23.5	7.96	7.96	Clear, odorless
1338	1	8	23.3	7.95	7.95	Clear, odorless

Total Purged: 8 gallons Casing Volumes Purged: 3.52 gallons

Additional Notes or Comments:

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-7-5-30-18	1338	1	Semi-Annual	No	
Dup-5-30-18	-	1	Semi-Annual	No	Duplicate

MONITORING WELL SAMPLING RECORD

Project:	SEGS VIII - IX Harper Lake	Technician:	Ralph De La Parra
Date:	May 30, 2018	Weather:	Clear, warm

Purge Volume Calculations

Monitoring Well ID:	**MW-10**		Depth to Water:	54.55 ft btoc	(b)
Elevation of Top of Casing:	2062.40 ft amsl	(a)	Water Elevation (a - b):	2007.85 ft amsl	(c)
Well Depth:	57.85 ft btoc		Water Thickness (c - d):	3.35 feet	(e)
Elevation of Bottom of Well:	2004.55 ft amsl	(d)	One Casing Volume (e * 0.66):	2.21 gallons	(f)
Casing Inside Diameter:	4.0 inches		Three Casing Volumes (f * 3):	6.63 gallons	

Monitoring Well Purge Data

Purging Apparatus: 4-inch disposable bailer

Sampling Apparatus: 1.56-inch disposable bailer

Decon Methods: N/A

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1305	N/A	1.0	25.3	7.49	5.95	Clear, odorless
1310	N/A	1.5	25.1	7.55	5.99	Clear, odorless

Total Purged: 1.5 gallons Casing Volumes Purged: 0.68 gallons

Additional Notes or Comments: Well bailed dry; sampled after 80% recovery

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-10-5-30-18	1430	1	Semi-Annual	No	

EVAPORATION POND WATER SAMPLING RECORD

Project:	SEGS VIII - IX Harper Lake	Technician:	Ralph De La Parra
Date:	May 30, 2018	Weather:	Clear, warm

Pond Designation:	SEGS VIII West (8W)	Comments: Slight organic odor
Color:	Green tint	
Clarity:	Clear	
Temperature (Deg C):	22.2	
pH:	8.02	
Conductivity (µmhos/cm):	>20,000	
Sample ID:	EP-8 (West) -5-30-18	
Sample Time:	1420	

Pond Designation:	SEGS VIII East (8E)	Comments: Slight organic odor
Color:	Green tint	
Clarity:	Clear	
Temperature (Deg C):	29.0	
pH:	7.69	
Conductivity (µmhos/cm):	>20,000	
Sample ID:	EP-8 (East) -5-30-18	
Sample Time:	1410	

Pond Designation:	SEGS IX North (9N)	Comments: Pond is dry
Color:	N/A	
Clarity:	N/A	
Temperature (Deg C):	N/A	
pH:	N/A	
Conductivity (µmhos/cm):	N/A	
Sample ID:	N/A	
Sample Time:	N/A	

LYSIMETER TEST RECORD

Project:	SEGS VIII - IX Harper Lake	Technician:	Ralph De La Parra
Date:	May 30, 2018	Weather:	Clear, warm

Lysimeter No:	1	Notes:
Result:	Dry	
Lysimeter No:	2	Notes:
Result:	Dry	
Lysimeter No:	3	Notes:
Result:	Dry	
Lysimeter No:	4	Notes:
Result:	Dry	

MONITORING WELL SAMPLING RECORD

Project:	SEGS VIII - IX Harper Lake	Technician:	Ralph De La Parra
Date:	December 7, 2018	Weather:	Clear, cool

Purge Volume Calculations

Monitoring Well ID:	**MW-7**		Depth to Water:	56.75 ft btoc	(b)
Elevation of Top of Casing:	2061.76 ft amsl	(a)	Water Elevation (a - b):	2005.01 ft amsl	(c)
Well Depth:	60.00 ft btoc		Water Thickness (c - d):	3.25 feet	(e)
Elevation of Bottom of Well:	2001.76 ft amsl	(d)	One Casing Volume (e * 0.66):	2.15 gallons	(f)
Casing Inside Diameter:	4.0 inches		Three Casing Volumes (f * 3):	6.45 gallons	

Monitoring Well Purge Data

Purging Apparatus: 3.5" Disposable Bailer

Sampling Apparatus: Bailer

Decon Methods: N/A

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1100	1	2	20.9	7	7.49	Clear, odorless
1105	1	4	20.6	6.92	7.55	Clear, odorless
1108	1	6	20.4	6.97	7.56	Clear, odorless
1111	1	8	20.4	6.96	7.56	Clear, odorless

Total Purged: 8 gallons Casing Volumes Purged: 3.72 volumes

Additional Notes or Comments:

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-7-12-7-18	1120	3	Annual	No	
Dup-12-7-18	-	3	Annual	No	Duplicate

MONITORING WELL SAMPLING RECORD

Project:	SEGS VIII - IX Harper Lake	Technician:	Ralph De La Parra
Date:	December 7, 2018	Weather:	Clear, cool

Purge Volume Calculations

Monitoring Well ID:	**MW-10**		Depth to Water:	54.62 ft btoc	(b)
Elevation of Top of Casing:	2062.40 ft amsl	(a)	Water Elevation (a - b):	2007.78 ft amsl	(c)
Well Depth:	57.85 ft btoc		Water Thickness (c - d):	3.23 feet	(e)
Elevation of Bottom of Well:	2004.55 ft amsl	(d)	One Casing Volume (e * 0.66):	2.13 gallons	(f)
Casing Inside Diameter:	4.0 inches		Three Casing Volumes (f * 3):	6.39 gallons	

Monitoring Well Purge Data

Purging Apparatus: 3.5-inch disposable bailer

Sampling Apparatus: Bailer

Decon Methods: N/A

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1045	N/A	1.0	24.1	7.65	6.03	Clear, odorless
1050	N/A	1.5	24.4	7.68	6.03	Clear, odorless

Total Purged: 1.5 gallons Casing Volumes Purged: 0.7 volumes

Additional Notes or Comments: Well bailed dry; sampled after 80% recovery

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-10-12-7-18	1220	3	Annual	No	

EVAPORATION POND WATER SAMPLING RECORD

Project:	SEGS VIII - IX Harper Lake	Technician:	Ralph De La Parra
Date:	December 7, 2018	Weather:	Clear, cool

Pond Designation:	SEGS VIII West (8W)	Comments: Slight organic odor
Color:	Green tint	
Clarity:	Clear	
Temperature (Deg C):	20.9	
pH:	8.15	
Conductivity (µmhos/cm):	>20,000	
Sample ID:	EP-8 (West)	
Sample Time:	1200	

Pond Designation:	SEGS VIII East (8E)	Comments: Slight organic odor
Color:	Green tint	
Clarity:	Clear	
Temperature (Deg C):	29.0	
pH:	7.69	
Conductivity (µmhos/cm):	>20,000	
Sample ID:	EP-8 (East)	
Sample Time:	1135	

Pond Designation:	SEGS IX North (9N)	Comments: Pond is dry
Color:	N/A	
Clarity:	N/A	
Temperature (Deg C):	N/A	
pH:	N/A	
Conductivity (µmhos/cm):	N/A	
Sample ID:	N/A	
Sample Time:	N/A	

LYSIMETER TEST RECORD

Project:	SEGS VIII - IX Harper Lake	Technician:	Ralph De La Parra
Date:	December 7, 2018	Weather:	Clear, cool

Lysimeter No:	1	Notes:
Result:	Dry	
Lysimeter No:	2	Notes:
Result:	Dry	
Lysimeter No:	3	Notes:
Result:	Dry	
Lysimeter No:	4	Notes:
Result:	Dry	

APPENDIX C

LABORATORY REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-212606-1
Client Project/Site: Terra-Gen Harper Lake

For:
Luz Solar Partners LTD VIII
43880 Harper Lake Rd
Hinkley, California 92347

Attn: Joseph Faubus

Authorized for release by:
6/18/2018 8:20:08 AM

Dennis Tran, Project Manager I
(949)261-1022
dennis.tran@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-212606-1	MW-7-5-30-18	Water	05/30/18 13:38	06/01/18 16:55
440-212606-2	MW-10-5-30-18	Water	05/30/18 14:30	06/01/18 16:55
440-212606-3	DUP-5-30-18	Water	05/30/18 00:01	06/01/18 16:55
440-212606-6	EP-5-30-18 (West/East Composite)	Water	05/30/18 14:15	06/01/18 16:55

Case Narrative

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

Job ID: 440-212606-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-212606-1

Comments
No additional comments.

Receipt
The samples were received on 6/1/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1º C.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6010B: The following sample was diluted due to the nature of the sample matrix: EP-5-30-18 (West/East Composite) (440-212606-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

Client Sample ID: MW-7-5-30-18 — Lab Sample ID: 440-212606-1

Date Collected: 05/30/18 13:38
Date Received: 06/01/18 16:55
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1800		250	mg/L			06/01/18 22:32	500
Sulfate	890		250	mg/L			06/01/18 22:32	500

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	8500		1.0	umhos/cm			06/06/18 09:16	1
Total Dissolved Solids	5200		100	mg/L			06/04/18 09:11	1
pH	8.1	HF	0.1	SU			06/03/18 14:36	1

Client Sample ID: MW-10-5-30-18 — Lab Sample ID: 440-212606-2

Date Collected: 05/30/18 14:30
Date Received: 06/01/18 16:55
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1400		100	mg/L			06/01/18 22:49	200
Sulfate	680		100	mg/L			06/01/18 22:49	200

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	6600		1.0	umhos/cm			06/06/18 09:16	1
Total Dissolved Solids	3800		100	mg/L			06/04/18 09:11	1
pH	8.3	HF	0.1	SU			06/03/18 14:36	1

Client Sample ID: DUP-5-30-18 — Lab Sample ID: 440-212606-3

Date Collected: 05/30/18 00:01
Date Received: 06/01/18 16:55
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1900		250	mg/L			06/01/18 23:06	500
Sulfate	920		250	mg/L			06/01/18 23:06	500

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	8500		1.0	umhos/cm			06/06/18 09:16	1
Total Dissolved Solids	5200		100	mg/L			06/04/18 09:11	1
pH	8.0	HF	0.1	SU			06/03/18 14:36	1

Client Sample ID: EP-5-30-18 (West/East Composite) — Lab Sample ID: 440-212606-6

Date Collected: 05/30/18 14:15
Date Received: 06/01/18 16:55
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140000		20000	mg/L			06/02/18 00:49	40000
Sulfate	19000		1000	mg/L			06/01/18 23:23	2000

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		06/06/18 14:02	06/15/18 18:45	10

Client Sample Results

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**290000**		5000		mg/L			06/04/18 09:11	1
Chlorine, Total Residual	ND	HF	0.10		mg/L			06/07/18 15:44	1
pH	**8.1**	**HF**	0.1		SU			06/03/18 14:36	1

Method Summary

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
SM 2510B	Conductivity, Specific Conductance	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 Cl G	Chlorine, Residual	SM	TAL IRV
SM 4500 H+ B	pH	SM	TAL IRV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL IRV
FILTRATION	Sample Filtration	None	TAL IRV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

Client Sample ID: MW-7-5-30-18 — Lab Sample ID: 440-212606-1

Date Collected: 05/30/18 13:38
Date Received: 06/01/18 16:55
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		500			479776	06/01/18 22:32	NTN	TAL IRV
Total/NA	Analysis	SM 2510B		1			480562	06/06/18 09:16	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	480079	06/04/18 09:11	XL	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			479987	06/03/18 14:36	CMM	TAL IRV

Client Sample ID: MW-10-5-30-18 — Lab Sample ID: 440-212606-2

Date Collected: 05/30/18 14:30
Date Received: 06/01/18 16:55
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		200			479776	06/01/18 22:49	NTN	TAL IRV
Total/NA	Analysis	SM 2510B		1			480562	06/06/18 09:16	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	480079	06/04/18 09:11	XL	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			479987	06/03/18 14:36	CMM	TAL IRV

Client Sample ID: DUP-5-30-18 — Lab Sample ID: 440-212606-3

Date Collected: 05/30/18 00:01
Date Received: 06/01/18 16:55
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		500			479776	06/01/18 23:06	NTN	TAL IRV
Total/NA	Analysis	SM 2510B		1			480562	06/06/18 09:16	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	480079	06/04/18 09:11	XL	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			479987	06/03/18 14:36	CMM	TAL IRV

Client Sample ID: EP-5-30-18 (West/East Composite) — Lab Sample ID: 440-212606-6

Date Collected: 05/30/18 14:15
Date Received: 06/01/18 16:55
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2000			479776	06/01/18 23:23	NTN	TAL IRV
Total/NA	Analysis	300.0		40000			479776	06/02/18 00:49	NTN	TAL IRV
Dissolved	Filtration	FILTRATION			200 mL	200 mL	480232	06/04/18 18:55	JL	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	480657	06/06/18 14:02	JL	TAL IRV
Dissolved	Analysis	6010B		10			482485	06/15/18 18:45	VS	TAL IRV
Total/NA	Analysis	SM 2540C		1	0.2 mL	100 mL	480079	06/04/18 09:11	XL	TAL IRV
Total/NA	Analysis	SM 4500 Cl G		1	10 mL	10 mL	480926	06/07/18 15:44	MMP	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			479987	06/03/18 14:36	CMM	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Sample Results

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-479776/6
Matrix: Water
Analysis Batch: 479776

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			06/01/18 11:32	1
Sulfate	ND		0.50		mg/L			06/01/18 11:32	1

Lab Sample ID: LCS 440-479776/5
Matrix: Water
Analysis Batch: 479776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.74		mg/L		95	90 - 110
Sulfate	5.00	4.75		mg/L		95	90 - 110

Lab Sample ID: 440-212566-H-7 MS
Matrix: Water
Analysis Batch: 479776

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.8		5.00	12.9		mg/L		103	80 - 120
Sulfate	78	E	5.00	84.1	E 4	mg/L		116	80 - 120

Lab Sample ID: 440-212566-H-7 MSD
Matrix: Water
Analysis Batch: 479776

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.8		5.00	12.9		mg/L		103	80 - 120	0	20
Sulfate	78	E	5.00	83.9	E 4	mg/L		113	80 - 120	0	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-480232/1-B
Matrix: Water
Analysis Batch: 480940

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 480657

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.010		mg/L		06/06/18 14:02	06/07/18 14:26	1

Lab Sample ID: LCS 440-480232/2-B
Matrix: Water
Analysis Batch: 480940

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 480657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	1.00	0.887		mg/L		89	80 - 120

Lab Sample ID: 440-212518-D-25-C MS
Matrix: Water
Analysis Batch: 480940

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 480657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.010		1.00	0.908		mg/L		90	75 - 125

QC Sample Results

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-212518-D-25-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 480940 — **Prep Batch: 480657**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	0.010		1.00	0.879		mg/L		87	75 - 125	3	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 440-480562/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 480562

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0		umhos/cm			06/06/18 08:52	1

Lab Sample ID: LCS 440-480562/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 480562

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Conductance			953	1010		umhos/cm		105	90 - 110		

Lab Sample ID: 440-212422-I-4 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 480562

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	4400			4410		umhos/cm				0.7	5

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-480079/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 480079

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			06/04/18 09:11	1

Lab Sample ID: LCS 440-480079/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 480079

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110		

Lab Sample ID: 440-212581-C-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 480079

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1600			1570		mg/L				3	5

QC Sample Results

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

Method: SM 4500 Cl G - Chlorine, Residual

Lab Sample ID: MB 440-480926/4
Matrix: Water
Analysis Batch: 480926

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chlorine, Total Residual	ND		0.10		mg/L			06/07/18 15:44	1

Lab Sample ID: MRL 440-480926/3
Matrix: Water
Analysis Batch: 480926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Chlorine, Total Residual			0.100	0.120		mg/L		120	50 - 150		

Lab Sample ID: 440-212828-J-1 DU
Matrix: Water
Analysis Batch: 480926

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chlorine, Total Residual	ND			ND		mg/L				NC	20

Method: SM 4500 H+ B - pH

Lab Sample ID: 440-212603-A-1 DU
Matrix: Water
Analysis Batch: 479987

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.1			8.0		SU				0.2	2

QC Association Summary

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

HPLC/IC

Analysis Batch: 479776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212606-1	MW-7-5-30-18	Total/NA	Water	300.0	
440-212606-2	MW-10-5-30-18	Total/NA	Water	300.0	
440-212606-3	DUP-5-30-18	Total/NA	Water	300.0	
440-212606-6	EP-5-30-18 (West/East Composite)	Total/NA	Water	300.0	
440-212606-6	EP-5-30-18 (West/East Composite)	Total/NA	Water	300.0	
MB 440-479776/6	Method Blank	Total/NA	Water	300.0	
LCS 440-479776/5	Lab Control Sample	Total/NA	Water	300.0	
440-212566-H-7 MS	Matrix Spike	Total/NA	Water	300.0	
440-212566-H-7 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Filtration Batch: 480232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212606-6	EP-5-30-18 (West/East Composite)	Dissolved	Water	FILTRATION	
MB 440-480232/1-B	Method Blank	Dissolved	Water	FILTRATION	
LCS 440-480232/2-B	Lab Control Sample	Dissolved	Water	FILTRATION	
440-212518-D-25-C MS	Matrix Spike	Dissolved	Water	FILTRATION	
440-212518-D-25-D MSD	Matrix Spike Duplicate	Dissolved	Water	FILTRATION	

Prep Batch: 480657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212606-6	EP-5-30-18 (West/East Composite)	Dissolved	Water	3005A	480232
MB 440-480232/1-B	Method Blank	Dissolved	Water	3005A	480232
LCS 440-480232/2-B	Lab Control Sample	Dissolved	Water	3005A	480232
440-212518-D-25-C MS	Matrix Spike	Dissolved	Water	3005A	480232
440-212518-D-25-D MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	480232

Analysis Batch: 480940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-480232/1-B	Method Blank	Dissolved	Water	6010B	480657
LCS 440-480232/2-B	Lab Control Sample	Dissolved	Water	6010B	480657
440-212518-D-25-C MS	Matrix Spike	Dissolved	Water	6010B	480657
440-212518-D-25-D MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	480657

Analysis Batch: 482485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212606-6	EP-5-30-18 (West/East Composite)	Dissolved	Water	6010B	480657

General Chemistry

Analysis Batch: 479987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212606-1	MW-7-5-30-18	Total/NA	Water	SM 4500 H+ B	
440-212606-2	MW-10-5-30-18	Total/NA	Water	SM 4500 H+ B	
440-212606-3	DUP-5-30-18	Total/NA	Water	SM 4500 H+ B	
440-212606-6	EP-5-30-18 (West/East Composite)	Total/NA	Water	SM 4500 H+ B	
440-212603-A-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

QC Association Summary

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

General Chemistry (Continued)

Analysis Batch: 480079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212606-1	MW-7-5-30-18	Total/NA	Water	SM 2540C	
440-212606-2	MW-10-5-30-18	Total/NA	Water	SM 2540C	
440-212606-3	DUP-5-30-18	Total/NA	Water	SM 2540C	
440-212606-6	EP-5-30-18 (West/East Composite)	Total/NA	Water	SM 2540C	
MB 440-480079/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-480079/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-212581-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 480562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212606-1	MW-7-5-30-18	Total/NA	Water	SM 2510B	
440-212606-2	MW-10-5-30-18	Total/NA	Water	SM 2510B	
440-212606-3	DUP-5-30-18	Total/NA	Water	SM 2510B	
MB 440-480562/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 440-480562/4	Lab Control Sample	Total/NA	Water	SM 2510B	
440-212422-I-4 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 480926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212606-6	EP-5-30-18 (West/East Composite)	Total/NA	Water	SM 4500 Cl G	
MB 440-480926/4	Method Blank	Total/NA	Water	SM 4500 Cl G	
MRL 440-480926/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl G	
440-212828-J-1 DU	Duplicate	Total/NA	Water	SM 4500 Cl G	

Definitions/Glossary

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-212606-1

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-18 *

Analysis Method	Prep Method	Matrix	Analyte

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody Record

267106

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Joe Fabus	Site Contact:	Date: 6-1-18	COC No:
Company Name: TerraGen	Tel/Fax:	Lab Contact:	Carrier:	1 of 1 COCs
Address: 43880 Harper Lake Rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Hinkley, CA 92347	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client
Fax	☐ 2 weeks			Lab Sampling:
Project Name: TerraGen – Harper Lake	☒ 1 week			
Site:	☐ 2 days			Job / SDG No.
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Chloride	Sulfate	TDS	Fluoride	Chlorine	Selenium	Sample Specific Notes
MW-7-5-30-18	5-30-18	1338	G	GW	1	N	N	X	X	X	X	X		
MW-10-5-30-18	"	1430	"	"	1			X	X	X	X	X		
Dup-5-30-18	"	—	"	"	1			X	X	X	X	X		
EP-5-30-18	"	1415	"	H2O	4			X	X	X		X	X X	Composite EP8 East & West & Report as EP-5-30-18

440-212606 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C). Obs'd: 2.1 Corr'd: 2.1 | Therm ID No.: 526

Relinquished by:	Company: NorthStar	Date/Time: 6-1-18 1655	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA-IRV	Date/Time: 6/1/18 1655

VG 6/1

6/8/2018

Login Sample Receipt Checklist

Client: Luz Solar Partners LTD VIII

Job Number: 440-212606-1

Login Number: 212606
List Number: 1
Creator: Garcia, Veronica G

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-227147-1
Client Project/Site: Terra-Gen Harper Lake

For:
Luz Solar Partners LTD VIII
43880 Harper Lake Rd
Hinkley, California 92347

Attn: Joseph Faubus

Authorized for release by:
12/28/2018 3:36:23 PM
Patty Mata, Senior Project Manager
patty.mata@testamericainc.com

Designee for

Dennis Tran, Project Manager I
(949)261-1022
dennis.tran@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-227147-1	LTU-1-12-7-18	Solid	12/07/18 09:50	12/10/18 07:10
440-227147-2	LTU-4-12-7-18	Solid	12/07/18 10:00	12/10/18 07:10
440-227147-3	LTU-6-12-7-18	Solid	12/07/18 10:10	12/10/18 07:10
440-227147-4	LTU-9 (aux)-12-7-18	Solid	12/07/18 10:20	12/10/18 07:10
440-227147-5	MW-7-12-7-18	Water	12/07/18 11:20	12/10/18 07:10
440-227147-6	MW-10-12-7-18	Water	12/07/18 12:20	12/10/18 07:10
440-227147-9	EP-12-7-18	Water	12/07/18 11:50	12/10/18 07:10
440-227147-10	DUP-12-7-18	Water	12/07/18 00:01	12/10/18 07:10
440-227147-11	EM-12-7-18	Water	12/07/18 11:55	12/10/18 07:10
440-227147-12	EP-8 (east) sludge-12-7-18	Solid	12/07/18 11:45	12/10/18 07:10
440-227147-13	EP-8 (west) sludge-12-7-18	Solid	12/07/18 12:00	12/10/18 07:10
440-227147-14	EP-9W-12-7-18	Solid	12/07/18 11:30	12/10/18 07:10

Job ID: 440-227147-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-227147-1

Comments
No additional comments.

Receipt
The samples were received on 12/10/2018 7:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6º C.

Receipt Exceptions
The following samples were received outside of 48-hour holding time for Nitrate, Nitrite and ortho-Phosphate: MW-7-12-7-18 (440-227147-5), MW-10-12-7-18 (440-227147-6), EP-12-7-18 (440-227147-9) and DUP-12-7-18 (440-227147-10).

HPLC/IC
Method(s) 300.0: The following samples were diluted due to the nature of the sample matrix: MW-7-12-7-18 (440-227147-5), MW-10-12-7-18 (440-227147-6), EP-12-7-18 (440-227147-9) and DUP-12-7-18 (440-227147-10). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were received and analyzed for Nitrate, Nitrite and o-Phosphate outside of 48-hour holding time: MW-7-12-7-18 (440-227147-5), MW-10-12-7-18 (440-227147-6), EP-12-7-18 (440-227147-9) and DUP-12-7-18 (440-227147-10).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015B: Insufficient additional sample volume was available to perform batch QC matrix spike/matrix spike duplicate (MS/MSD) sets associated with preparation batches 440-516263 and 440-516311. The laboratory control sample (LCS) was performed in duplicate to provide precision data for each of the two batches.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The following samples were diluted due to the nature of the sample matrix: EP-12-7-18 (440-227147-9), EP-8 (west) sludge-12-7-18 (440-227147-13) and EP-9W-12-7-18 (440-227147-14). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: Due to the relatively high concentration of Sodium in the batch QC source sample, the matrix spike and matrix spike duplicate (MS/MSD) for preparation batch 440-517563 could not be evaluated for accuracy and precision, and were not reported. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Client Sample ID: LTU-1-12-7-18

Lab Sample ID: 440-227147-1

Date Collected: 12/07/18 09:50
Matrix: Solid
Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0	mg/Kg		12/11/18 13:15	12/12/18 16:24	1
1,1'-Biphenyl	ND		5.0	mg/Kg		12/11/18 13:15	12/12/18 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*86*		*40 - 140*	*12/11/18 13:15*	*12/12/18 16:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**4.1**		1.1	mg/Kg			12/11/18 00:59	1
Nitrite as N	ND		1.5	mg/Kg			12/11/18 00:59	1

Method: NO3NO2 Calc - Nitrogen, Nitrate-Nitrite - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	**4.1**		1.5	mg/Kg			12/24/18 15:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus	**270**		5.0	mg/Kg		12/18/18 10:55	12/21/18 12:19	5
Potassium	**1000**		62	mg/Kg		12/18/18 10:55	12/21/18 12:19	5

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	**24**		13	mg/Kg		12/20/18 14:47	12/22/18 17:23	1
Nitrogen, Total	**28**		5.0	mg/Kg			12/24/18 15:24	1

Client Sample ID: LTU-4-12-7-18

Lab Sample ID: 440-227147-2

Date Collected: 12/07/18 10:00
Matrix: Solid
Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		4.9	mg/Kg		12/11/18 13:15	12/12/18 16:46	1
1,1'-Biphenyl	ND		4.9	mg/Kg		12/11/18 13:15	12/12/18 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*92*		*40 - 140*	*12/11/18 13:15*	*12/12/18 16:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**6.2**		1.1	mg/Kg			12/11/18 01:17	1
Nitrite as N	ND		1.5	mg/Kg			12/11/18 01:17	1

Method: NO3NO2 Calc - Nitrogen, Nitrate-Nitrite - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	**6.2**		1.5	mg/Kg			12/24/18 15:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus	**190**		4.9	mg/Kg		12/18/18 10:55	12/21/18 12:21	5
Potassium	**670**		62	mg/Kg		12/18/18 10:55	12/21/18 12:21	5

Client Sample Results

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Client Sample ID: LTU-4-12-7-18

Lab Sample ID: 440-227147-2

Date Collected: 12/07/18 10:00
Matrix: Solid
Date Received: 12/10/18 07:10

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	22		13	mg/Kg		12/20/18 14:47	12/22/18 17:23	1
Nitrogen, Total	28		5.0	mg/Kg			12/24/18 15:24	1

Client Sample ID: LTU-6-12-7-18

Lab Sample ID: 440-227147-3

Date Collected: 12/07/18 10:10
Matrix: Solid
Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0	mg/Kg		12/11/18 13:15	12/12/18 17:08	1
1,1'-Biphenyl	ND		5.0	mg/Kg		12/11/18 13:15	12/12/18 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*90*		*40 - 140*	*12/11/18 13:15*	*12/12/18 17:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1.1		1.1	mg/Kg			12/11/18 01:36	1
Nitrite as N	ND		1.5	mg/Kg			12/11/18 01:36	1

Method: NO3NO2 Calc - Nitrogen, Nitrate-Nitrite - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.5	mg/Kg			12/24/18 15:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus	220		5.0	mg/Kg		12/18/18 10:55	12/21/18 12:24	5
Potassium	780		62	mg/Kg		12/18/18 10:55	12/21/18 12:24	5

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	23		8.7	mg/Kg		12/20/18 14:47	12/22/18 17:23	1
Nitrogen, Total	24		5.0	mg/Kg			12/24/18 15:24	1

Client Sample ID: LTU-9 (aux)-12-7-18

Lab Sample ID: 440-227147-4

Date Collected: 12/07/18 10:20
Matrix: Solid
Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0	mg/Kg		12/11/18 13:15	12/12/18 17:29	1
1,1'-Biphenyl	ND		5.0	mg/Kg		12/11/18 13:15	12/12/18 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*90*		*40 - 140*	*12/11/18 13:15*	*12/12/18 17:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1.5		1.1	mg/Kg			12/11/18 01:54	1
Nitrite as N	ND		1.5	mg/Kg			12/11/18 01:54	1

Client Sample Results

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Client Sample ID: LTU-9 (aux)-12-7-18

Lab Sample ID: 440-227147-4

Date Collected: 12/07/18 10:20
Matrix: Solid
Date Received: 12/10/18 07:10

Method: NO3NO2 Calc - Nitrogen, Nitrate-Nitrite - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	1.5		1.5	mg/Kg			12/24/18 15:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus	350		5.0	mg/Kg		12/18/18 10:55	12/21/18 12:26	5
Potassium	1200		63	mg/Kg		12/18/18 10:55	12/21/18 12:26	5

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	39		13	mg/Kg		12/20/18 14:47	12/22/18 17:23	1
Nitrogen, Total	41		5.0	mg/Kg			12/24/18 15:24	1

Client Sample ID: MW-7-12-7-18

Lab Sample ID: 440-227147-5

Date Collected: 12/07/18 11:20
Matrix: Water
Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.095	mg/L		12/11/18 10:09	12/12/18 12:27	1
1,1'-Biphenyl	ND		0.095	mg/L		12/11/18 10:09	12/12/18 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*57*		*45 - 120*	*12/11/18 10:09*	*12/12/18 12:27*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1800		250	mg/L			12/15/18 00:44	500
Nitrate as N	20	H	2.2	mg/L			12/15/18 00:27	20
Fluoride	ND		10	mg/L			12/15/18 00:27	20
Nitrite as N	ND	H	3.0	mg/L			12/15/18 00:27	20
Orthophosphate as PO4	ND	H	10	mg/L			12/15/18 00:27	20
Sulfate	910		250	mg/L			12/15/18 00:44	500

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	5.9		0.050	mg/L		12/17/18 11:25	12/17/18 22:50	1
Calcium	160		0.10	mg/L		12/17/18 11:25	12/17/18 22:50	1
Iron	ND		0.10	mg/L		12/17/18 11:25	12/17/18 22:50	1
Magnesium	47		0.020	mg/L		12/17/18 11:25	12/17/18 22:50	1
Molybdenum	ND		0.020	mg/L		12/17/18 11:25	12/17/18 22:50	1
Potassium	5.8		0.50	mg/L		12/17/18 11:25	12/17/18 22:50	1
Selenium	0.021		0.010	mg/L		12/17/18 11:25	12/17/18 22:50	1
Sodium	1400	F2	5.0	mg/L		12/17/18 11:25	12/19/18 10:34	10
Strontium	6.1		0.020	mg/L		12/17/18 11:25	12/17/18 22:50	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	370		4.0	mg/L			12/11/18 08:43	1
Bicarbonate Alkalinity as CaCO3	370		4.0	mg/L			12/11/18 08:43	1
Carbonate Alkalinity as CaCO3	ND		4.0	mg/L			12/11/18 08:43	1
Hydroxide Alkalinity as CaCO3	ND		4.0	mg/L			12/11/18 08:43	1

Client Sample ID: MW-7-12-7-18

Lab Sample ID: 440-227147-5

Date Collected: 12/07/18 11:20

Matrix: Water

Date Received: 12/10/18 07:10

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	7300		1.0	umhos/cm			12/19/18 13:19	1
Total Dissolved Solids	5100		100	mg/L			12/14/18 09:20	1
pH	8.0	HF	0.1	SU			12/18/18 16:13	1
Temperature	22.2	HF	1.0	Celsius			12/18/18 16:13	1

Client Sample ID: MW-10-12-7-18

Lab Sample ID: 440-227147-6

Date Collected: 12/07/18 12:20

Matrix: Water

Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.096	mg/L		12/11/18 10:09	12/12/18 12:48	1
1,1'-Biphenyl	ND		0.096	mg/L		12/11/18 10:09	12/12/18 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*70*		*45 - 120*	*12/11/18 10:09*	*12/12/18 12:48*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		250	mg/L			12/15/18 01:18	500
Nitrate as N	18	H	1.1	mg/L			12/15/18 01:01	10
Fluoride	ND		5.0	mg/L			12/15/18 01:01	10
Nitrite as N	ND	H	1.5	mg/L			12/15/18 01:01	10
Orthophosphate as PO4	ND	H	5.0	mg/L			12/15/18 01:01	10
Sulfate	590		250	mg/L			12/15/18 01:18	500

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4.7		0.050	mg/L		12/17/18 11:25	12/17/18 23:02	1
Calcium	32		0.10	mg/L		12/17/18 11:25	12/17/18 23:02	1
Iron	ND		0.10	mg/L		12/17/18 11:25	12/17/18 23:02	1
Magnesium	12		0.020	mg/L		12/17/18 11:25	12/17/18 23:02	1
Molybdenum	ND		0.020	mg/L		12/17/18 11:25	12/17/18 23:02	1
Potassium	3.6		0.50	mg/L		12/17/18 11:25	12/17/18 23:02	1
Selenium	0.022		0.010	mg/L		12/17/18 11:25	12/17/18 23:02	1
Sodium	1100		5.0	mg/L		12/17/18 11:25	12/19/18 10:36	10
Strontium	1.9		0.020	mg/L		12/17/18 11:25	12/17/18 23:02	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	330		4.0	mg/L			12/11/18 09:03	1
Bicarbonate Alkalinity as CaCO3	330		4.0	mg/L			12/11/18 09:03	1
Carbonate Alkalinity as CaCO3	ND		4.0	mg/L			12/11/18 09:03	1
Hydroxide Alkalinity as CaCO3	ND		4.0	mg/L			12/11/18 09:03	1
Specific Conductance	5500		1.0	umhos/cm			12/19/18 13:19	1
Total Dissolved Solids	3500		100	mg/L			12/14/18 09:20	1
pH	8.2	HF	0.1	SU			12/18/18 16:13	1
Temperature	22.3	HF	1.0	Celsius			12/18/18 16:13	1

Client Sample Results

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Client Sample ID: EP-12-7-18

Lab Sample ID: 440-227147-9

Date Collected: 12/07/18 11:50
Matrix: Water
Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.10	mg/L		12/11/18 10:29	12/12/18 13:31	1
1,1'-Biphenyl	ND		0.10	mg/L		12/11/18 10:29	12/12/18 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*76*		*45 - 120*	*12/11/18 10:29*	*12/12/18 13:31*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**70000**		10000	mg/L			12/14/18 02:08	20000
Nitrate as N	**32**	**H**	11	mg/L			12/14/18 01:35	100
Fluoride	ND		50	mg/L			12/14/18 01:35	100
Nitrite as N	ND	H	15	mg/L			12/14/18 01:35	100
Orthophosphate as PO4	ND	H	50	mg/L			12/14/18 01:35	100
Sulfate	**14000**		1000	mg/L			12/14/18 01:51	2000

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**79**		0.50	mg/L		12/17/18 11:25	12/19/18 10:44	10
Calcium	**340**		1.0	mg/L		12/17/18 11:25	12/19/18 10:44	10
Iron	ND		1.0	mg/L		12/17/18 11:25	12/19/18 10:44	10
Magnesium	**480**		0.20	mg/L		12/17/18 11:25	12/19/18 10:44	10
Molybdenum	**1.3**		0.20	mg/L		12/17/18 11:25	12/19/18 10:44	10
Potassium	**880**		5.0	mg/L		12/17/18 11:25	12/19/18 10:44	10
Selenium	**0.13**		0.10	mg/L		12/17/18 11:25	12/19/18 10:44	10
Sodium	**43000**		50	mg/L		12/17/18 11:25	12/19/18 10:41	100
Strontium	**9.3**		0.20	mg/L		12/17/18 11:25	12/19/18 10:44	10

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**220**		4.0	mg/L			12/11/18 09:10	1
Bicarbonate Alkalinity as CaCO3	**220**		4.0	mg/L			12/11/18 09:10	1
Carbonate Alkalinity as CaCO3	ND		4.0	mg/L			12/11/18 09:10	1
Hydroxide Alkalinity as CaCO3	ND		4.0	mg/L			12/11/18 09:10	1
Total Dissolved Solids	**150000**		2000	mg/L			12/14/18 09:20	1
Chlorine, Total Residual	ND	HF	0.10	mg/L			12/20/18 12:19	1

Client Sample ID: DUP-12-7-18

Lab Sample ID: 440-227147-10

Date Collected: 12/07/18 00:01
Matrix: Water
Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.095	mg/L		12/11/18 10:09	12/12/18 13:10	1
1,1'-Biphenyl	ND		0.095	mg/L		12/11/18 10:09	12/12/18 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*67*		*45 - 120*	*12/11/18 10:09*	*12/12/18 13:10*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1800**		250	mg/L			12/15/18 02:26	500

Client Sample ID: DUP-12-7-18

Lab Sample ID: 440-227147-10

Date Collected: 12/07/18 00:01

Matrix: Water

Date Received: 12/10/18 07:10

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	19	H	2.2	mg/L			12/15/18 02:09	20
Fluoride	ND		10	mg/L			12/15/18 02:09	20
Nitrite as N	ND	H	3.0	mg/L			12/15/18 02:09	20
Orthophosphate as PO4	ND	H	10	mg/L			12/15/18 02:09	20
Sulfate	920		250	mg/L			12/15/18 02:26	500

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	6.0		0.050	mg/L		12/17/18 11:25	12/17/18 23:08	1
Calcium	160		0.10	mg/L		12/17/18 11:25	12/17/18 23:08	1
Iron	ND		0.10	mg/L		12/17/18 11:25	12/17/18 23:08	1
Magnesium	48		0.020	mg/L		12/17/18 11:25	12/17/18 23:08	1
Molybdenum	ND		0.020	mg/L		12/17/18 11:25	12/17/18 23:08	1
Potassium	6.4		0.50	mg/L		12/17/18 11:25	12/17/18 23:08	1
Selenium	0.021		0.010	mg/L		12/17/18 11:25	12/17/18 23:08	1
Sodium	1400		5.0	mg/L		12/17/18 11:25	12/19/18 10:39	10
Strontium	6.1		0.020	mg/L		12/17/18 11:25	12/17/18 23:08	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	370		4.0	mg/L			12/11/18 09:20	1
Bicarbonate Alkalinity as CaCO3	370		4.0	mg/L			12/11/18 09:20	1
Carbonate Alkalinity as CaCO3	ND		4.0	mg/L			12/11/18 09:20	1
Hydroxide Alkalinity as CaCO3	ND		4.0	mg/L			12/11/18 09:20	1
Specific Conductance	7600		1.0	umhos/cm			12/19/18 13:19	1
Total Dissolved Solids	5400		100	mg/L			12/14/18 09:20	1
pH	7.9	HF	0.1	SU			12/18/18 16:13	1
Temperature	22.2	HF	1.0	Celsius			12/18/18 16:13	1

Client Sample ID: EM-12-7-18

Lab Sample ID: 440-227147-11

Date Collected: 12/07/18 11:55

Matrix: Water

Date Received: 12/10/18 07:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11000		1000	mg/L			12/15/18 03:01	2000
Sulfate	3700		1000	mg/L			12/15/18 03:01	2000

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	25000		1000	mg/L			12/14/18 09:20	1

Client Sample ID: EP-8 (east) sludge-12-7-18

Lab Sample ID: 440-227147-12

Date Collected: 12/07/18 11:45

Matrix: Solid

Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0	mg/Kg		12/11/18 13:15	12/12/18 14:14	1
1,1'-Biphenyl	ND		5.0	mg/Kg		12/11/18 13:15	12/12/18 14:14	1

Client Sample ID: EP-8 (east) sludge-12-7-18

Lab Sample ID: 440-227147-12

Date Collected: 12/07/18 11:45
Matrix: Solid
Date Received: 12/10/18 07:10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*86*		*40 - 140*	*12/11/18 13:15*	*12/12/18 14:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Arsenic	ND		3.0	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Barium	**17**		1.5	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Beryllium	ND		0.50	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Cadmium	ND		0.50	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Chromium	**1.1**		1.0	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Cobalt	ND		1.0	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Copper	**2.3**		2.0	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Lead	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Molybdenum	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Nickel	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Selenium	ND		3.0	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Silver	ND		1.5	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Thallium	ND		10	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Vanadium	**2.7**		1.0	mg/Kg		12/24/18 10:53	12/26/18 14:19	5
Zinc	**6.9**		5.0	mg/Kg		12/24/18 10:53	12/26/18 14:19	5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	mg/Kg		12/17/18 12:36	12/17/18 21:44	1

Client Sample ID: EP-8 (west) sludge-12-7-18

Lab Sample ID: 440-227147-13

Date Collected: 12/07/18 12:00
Matrix: Solid
Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0	mg/Kg		12/11/18 13:15	12/12/18 14:36	1
1,1'-Biphenyl	ND		5.0	mg/Kg		12/11/18 13:15	12/12/18 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*40 - 140*	*12/11/18 13:15*	*12/12/18 14:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		20	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Arsenic	**7.8**		6.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Barium	**46**		3.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Beryllium	ND		1.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Cadmium	ND		1.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Chromium	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Cobalt	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Copper	ND		4.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Lead	ND		4.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Molybdenum	ND		4.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Nickel	ND		4.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Selenium	ND		6.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10

Client Sample ID: EP-8 (west) sludge-12-7-18

Lab Sample ID: 440-227147-13

Date Collected: 12/07/18 12:00

Matrix: Solid

Date Received: 12/10/18 07:10

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		3.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Thallium	ND		20	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Vanadium	**3.0**		2.0	mg/Kg		12/24/18 10:53	12/26/18 14:49	10
Zinc	ND		10	mg/Kg		12/24/18 10:53	12/26/18 14:49	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	mg/Kg		12/17/18 12:36	12/17/18 21:46	1

Client Sample ID: EP-9W-12-7-18

Lab Sample ID: 440-227147-14

Date Collected: 12/07/18 11:30

Matrix: Solid

Date Received: 12/10/18 07:10

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		4.9	mg/Kg		12/11/18 13:15	12/12/18 14:57	1
1,1'-Biphenyl	ND		4.9	mg/Kg		12/11/18 13:15	12/12/18 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*82*		*40 - 140*	*12/11/18 13:15*	*12/12/18 14:57*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		20	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Arsenic	**6.3**		6.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Barium	**38**		3.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Beryllium	ND		1.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Cadmium	ND		1.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Chromium	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Cobalt	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Copper	ND		4.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Lead	ND		4.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Molybdenum	ND		4.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Nickel	ND		4.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Selenium	ND		6.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Silver	ND		3.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Thallium	ND		20	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Vanadium	**2.3**		2.0	mg/Kg		12/24/18 10:53	12/26/18 14:52	10
Zinc	ND		10	mg/Kg		12/24/18 10:53	12/26/18 14:52	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	mg/Kg		12/17/18 12:36	12/17/18 21:48	1

Method Summary

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL IRV
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
NO3NO2 Calc	Nitrogen, Nitrate-Nitrite	EPA	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
7471A	Mercury (CVAA)	SW846	TAL IRV
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2510B	Conductivity, Specific Conductance	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 Cl G	Chlorine, Residual	SM	TAL IRV
SM 4500 H+ B	pH	SM	TAL IRV
Total Nitrogen	Nitrogen, Total	EPA	TAL IRV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL IRV
3050B	Preparation, Metals	SW846	TAL IRV
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL IRV
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL IRV
3546	Microwave Extraction	SW846	TAL IRV
7471A	Preparation, Mercury	SW846	TAL IRV
DI Leach	Deionized Water Leaching Procedure	ASTM	TAL IRV
FILTRATION	Sample Filtration	None	TAL IRV

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Client Sample ID: LTU-1-12-7-18

Lab Sample ID: 440-227147-1

Date Collected: 12/07/18 09:50

Matrix: Solid

Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.13 g	1.00 mL	516311	12/11/18 13:15	EGC	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 16:24	LMB	TAL IRV
Soluble	Leach	DI Leach			4.00 g	40 mL	516109	12/10/18 19:01	HTL	TAL IRV
Soluble	Analysis	300.0		1			515939	12/11/18 00:59	NTN	TAL IRV
Soluble	Analysis	NO3NO2 Calc		1			519155	12/24/18 15:12	NN	TAL IRV
Total/NA	Prep	3050B			2.01 g	50 mL	517873	12/18/18 10:55	DEG	TAL IRV
Total/NA	Analysis	6010B		5			518761	12/21/18 12:19	VS	TAL IRV
Total/NA	Prep	351.2			0.9474 g	25 mL	518518	12/20/18 14:47	HTL	TAL IRV
Total/NA	Analysis	351.2		1			518943	12/22/18 17:23	HTL	TAL IRV
Total/NA	Analysis	Total Nitrogen		1			519157	12/24/18 15:24	TLN	TAL IRV

Client Sample ID: LTU-4-12-7-18

Lab Sample ID: 440-227147-2

Date Collected: 12/07/18 10:00

Matrix: Solid

Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.18 g	1.00 mL	516311	12/11/18 13:15	EGC	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 16:46	LMB	TAL IRV
Soluble	Leach	DI Leach			3.98 g	40 mL	516109	12/10/18 19:01	HTL	TAL IRV
Soluble	Analysis	300.0		1			515939	12/11/18 01:17	NTN	TAL IRV
Soluble	Analysis	NO3NO2 Calc		1			519155	12/24/18 15:12	NN	TAL IRV
Total/NA	Prep	3050B			2.03 g	50 mL	517873	12/18/18 10:55	DEG	TAL IRV
Total/NA	Analysis	6010B		5			518761	12/21/18 12:21	VS	TAL IRV
Total/NA	Prep	351.2			0.9450 g	25 mL	518518	12/20/18 14:47	HTL	TAL IRV
Total/NA	Analysis	351.2		1			518943	12/22/18 17:23	HTL	TAL IRV
Total/NA	Analysis	Total Nitrogen		1			519157	12/24/18 15:24	TLN	TAL IRV

Client Sample ID: LTU-6-12-7-18

Lab Sample ID: 440-227147-3

Date Collected: 12/07/18 10:10

Matrix: Solid

Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	1.00 mL	516311	12/11/18 13:15	EGC	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 17:08	LMB	TAL IRV
Soluble	Leach	DI Leach			4.03 g	40 mL	516109	12/10/18 19:09	HTL	TAL IRV
Soluble	Analysis	300.0		1			515939	12/11/18 01:36	NTN	TAL IRV
Soluble	Analysis	NO3NO2 Calc		1			519155	12/24/18 15:12	NN	TAL IRV
Total/NA	Prep	3050B			2.02 g	50 mL	517873	12/18/18 10:55	DEG	TAL IRV
Total/NA	Analysis	6010B		5			518761	12/21/18 12:24	VS	TAL IRV
Total/NA	Prep	351.2			1.4292 g	25 mL	518518	12/20/18 14:47	HTL	TAL IRV
Total/NA	Analysis	351.2		1			518943	12/22/18 17:23	HTL	TAL IRV
Total/NA	Analysis	Total Nitrogen		1			519157	12/24/18 15:24	TLN	TAL IRV

Lab Chronicle

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Client Sample ID: LTU-9 (aux)-12-7-18

Lab Sample ID: 440-227147-4

Date Collected: 12/07/18 10:20
Matrix: Solid
Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	1.00 mL	516311	12/11/18 13:15	EGC	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 17:29	LMB	TAL IRV
Soluble	Leach	DI Leach			4.03 g	40 mL	516109	12/10/18 19:09	HTL	TAL IRV
Soluble	Analysis	300.0		1			515939	12/11/18 01:54	NTN	TAL IRV
Soluble	Analysis	NO3NO2 Calc		1			519155	12/24/18 15:12	NN	TAL IRV
Total/NA	Prep	3050B			1.99 g	50 mL	517873	12/18/18 10:55	DEG	TAL IRV
Total/NA	Analysis	6010B		5			518761	12/21/18 12:26	VS	TAL IRV
Total/NA	Prep	351.2			0.9579 g	25 mL	518518	12/20/18 14:47	HTL	TAL IRV
Total/NA	Analysis	351.2		1			518943	12/22/18 17:23	HTL	TAL IRV
Total/NA	Analysis	Total Nitrogen		1			519157	12/24/18 15:24	TLN	TAL IRV

Client Sample ID: MW-7-12-7-18

Lab Sample ID: 440-227147-5

Date Collected: 12/07/18 11:20
Matrix: Water
Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1050 mL	1 mL	516263	12/11/18 10:09	HCK	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 12:27	LMB	TAL IRV
Total/NA	Analysis	300.0		20			517121	12/15/18 00:27	NTN	TAL IRV
Total/NA	Analysis	300.0		20			517122	12/15/18 00:27	NTN	TAL IRV
Total/NA	Analysis	300.0		500			517122	12/15/18 00:44	NTN	TAL IRV
Dissolved	Filtration	FILTRATION			150 mL	150 mL	516919	12/13/18 13:55	KE	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	517563	12/17/18 11:25	KE	TAL IRV
Dissolved	Analysis	6010B		1			517757	12/17/18 22:50	P1R	TAL IRV
Dissolved	Filtration	FILTRATION			150 mL	150 mL	516919	12/13/18 13:55	KE	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	517563	12/17/18 11:25	KE	TAL IRV
Dissolved	Analysis	6010B		10			518168	12/19/18 10:34	VS	TAL IRV
Total/NA	Analysis	SM 2320B		1			516261	12/11/18 08:43	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			518194	12/19/18 13:19	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	517081	12/14/18 09:20	XL	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			517913	12/18/18 16:13	CMM	TAL IRV

Client Sample ID: MW-10-12-7-18

Lab Sample ID: 440-227147-6

Date Collected: 12/07/18 12:20
Matrix: Water
Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1045 mL	1 mL	516263	12/11/18 10:09	HCK	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 12:48	LMB	TAL IRV
Total/NA	Analysis	300.0		10	5 mL	1.0 mL	517121	12/15/18 01:01	NTN	TAL IRV
Total/NA	Analysis	300.0		10	5 mL	1.0 mL	517122	12/15/18 01:01	NTN	TAL IRV
Total/NA	Analysis	300.0		500			517122	12/15/18 01:18	NTN	TAL IRV

Lab Chronicle

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Client Sample ID: MW-10-12-7-18

Lab Sample ID: 440-227147-6
Date Collected: 12/07/18 12:20
Matrix: Water
Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			150 mL	150 mL	516919	12/13/18 13:55	KE	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	517563	12/17/18 11:25	KE	TAL IRV
Dissolved	Analysis	6010B		1			517757	12/17/18 23:02	P1R	TAL IRV
Dissolved	Filtration	FILTRATION			150 mL	150 mL	516919	12/13/18 13:55	KE	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	517563	12/17/18 11:25	KE	TAL IRV
Dissolved	Analysis	6010B		10			518168	12/19/18 10:36	VS	TAL IRV
Total/NA	Analysis	SM 2320B		1			516261	12/11/18 09:03	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			518194	12/19/18 13:19	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	517081	12/14/18 09:20	XL	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			517913	12/18/18 16:13	CMM	TAL IRV

Client Sample ID: EP-12-7-18

Lab Sample ID: 440-227147-9
Date Collected: 12/07/18 11:50
Matrix: Water
Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1000 mL	1 mL	516263	12/11/18 10:29	HCK	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 13:31	LMB	TAL IRV
Total/NA	Analysis	300.0		100			516842	12/14/18 01:35	NTN	TAL IRV
Total/NA	Analysis	300.0		100			516843	12/14/18 01:35	NTN	TAL IRV
Total/NA	Analysis	300.0		2000			516843	12/14/18 01:51	NTN	TAL IRV
Total/NA	Analysis	300.0		20000			516843	12/14/18 02:08	NTN	TAL IRV
Dissolved	Filtration	FILTRATION			150 mL	150 mL	516919	12/13/18 13:55	KE	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	517563	12/17/18 11:25	KE	TAL IRV
Dissolved	Analysis	6010B		100			518168	12/19/18 10:41	VS	TAL IRV
Dissolved	Filtration	FILTRATION			150 mL	150 mL	516919	12/13/18 13:55	KE	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	517563	12/17/18 11:25	KE	TAL IRV
Dissolved	Analysis	6010B		10			518168	12/19/18 10:44	VS	TAL IRV
Total/NA	Analysis	SM 2320B		1			516261	12/11/18 09:10	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	0.5 mL	100 mL	517081	12/14/18 09:20	XL	TAL IRV
Total/NA	Analysis	SM 4500 Cl G		1	10 mL	10 mL	518470	12/20/18 12:19	MMP	TAL IRV

Client Sample ID: DUP-12-7-18

Lab Sample ID: 440-227147-10
Date Collected: 12/07/18 00:01
Matrix: Water
Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1050 mL	1 mL	516263	12/11/18 10:09	HCK	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 13:10	LMB	TAL IRV
Total/NA	Analysis	300.0		20	5 mL	1.0 mL	517121	12/15/18 02:09	NTN	TAL IRV
Total/NA	Analysis	300.0		20	5 mL	1.0 mL	517122	12/15/18 02:09	NTN	TAL IRV
Total/NA	Analysis	300.0		500			517122	12/15/18 02:26	NTN	TAL IRV

Client Sample ID: DUP-12-7-18 — Lab Sample ID: 440-227147-10

Date Collected: 12/07/18 00:01 — **Matrix: Water**
Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			150 mL	150 mL	516919	12/13/18 13:55	KE	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	517563	12/17/18 11:25	KE	TAL IRV
Dissolved	Analysis	6010B		1			517757	12/17/18 23:08	P1R	TAL IRV
Dissolved	Filtration	FILTRATION			150 mL	150 mL	516919	12/13/18 13:55	KE	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	517563	12/17/18 11:25	KE	TAL IRV
Dissolved	Analysis	6010B		10			518168	12/19/18 10:39	VS	TAL IRV
Total/NA	Analysis	SM 2320B		1			516261	12/11/18 09:20	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			518194	12/19/18 13:19	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	517081	12/14/18 09:20	XL	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			517913	12/18/18 16:13	CMM	TAL IRV

Client Sample ID: EM-12-7-18 — Lab Sample ID: 440-227147-11

Date Collected: 12/07/18 11:55 — **Matrix: Water**
Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2000			517122	12/15/18 03:01	NTN	TAL IRV
Total/NA	Analysis	SM 2540C		1	1 mL	100 mL	517081	12/14/18 09:20	XL	TAL IRV

Client Sample ID: EP-8 (east) sludge-12-7-18 — Lab Sample ID: 440-227147-12

Date Collected: 12/07/18 11:45 — **Matrix: Solid**
Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.09 g	1.00 mL	516311	12/11/18 13:15	EGC	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 14:14	LMB	TAL IRV
Total/NA	Prep	3050B			2.01 g	50 mL	519097	12/24/18 10:53	DEG	TAL IRV
Total/NA	Analysis	6010B		5			519365	12/26/18 14:19	VS	TAL IRV
Total/NA	Prep	7471A			0.50 g	50 mL	517598	12/17/18 12:36	DB	TAL IRV
Total/NA	Analysis	7471A		1			517762	12/17/18 21:44	DB	TAL IRV

Client Sample ID: EP-8 (west) sludge-12-7-18 — Lab Sample ID: 440-227147-13

Date Collected: 12/07/18 12:00 — **Matrix: Solid**
Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.02 g	1.00 mL	516311	12/11/18 13:15	EGC	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 14:36	LMB	TAL IRV
Total/NA	Prep	3050B			1.99 g	50 mL	519097	12/24/18 10:53	DEG	TAL IRV
Total/NA	Analysis	6010B		10			519365	12/26/18 14:49	VS	TAL IRV
Total/NA	Prep	7471A			0.50 g	50 mL	517598	12/17/18 12:36	DB	TAL IRV
Total/NA	Analysis	7471A		1			517762	12/17/18 21:46	DB	TAL IRV

Lab Chronicle

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Client Sample ID: EP-9W-12-7-18

Lab Sample ID: 440-227147-14

Date Collected: 12/07/18 11:30

Matrix: Solid

Date Received: 12/10/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.26 g	1.00 mL	516311	12/11/18 13:15	EGC	TAL IRV
Total/NA	Analysis	8015B		1			516487	12/12/18 14:57	LMB	TAL IRV
Total/NA	Prep	3050B			2.01 g	50 mL	519097	12/24/18 10:53	DEG	TAL IRV
Total/NA	Analysis	6010B		10			519365	12/26/18 14:52	VS	TAL IRV
Total/NA	Prep	7471A			0.51 g	50 mL	517598	12/17/18 12:36	DB	TAL IRV
Total/NA	Analysis	7471A		1			517762	12/17/18 21:48	DB	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-516263/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516487 — **Prep Batch: 516263**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.10		mg/L		12/11/18 10:09	12/12/18 10:16	1
1,1'-Biphenyl	ND		0.10		mg/L		12/11/18 10:09	12/12/18 10:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*45 - 120*	*12/11/18 10:09*	*12/12/18 10:16*	*1*

Lab Sample ID: LCS 440-516263/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516487 — **Prep Batch: 516263**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene, 1,1'-oxybis-	0.100	0.0935	J	mg/L		93	50 - 115
1,1'-Biphenyl	0.100	0.0584	J	mg/L		58	50 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*87*		*45 - 120*

Lab Sample ID: LCSD 440-516263/5-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516487 — **Prep Batch: 516263**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-	0.100	0.0951	J	mg/L		95	50 - 115	2	30
1,1'-Biphenyl	0.100	0.0595	J	mg/L		60	50 - 115	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*86*		*45 - 120*

Lab Sample ID: MB 440-516311/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 516487 — **Prep Batch: 516311**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0		mg/Kg		12/11/18 13:15	12/12/18 11:20	1
1,1'-Biphenyl	ND		5.0		mg/Kg		12/11/18 13:15	12/12/18 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*89*		*40 - 140*	*12/11/18 13:15*	*12/12/18 11:20*	*1*

Lab Sample ID: LCS 440-516311/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 516487 — **Prep Batch: 516311**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene, 1,1'-oxybis-	6.67	6.55		mg/Kg		98	45 - 115
1,1'-Biphenyl	6.67	4.43	J	mg/Kg		66	45 - 115

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 440-516311/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 516487 — **Prep Batch: 516311**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-Octacosane	87		40 - 140

Lab Sample ID: LCSD 440-516311/4-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 516487 — **Prep Batch: 516311**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-	6.67	6.77		mg/Kg		102	45 - 115	3	30
1,1'-Biphenyl	6.67	4.41	J	mg/Kg		66	45 - 115	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
n-Octacosane	90		40 - 140

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-516842/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516842

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	mg/L			12/13/18 16:15	1
Nitrite as N	ND		0.15	mg/L			12/13/18 16:15	1
Orthophosphate as PO4	ND		0.50	mg/L			12/13/18 16:15	1

Lab Sample ID: LCS 440-516842/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516842

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.13	1.12		mg/L		99	90 - 110
Nitrite as N	1.52	1.53		mg/L		100	90 - 110
Orthophosphate as PO4	5.00	4.63		mg/L		93	90 - 110

Lab Sample ID: 440-227608-B-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516842

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.75		1.13	1.94		mg/L		105	80 - 120
Nitrite as N	ND		1.52	1.63		mg/L		107	80 - 120
Orthophosphate as PO4	0.53		5.00	5.83		mg/L		106	80 - 120

Lab Sample ID: 440-227608-B-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516842

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.75		1.13	1.91		mg/L		103	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-227608-B-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516842

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrite as N	ND		1.52	1.60		mg/L		105	80 - 120	1	20
Orthophosphate as PO4	0.53		5.00	6.19		mg/L		113	80 - 120	6	20

Lab Sample ID: MB 440-516843/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516843

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/L			12/13/18 16:15	1
Fluoride	ND		0.50	mg/L			12/13/18 16:15	1
Sulfate	ND		0.50	mg/L			12/13/18 16:15	1

Lab Sample ID: LCS 440-516843/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516843

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.82		mg/L		96	90 - 110
Fluoride	5.00	4.51		mg/L		90	90 - 110
Sulfate	5.00	4.80		mg/L		96	90 - 110

Lab Sample ID: 440-227608-B-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516843

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	65	E	5.00	71.0	E 4	mg/L		114	80 - 120
Fluoride	0.60		5.00	4.70		mg/L		82	80 - 120
Sulfate	130	E	5.00	139	E 4	mg/L		98	80 - 120

Lab Sample ID: 440-227608-B-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516843

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	65	E	5.00	71.1	E 4	mg/L		116	80 - 120	0	20
Fluoride	0.60		5.00	4.70		mg/L		82	80 - 120	0	20
Sulfate	130	E	5.00	139	E 4	mg/L		109	80 - 120	0	20

Lab Sample ID: MB 440-517121/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517121

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	mg/L			12/14/18 11:59	1
Nitrite as N	ND		0.15	mg/L			12/14/18 11:59	1
Orthophosphate as PO4	ND		0.50	mg/L			12/14/18 11:59	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 440-517121/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.13	1.14		mg/L		101	90 - 110
Nitrite as N	1.52	1.44		mg/L		94	90 - 110
Orthophosphate as PO4	5.00	4.90		mg/L		98	90 - 110

Lab Sample ID: 440-227767-H-3 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517121

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	4.5		11.3	17.5		mg/L		115	80 - 120
Nitrite as N	ND		15.2	17.2		mg/L		110	80 - 120
Orthophosphate as PO4	ND	F1 F2	50.0	44.1		mg/L		88	80 - 120

Lab Sample ID: 440-227767-H-3 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517121

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	4.5		11.3	17.1		mg/L		112	80 - 120	2	20
Nitrite as N	ND		15.2	17.0		mg/L		108	80 - 120	2	20
Orthophosphate as PO4	ND	F1 F2	50.0	33.9	F1 F2	mg/L		68	80 - 120	26	20

Lab Sample ID: MB 440-517122/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517122

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/L			12/14/18 11:59	1
Fluoride	ND		0.50	mg/L			12/14/18 11:59	1
Sulfate	ND		0.50	mg/L			12/14/18 11:59	1

Lab Sample ID: LCS 440-517122/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.97		mg/L		99	90 - 110
Fluoride	5.00	4.84		mg/L		97	90 - 110
Sulfate	5.00	4.98		mg/L		100	90 - 110

Lab Sample ID: 440-227597-A-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517122

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.3		5.00	9.33		mg/L		101	80 - 120
Fluoride	1.6		5.00	6.37		mg/L		95	80 - 120
Sulfate	16		5.00	21.5		mg/L		103	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-227597-A-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517122

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.3		5.00	9.38		mg/L		102	80 - 120	1	20
Fluoride	1.6		5.00	6.40		mg/L		96	80 - 120	1	20
Sulfate	16		5.00	21.7		mg/L		106	80 - 120	1	20

Lab Sample ID: MB 440-516109/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 515939

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		1.1		mg/Kg			12/10/18 20:40	1
Nitrite as N	ND		1.5		mg/Kg			12/10/18 20:40	1

Lab Sample ID: LCS 440-516109/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 515939

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			11.3	10.9		mg/Kg		97	90 - 110		
Nitrite as N			15.2	15.3		mg/Kg		101	90 - 110		

Lab Sample ID: 440-226581-A-1-F MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 515939

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	1.9		11.2	13.7		mg/Kg		106	80 - 120		
Nitrite as N	ND	F1	15.1	22.9	F1	mg/Kg		143	80 - 120		

Lab Sample ID: 440-226581-A-1-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 515939

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	1.9		11.3	14.0		mg/Kg		107	80 - 120	2	20
Nitrite as N	ND	F1	15.3	23.5	F1	mg/Kg		146	80 - 120	3	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-517873/1-A ^5 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 518761 — **Prep Batch: 517873**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus	ND		5.0		mg/Kg		12/18/18 10:55	12/21/18 10:10	5
Potassium	ND		63		mg/Kg		12/18/18 10:55	12/21/18 10:10	5

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-517873/2-A ^5 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 518761 — **Prep Batch: 517873**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus	49.8	41.6		mg/Kg		84	80 - 120
Potassium	498	423		mg/Kg		85	80 - 120

Lab Sample ID: 440-225827-A-21-F MS ^5 — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 518761 — **Prep Batch: 517873**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus	710		50.0	751	4	mg/Kg		90	75 - 125
Potassium	2900		500	3450	4	mg/Kg		107	75 - 125

Lab Sample ID: 440-225827-A-21-G MSD ^5 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 518761 — **Prep Batch: 517873**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phosphorus	710		49.3	773	4	mg/Kg		136	75 - 125	3	20
Potassium	2900		493	3270	4	mg/Kg		72	75 - 125	5	20

Lab Sample ID: MB 440-519097/1-A ^5 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 519365 — **Prep Batch: 519097**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Arsenic	ND		3.0	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Barium	ND		1.5	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Beryllium	ND		0.50	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Cadmium	ND		0.50	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Chromium	ND		1.0	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Cobalt	ND		1.0	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Copper	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Lead	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Molybdenum	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Nickel	ND		2.0	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Selenium	ND		3.0	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Silver	ND		1.5	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Thallium	ND		10	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Vanadium	ND		1.0	mg/Kg		12/24/18 10:53	12/26/18 13:31	5
Zinc	ND		5.0	mg/Kg		12/24/18 10:53	12/26/18 13:31	5

Lab Sample ID: LCS 440-519097/2-A ^5 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 519365 — **Prep Batch: 519097**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	49.3		mg/Kg		99	80 - 120
Arsenic	50.0	46.4		mg/Kg		93	80 - 120
Barium	50.0	48.2		mg/Kg		96	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-519097/2-A ^5 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 519365 — **Prep Batch: 519097**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	50.0	47.1		mg/Kg		94	80 - 120
Cadmium	50.0	47.8		mg/Kg		96	80 - 120
Chromium	50.0	48.3		mg/Kg		97	80 - 120
Cobalt	50.0	48.3		mg/Kg		97	80 - 120
Copper	50.0	48.5		mg/Kg		97	80 - 120
Lead	50.0	47.9		mg/Kg		96	80 - 120
Molybdenum	50.0	48.1		mg/Kg		96	80 - 120
Nickel	50.0	48.7		mg/Kg		97	80 - 120
Selenium	50.0	43.6		mg/Kg		87	80 - 120
Silver	25.0	24.2		mg/Kg		97	80 - 120
Thallium	50.0	47.4		mg/Kg		95	80 - 120
Vanadium	50.0	47.9		mg/Kg		96	80 - 120
Zinc	50.0	47.1		mg/Kg		94	80 - 120

Lab Sample ID: 440-228400-A-58-D MS ^5 — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 519365 — **Prep Batch: 519097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	50.0	23.5	F1	mg/Kg		47	75 - 125
Arsenic	5.0		50.0	50.9		mg/Kg		92	75 - 125
Barium	120		50.0	177		mg/Kg		114	75 - 125
Beryllium	ND		50.0	47.5		mg/Kg		94	75 - 125
Cadmium	ND		50.0	46.2		mg/Kg		92	75 - 125
Chromium	16		50.0	66.3		mg/Kg		100	75 - 125
Cobalt	7.3		50.0	54.0		mg/Kg		93	75 - 125
Copper	24		50.0	77.2		mg/Kg		106	75 - 125
Lead	33		50.0	87.8		mg/Kg		110	75 - 125
Molybdenum	ND		50.0	46.9		mg/Kg		94	75 - 125
Nickel	11		50.0	57.8		mg/Kg		94	75 - 125
Selenium	ND		50.0	43.6		mg/Kg		87	75 - 125
Silver	ND		25.0	24.0		mg/Kg		96	75 - 125
Thallium	ND		50.0	45.7		mg/Kg		91	75 - 125
Vanadium	37		50.0	91.0		mg/Kg		108	75 - 125
Zinc	110	F1	50.0	184	F1	mg/Kg		150	75 - 125

Lab Sample ID: 440-228400-A-58-E MSD ^5 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 519365 — **Prep Batch: 519097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	50.0	23.5	F1	mg/Kg		47	75 - 125	0	20
Arsenic	5.0		50.0	48.9		mg/Kg		88	75 - 125	4	20
Barium	120		50.0	161		mg/Kg		82	75 - 125	10	20
Beryllium	ND		50.0	45.7		mg/Kg		91	75 - 125	4	20
Cadmium	ND		50.0	44.4		mg/Kg		88	75 - 125	4	20
Chromium	16		50.0	63.3		mg/Kg		94	75 - 125	5	20
Cobalt	7.3		50.0	51.9		mg/Kg		89	75 - 125	4	20
Copper	24		50.0	71.8		mg/Kg		96	75 - 125	7	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-228400-A-58-E MSD ^5 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 519365 — **Prep Batch: 519097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	33		50.0	73.0		mg/Kg		80	75 - 125	19	20
Molybdenum	ND		50.0	44.9		mg/Kg		90	75 - 125	4	20
Nickel	11		50.0	54.6		mg/Kg		88	75 - 125	6	20
Selenium	ND		50.0	42.2		mg/Kg		84	75 - 125	3	20
Silver	ND		25.0	22.9		mg/Kg		92	75 - 125	4	20
Thallium	ND		50.0	43.9		mg/Kg		88	75 - 125	4	20
Vanadium	37		50.0	87.7		mg/Kg		101	75 - 125	4	20
Zinc	110	F1	50.0	153		mg/Kg		87	75 - 125	19	20

Lab Sample ID: MB 440-516919/1-D — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 517757 — **Prep Batch: 517563**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050	mg/L		12/17/18 11:25	12/17/18 22:44	1
Calcium	ND		0.10	mg/L		12/17/18 11:25	12/17/18 22:44	1
Iron	ND		0.10	mg/L		12/17/18 11:25	12/17/18 22:44	1
Magnesium	ND		0.020	mg/L		12/17/18 11:25	12/17/18 22:44	1
Potassium	ND		0.50	mg/L		12/17/18 11:25	12/17/18 22:44	1
Strontium	ND		0.020	mg/L		12/17/18 11:25	12/17/18 22:44	1
Molybdenum	ND		0.020	mg/L		12/17/18 11:25	12/17/18 22:44	1
Selenium	ND		0.010	mg/L		12/17/18 11:25	12/17/18 22:44	1

Lab Sample ID: MB 440-516919/1-D — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 518168 — **Prep Batch: 517563**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		0.50	mg/L		12/17/18 11:25	12/19/18 10:29	1

Lab Sample ID: LCS 440-516919/2-D — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 517757 — **Prep Batch: 517563**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	0.920		mg/L		92	80 - 120
Calcium	5.00	4.73		mg/L		95	80 - 120
Iron	1.00	0.960		mg/L		96	80 - 120
Magnesium	5.00	4.56		mg/L		91	80 - 120
Potassium	10.0	9.47		mg/L		95	80 - 120
Strontium	1.00	0.952		mg/L		95	80 - 120
Molybdenum	1.00	0.947		mg/L		95	80 - 120
Selenium	1.00	0.855		mg/L		85	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-516919/2-D — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 518168 — **Prep Batch: 517563**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	9.30		mg/L		93	80 - 120

Lab Sample ID: 440-227147-5 MS — **Client Sample ID: MW-7-12-7-18**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 517757 — **Prep Batch: 517563**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5.9		1.00	6.77	4	mg/L		85	75 - 125
Calcium	160		5.00	159	4	mg/L		52	75 - 125
Iron	ND		1.00	0.924		mg/L		92	75 - 125
Magnesium	47		5.00	49.8	4	mg/L		57	75 - 125
Potassium	5.8		10.0	15.2		mg/L		94	75 - 125
Strontium	6.1		1.00	6.89	4	mg/L		83	75 - 125
Molybdenum	ND		1.00	0.959		mg/L		96	75 - 125
Selenium	0.021		1.00	0.881		mg/L		86	75 - 125

Lab Sample ID: 440-227147-5 MSD — **Client Sample ID: MW-7-12-7-18**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 517757 — **Prep Batch: 517563**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	5.9		1.00	6.81	4	mg/L		89	75 - 125	1	20
Calcium	160		5.00	159	4	mg/L		52	75 - 125	0	20
Iron	ND		1.00	0.950		mg/L		95	75 - 125	3	20
Magnesium	47		5.00	50.6	4	mg/L		73	75 - 125	2	20
Potassium	5.8		10.0	15.6		mg/L		98	75 - 125	2	20
Strontium	6.1		1.00	6.92	4	mg/L		86	75 - 125	0	20
Molybdenum	ND		1.00	0.984		mg/L		98	75 - 125	3	20
Selenium	0.021		1.00	0.902		mg/L		88	75 - 125	2	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 440-517598/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 517762 — **Prep Batch: 517598**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	mg/Kg		12/17/18 12:36	12/17/18 21:26	1

Lab Sample ID: LCS 440-517598/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 517762 — **Prep Batch: 517598**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.784	0.739		mg/Kg		94	80 - 120

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 440-227170-A-4-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 517762 — **Prep Batch: 517598**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.061		0.800	0.751		mg/Kg		86	75 - 125		

Lab Sample ID: 440-227170-A-4-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 517762 — **Prep Batch: 517598**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.061		0.800	0.764		mg/Kg		88	75 - 125	2	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 440-518518/3-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 518943 — **Prep Batch: 518518**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		5.0		mg/Kg		12/20/18 14:47	12/22/18 16:52	1

Lab Sample ID: LCS 440-518518/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 518943 — **Prep Batch: 518518**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Kjeldahl Nitrogen			50.0	52.6		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 440-518518/5-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 518943 — **Prep Batch: 518518**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen			50.0	53.6		mg/Kg		107	90 - 110	2	20

Lab Sample ID: 440-227603-A-1-C MS ^10 — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 518943 — **Prep Batch: 518518**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Kjeldahl Nitrogen	12000		1270	13300	4	mg/Kg		77	50 - 150		

Lab Sample ID: 440-227603-A-1-D MSD ^10 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 518943 — **Prep Batch: 518518**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	12000		1300	14400	4	mg/Kg		164	50 - 150	8	35

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-516261/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516261

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		4.0		mg/L			12/11/18 07:02	1
Bicarbonate Alkalinity as CaCO3	ND		4.0		mg/L			12/11/18 07:02	1
Carbonate Alkalinity as CaCO3	ND		4.0		mg/L			12/11/18 07:02	1
Hydroxide Alkalinity as CaCO3	ND		4.0		mg/L			12/11/18 07:02	1

Lab Sample ID: LCS 440-516261/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516261

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity as CaCO3			80.7	81.3		mg/L		101	80 - 120		

Lab Sample ID: 440-227147-5 DU — **Client Sample ID: MW-7-12-7-18**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 516261

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	370			371		mg/L				1	20
Bicarbonate Alkalinity as CaCO3	370			371		mg/L				1	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 440-518194/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 518194

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0		umhos/cm			12/19/18 13:19	1

Lab Sample ID: LCS 440-518194/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 518194

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Conductance			953	968		umhos/cm		102	90 - 110		

Lab Sample ID: 440-226959-Y-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 518194

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	480			469		umhos/cm				2	5

QC Sample Results

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-517081/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517081

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			12/14/18 09:20	1

Lab Sample ID: LCS 440-517081/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517081

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1000	994		mg/L		99	90 - 110		

Lab Sample ID: 440-227147-5 DU — **Client Sample ID: MW-7-12-7-18**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517081

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	5100			5270		mg/L				3	5

Method: SM 4500 Cl G - Chlorine, Residual

Lab Sample ID: MB 440-518470/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 518470

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chlorine, Total Residual	ND		0.10		mg/L			12/20/18 12:19	1

Lab Sample ID: MRL 440-518470/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 518470

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Chlorine, Total Residual			0.100	0.110		mg/L		110	50 - 150		

Lab Sample ID: 440-227258-E-2 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 518470

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chlorine, Total Residual	ND			ND		mg/L				NC	20

Method: SM 4500 H+ B - pH

Lab Sample ID: 440-227147-5 DU — **Client Sample ID: MW-7-12-7-18**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517913

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.0	HF		7.9		SU				0.4	2
Temperature	22.2	HF		22.4		Celsius				0.9	2

QC Association Summary

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

GC Semi VOA

Prep Batch: 516263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Total/NA	Water	3510C	
440-227147-6	MW-10-12-7-18	Total/NA	Water	3510C	
440-227147-9	EP-12-7-18	Total/NA	Water	3510C	
440-227147-10	DUP-12-7-18	Total/NA	Water	3510C	
MB 440-516263/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-516263/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-516263/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 516311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-1	LTU-1-12-7-18	Total/NA	Solid	3546	
440-227147-2	LTU-4-12-7-18	Total/NA	Solid	3546	
440-227147-3	LTU-6-12-7-18	Total/NA	Solid	3546	
440-227147-4	LTU-9 (aux)-12-7-18	Total/NA	Solid	3546	
440-227147-12	EP-8 (east) sludge-12-7-18	Total/NA	Solid	3546	
440-227147-13	EP-8 (west) sludge-12-7-18	Total/NA	Solid	3546	
440-227147-14	EP-9W-12-7-18	Total/NA	Solid	3546	
MB 440-516311/1-A	Method Blank	Total/NA	Solid	3546	
LCS 440-516311/3-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 440-516311/4-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 516487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-1	LTU-1-12-7-18	Total/NA	Solid	8015B	516311
440-227147-2	LTU-4-12-7-18	Total/NA	Solid	8015B	516311
440-227147-3	LTU-6-12-7-18	Total/NA	Solid	8015B	516311
440-227147-4	LTU-9 (aux)-12-7-18	Total/NA	Solid	8015B	516311
440-227147-5	MW-7-12-7-18	Total/NA	Water	8015B	516263
440-227147-6	MW-10-12-7-18	Total/NA	Water	8015B	516263
440-227147-9	EP-12-7-18	Total/NA	Water	8015B	516263
440-227147-10	DUP-12-7-18	Total/NA	Water	8015B	516263
440-227147-12	EP-8 (east) sludge-12-7-18	Total/NA	Solid	8015B	516311
440-227147-13	EP-8 (west) sludge-12-7-18	Total/NA	Solid	8015B	516311
440-227147-14	EP-9W-12-7-18	Total/NA	Solid	8015B	516311
MB 440-516263/1-A	Method Blank	Total/NA	Water	8015B	516263
MB 440-516311/1-A	Method Blank	Total/NA	Solid	8015B	516311
LCS 440-516263/4-A	Lab Control Sample	Total/NA	Water	8015B	516263
LCS 440-516311/3-A	Lab Control Sample	Total/NA	Solid	8015B	516311
LCSD 440-516263/5-A	Lab Control Sample Dup	Total/NA	Water	8015B	516263
LCSD 440-516311/4-A	Lab Control Sample Dup	Total/NA	Solid	8015B	516311

HPLC/IC

Analysis Batch: 515939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-1	LTU-1-12-7-18	Soluble	Solid	300.0	516109
440-227147-2	LTU-4-12-7-18	Soluble	Solid	300.0	516109
440-227147-3	LTU-6-12-7-18	Soluble	Solid	300.0	516109
440-227147-4	LTU-9 (aux)-12-7-18	Soluble	Solid	300.0	516109
MB 440-516109/1-A	Method Blank	Soluble	Solid	300.0	516109

HPLC/IC (Continued)

Analysis Batch: 515939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-516109/2-A	Lab Control Sample	Soluble	Solid	300.0	516109
440-226581-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	516109
440-226581-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	516109

Leach Batch: 516109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-1	LTU-1-12-7-18	Soluble	Solid	DI Leach	
440-227147-2	LTU-4-12-7-18	Soluble	Solid	DI Leach	
440-227147-3	LTU-6-12-7-18	Soluble	Solid	DI Leach	
440-227147-4	LTU-9 (aux)-12-7-18	Soluble	Solid	DI Leach	
MB 440-516109/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 440-516109/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
440-226581-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
440-226581-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 516842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-9	EP-12-7-18	Total/NA	Water	300.0	
MB 440-516842/6	Method Blank	Total/NA	Water	300.0	
LCS 440-516842/5	Lab Control Sample	Total/NA	Water	300.0	
440-227608-B-2 MS	Matrix Spike	Total/NA	Water	300.0	
440-227608-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 516843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-9	EP-12-7-18	Total/NA	Water	300.0	
440-227147-9	EP-12-7-18	Total/NA	Water	300.0	
440-227147-9	EP-12-7-18	Total/NA	Water	300.0	
MB 440-516843/6	Method Blank	Total/NA	Water	300.0	
LCS 440-516843/5	Lab Control Sample	Total/NA	Water	300.0	
440-227608-B-2 MS	Matrix Spike	Total/NA	Water	300.0	
440-227608-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 517121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Total/NA	Water	300.0	
440-227147-6	MW-10-12-7-18	Total/NA	Water	300.0	
440-227147-10	DUP-12-7-18	Total/NA	Water	300.0	
MB 440-517121/6	Method Blank	Total/NA	Water	300.0	
LCS 440-517121/5	Lab Control Sample	Total/NA	Water	300.0	
440-227767-H-3 MS	Matrix Spike	Total/NA	Water	300.0	
440-227767-H-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 517122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Total/NA	Water	300.0	
440-227147-5	MW-7-12-7-18	Total/NA	Water	300.0	
440-227147-6	MW-10-12-7-18	Total/NA	Water	300.0	
440-227147-6	MW-10-12-7-18	Total/NA	Water	300.0	
440-227147-10	DUP-12-7-18	Total/NA	Water	300.0	
440-227147-10	DUP-12-7-18	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 517122 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-11	EM-12-7-18	Total/NA	Water	300.0	
MB 440-517122/6	Method Blank	Total/NA	Water	300.0	
LCS 440-517122/5	Lab Control Sample	Total/NA	Water	300.0	
440-227597-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
440-227597-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 519155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-1	LTU-1-12-7-18	Soluble	Solid	NO3NO2 Calc	
440-227147-2	LTU-4-12-7-18	Soluble	Solid	NO3NO2 Calc	
440-227147-3	LTU-6-12-7-18	Soluble	Solid	NO3NO2 Calc	
440-227147-4	LTU-9 (aux)-12-7-18	Soluble	Solid	NO3NO2 Calc	

Metals

Filtration Batch: 516919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Dissolved	Water	FILTRATION	
440-227147-6	MW-10-12-7-18	Dissolved	Water	FILTRATION	
440-227147-9	EP-12-7-18	Dissolved	Water	FILTRATION	
440-227147-10	DUP-12-7-18	Dissolved	Water	FILTRATION	
MB 440-516919/1-D	Method Blank	Dissolved	Water	FILTRATION	
LCS 440-516919/2-D	Lab Control Sample	Dissolved	Water	FILTRATION	
440-227147-5 MS	MW-7-12-7-18	Dissolved	Water	FILTRATION	
440-227147-5 MSD	MW-7-12-7-18	Dissolved	Water	FILTRATION	

Prep Batch: 517563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Dissolved	Water	3005A	516919
440-227147-6	MW-10-12-7-18	Dissolved	Water	3005A	516919
440-227147-9	EP-12-7-18	Dissolved	Water	3005A	516919
440-227147-10	DUP-12-7-18	Dissolved	Water	3005A	516919
MB 440-516919/1-D	Method Blank	Dissolved	Water	3005A	516919
LCS 440-516919/2-D	Lab Control Sample	Dissolved	Water	3005A	516919
440-227147-5 MS	MW-7-12-7-18	Dissolved	Water	3005A	516919
440-227147-5 MSD	MW-7-12-7-18	Dissolved	Water	3005A	516919

Prep Batch: 517598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-12	EP-8 (east) sludge-12-7-18	Total/NA	Solid	7471A	
440-227147-13	EP-8 (west) sludge-12-7-18	Total/NA	Solid	7471A	
440-227147-14	EP-9W-12-7-18	Total/NA	Solid	7471A	
MB 440-517598/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 440-517598/2-A	Lab Control Sample	Total/NA	Solid	7471A	
440-227170-A-4-B MS	Matrix Spike	Total/NA	Solid	7471A	
440-227170-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 517757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Dissolved	Water	6010B	517563

Metals (Continued)

Analysis Batch: 517757 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-6	MW-10-12-7-18	Dissolved	Water	6010B	517563
440-227147-10	DUP-12-7-18	Dissolved	Water	6010B	517563
MB 440-516919/1-D	Method Blank	Dissolved	Water	6010B	517563
LCS 440-516919/2-D	Lab Control Sample	Dissolved	Water	6010B	517563
440-227147-5 MS	MW-7-12-7-18	Dissolved	Water	6010B	517563
440-227147-5 MSD	MW-7-12-7-18	Dissolved	Water	6010B	517563

Analysis Batch: 517762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-12	EP-8 (east) sludge-12-7-18	Total/NA	Solid	7471A	517598
440-227147-13	EP-8 (west) sludge-12-7-18	Total/NA	Solid	7471A	517598
440-227147-14	EP-9W-12-7-18	Total/NA	Solid	7471A	517598
MB 440-517598/1-A	Method Blank	Total/NA	Solid	7471A	517598
LCS 440-517598/2-A	Lab Control Sample	Total/NA	Solid	7471A	517598
440-227170-A-4-B MS	Matrix Spike	Total/NA	Solid	7471A	517598
440-227170-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	517598

Prep Batch: 517873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-1	LTU-1-12-7-18	Total/NA	Solid	3050B	
440-227147-2	LTU-4-12-7-18	Total/NA	Solid	3050B	
440-227147-3	LTU-6-12-7-18	Total/NA	Solid	3050B	
440-227147-4	LTU-9 (aux)-12-7-18	Total/NA	Solid	3050B	
MB 440-517873/1-A ^5	Method Blank	Total/NA	Solid	3050B	
LCS 440-517873/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
440-225827-A-21-F MS ^5	Matrix Spike	Total/NA	Solid	3050B	
440-225827-A-21-G MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 518168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Dissolved	Water	6010B	517563
440-227147-6	MW-10-12-7-18	Dissolved	Water	6010B	517563
440-227147-9	EP-12-7-18	Dissolved	Water	6010B	517563
440-227147-9	EP-12-7-18	Dissolved	Water	6010B	517563
440-227147-10	DUP-12-7-18	Dissolved	Water	6010B	517563
MB 440-516919/1-D	Method Blank	Dissolved	Water	6010B	517563
LCS 440-516919/2-D	Lab Control Sample	Dissolved	Water	6010B	517563

Analysis Batch: 518761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-1	LTU-1-12-7-18	Total/NA	Solid	6010B	517873
440-227147-2	LTU-4-12-7-18	Total/NA	Solid	6010B	517873
440-227147-3	LTU-6-12-7-18	Total/NA	Solid	6010B	517873
440-227147-4	LTU-9 (aux)-12-7-18	Total/NA	Solid	6010B	517873
MB 440-517873/1-A ^5	Method Blank	Total/NA	Solid	6010B	517873
LCS 440-517873/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	517873
440-225827-A-21-F MS ^5	Matrix Spike	Total/NA	Solid	6010B	517873
440-225827-A-21-G MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	6010B	517873

Metals (Continued)

Prep Batch: 519097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-12	EP-8 (east) sludge-12-7-18	Total/NA	Solid	3050B	
440-227147-13	EP-8 (west) sludge-12-7-18	Total/NA	Solid	3050B	
440-227147-14	EP-9W-12-7-18	Total/NA	Solid	3050B	
MB 440-519097/1-A ^5	Method Blank	Total/NA	Solid	3050B	
LCS 440-519097/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
440-228400-A-58-D MS ^5	Matrix Spike	Total/NA	Solid	3050B	
440-228400-A-58-E MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 519365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-12	EP-8 (east) sludge-12-7-18	Total/NA	Solid	6010B	519097
440-227147-13	EP-8 (west) sludge-12-7-18	Total/NA	Solid	6010B	519097
440-227147-14	EP-9W-12-7-18	Total/NA	Solid	6010B	519097
MB 440-519097/1-A ^5	Method Blank	Total/NA	Solid	6010B	519097
LCS 440-519097/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	519097
440-228400-A-58-D MS ^5	Matrix Spike	Total/NA	Solid	6010B	519097
440-228400-A-58-E MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	6010B	519097

General Chemistry

Analysis Batch: 516261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Total/NA	Water	SM 2320B	
440-227147-6	MW-10-12-7-18	Total/NA	Water	SM 2320B	
440-227147-9	EP-12-7-18	Total/NA	Water	SM 2320B	
440-227147-10	DUP-12-7-18	Total/NA	Water	SM 2320B	
MB 440-516261/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 440-516261/2	Lab Control Sample	Total/NA	Water	SM 2320B	
440-227147-5 DU	MW-7-12-7-18	Total/NA	Water	SM 2320B	

Analysis Batch: 517081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Total/NA	Water	SM 2540C	
440-227147-6	MW-10-12-7-18	Total/NA	Water	SM 2540C	
440-227147-9	EP-12-7-18	Total/NA	Water	SM 2540C	
440-227147-10	DUP-12-7-18	Total/NA	Water	SM 2540C	
440-227147-11	EM-12-7-18	Total/NA	Water	SM 2540C	
MB 440-517081/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-517081/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-227147-5 DU	MW-7-12-7-18	Total/NA	Water	SM 2540C	

Analysis Batch: 517913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Total/NA	Water	SM 4500 H+ B	
440-227147-6	MW-10-12-7-18	Total/NA	Water	SM 4500 H+ B	
440-227147-10	DUP-12-7-18	Total/NA	Water	SM 4500 H+ B	
440-227147-5 DU	MW-7-12-7-18	Total/NA	Water	SM 4500 H+ B	

General Chemistry (Continued)

Analysis Batch: 518194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-5	MW-7-12-7-18	Total/NA	Water	SM 2510B	
440-227147-6	MW-10-12-7-18	Total/NA	Water	SM 2510B	
440-227147-10	DUP-12-7-18	Total/NA	Water	SM 2510B	
MB 440-518194/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 440-518194/4	Lab Control Sample	Total/NA	Water	SM 2510B	
440-226959-Y-1 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 518470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-9	EP-12-7-18	Total/NA	Water	SM 4500 Cl G	
MB 440-518470/7	Method Blank	Total/NA	Water	SM 4500 Cl G	
MRL 440-518470/6	Lab Control Sample	Total/NA	Water	SM 4500 Cl G	
440-227258-E-2 DU	Duplicate	Total/NA	Water	SM 4500 Cl G	

Prep Batch: 518518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-1	LTU-1-12-7-18	Total/NA	Solid	351.2	
440-227147-2	LTU-4-12-7-18	Total/NA	Solid	351.2	
440-227147-3	LTU-6-12-7-18	Total/NA	Solid	351.2	
440-227147-4	LTU-9 (aux)-12-7-18	Total/NA	Solid	351.2	
MB 440-518518/3-A	Method Blank	Total/NA	Solid	351.2	
LCS 440-518518/4-A	Lab Control Sample	Total/NA	Solid	351.2	
LCSD 440-518518/5-A	Lab Control Sample Dup	Total/NA	Solid	351.2	
440-227603-A-1-C MS ^10	Matrix Spike	Total/NA	Solid	351.2	
440-227603-A-1-D MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	351.2	

Analysis Batch: 518943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-1	LTU-1-12-7-18	Total/NA	Solid	351.2	518518
440-227147-2	LTU-4-12-7-18	Total/NA	Solid	351.2	518518
440-227147-3	LTU-6-12-7-18	Total/NA	Solid	351.2	518518
440-227147-4	LTU-9 (aux)-12-7-18	Total/NA	Solid	351.2	518518
MB 440-518518/3-A	Method Blank	Total/NA	Solid	351.2	518518
LCS 440-518518/4-A	Lab Control Sample	Total/NA	Solid	351.2	518518
LCSD 440-518518/5-A	Lab Control Sample Dup	Total/NA	Solid	351.2	518518
440-227603-A-1-C MS ^10	Matrix Spike	Total/NA	Solid	351.2	518518
440-227603-A-1-D MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	351.2	518518

Analysis Batch: 519157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-227147-1	LTU-1-12-7-18	Total/NA	Solid	Total Nitrogen	
440-227147-2	LTU-4-12-7-18	Total/NA	Solid	Total Nitrogen	
440-227147-3	LTU-6-12-7-18	Total/NA	Solid	Total Nitrogen	
440-227147-4	LTU-9 (aux)-12-7-18	Total/NA	Solid	Total Nitrogen	

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Luz Solar Partners LTD VIII
Project/Site: Terra-Gen Harper Lake

TestAmerica Job ID: 440-227147-1

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0		Solid	Nitrate as N
300.0		Solid	Nitrite as N
300.0		Water	Orthophosphate as PO4
351.2	351.2	Solid	Total Kjeldahl Nitrogen
6010B	3005A	Water	Boron
6010B	3005A	Water	Calcium
6010B	3005A	Water	Iron
6010B	3005A	Water	Magnesium
6010B	3005A	Water	Potassium
6010B	3005A	Water	Sodium
6010B	3005A	Water	Strontium
6010B	3050B	Solid	Phosphorus
6010B	3050B	Solid	Potassium
8015B	3510C	Water	1,1'-Biphenyl
8015B	3510C	Water	Benzene, 1,1'-oxybis-
8015B	3546	Solid	1,1'-Biphenyl
8015B	3546	Solid	Benzene, 1,1'-oxybis-
NO3NO2 Calc		Solid	Nitrate Nitrite as N
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity as CaCO3
SM 4500 H+ B		Water	Temperature
Total Nitrogen		Solid	Nitrogen, Total

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

207905

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Project Manager: Joe Faubes	Site Contact:	Date: 12-7-18	COC No
Company Name Terra Gen	Tel/Fax:	Lab Contact:	Carrier:	1 of 1 COCs
Address	Analysis Turnaround Time			Sampler:
City/State/Zip	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: Terra Gen - Harper Lake	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

AK 12/10/18

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8015 Mod for Therm.	Nitrogen	Phosphate	See attached pg 4+5 Section 2C	" pg 2+3 Section 3B	Title 22 metals	Chlorine	Chloride	Sulfate	TDS	Sample Specific Notes:
LTU-1-12-7-18	12-7-18	0950	G	Soil	1		N	X	X	X								
LTU-4 "		1000		"	1			X	X	X								
LTU-6 "		1010		"	1			X	X	X								
LTU-9 (aux) "		1020		"	1			X	X	X								
MW-7-12-7-18		1120		H_2O	3			X			X							
MW-10 "		1220		"	3			X			X							
EP - "		1150		"	8			X				X		X				- Composite EP East + West
Dup - "		—		H_2O	3			X			X							+ report as EP-12-7-18
Em - "		1155		"	1										X	X	X	
EP-8E Sludge-12-7-18		1145		Soil	1			X					X					
EP-8W " "		1200		"	1			X					X					
EP-9W " "		1180		"	1			X					X					

440-227147 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp. (°C). Obs'd: 1.4 Corr'd. 1.4 Therm ID No. 1289

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	NorthStar	12-10-18 @ 0710	[signature]	FAIRV	12/10/18 @ 0710
Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time:
Relinquished by:	Company	Date/Time	Received in Laboratory by	Company:	Date/Time:

12/26/2018

C. Impoundment Monitoring

1. Dikes and Liners

a) Monthly, the freeboard measured from the top of the lowest part of the dike to the wastewater surface, in the surface impoundment. If the pond is dry, indicate that it is empty.

b) Monthly, the integrity of the dikes and liners shall be checked. Should the inspection indicate any unauthorized discharge has occurred, or may occur, the Regional Board shall be notified within 48 hours, followed by confirmation in writing.

2. Leachate Collection and Removal System

a) Weekly, visual inspection for liquid in the leakage detection sumps shall be conducted. The results of those inspections shall be recorded in a permanent log book.

b) Any volume of liquid pumped out of the leakage detection sumps shall be recorded along with date, time and discharge location, in a permanent log book kept on-site.

3. Wastewater Monitoring

a) Semi-annually, liquid grab samples shall be collected at three (3) sample locations in the evaporation ponds as shown in Attachment "A." The collected samples shall be composited into one sample by the laboratory and analyzed to determine the quantification of the following parameters:

Parameter	Units
chloride	mg/l
chlorine	mg/l
selenium	mg/l - Dissolved Filter, Preserve
sulfate	mg/l
total dissolved solids	mg/l
temperature	°F or °C
pH	pH units

b) The list below contains the constituents of concern that may be in the discharge. Annually, in the last quarter of each year, grab samples shall be collected of wastewater in the evaporation pond at the established sample locations shown in Attachment "A." The samples shall be analyzed to determine the concentration of the following parameters:

Parameter	Units
boron	mg/l
calcium	mg/l
chloride	mg/l
fluoride	mg/l

Parameter	Units
iron	mg/l
magnesium	mg/l
molybdenum	mg/l
nitrate as nitrogen	mg/l
nitrite as nitrogen	mg/l
phosphate	mg/l
potassium	mg/l
selenium	mg/l
sodium	mg/l
strontium	mg/l
sulfate	mg/l
total dissolved solids	mg/l
total alkalinity	mg/l as $CaCO_3$
biphenyl	mg/l
diphenyl oxide	mg/l

4. Sludge Monitoring

Annually, in the last quarter of each year, two (2) representative grab samples of the bottom sludge in each pond if present shall be collected, composited and analyzed for the following constituents:

Parameter	Units	Method
Title 22 metals	mg/l	Section 66699, Title 22, CCR
biphenyl, diphenyl oxide	mg/l	EPA 8015 modified for biphenyl and diphenyl oxide (Therminol)

5. Closed System at the Power Block Monitoring

The wastewater blowdown from the cooling towers for the closed system at the power block to the Impoundments shall be analyzed at the frequency required below to determine the concentrations of the following:

Parameter	Units	Sampling Frequency
molybdenum	mg/l	monthly

6. Heat Transfer Fluid Containment Pit Monitoring

Wastewater proposed to be removed from the closed system at the power block to the Impoundments, shall be analyzed at the noted frequency to determine the concentrations of the following:

Parameter	Units	Sampling Frequency
biphenyl	mg/l	before wastewater is discharged from the HTF Pit to the Impoundments
diphenyl oxide	mg/l	before wastewater is discharged from the HTF Pit to the Impoundments

D. Detection Monitoring

Using approved statistical or non-statistical data analysis methods approved in Board Order No. 6-98-74, the Discharger shall, for each monitoring event, compare the concentration of each monitoring parameter with its respective concentration limit to determine if there has been a release from the Impoundment. Monitoring shall be completed as follows:

1. Unsaturated Zone Monitoring - Neutron Probe

a) Quarterly, the Discharger shall check for moisture below the Pond IX North Impoundment liner using a neutron moisture probe calibrated for use at the site. If moisture content is detected above 30 percent by volume, field verification testing shall be performed and the Dischargers shall notify the Regional Board and report physical evidence of a release (see notification procedures below). Field verification testing may include a combination of additional neutron analysis, laboratory analysis of liquids drawn from the neutron probe casing and visual observation to verify existence of a release.

b) Annually, the Dischargers shall submit documentation of instrument calibration and performance checks. Performance checks shall be a comparison of quarterly results of neutron moisture testing with earlier tests made under comparable conditions to verify proper operation of equipment.

2. Ground Water Monitoring

a) Semi-annually, water samples in Monitoring Well Nos. MW-4, MW-7, MW-8, MW-9, MW-10 and MW-11 shall be collected and analyzed for the following parameters:

Parameter	Units
chloride	mg/l
sulfate	mg/l
total dissolved solids	mg/l
static water depth	feet below ground surface
electrical conductivity(Ec)	micromhos/cm
pH reading	pH units
temperature	°F or °C

b) Semi-annually, the groundwater potentiometric surface shall be illustrated on a 8.5" x 11" copy of a site plan showing the static water level, in feet below ground surface; the monitoring well locations; the location of the surface impoundments; and the ground water gradient under each surface impoundment.

c) Annually, water in Monitoring Well Nos. MW-4, MW-7, MW-8, MW-9, MW-10 and MW-11 shall be collected and analyzed for the parameters listed below. The results of the analysis shall be reported in the annual

report in tabular and graphical form. Each such graph shall be plotted with raw data at a scale appropriate to show trends or variations in water quality. For graphs showing the trends of similar constituents, the scale shall be the same. The data shall also be used to construct an Upper Tolerance Limit to determine evidence of a release and shall be used to evaluate data from the previous three quarters for evidence of a release.

MW-7, 10 + Dup

Parameter	Units
boron	mg/l
calcium	mg/l
chloride	mg/l
fluoride	mg/l
iron	mg/l
magnesium	mg/l
molybdenum	mg/l
nitrate as nitrogen	mg/l
nitrite as nitrogen	mg/l
phosphate	mg/l
potassium	mg/l
selenium	mg/l
sodium	mg/l
strontium	mg/l
sulfate	mg/l
total dissolved solids	mg/l
total alkalinity	mg/l as CaCO3
biphenyl	mg/l
diphenyl oxide	mg/l
static water depth	feet below ground surface
electrical conductivity(Ec)	micromhos/cm
pH reading	pH units
temperature	°F or °C

d) Each monitoring well shall be sufficiently purged in accordance with generally accepted sampling practices in order to obtain a representative ground water sample. If any monitoring well is dry for more than four quarters, a new or modified well shall be provided.

E. Heat Transfer Fluid Contaminated Soil - Spills

1. All spills of heat transfer fluid (HTF) shall be cleaned up within 48 hours. The cleanup shall be performed according to the approved Spill Management Plan. Representative soil samples shall be analyzed by a California certified laboratory accredited to conduct the specific analytical method. Disposal of contaminated soil resulting from HTF spills shall be in accordance with applicable waste disposal regulations.

2. Semi-Annually, the Dischargers shall report a summary of HTF spills. The summary shall include HTF spill volumes in excess of 25 gallons, volume of contaminated soil resulting from spills, locations of spilled heat transfer fluid, date(s) of spills, and dispensation of contaminated soil.

Login Sample Receipt Checklist

Client: Luz Solar Partners LTD VIII

Job Number: 440-227147-1

Login Number: 227147

List Source: TestAmerica Irvine

List Number: 1

Creator: Skinner, Alma D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX D

LETTERS OF FINANCIAL ASSURANCE

Bank of America
Instrument ID - 3041702

DATE: NOVEMBER 8, 2001

IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER: 3041702

BENEFICIARY
CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
LAHONTAN REGION
15428 CIVIC DRIVE, SUITE 100

VICTORVILLE, CA 92392

APPLICANT
LUZ SOLAR PARTNERS LTD., VIII &
LUZ SOLAR PARTNERS LTD., IX
700 UNIVERSE BOULEVARD
JUNO BEACH, FL 33408

AMOUNT
NOT EXCEEDING USD 200,000.00
NOT EXCEEDING TWO HUNDRED THOUSAND
AND 00/100'S US DOLLARS

EXPIRATION
OCTOBER 25, 2002 AT OUR COUNTERS

WE HEREBY ISSUE THIS IRREVOCABLE LETTER OF CREDIT IN YOUR FAVOR WHICH IS AVAILABLE AT SIGHT BY DRAFTS DRAWN ON BANK OF AMERICA, N.A., BEARING THE CLAUSE "DRAWN UNDER BANK OF AMERICA, N.A. IRREVOCABLE LETTER OF CREDIT NO. 3041702" ACCOMPANIED BY:

1. THE ORIGINAL OF THIS LETTER OF CREDIT WITH ORIGINAL AMENDMENT, IF ANY, AND

2. A WRITTEN STATEMENT PURPORTEDLY SIGNED BY THE EXECUTIVE OFFICER OF THE LAHONTAN REGION CERTIFYING THAT:

"A CEASE AND DESIST ORDER HAS BEEN ADOPTED, A CLEAN-UP AND ABATEMENT ORDER HAS BEEN ISSUED OR WASTE DISCHARGE REQUIREMENTS HAVE BEEN AMENDED CONCERNING FAILURE TO IMPLEMENT EVALUATION MONITORING AND/OR CORRECTIVE ACTION FOR A SUSPECTED OR KNOWN RELEASE."

IT IS A CONDITION OF THIS LETTER OF CREDIT THAT IT IS DEEMED TO BE AUTOMATICALLY EXTENDED WITHOUT AMENDMENT FOR ONE YEAR FROM THE EXPIRY DATE HEREOF, OR ANY FUTURE EXPIRATION DATE, UNLESS AT LEAST 30 DAYS PRIOR TO ANY EXPIRATION DATE WE NOTIFY YOU BY REGISTERED MAIL OR OVERNIGHT COURIER SERVICE THAT WE ELECT NOT TO CONSIDER THIS LETTER OF CREDIT RENEWED FOR ANY SUCH ADDITIONAL PERIOD.

WE HEREBY ENGAGE WITH YOU THAT DRAFTS DRAWN UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF CREDIT THAT SUCH DRAFTS WILL BE DULY HONORED UPON PRESENTATION TO OUR STANDBY LETTER OF CREDIT DEPARTMENT LOCATED AT 333 S. BEAUDRY AVENUE, 19TH FLOOR, MAIL CODE: CA9-703-19-23, LOS ANGELES, CA 90017.

UNLESS OTHERWISE EXPRESSLY STATED, THIS LETTER OF CREDIT IS SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS (1993 REVISION) INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 500.

IF YOU REQUIRE ANY ASSISTANCE OR HAVE ANY QUESTIONS REGARDING THIS TRANSACTION, PLEASE CALL 213-345-6630.

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AUTHORIZED SIGNATURE AUTHORIZED SIGNATURE

THIS DOCUMENT CONSISTS OF 1 PAGE(S).

SERAFIN CABAYAN CARRILLO, BOLIVAR

ORIGINAL

Bank of America, N.A. Trade Operations
Mail Code: CA9-703-19-09
333 S. Beaudry Avenue, 19th Floor, Los Angeles, CA 90017

00-35-0202NSB 9-1999_CA9 19

Recycled Paper

DATE: NOVEMBER 8, 2001

IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER: 3041703

BENEFICIARY
CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
LAHONTAN REGION
15428 CIVIC DRIVE, SUITE 100

VICTORVILLE, CA 92392

APPLICANT
LUZ SOLAR PARTNERS LTD., VIII &
LUZ SOLAR PARTNERS LTD., IX
700 UNIVERSE BLVD
JUNO BEACH, FL 33408

AMOUNT
NOT EXCEEDING USD 187,642.00
NOT EXCEEDING ONE HUNDRED EIGHTY
SEVEN THOUSAND SIX HUNDRED FORTY TWO
AND 00/100'S US DOLLARS

EXPIRATION
OCTOBER 25, 2002 AT OUR COUNTERS

WE HEREBY ISSUE THIS IRREVOCABLE LETTER OF CREDIT IN YOUR FAVOR WHICH IS AVAILABLE AT SIGHT BY DRAFTS DRAWN ON BANK OF AMERICA, N.A., BEARING THE CLAUSE "DRAWN UNDER BANK OF AMERICA, N.A. IRREVOCABLE LETTER OF CREDIT NO. 3041703" ACCOMPANIED BY:

1. THE ORIGINAL OF THIS LETTER OF CREDIT WITH ORIGINAL AMENDMENT, IF ANY, AND

2. A WRITTEN STATEMENT PURPORTEDLY SIGNED BY A PERSON AUTHORIZED BY THE BENEFICIARY FOR THAT PURPOSE, STATING:

"(A) THE PERSON MAKING THE STATEMENT IS AUTHORIZED TO MAKE THE STATEMENT ON BEHALF OF THE BENEFICIARY.

(B) AS OF THE DATE OF THE STATEMENT, THE BENEFICIARY HAS EITHER:

(I) ISSUED A CLEAN-UP AND ABATEMENT ORDER IN RELATION TO THE EVAPORATION PONDS USED BY THE SEGS VIII & IX PROJECTS, PURSUANT TO THE BOARD ORDER NO. 6-98-74,

OR

(II) ISSUED A CEASE AND DESIST ORDER IN RELATION TO THE EVAPORATION PONDS USED BY THE SEGS VIII & IX PROJECTS, PURSUANT TO BOARD ORDER NO. 6-98-74, AND THE DISCHARGERS UNDER SUCH ORDER HAVE DEFAULTED AND REMAIN IN DEFAULT OF POST CLOSURE MAINTENANCE REQUIREMENTS UNDER THE APPROVED POST CLOSURE MAINTENANCE PLAN IN RELATION TO THE EVAPORATION PONDS USED BY THE SEGS VIII & IX PROJECTS."

IT IS A CONDITION OF THIS LETTER OF CREDIT THAT IT IS DEEMED TO BE AUTOMATICALLY EXTENDED WITHOUT AMENDMENT FOR ONE YEAR FROM THE EXPIRY DATE HEREOF, OR ANY FUTURE EXPIRATION DATE, UNLESS AT LEAST 30 DAYS PRIOR TO ANY EXPIRATION DATE WE NOTIFY YOU BY REGISTERED MAIL OR OVERNIGHT COURIER SERVICE THAT WE ELECT NOT TO CONSIDER THIS LETTER OF CREDIT RENEWED FOR ANY SUCH ADDITIONAL PERIOD.

WE HEREBY ENGAGE WITH YOU THAT DRAFTS DRAWN UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF CREDIT THAT SUCH DRAFTS WILL BE DULY HONORED UPON PRESENTATION TO OUR STANDBY LETTER OF CREDIT DEPARTMENT LOCATED AT 333 S. BEAUDRY AVENUE, 19TH FLOOR, MAIL CODE: CA9-703-19-23, LOS ANGELES, CA 90017.

ORIGINAL

Recycled Paper

THIS IS AN INTEGRAL PART OF LETTER OF CREDIT NUMBER: 3041703

UNLESS OTHERWISE EXPRESSLY STATED, THIS LETTER OF CREDIT IS SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS (1993 REVISION) INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 500.

IF YOU REQUIRE ANY ASSISTANCE OR HAVE ANY QUESTIONS REGARDING THIS TRANSACTION, PLEASE CALL 213-345-6630.

CARRILLO

AUTHORIZED SIGNATURE AUTHORIZED SIGNATURE

THIS DOCUMENT CONSISTS OF 2 PAGE(S).

SERAFIN CABAYAN

Bank of America
Instrument ID - 3041704

DATE: NOVEMBER 8, 2001

IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER: 3041704

BENEFICIARY
CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
LAHONTAN REGION
15428 CIVIC DRIVE, SUITE 100

VICTORVILLE, CA 92392

APPLICANT
LUZ SOLAR PARTNERS LTD., VIII &
LUZ SOLAR PARTNERS LTD., IX
700 UNIVERSE BLVD
JUNO BEACH, FL 33408

AMOUNT
NOT EXCEEDING USD 334,763.00
NOT EXCEEDING THREE HUNDRED THIRTY
FOUR THOUSAND SEVEN HUNDRED SIXTY
THREE AND 00/100'S US DOLLARS

EXPIRATION
OCTOBER 25, 2002 AT OUR COUNTERS

WE HEREBY ISSUE THIS IRREVOCABLE LETTER OF CREDIT IN YOUR FAVOR WHICH IS AVAILABLE AT SIGHT BY DRAFTS DRAWN ON BANK OF AMERICA, N.A., BEARING THE CLAUSE "DRAWN UNDER BANK OF AMERICA, N.A. IRREVOCABLE LETTER OF CREDIT NO. 3041704" ACCOMPANIED BY:

1. THE ORIGINAL OF THIS LETTER OF CREDIT WITH ORIGINAL AMENDMENT, IF ANY, AND

2. A WRITTEN STATEMENT PURPORTEDLY SIGNED BY A PERSON AUTHORIZED BY THE BENEFICIARY FOR THAT PURPOSE, STATING:

"(A) THE PERSON MAKING THE STATEMENT IS AUTHORIZED TO MAKE THE STATEMENT ON BEHALF OF THE BENEFICIARY.

(B) AS OF THE DATE OF THE STATEMENT, THE BENEFICIARY HAS EITHER:

(I) ISSUED A CLEAN-UP AND ABATEMENT ORDER IN RELATION TO THE EVAPORATION PONDS USED BY THE SEGS VIII & IX PROJECTS, PURSUANT TO THE BOARD ORDER NO. 6-98-74,

OR

(II) ISSUED A CEASE AND DESIST ORDER IN RELATION TO THE EVAPORATION PONDS USED BY THE SEGS VIII & IX PROJECTS, PURSUANT TO BOARD ORDER NO. 6-98-74, AND THE DISCHARGERS UNDER SUCH ORDER HAVE DEFAULTED AND REMAIN IN DEFAULT OF CLOSURE REQUIREMENTS UNDER THE APPROVED CLOSURE PLAN IN RELATION TO THE EVAPORATION PONDS USED BY THE SEGS VIII & IX PROJECTS."

IT IS A CONDITION OF THIS LETTER OF CREDIT THAT IT IS DEEMED TO BE AUTOMATICALLY EXTENDED WITHOUT AMENDMENT FOR ONE YEAR FROM THE EXPIRY DATE HEREOF, OR ANY FUTURE EXPIRATION DATE, UNLESS AT LEAST 30 DAYS PRIOR TO ANY EXPIRATION DATE WE NOTIFY YOU BY REGISTERED MAIL OR OVERNIGHT COURIER SERVICE THAT WE ELECT NOT TO CONSIDER THIS LETTER OF CREDIT RENEWED FOR ANY SUCH ADDITIONAL PERIOD.

WE HEREBY ENGAGE WITH YOU THAT DRAFTS DRAWN UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF CREDIT THAT SUCH DRAFTS WILL BE DULY HONORED UPON PRESENTATION TO OUR STANDBY LETTER OF CREDIT DEPARTMENT LOCATED AT 333 S. BEAUDRY AVENUE, 19TH FLOOR, MAIL CODE: CA9-703-19-23, LOS ANGELES, CA 90017.

ORIGINAL

Recycled Paper

THIS IS AN INTEGRAL PART OF LETTER OF CREDIT NUMBER: 3041704

UNLESS OTHERWISE EXPRESSLY STATED, THIS LETTER OF CREDIT IS SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS (1993 REVISION) INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 500.

IF YOU REQUIRE ANY ASSISTANCE OR HAVE ANY QUESTIONS REGARDING THIS TRANSACTION, PLEASE CALL 213-345-6630.

AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

THIS DOCUMENT CONSISTS OF 2 PAGE(S).

SERAFIN CABAYAN

CARRILLO, BOLIVAR

Property Address: **HINKLEY CA 92347**

General Information

County:	**SAN BERNARDINO**
Parcel # (APN):	**0490-101-54-0000** Open Map
Owner:	See Full Detail
Mailing Address:	**700 UNIVERSE BLVD JUNO BEACH FL 33408**
Legal Description:	**PARCEL MAP 12194 PARCEL 6**
Use Type:	**WELL / WATER**
Tax Rate Area:	**056-053**

Full Detail $14.95 Add to Cart

Assessment

Total Value:	**$195,386**	Year Assd:	**2020**
Land:	**$188,219**	Zoning:	
Structures:	**$7,167**	Use Code:	See Full Detail
Other:		Census Tract:	See Full Detail
% Improved:	See Full Detail	Price/SqFt:	
Exempt Amt:			
HO Exempt:	**N**		

Sale History

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:	**07/15/1998**			See Full Detail
Document Number:	**19980275605**			See Full Detail
Document Type:	See Full Detail			
Transfer Amount:				
Seller (Grantor):	See Full Detail			

Property Characteristics

Bedrooms:		Fireplace:		Units:	
Baths (Full):		A/C:		Stories:	
Baths (Half):		Heating:		Quality:	
Total Rooms:		Pool:		Building Class:	
Bldg/Liv Area:		Park Type:		Condition:	
Lot Acres:	**208.232**	Spaces:		Site Influence:	See Full Detail
Lot SqFt:	**9,070,568**	Garage SqFt:		Timber Preserve:	
Year Built:				Ag Preserve:	
Effective Year:					

**The information provided here is deemed reliable, but is not guaranteed.

Additional reports on this property

Privacy Policy | Refund Policy | Disclaimer | Usage Limits | ParcelQuest.com

Property Address: **HINKLEY CA 92347**

General Information

County:	**SAN BERNARDINO**
Parcel # (APN):	**0490-101-56-0000** Open Map
Owner:	See Full Detail
Mailing Address:	**P O BOX 340 MERION STATION PA 19066**
Legal Description:	**PARCEL MAP 12194 PARCEL 1**
Use Type:	**INDUSTRIAL**
Tax Rate Area:	**056-053**

Full Detail $14.95 Add to Cart

Assessment

Total Value:	**$463,572**	Year Assd:	**2020**
Land:	**$317,482**	Zoning:	
Structures:	**$146,090**	Use Code:	See Full Detail
Other:		Census Tract:	See Full Detail
% Improved:	See Full Detail	Price/SqFt:	
Exempt Amt:			
HO Exempt:	**N**		

Sale History

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:	**08/22/1995**			See Full Detail
Document Number:	**19950289891**			See Full Detail
Document Type:	See Full Detail			
Transfer Amount:	**$850,000**			
Seller (Grantor):				

Property Characteristics

Bedrooms:		Fireplace:		Units:	
Baths (Full):		A/C:		Stories:	
Baths (Half):		Heating:		Quality:	
Total Rooms:		Pool:		Building Class:	
Bldg/Liv Area:		Park Type:		Condition:	
Lot Acres:	**11.102**	Spaces:		Site Influence:	See Full Detail
Lot SqFt:	**483,585**	Garage SqFt:		Timber Preserve:	
Year Built:				Ag Preserve:	
Effective Year:					

**The information provided here is deemed reliable, but is not guaranteed.

Additional reports on this property

Privacy Policy | Refund Policy | Disclaimer | Usage Limits | ParcelQuest.com

Property Address:

General Information

County:	**SAN BERNARDINO**
Parcel # (APN):	**0490-223-33-0000** Open Map
Owner:	See Full Detail
Mailing Address:	**700 UNIVERSE BLVD JUNO BEACH FL 33408**
Legal Description:	**PARCEL MAP 12194 PARCEL NO 5 TOGETHER WITH NW 1/4 SEC 13 TP 11N R 5W***COMBO REQUEST*****
Use Type:	**WELL / WATER**
Tax Rate Area:	**056-053**

Full Detail $14.95 Add to Cart

Assessment

Total Value:	**$459,436**	Year Assd:	**2020**
Land:	**$423,599**	Zoning:	
Structures:	**$35,837**	Use Code:	See Full Detail
Other:		Census Tract:	
% Improved:	See Full Detail	Price/SqFt:	
Exempt Amt:			
HO Exempt:	**N**		

Sale History

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:				See Full Detail
Document Number:				See Full Detail
Document Type:				
Transfer Amount:				
Seller (Grantor):				

Property Characteristics

Bedrooms:		Fireplace:		Units:	
Baths (Full):		A/C:		Stories:	
Baths (Half):		Heating:		Quality:	
Total Rooms:		Pool:		Building Class:	
Bldg/Liv Area:		Park Type:		Condition:	
Lot Acres:	**948.400**	Spaces:		Site Influence:	See Full Detail
Lot SqFt:	**41,312,304**	Garage SqFt:		Timber Preserve:	
Year Built:				Ag Preserve:	
Effective Year:					

**The information provided here is deemed reliable, but is not guaranteed.

Additional reports on this property

Privacy Policy | Refund Policy | Disclaimer | Usage Limits | ParcelQuest.com

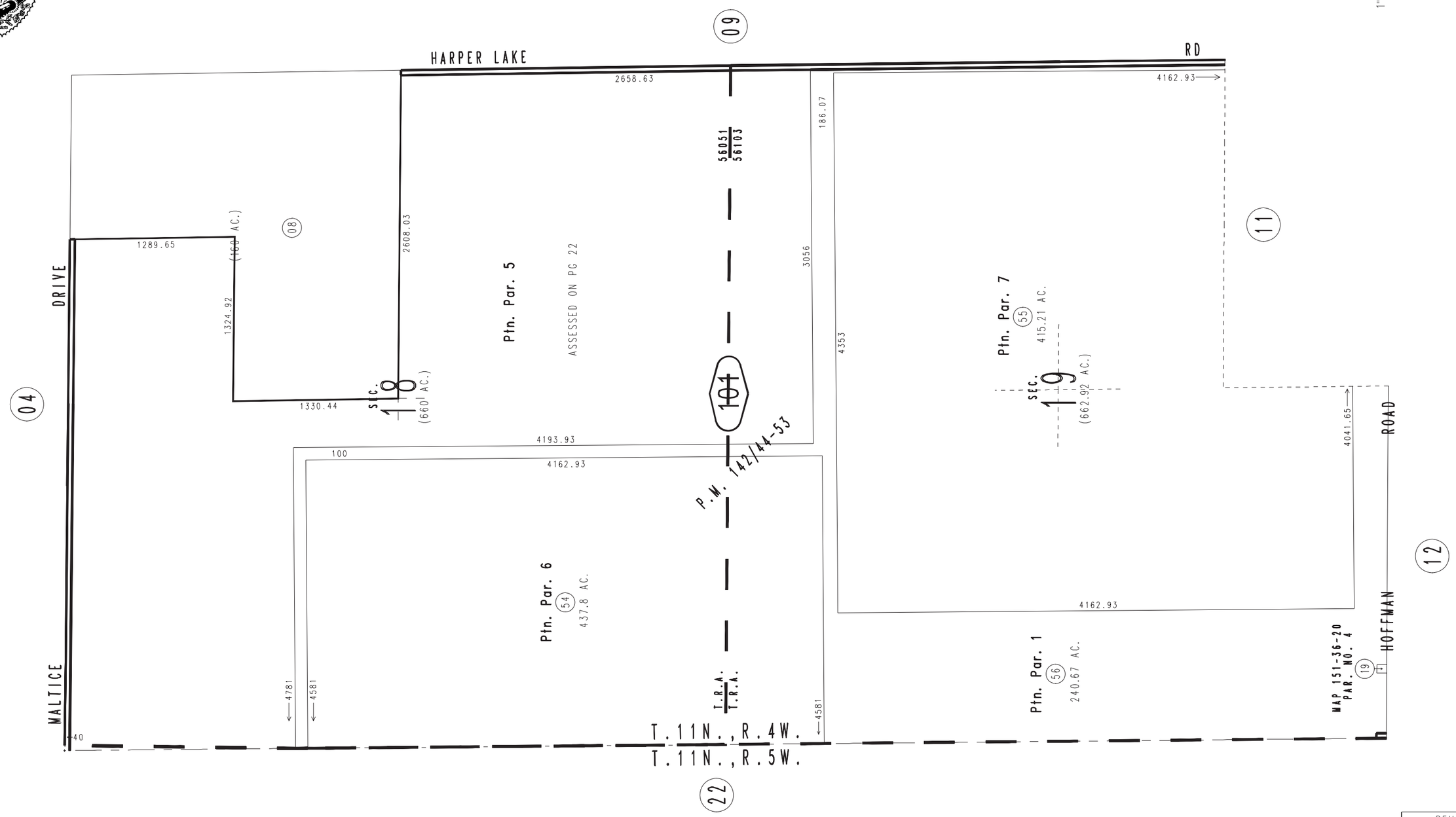
THIS MAP IS FOR THE PURPOSE OF AD VALOREM TAXATION ONLY.

Fractional Sec.18 & Ptn. Fractional Sec.19, T.11N.,R.4W., S.B.B.&M.

Barstow Unified
Tax Rate Area
56051,56103

0490 - 10

1" = 800'



REVISED
03/06/07 BK
03/19/07 LH

Assessor's Map
Book 0490 Page 10
San Bernardino County

June 2005

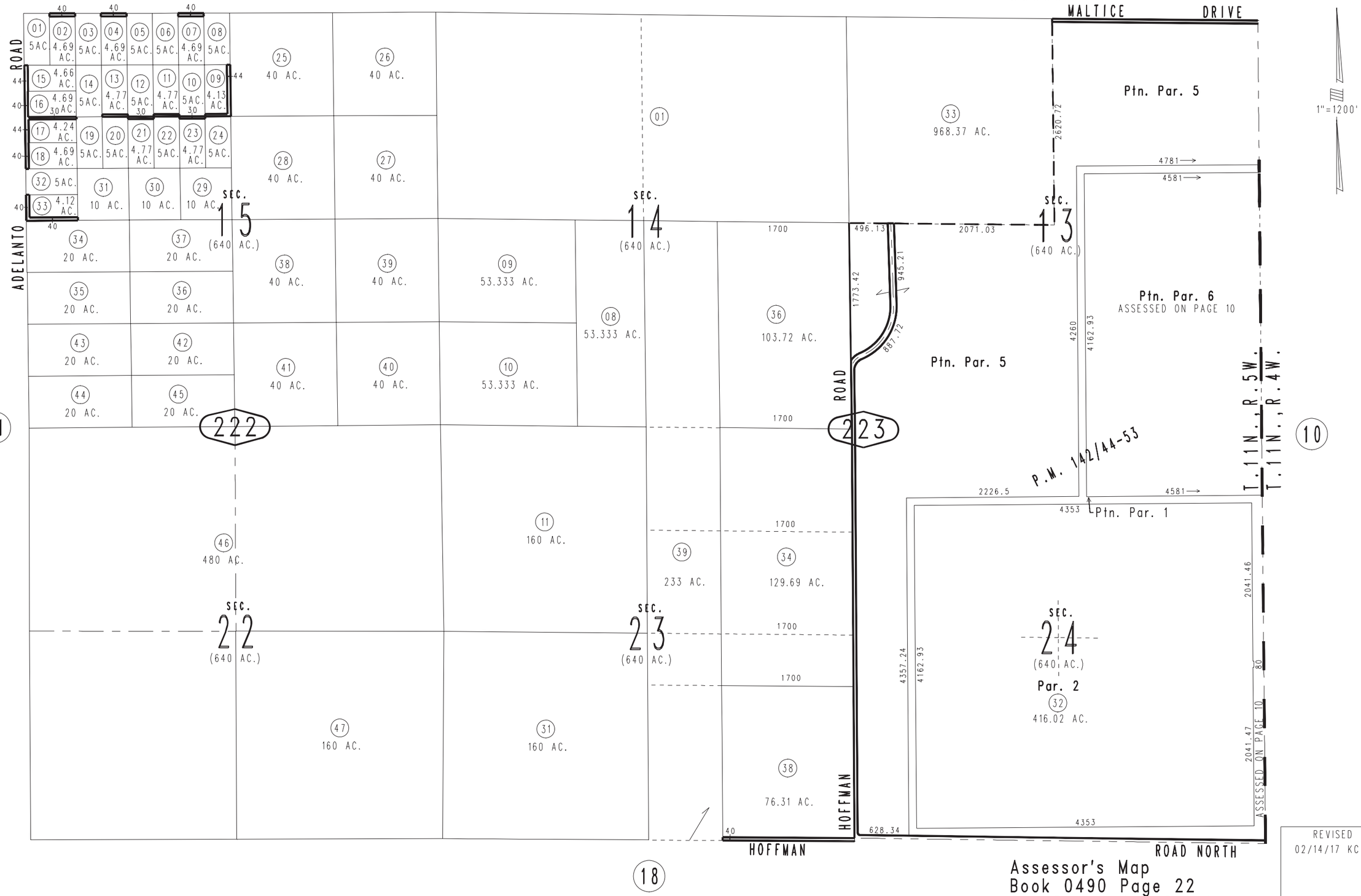
Ptn. Parcel Map No. 12194, P.M. 142/44-53

THIS MAP IS FOR THE PURPOSE OF AD VALOREM TAXATION ONLY.

Sec.13,14,15,22,23,24, T.11N.,R.5W., S.B.B.&M.

Barstow Unified
Tax Rate Area
56053

0490- 22



June 2005

Ptn. Parcel Map No. 12194, P.M. 142/44-53

Assessor's Map
Book 0490 Page 22
San Bernardino County

REVISED
02/14/17 KC

Property Information Management System

San Bernardino County

Office of the Assessor

PIMS PACKAGE REPORT FOR PARCEL 0490-101-54-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address HIGH DESERT LAND ACQUISITON LLC
C/O PROPERTY TAX - PSX/JB
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 12/17/2014

Parcel 0490101540000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code WELL SITE
Land Access CHECK
Size 25.001 ACRES AND OVER
Land Type SINGLE FAMILY RESIDENTIAL
District HESPERIA
Resp Group REAL PROPERTY
Resp Unit RES ZONE(MAX 14 UTS) &USE EX HPC/MHM(1-14 UTS,CHURC

Current Owners

Name HIGH DESERT LAND ACQUISITON LLC
R/I SOLE OWNER
% Int 100.0000000
Type BILLED OWNER
Acquisition Date NONE
Document Date 07/15/1998
Inactive Date NONE

Document Numbers
9827560500000

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
12194	0490101540000			

Legal Description

PARCEL MAP 12194 PARCEL 6

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Prior Roll History

Year: 2020

TRA	56053	**Land Value**	188,219
Supplement	NO	**Improvement Value**	7,167
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	195,386
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**195,386**

Year: 2019

TRA	56053	**Land Value**	184,528
Supplement	NO	**Improvement Value**	7,026
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	191,554
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**191,554**

Year: 2018

TRA	56053	**Land Value**	180,910
Supplement	NO	**Improvement Value**	6,888
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	187,798
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**187,798**

Year: 2017

TRA	56053	**Land Value**	177,363
Supplement	NO	**Improvement Value**	6,753
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	184,116
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**184,116**

Year: 2016

TRA	56053	**Land Value**	173,885
Supplement	NO	**Improvement Value**	6,621
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	180,506
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**180,506**

Year: 2015

TRA	56053	**Land Value**	171,273
Supplement	NO	**Improvement Value**	6,522
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	177,795
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**177,795**

Year: 2014

TRA	56053	**Land Value**	167,918
Supplement	NO	**Improvement Value**	6,394
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	174,312
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**174,312**

Year: 2013

TRA	56053	**Land Value**	167,159
Supplement	NO	**Improvement Value**	6,365
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	173,524
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**173,524**

Year: 2012

TRA	56053	**Land Value**	163,881
Supplement	NO	**Improvement Value**	6,240
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	170,121
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**170,121**

Year: 2011

TRA	56053	**Land Value**	160,668
Supplement	NO	**Improvement Value**	6,118
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	166,786
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**166,786**

Year: 2010

TRA	56053	**Land Value**	159,467
Supplement	NO	**Improvement Value**	6,072
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	165,539
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**165,539**

Year: 2009

TRA	56053	**Land Value**	159,846
Supplement	NO	**Improvement Value**	6,086
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	165,932
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**165,932**

Year: 2008

TRA	56053	**Land Value**	156,712
Supplement	NO	**Improvement Value**	5,967
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	162,679
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**162,679**

Year: 2007

TRA	56053	**Land Value**	153,639
Supplement	NO	**Improvement Value**	5,850
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	159,489
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**159,489**

Year: 2006

TRA	56053	**Land Value**	150,626
Supplement	NO	**Improvement Value**	5,735
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	156,361
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**156,361**

Year: 2005

TRA	56053	**Land Value**	147,673
Supplement	NO	**Improvement Value**	5,623
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	153,296
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**153,296**

Year: 2004

TRA	56053	**Land Value**	144,777
Supplement	NO	**Improvement Value**	5,513
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	150,290
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**150,290**

Year: 2003

TRA	56053	**Land Value**	142,124
Supplement	NO	**Improvement Value**	5,412
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	147,536
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**147,536**

Year: 2002

TRA	56053	**Land Value**	139,337
Supplement	NO	**Improvement Value**	5,306
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	144,643
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**144,643**

Year: 2001

TRA	56053	**Land Value**	136,605
Supplement	NO	**Improvement Value**	5,202
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	141,807
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**141,807**

Year: 2000

TRA	56053	**Land Value**	133,926
Supplement	NO	**Improvement Value**	5,100
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	139,026
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**139,026**

Year: 1999

TRA	56053	**Land Value**	131,300
Supplement	NO	**Improvement Value**	5,000
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	136,300
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**136,300**

Year: 1998

TRA	56053	**Land Value**	395,640
Supplement	YES	**Improvement Value**	6,426
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	402,066
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**402,066**

Year: 1997

TRA	56053	**Land Value**	387,882
Supplement	NO	**Improvement Value**	6,300
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	394,182
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**394,182**

Year: 1996

TRA	56053	**Land Value**	380,276
Supplement	NO	**Improvement Value**	6,176
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	386,452
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**386,452**

Year: 1995

TRA	56053	**Land Value**	376,101
Supplement	NO	**Improvement Value**	6,108
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	382,209
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**382,209**

Year: 1994

TRA	56053	**Land Value**	371,678
Supplement	NO	**Improvement Value**	6,036
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	377,714
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**377,714**

Year: 1993

TRA	56053	**Land Value**	364,390
Supplement	NO	**Improvement Value**	5,918
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	370,308
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**370,308**

Year: 1992

TRA	56053	**Land Value**	357,245
Supplement	NO	**Improvement Value**	5,802
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	363,047
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**363,047**

Year: 1991

TRA	56053	**Land Value**	350,240
Supplement	NO	**Improvement Value**	5,688
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101540000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	355,928
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**355,928**

Parcel History

		Multi Parcel List
Event Date	07/15/1998	
Event Group/Type	TRANSFER - WORKED IN OLD SYSTEM (100% OR PARTIAL)	
Multi Parcel	No	

		Multi Parcel List
Event Date	03/02/1990	
Event Group/Type	CREATE - SUBDIVISION	0490101530000 NEW-SUB
Multi Parcel	Yes	0490101540000 NEW-SUB
		0490101550000 NEW-SUB
		0490101560000 NEW-SUB
		0490121410000 NEW-SUB
		0490183650000 NEW-SUB
		0490223320000 NEW-SUB
		0490101010000 OLD-SUB
		0490101040000 OLD-SUB
		0490101050000 OLD-SUB
		0490101060000 OLD-SUB
		0490101070000 OLD-SUB
		0490101090000 OLD-SUB
		0490101100000 OLD-SUB
		0490101110000 OLD-SUB
		0490101120000 OLD-SUB
		0490101130000 OLD-SUB
		0490101140000 OLD-SUB
		0490101150000 OLD-SUB
		0490101160000 OLD-SUB
		0490101170000 OLD-SUB
		0490101180000 OLD-SUB
		0490101200000 OLD-SUB
		0490101210000 OLD-SUB
		0490101220000 OLD-SUB
		0490101230000 OLD-SUB
		0490101240000 OLD-SUB
		0490101270000 OLD-SUB
		0490101280000 OLD-SUB
		0490101290000 OLD-SUB
		0490101300000 OLD-SUB
		0490101380000 OLD-SUB
		0490101400000 OLD-SUB
		0490101410000 OLD-SUB

0490101420000 OLD-SUB
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0490101450000 OLD-SUB
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0490101490000 OLD-SUB
0490101500000 OLD-SUB
0490101510000 OLD-SUB
0490101520000 OLD-SUB
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0490111030000 OLD-SUB
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0490111060000 OLD-SUB
0490111070000 OLD-SUB
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0490111120000 OLD-SUB
0490111130000 OLD-SUB
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0490183620000 OLD-SUB
0490223030000 OLD-SUB

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0490223050000 OLD-SUB
0490223060000 OLD-SUB
0490223140000 OLD-SUB
0490223150000 OLD-SUB
0490223160000 OLD-SUB
0490223170000 OLD-SUB
0490223180000 OLD-SUB
0490223190000 OLD-SUB
0490223200000 OLD-SUB

Ownership History

Owner Name: HIGH DESERT LAND ACQUISITON LLC

R/I	SOLE OWNER
% Int	100.0000000
Type	BILLED OWNER
Acquisition Date	NONE
Document Date	07/15/1998
Inactive Date	NONE

Document Numbers

9827560500000

Owner Name: LUZ DEVELOPMENT AND FINANCE CORP

R/I	CORPORATION
% Int	100.0000000
Type	BILLED OWNER
Acquisition Date	NONE
Document Date	03/01/1990
Inactive Date	07/14/1998

Document Numbers

9100000000000

Supplement History

Supplement Date: 07/15/1998

Roll Type	REGULAR SUPPLEMENT	**Supp Type**	OWNERSHIP TRANSFER
Supp Year	1998	**New Land**	131,300
Revised IND		**New Imprv**	5,000
Corrected Date		**Old Land**	395,640
Correction Code		**Old Imprv**	6,426
Legal Status	SECURED	**New HOX**	0
TRA	56053	**Old HOX**	0
NOPIC Date	03/22/1999	**Supp HOX**	0
Extract Date	06/20/1999	**Special Exem**	0
Months Prorated	11	**Impr Penalty**	0
Corr Status		**Prior Supps**	0
Original Parcel	0490101540000	**Construction in Progress**	0
		Net Value	**(265,766)**
Billed Owner	HIGH DESERT LAND ACQUISITON LLC		
Joint Owner			

Property Information Management System

San Bernardino County

Office of the Assessor

PIMS PACKAGE REPORT FOR PARCEL 0490-101-56-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address ALL AMERICAN VENTURES INC
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 12/18/2012

Parcel 0490101560000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code SOLAR CGN
Land Access CHECK
Size 25.001 ACRES AND OVER
Land Type INDUSTRIAL
District HESPERIA
Resp Group SPECIAL PROPERTY
Resp Unit ELECTRICAL POWER USE REGARDLESS OF ZONE

Current Owners

Name ALL AMERICAN VENTURES INC
R/I CORPORATION
% Int 100.0000000
Type BILLED OWNER
Acquisition Date NONE
Document Date 08/22/1995
Inactive Date NONE

Document Numbers
9528989100000

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
12194	0490101560000			

Legal Description

PARCEL MAP 12194 PARCEL 1

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Prior Roll History

Year: 2020

TRA	56053	**Land Value**	317,482
Supplement	NO	**Improvement Value**	146,090
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	463,572
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**463,572**

Year: 2019

TRA	56053	**Land Value**	311,257
Supplement	NO	**Improvement Value**	143,225
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	454,482
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**454,482**

Year: 2018

TRA	56053	**Land Value**	305,154
Supplement	NO	**Improvement Value**	140,417
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	445,571
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**445,571**

Year: 2017

TRA	56053	**Land Value**	299,171
Supplement	NO	**Improvement Value**	137,664
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	436,835
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**436,835**

Year: 2016

TRA	56053	**Land Value**	293,305
Supplement	NO	**Improvement Value**	134,965
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	428,270
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**428,270**

Year: 2015

TRA	56053	**Land Value**	288,899
Supplement	NO	**Improvement Value**	132,938
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	421,837
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**421,837**

Year: 2014

TRA	56053	**Land Value**	283,240
Supplement	NO	**Improvement Value**	130,334
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	413,574
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**413,574**

Year: 2013

TRA	56053	**Land Value**	281,960
Supplement	NO	**Improvement Value**	129,745
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	411,705
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**411,705**

Year: 2012

TRA	56053	**Land Value**	276,431
Supplement	NO	**Improvement Value**	127,201
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	403,632
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**403,632**

Year: 2011

TRA	56053	**Land Value**	271,011
Supplement	NO	**Improvement Value**	124,707
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	395,718
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**395,718**

Year: 2010

TRA	56053	**Land Value**	268,986
Supplement	NO	**Improvement Value**	123,775
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	392,761
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**392,761**

Year: 2009

TRA	56053	**Land Value**	269,625
Supplement	NO	**Improvement Value**	124,069
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	393,694
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**393,694**

Year: 2008

TRA	56053	**Land Value**	264,338
Supplement	NO	**Improvement Value**	121,636
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	385,974
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**385,974**

Year: 2007

TRA	56053	**Land Value**	259,155
Supplement	NO	**Improvement Value**	119,251
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	378,406
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**378,406**

Year: 2006

TRA	56053	**Land Value**	254,074
Supplement	NO	**Improvement Value**	116,913
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	370,987
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**370,987**

Year: 2005

TRA	56053	**Land Value**	249,092
Supplement	NO	**Improvement Value**	114,621
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	363,713
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**363,713**

Year: 2004

TRA	56053	**Land Value**	244,208
Supplement	NO	**Improvement Value**	112,374
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	356,582
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**356,582**

Year: 2003

TRA	56053	**Land Value**	239,732
Supplement	NO	**Improvement Value**	110,314
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	350,046
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**350,046**

Year: 2002

TRA	56053	**Land Value**	235,031
Supplement	NO	**Improvement Value**	108,151
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	343,182
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**343,182**

Year: 2001

TRA	56053	**Land Value**	230,423
Supplement	NO	**Improvement Value**	106,030
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	336,453
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**336,453**

Year: 2000

TRA	56053	**Land Value**	225,905
Supplement	NO	**Improvement Value**	103,951
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	329,856
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**329,856**

Year: 1999

TRA	56053	**Land Value**	221,475
Supplement	NO	**Improvement Value**	101,913
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	323,388
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**323,388**

Year: 1998

TRA	56053	**Land Value**	217,452
Supplement	NO	**Improvement Value**	100,062
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	317,514
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**317,514**

Year: 1997

TRA	56053	**Land Value**	213,188
Supplement	NO	**Improvement Value**	98,100
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	311,288
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**311,288**

Year: 1996

TRA	56053	**Land Value**	209,008
Supplement	NO	**Improvement Value**	96,176
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	ALL AMERICAN VENTURES INC	**Total Penalties**	0
Joint Owner		**Total Value**	305,184
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**305,184**

Year: 1995

TRA	56053	**Land Value**	206,714
Supplement	NO	**Improvement Value**	95,121
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	301,835
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**301,835**

Year: 1994

TRA	56053	**Land Value**	204,283
Supplement	NO	**Improvement Value**	94,002
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	298,285
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**298,285**

Year: 1993

TRA	56053	**Land Value**	200,277
Supplement	NO	**Improvement Value**	92,159
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	292,436
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**292,436**

Year: 1992

TRA	56053	**Land Value**	196,350
Supplement	NO	**Improvement Value**	90,352
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	286,702
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**286,702**

Year: 1991

TRA	56053	**Land Value**	192,500
Supplement	NO	**Improvement Value**	88,580
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490101560000	**Pers Prop Penalty**	0
Billed Owner	LUZ DEVELOPMENT AND FINANCE CORP	**Total Penalties**	0
Joint Owner		**Total Value**	281,080
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**281,080**

Parcel History

Event Date	08/22/1995
Event Group/Type	TRANSFER - WORKED IN OLD SYSTEM (100% OR PARTIAL)
Multi Parcel	Yes

Multi Parcel List

0490101550000 TOT-CNV
0490101560000 TOT-CNV
0490223320000 TOT-CNV

Event Date	03/02/1990
Event Group/Type	CREATE - SUBDIVISION
Multi Parcel	Yes

Multi Parcel List

0490101530000 NEW-SUB
0490101540000 NEW-SUB
0490101550000 NEW-SUB
0490101560000 NEW-SUB
0490121410000 NEW-SUB
0490183650000 NEW-SUB
0490223320000 NEW-SUB
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0490101040000 OLD-SUB
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0490111020000 OLD-SUB
0490111030000 OLD-SUB
0490111040000 OLD-SUB
0490111050000 OLD-SUB
0490111060000 OLD-SUB
0490111070000 OLD-SUB
0490111110000 OLD-SUB
0490111120000 OLD-SUB
0490111130000 OLD-SUB
0490121010000 OLD-SUB
0490121020000 OLD-SUB
0490121030000 OLD-SUB
0490121040000 OLD-SUB
0490121050000 OLD-SUB
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0490223140000 OLD-SUB
0490223150000 OLD-SUB
0490223160000 OLD-SUB
0490223170000 OLD-SUB
0490223180000 OLD-SUB
0490223190000 OLD-SUB
0490223200000 OLD-SUB

Ownership History

Owner Name: ALL AMERICAN VENTURES INC

R/I	CORPORATION
% Int	100.0000000
Type	BILLED OWNER
Acquisition Date	NONE
Document Date	08/22/1995
Inactive Date	NONE

Document Numbers

9528989100000

Owner Name: LUZ DEVELOPMENT AND FINANCE CORP

R/I	CORPORATION
% Int	100.0000000
Type	BILLED OWNER
Acquisition Date	NONE
Document Date	03/01/1990
Inactive Date	08/21/1995

Document Numbers

9100000000000

Supplement History

No Supplement History

Property Information Management System

San Bernardino County

Office of the Assessor

PIMS PACKAGE REPORT FOR PARCEL 0490-223-33-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address HIGH DESERT LAND ACQUISITON LLC
C/O PROPERTY TAX - PSX/JB
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 12/17/2014

Parcel 0490223330000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code WELL SITE
Land Access PRIVATE UNPAVED
Size 25.001 ACRES AND OVER
Land Type INDUSTRIAL
District HESPERIA
Resp Group SPECIAL PROPERTY
Resp Unit ELECTRICAL POWER USE REGARDLESS OF ZONE

Current Owners

Name HIGH DESERT LAND ACQUISITON LLC
R/I SOLE OWNER
% Int 100.0000000
Type BILLED OWNER
Acquisition Date 07/15/1998
Document Date 12/29/2006
Inactive Date NONE

Document Numbers
2006122900032

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	0490223330000			

Legal Description

PARCEL MAP 12194 PARCEL NO 5 TOGETHER WITH NW 1/4 SEC 13 TP 11N R 5W***COMBO REQUEST***

Legal Reason for Change

Legal Reason for Change	Document Number	Date
COMBINATION BY REQUEST		12/29/2006

No Active Homeowner's Exemptions Found

Prior Roll History

Year: 2020

TRA	56053	**Land Value**	423,599
Supplement	NO	**Improvement Value**	35,837
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	459,436
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**459,436**

Year: 2019

TRA	56053	**Land Value**	415,293
Supplement	NO	**Improvement Value**	35,134
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	450,427
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**450,427**

Year: 2018

TRA	56053	**Land Value**	407,150
Supplement	NO	**Improvement Value**	34,445
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	441,595
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**441,595**

Year: 2017

TRA	56053	**Land Value**	399,167
Supplement	NO	**Improvement Value**	33,770
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	432,937
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**432,937**

Year: 2016

TRA	56053	**Land Value**	391,340
Supplement	NO	**Improvement Value**	33,108
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	424,448
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**424,448**

Year: 2015

TRA	56053	**Land Value**	385,462
Supplement	NO	**Improvement Value**	32,611
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	418,073
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**418,073**

Year: 2014

TRA	56053	**Land Value**	377,911
Supplement	NO	**Improvement Value**	31,972
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	409,883
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**409,883**

Year: 2013

TRA	56053	**Land Value**	376,203
Supplement	NO	**Improvement Value**	31,828
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	408,031
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**408,031**

Year: 2012

TRA	56053	**Land Value**	368,826
Supplement	NO	**Improvement Value**	31,204
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	400,030
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**400,030**

Year: 2011

TRA	56053	**Land Value**	361,594
Supplement	NO	**Improvement Value**	30,592
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	392,186
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**392,186**

Year: 2010

TRA	56053	**Land Value**	358,892
Supplement	NO	**Improvement Value**	30,363
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	389,255
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**389,255**

Year: 2009

TRA	56053	**Land Value**	359,745
Supplement	NO	**Improvement Value**	30,435
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	390,180
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**390,180**

Year: 2008

TRA	56053	**Land Value**	352,691
Supplement	NO	**Improvement Value**	29,838
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	382,529
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**382,529**

Year: 2007

TRA	56053	**Land Value**	345,775
Supplement	NO	**Improvement Value**	29,253
Correction Date		**Improvement Penalty**	0
Correction Code		**Pers Prop Value**	0
Original Parcel	0490223330000	**Pers Prop Penalty**	0
Billed Owner	HIGH DESERT LAND ACQUISITON LLC	**Total Penalties**	0
Joint Owner		**Total Value**	375,028
		HOX Exemptions	0
		Special Exemptions	0
		Net Value	**375,028**

Parcel History

Event Date	12/29/2006
Event Group/Type	CREATE - COMBINATION
Multi Parcel	Yes

Multi Parcel List
0490223330000 NEW-COM
0490101530000 OLD-COM
0490223020000 OLD-COM

Ownership History

Owner Name: HIGH DESERT LAND ACQUISITON LLC

R/I	SOLE OWNER
% Int	100.0000000
Type	BILLED OWNER
Acquisition Date	07/15/1998
Document Date	12/29/2006
Inactive Date	NONE

Document Numbers
2006122900032

Supplement History

No Supplement History

May 27, 2014

Glen King
NextEra Energy Resources, LLC
43880 Harper Lake Road
Hinkley, CA 92347

No Further Action Required For SEGS VIII & IX, 43880 Harper Lake Road, Hinkley, San Bernardino County, UST Case No. 6B3601036T

The Lahontan Regional Water Quality Control Board (Water Board) finds the release of heat transfer fluid (HTF) products at this site poses a low threat to human health, safety, and the environment, and concludes the site meets the criteria of the Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closure.

This letter confirms the completion of a site investigation and corrective action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tanks site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required. This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code.

Claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or

- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

Please contact John Steude at (530) 542-5571, if you have any questions regarding this matter.

Patty Z. Kouyoumdjian

Patty Z. Kouyoumdjian
Executive Officer

Enclosures: Low-threat UST Case Closure Policy Checklist
Petroleum Case Closure Supplemental Information Form – SEGS VIII
Petroleum Case Closure Supplemental Information Form – SEGS IX

cc w/ enclosure: Duane Paul, AMEC
State Water Resources Control Board, Underground Storage Tank Cleanup Fund, Dayne Kendrick

JSS/adw/T: SEGS VIII & IX NFAR
UST File: SEGS VIII & IX, Lassen County, 6B3601036T

LTCP Checklist ▼ Go

GEOTRACKER HOME | MANAGE PROJECTS | REPORTS | SEARCH | LOGOUT

SEGS 8, SEGS 9 (T0607138824) - MAP THIS SITE

OPEN - ELIGIBLE FOR CLOSURE

43880 HARPER LAKE ROAD
HINKLEY , CA 92347
SAN BERNARDINO COUNTY

VIEW PRINTABLE CASE SUMMARY FOR THIS SITE

ACTIVITIES REPORT

PUBLIC WEBPAGE

CLEANUP OVERSIGHT AGENCIES

LAHONTAN RWQCB (REGION 6T) *(LEAD)* - *CASE #: 6B3601036T*
CASEWORKER: *JOHN STEUDE* - ***SUPERVISOR:*** *TOM GAVIGAN*
LAHONTAN RWQCB (REGION 6V) - *CASE #: 6B3601036T*
SAN BERNARDINO COUNTY - *CASE #: 2007007*
CASEWORKER: *JACKSON CRUTSINGER* - ***SUPERVISOR:*** *MARILYN KRAFT*

THIS PROJECT WAS LAST MODIFIED BY *TOM GAVIGAN* ON 5/21/2014 2:32:18 PM - HISTORY

THIS SITE HAS SUBMITTALS. CLICK HERE TO OPEN A NEW WINDOW WITH THE SUBMITTAL APPROVAL PAGE FOR THIS SITE.

CLOSURE POLICY

THIS V / /2 CLOSURE POLICY HISTORY

General Criteria - *The site satisfies the policy general criteria* - CLEAR SECTION ANSWERS — **NO**

a. Is the unauthorized release located within the service area of a public water system? — ○ YES ◉ NO

b. The unauthorized release consists only of petroleum (info). — ○ YES ◉ NO

Contaminants : ☐ Chlorobenzene ☐ PCE ☐ TCE ☐ Chloroform ☐ Vinyl Chloride ☐ Bromoform
☑ Other: synthetic oil - heat transfer fluid (HTF)

c. The unauthorized ("primary") release from the UST system has been stopped. — ◉ YES ○ NO

d. Free product has been removed to the maximum extent practicable (info). — ◉ FP Not Encountered ○ YES ○ NO

e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed (info). — ◉ YES ○ NO

f. Secondary source has been removed to the extent practicable (info). — ◉ YES ○ NO

g. Soil or groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15. — ◉ Not Required ○ YES ○ NO

h. Does a nuisance exist, as defined by Water Code section 13050. — ○ YES ◉ NO

1. Media-Specific Criteria: Groundwater - *The contaminant plume that exceeds water quality objectives is stable or decreasing in areal extent, and meets all of the additional characteristics of one of the five classes of sites listed below.* - CLEAR SECTION ANSWERS — **YES**

EXEMPTION - Soil Only Case (Release has not Affected Groundwater - Info) — ○ YES ◉ NO

Does the site meet any of the Groundwater specific criteria scenarios? — ◉ YES ○ NO

1.5 - The regulatory agency determines, based on an analysis of site specific conditions, that the site under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame. — ◉ YES ○ NO

2. Media Specific Criteria: Petroleum Vapor Intrusion to Indoor Air - *The site is considered low-threat for the vapor-intrusion-to-air pathway if site-specific conditions satisfy items 2a, 2b, or 2c* - CLEAR SECTION ANSWERS — **YES**

EXEMPTION - Active Commercial Petroleum Fueling Facility — ○ YES ◉ NO

Does the site meet any of the Petroleum Vapor Intrusion to Indoor Air specific criteria scenarios? — ◉ YES ○ NO

2b - Petroleum Vapor Intrusion to Indoor Air - A site-specific risk assessment for the vapor intrusion pathway has been prepared that demonstrates human health is protected to the satisfaction of the regulatory agency. — ◉ YES ○ NO

3. Media Specific Criteria: Direct Contact and Outdoor Air Exposure - *The site is considered low-threat for direct contact and outdoor air exposure if it meets 1, 2, or 3 below.* - CLEAR SECTION ANSWERS — **YES**

EXEMPTION - The upper 10 feet of soil is free of petroleum contamination — ◉ YES ○ NO

Additional Information

Should this case be closed in spite of NOT meeting policy criteria? — ◉ YES ○ NO

Explain:

Synthetic oil known as heat transfer fluid (HTF) is similar to oil produced from crude oil. Fate and transport properties, including biodegradation, are similar for HTF and petroleum products. See separate Supplemental Information Forms for SEGS VIII & IX.

Has this LTCP Checklist been updated for FY 13/14? — ◉ YES ○ NO

SPELL CHECK

Save Form as Partially Completed | Save Form as Complete

LOGGED IN AS TGAVIGAN

CONTACT GEOTRACKER HELP

Petroleum Case Closure
Supplemental Information Form

Lahontan Regional Water Quality Control Board - Region 6

South Lake Tahoe Office:
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Victorville Office:
14440 Civic Drive, Suite 200
Victorville, CA 92392

1. Lahontan Regional Water Quality Control Board Contact

Case Worker:	**Phone:**
John Steude	(530) 542-5571

2. Case Information

Lahontan UST Case #:	**UST Cleanup Fund #:**	**Geotracker Global ID #:**
6B3601036T	NA	T0607138824
Site Name: SEGS VIII	**Site Address:** 43880 Harper Lake Road Hinkley, CA 92347	
Unauthorized Release Form Date: April 30, 2007	**County:** San Bernardino	
Water Board Permits and Cleanup and Abatement Orders Issued: None		

3. Responsible Parties

Fee Title Owner(s): **Owner Address(es):**	**Operator(s):** **Operator Address(es):**
High Desert Land Acquistion, LLC. 700 Universe Blvd. Juno Beach, FL 33408	NextEra Energy Operating Services 43880 Harper Lake Road Hinkley, CA 92347
Designated Responsible Party: FPL Energy Operating Services	

4. Notifications

Was fee title ownership confirmed through county assessor's office (date)? Yes (5-20-14)
How was fee title owner notified? 60 day notification period beginning 3/19/14
Does contamination extend off-site? No **If yes, how and when were affected off-site property owners notified?**
Comments:

5. Unauthorized Release Description

Type of product released (e.g. gasoline, diesel): Heat transfer fluid (HTF).
Primary source/release mechanism: Release was from a former 1,000-gallon UST system used to collect and contain any spills or leaks of heat transfer fluid (HTF) used at the facilities. The HTF was conveyed to the USTs via floor drains and product piping.

Release discovery description:
Release was discovered on April 16, 2007 during a limited subsurface investigation that was conducted for the in-place closure of a 1,000-gallon UST located at the SEGS VIII energy production unit. The subsurface investigation consisted of drilling and collecting soil samples to a depth of 12 feet adjacent to the SEGS VIII UST. The soil sample collected from a depth of 12 feet was submitted for laboratory analysis of volatile organic compounds (VOCs) using EPA Method 8260 and total petroleum hydrocarbon (TPH) reported as gasoline and diesel fuel range compounds using EPA Method 8015. The soil sample was reported to contain 8,220 milligrams per kilogram (mg/kg) of diesel ranged TPH (C13 - C23). Benzene, toluene, ethlybenzene, and xylenes (BTEX) and fuel oxygenates including MTBE were not detected. Based on these results, an unauthorized release report was filed with the San Bernardino County Fire Department on April 30, 2007.

On October 29, 2007, the 1,000-gallon UST at the SEGS VIII facility was abandoned in-place by cleaning and then filling the UST with a two-sack cement slurry.

Further assessment of the soil impacts beneath the SEGS VIII UST were conducted in September 2007. On October 14, 2009, regulatory oversight for the project was transferred from the San Bernardino County Fire Department to the Lahontan Regional Water Quality Control Board.

Comments: This UST case consists of two USTs. One UST was located at the SEGS IX facility and the other UST was located at the SEGS VIII facility. This case summary addresses the characteristics of the UST at the SEGS VII facility. There is an accompanying case summary for the UST at the SEGS IX facility.

6. Site Characterization Information

Site Location (describe general site area, e.g., located in a commercial area) and Site Land Use (current and any known planned use of the site):
The facility is located at 43880 Harper Lake Road near Hinkley, California, and consists of two solar energy generating systems (SEGS VIII and SEGS IX), and supporting office and maintenance buildings. The facility is located approximately 20 miles northwest of Barstow, California, near Harper Dry Lake. There are no planned changes for the future use of the site.

Unsaturated Zone Characterization (soil/rock type, thickness, COC (mg/kg), extent of impacts, etc.): The general lithology of the unsaturated zone consists of an upper coarser-grained interval of sand and gravelly sand that is present from ground surface to approximately 55 feet. First (perched) ground water was encountered within the alluvium at a depth of approximately 51 feet.

A boring location was placed adjacent to the former SEGS VIII UST. A shallow boring was drilled and sampled to a depth of approximately 12 feet using a hand auger. Subsequently, a deeper soil boring was advanced to a depth of approximately 55 feet using hollow-stem auger drilling and split-spoon soil sampling methods. Soil samples were collected at depths of 15, 20, and every five vertical feet thereafter to the completion depth of 55 feet and were submitted for laboratory analysis of TPH by EPA Method 8015 (carbon chain analysis) and VOCs including BTEX and fuel oxygenate compounds including MTBE by EPA Method 8260B. The soil sampling results are summarized below.

Sample Depth (feet)	TPH by EPA 8015 M			VOCs by EPA 8260B	
	C4-C12 (mg/kg)	C13-C23 (mg/kg)	C24-C40 (mg/kg)	BTEX (µg/kg)	Fuel Oxygenates (µg/kg)
12	ND (<0.2)	8,220	ND (<25)	ND (<1.0)	ND (<2.0)
15	ND (<0.2)	1.7 S J	ND (<25)	ND (<1.0)	ND (<2.0)
20	ND (<0.2)	0.4 S J	ND (<25)	ND (<1.0)	ND (<2.0)
25	ND (<0.2)	9.0 S J	ND (<25)	ND (<1.0)	ND (<2.0)
30	ND (<0.2)	ND (<5)	ND (<25)	ND (<1.0)	ND (<2.0)
35	ND (<0.2)	ND (<5)	ND (<25)	ND (<1.0)	ND (<2.0)
40	ND (<0.2)	ND (<5)	ND (<25)	ND (<1.0)	ND (<2.0)
45	ND (<0.2)	ND (<5)	ND (<25)	ND (<1.0)	ND (<2.0)
50	ND (<0.2)	ND (<5)	ND (<25)	ND (<1.0)	ND (<2.0)
55	NA	NA	NA	NA	NA

ND = Not detected at or above the method detection limit shown in parentheses.
NA = Not analyzed.
S = Qualitatively identified as biphenyl and diphenyl ether.
J = Estimated value.

As shown above, the highest concentration of TPH, qualitatively identified as biphenyl and diphenyl ether, was detected in the soil sample collected at a depth of 12 feet, with significantly lower concentrations reported in soil samples collected at depths of 15, 20 and 25 feet. Approximately 20 vertical feet of soil containing non-detect concentrations of TPH and VOCs were present between a depth of approximately 30 feet and 51 feet. Perched groundwater was encountered at approximately 51 feet at the base of the borehole.

If release involved gasoline, was unsaturated zone sampled for MTBE?
Not applicable.

Saturated Zone Description (soil/rock type, groundwater basin, relationship to water supply aquifer, beneficial uses etc.):
The water-bearing zone beneath the SEGS VIII site is a perched groundwater interval that occurs at a depth of approximately 51 feet. The perched water interval is approximately 120 feet above the regional aquifer beneath the site. Based on logs for water supply wells at the site, finer-grained sediments that support the perched water-bearing sediments and separate them from the regional aquifer may be 90 feet or more in thickness. The perched groundwater interval is not used for beneficial purposes.

Depth to groundwater and groundwater fluctuations (include minimum and maximum depth to groundwater with dates of measurements and any seasonal or long-term groundwater fluctuations):
Perched groundwater was observed at a depth of approximately 51 feet during assessment activities conducted at SEGS VIII in September 2007. Seasonal fluctuations were not evaluated, but are not expected to be significant because minimal rainfall (5 inches or less) is received on an annual basis.

Groundwater occurs in the regional aquifer system at a depth of approximately 170 to 180 feet.

Groundwater flow direction or range of directions:
Not known. Flow directions in perched water interval are anticipated to mimic the topography and flow towards the northwest and Harper Dry Lake, but may locally be variable depending on the thickness and variability of sediments containing perched water.

Most recent groundwater COC concentrations (µg/L) (include date of sampling): Not applicable (see below).
Lateral and vertical extent of groundwater contaminant plume during most recent groundwater sampling event: Because soil sampling revealed approximately 20 feet of soil containing non-detect concentrations of TPH and VOCs above perched groundwater, perched groundwater was not sampled.
Comments:

7. Water Supply Wells and Surface Water

Is the region served by a municipal or community water district? Water supply is provided by local privately-owned water supply wells. **Provide the approximate distance to the nearest domestic or other water supply well:** There are four existing water supply wells used by the Harper Lake facility. The wells are located approximately 2,000 to 4,000 feet from the former UST at SEGS VIII.
Were water supply wells affected? No **If yes, describe:**
Name of and distance to nearby surface water: Harper Dry Lake is approximately one mile northwest of the site. There are no surface water bodies within a mile of the site.
Were COCs detected in surface water? Not applicable **If yes, describe:**
Comments:

8. Free Product

Was floating free product encountered? No. **If yes:** **Date and location of last free product encountered:** **Total volume recovered:** **Was floating free product recovered to the extent practicable?**
Comments:

9. Monitoring and Remediation Well Summary

Number of wells	Type (monitoring, SVE, etc.)	Screen Interval (feet bgs)	Number of Wells Remaining
0	Not applicable (see comments).		0

Comments:
Site assessment conducted using a combination of hand auger and truck-mounted hollow-stem auger drilling and soil sampling.

10. Soil Remediation

Method(s) and duration of each method: Former UST located beneath concrete paving that is part of the power block for SEGS VIII production facility. UST was cleaned and backfilled in place. Soil remediation was not conducted.	
Quantity treated/removed: Not Applicable.	**Disposal location:** Not Applicable.
Comments:	

11. Groundwater Remediation

Method(s) and duration of each method: Groundwater remediation was not conducted.	
Quantity treated/contaminants removed: Not Applicable.	**Disposal location:** Not Applicable.
Comments:	

12. Electronic Deliverable Format Submission

Have electronic data reporting requirements been met? Yes

13. Rationale for No Further Action

Potential for Site COC to Affect Water Supply Wells and Surface Water *(e.g.: extent of contamination, plume stability, time to reach background concentrations, proximity and interconnection of impacted groundwater to water supply aquifer, etc.):*

The HTF-affected groundwater is perched and not used for water supply. Based on information reported for water supply well PW-35 located approximately ½-mile west of the UST area, the finer-grained sediments occur at a depth of approximately 50 feet and may be 90 feet or more in thickness.

The average annual rainfall for this area is generally less than 5-inches per year based on rainfall data for Barstow, California (http://cdec.water.ca.gov/). Based on this relatively low annual rainfall and reported evaporation rates in excess of 90 inches per year in this area, rainfall infiltration is not expected to have a significant effect on future movement of perched groundwater containing HTF-related compounds.

Based on the significant thickness of finer-grained sediments that separate the perched groundwater and the regional aquifer beneath the facility as described above, and the distance to the nearest on-site water supply well, which is approximately 2000 feet from the impacted interval of perched groundwater, it is unlikely that the impacts to perched groundwater at and in the vicinity of the SEGS VIII UST will migrate downward and affect the water supply wells at the facility. It is likely that the HTF-related impacts to perched groundwater will attenuate with time. There is a low threat of impacted perched groundwater affecting groundwater quality in the regional aquifer beneath the site.

Potential for UST COC to Affect Indoor Air *(location of buildings relative to shallow contamination, groundwater COC concentrations, results of soil vapor monitoring, etc)*:
The office buildings for the SEGS VIII and IX facilities are located approximately 3500 feet southeast of the former 1,000-gallon UST at the SEGS VIII site. The site is an operating solar power generating station and land use is not expected to change in the foreseeable future. There is a low threat to human health from residual HTF-affected soil and groundwater via the indoor air pathway.

Potential for Direct Contact with UST COC *(are COC present in shallow soils? is the site paved, etc.):*
The former UST is located beneath concrete paving that is part of the power block for SEGS VIII. It is unlikely excavation activities would contact HTF-impacted soils due to the depth to affected soil (12 feet bgs). There is a low threat to human health from the remaining HTF-affected soil via the direct contact pathway.

List of acronyms that may have been used in this form:

BTEX – benzene, toluene, ethylbenzene,
and total xylenes
bgs – below ground surface
COC – constituents of concern
DIPE - di-isopropyl ether,
DPE – dual phase extraction
DTW – depth to water
ETBE - ethyl tertiary butyl ether
GAC – granular activated carbon
MCL – maximum contaminant level
MTBE - methyl-tert-butyl ether
mg/kg – milligrams/kilogram
NA - not applicable
NFAR – No further action required
NS - not sampled
PAH - polycyclic aromatic hydrocarbon
ppmv – parts per million by volume
SVE – soil vapor extraction
TAME - tertiary amyl methyl ether
TBA - tertiary butyl alcohol '
TPH - total petroleum hydrocarbons
TPHd – TPH, diesel range
TPHg - TPH, gasoline range
TPHmo –TPH, motor range
UST – underground storage tank
µg/L – micrograms/liter

Petroleum Case Closure
Supplemental Information Form
Lahontan Regional Water Quality Control Board - Region 6

South Lake Tahoe Office:
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Victorville Office:
14440 Civic Drive, Suite 200
Victorville, CA 92392

1. Lahontan Regional Water Quality Control Board Contact

Case Worker:	**Phone:**
John Steude	(530) 542-5571

2. Case Information

Lahontan UST Case #:	**UST Cleanup Fund #:**	**Geotracker Global ID #:**
6B3601036T	NA	T0607138824
Site Name: SEGS IX	**Site Address:** 43880 Harper Lake Road Hinkley, CA 92347	
Unauthorized Release Form Date: April 30, 2007	**County:** San Bernardino	
Water Board Permits and Cleanup and Abatement Orders Issued: none		

3. Responsible Parties

Fee Title Owner(s): **Owner Address(es):** High Desert Land Acquisitions, LLC 700 Universe Blvd. Juno Beach, FL 33408	**Operator(s):** **Operator Address(es):** NextEra Energy Operating Services 43880 Harper Lake Road Hinkley, CA 92347
Designated Responsible Party: FPL Energy Operating Services	

4. Notifications

Was fee title ownership confirmed through county assessor's office (date)? Yes (5-20-14)
How was fee title owner notified? 60 day notification period beginning 3/19/14.
Does contamination extend off-site? No **If yes, how and when were affected off-site property owners notified?**
Comments:

5. Unauthorized Release Description

Type of product released (e.g. gasoline, diesel):
Heat transfer fluid (HTF).

Primary source/release mechanism:
Release was from a former 1,000-gallon UST system used to collect and contain any spills or leaks of heat transfer fluid (HTF) used at the facilities. The HTF was conveyed to the USTs via floor drains and product piping.

Release discovery description:
Release was discovered on April 16, 2007 during a limited subsurface investigation that was conducted for the in-place closure of a 1,000-gallon UST located at the SEGS IX energy production unit. The subsurface investigation consisted of drilling and sampling soil adjacent to the UST to a depth of 12 feet. The soil sample collected from a depth of 12 feet was submitted for laboratory analysis of volatile organic compounds (VOCs) using EPA Method 8260 and total petroleum hydrocarbon (TPH) reported as gasoline and diesel fuel range compounds using EPA Method 8015. The soil sample was reported to contain 8,550 milligrams per kilogram (mg/kg) of diesel ranged TPH (C13 - C23) and low levels of benzene, toluene, ethlybenzene, and xylenes that ranged from 2 to 4 micrograms per kilogram (µg/kg). Fuel oxygenates including MTBE were not detected. Based on these results, an unauthorized release report was filed with the San Bernardino County Fire Department on April 30, 2007.

On October 29, 2007, the 1,000-gallon UST at the SEGS IX facility was abandoned in-place by cleaning and then filling the UST with two-sack cement slurry.

Further assessment of the impacts to soil and perched groundwater were conducted between September 2007 and June 2009. On October 14, 2009, regulatory oversight for the project was transferred from the San Bernardino County Fire Department to the Lahontan Regional Water Quality Control Board.

Comments: This UST case consists of two USTs. One UST was located at the SEGS IX facility and the other UST was located at the SEGS VIII facility. This case summary addresses the characteristics of the UST at the SEGS IX facility. There is an accompanying case summary for the UST at the SEGS VIII facility.

6. Site Characterization Information

Site Location (describe general site area, e.g., located in a commercial area) and Site Land Use (current and any known planned use of the site):
The facility is located at 43880 Harper Lake Road near Hinkley, California, and consists of two solar energy generating systems (SEGS VIII and SEGS IX), and supporting office and maintenance buildings. The facility is located approximately 20 miles northwest of Barstow, California, near Harper Dry Lake. There no planned changes for the future use of the site.

Unsaturated Zone Characterization (soil/rock type, thickness, COC (mg/kg), extent of impacts, etc.): The general lithology of the unsaturated zone consists of an upper coarser-grained interval of sand and gravelly sand that is present from ground surface to approximately 30 feet bgs and is underlain by interbedded finer-grained interval consisting of silty sand/sandy silt, clayey silt, sand, and very dense/stiff sand to clayey sand to depth of approximately 46 feet. First encountered (perched) ground water was encountered within the alluvium at depths between 30 and 46 feet.

If release involved gasoline, was unsaturated zone sampled for MTBE?
Not applicable.

Saturated Zone Description (soil/rock type, groundwater basin, relationship to water supply aquifer, beneficial uses etc.):
The water-bearing zone that contains HTF-related impacts is a perched groundwater interval that occurs at a depth between approximately 30 and 56 feet. The perched water-bearing sediments are underlain by finer-grained sediments characterized as sandy silt to clayey silt to clay encountered at depths of between 36 and 56 feet. The perched water interval is approximately 120 feet above the regional aquifer beneath the site. Based on logs for water supply wells at the site, the finer-grained sediments that support the perched water-bearing sediments and separate them from the regional aquifer may be 90 feet or more in thickness. The perched groundwater interval is not used for beneficial purposes.

Depth to groundwater and groundwater fluctuations (include minimum and maximum depth to groundwater with dates of measurements and any seasonal or long-term groundwater fluctuations):
Depth to perched groundwater is variable and was encountered between depths of approximately 30 to 46 feet. Seasonal fluctuations were not evaluated, but are not expected to be significant because minimal rainfall (5 inches or less) is received on an annual basis.

Groundwater occurs in the regional aquifer system at a depth of approximately 170 to 180 feet.

Groundwater flow direction or range of directions:
Not known. Flow directions in perched water interval are anticipated to mimic the topography and flow toward the northwest Harper Dry Lake, but may locally be variable depending on the thickness and variability of sediments containing perched water.

Most recent groundwater COC concentrations (µg/L) (include date of sampling):
Note: Concentrations shown below are the maximum concentrations detected during the assessment activities. Reported concentrations used to assess the lateral extent of groundwater impacts are shown in **[BOLD]**.
TPHg: Reported as other COCs below.
TPHd: Reported as other COCs below.
BETX: Benzene = 47 µg/L (4/29/2009), **[<0.5 µg/L]**; (ethylbenzene, toluene, and xylenes not detected)
MTBE: Not detected.
Other COC:
1,1-Biphenyl (Biphenyl) = 3,160 µg/L (7/25/2008), **[<100 µg/L]**
1,1-Oxybisbenzene (Diphenyl Ether) = 7,340 µg/L (7/25/2008), **[<100 µg/L]**
Phenol = 150 µg/L (4/29/2009), **[<9.5 µg/L]**
Diethyl Phthalate = 41µg/L (6/9/2009), **[20 – 41 µg/L]**

Lateral and vertical extent of groundwater contaminant plume during most recent groundwater sampling event:
The lateral extent of HTF-related compounds appears to be relatively well-defined based on analytical results for perched groundwater samples collected during the CPT groundwater sampling program conducted at the site in 2009. The lateral extent of HTF compounds detected in groundwater is estimated to be within an area approximately 150 feet wide by approximately 300 feet long. The deeper finer-grained sediments encountered at depths of between 36 and 56 feet were characterized as sandy silt to clayey silt to clay. These finer-grained sediments would appear to support the perched groundwater conditions and inhibit the downward vertical migration of perched groundwater beneath the facility.

Comments:

7. Water Supply Wells and Surface Water

Is the region served by a municipal or community water district?
Water supply is provided by local privately-owned water supply wells.
Provide the approximate distance to the nearest domestic or other water supply well:
There are four existing water supply wells used by the Harper Lake facility. The wells are located approximately 2,000 to 3,200 feet from the former UST at SEGS IX.

Were water supply wells affected? No
If yes, describe:

Name of and distance to nearby surface water:
Harper Dry Lake is approximately one mile northwest of the site. There are no surface water bodies within a mile of the site.

Were COCs detected in surface water? Not applicable
If yes, describe:

Comments:

8. Free Product

Was floating free product encountered?
No.
If yes:
Date and location of last free product encountered:
Total volume recovered:
Was floating free product recovered to the extent practicable?

Comments:

9. Monitoring and Remediation Well Summary

Number of wells	Type (monitoring, SVE, etc.)	Screen Interval (feet bgs)	Number of Wells Remaining
0	Not applicable (see comments).		0

Comments:
Site assessment conducted using a combination of hollow-stem auger drilling and (soil and groundwater) sampling and CPT drilling and grab groundwater sampling.

10. Soil Remediation

Method(s) and duration of each method:
Former UST was located beneath the energy production facility footprint. UST was cleaned and backfilled in place. Soil remediation was not conducted.

Quantity treated/removed:	Disposal location:
Not Applicable.	Not Applicable.

Comments:

11. Groundwater Remediation

Method(s) and duration of each method:
Groundwater remediation was not conducted.

Quantity treated/contaminants removed:	Disposal location:
Not Applicable.	Not Applicable.

Comments:

12. Electronic Deliverable Format Submission

Have electronic data reporting requirements been met? Yes.

13. Rationale for No Further Action

Potential for Site COC to Affect Water Supply Wells and Surface Water *(e.g.: extent of contamination, plume stability, time to reach background concentrations, proximity and interconnection of impacted groundwater to water supply aquifer, etc.):*

The HTF-affected groundwater is perched and not used for water supply. Based on information reported for water supply well PW-35 located approximately ½-mile west of the UST area, the finer-grained sediments occur at a depth of approximately 50 feet and may be 90 feet or more in thickness.

The average annual rainfall for this area is generally less than 5-inches per year based on rainfall data for Barstow, California (http://cdec.water.ca.gov/). Based on this relatively low annual rainfall and reported evaporation rates in excess of 90 inches per year in this area, rainfall infiltration is not expected to have a significant effect on future movement of perched groundwater containing HTF-related compounds.

Based on the significant thickness of finer-grained sediments that separate the perched groundwater and the regional aquifer beneath the facility as described above, and the distance to the nearest on-site water supply well, which is approximately 2000 feet from the impacted interval of perched groundwater, it is unlikely that the impacts to perched groundwater at and in the vicinity of the SEGS IX UST will migrate downward and affect the water supply wells at the facility. The HTF-related impacts to perched groundwater will naturally attenuate with time. There is a low threat of impacted perched groundwater affecting groundwater quality in the regional aquifer beneath the site.

Potential for UST COC to Affect Indoor Air *(location of buildings relative to shallow contamination, groundwater COC concentrations, results of soil vapor monitoring, etc)*:
The office buildings for the SEGS VIII and IX facilities are located approximately 3500 feet southwest of the former 1,000-gallon UST site. The site is an operating solar power generating station and land use is not expected to change in the foreseeable future. There is a low threat to human health from residual HTF-affected soil and groundwater via the indoor air pathway.

Potential for Direct Contact with UST COC *(are COC present in shallow soils? is the site paved, etc.):*
The former UST is located beneath concrete paving that is part of the power block for SEGS IX. It is unlikely excavation activities would contact HTF-impacted soils due to the depth to affected soil (12 feet bgs). There is a low threat to human health from the remaining HTF-affected soil via the direct contact pathway.

List of acronyms that may have been used in this form:

BTEX – benzene, toluene, ethylbenzene, and total xylenes
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GAC – granular activated carbon
MCL – maximum contaminant level
MTBE - methyl-tert-butyl ether
mg/kg – milligrams/kilogram
NA - not applicable
NFAR – No further action required
NS - not sampled
PAH - polycyclic aromatic hydrocarbon
ppmv – parts per million by volume
SVE – soil vapor extraction
TAME - tertiary amyl methyl ether
TBA - tertiary butyl alcohol '
TPH - total petroleum hydrocarbons
TPHd – TPH, diesel range
TPHg - TPH, gasoline range
TPHmo –TPH, motor range
UST – underground storage tank
µg/L – micrograms/liter

APPENDIX C: REGULATORY DATABASE REPORT

PARTNER

Lockhart Solar II aka SEGS 10
APNs 049-022-333, 049-010-154, 049-010-156
Hinkley, CA 92347

Inquiry Number: 6149556.2s
August 07, 2020

The EDR Radius Map™ Report with GeoCheck®

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

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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

APNS 049-022-333, 049-010-154, 049-010-156
HINKLEY, CA 92347

COORDINATES

Latitude (North):	35.0413950 - 35˚ 2' 29.02''
Longitude (West):	117.3462310 - 117˚ 20' 46.43''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	468421.0
UTM Y (Meters):	3877490.8
Elevation:	2053 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5629422 LOCKHART, CA
Version Date:	2012
West Map:	5629462 THE BUTTES, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140601
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
APNS 049-022-333, 049-010-154, 049-010-156
HINKLEY, CA 92347

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1		43880 HARBOR LAKE RD	CHMIRS	Higher	3263, 0.618, SSW
A2		43880 HARPER LANE RD	CHMIRS	Higher	3263, 0.618, SSW
3	LUZ HARPER LAKE	42524 LOCKHART ST	LUST, SWEEPS UST, Cortese, HIST CORTESE, CERS	Higher	5548, 1.051, South

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-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

EXECUTIVE SUMMARY

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROLS..... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State- and tribal - 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
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

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

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

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

Local Lists of Landfill / Solid Waste Disposal Sites

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

EXECUTIVE SUMMARY

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
CERS HAZ WASTE ..... CERS HAZ WASTE
Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register
PFAS ..... PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

HIST UST ..... Hazardous Substance Storage Container Database
CA FID UST ..... Facility Inventory Database
CERS TANKS ..... California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

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

Other Ascertainable Records

RCRA NonGen / NLR ..... RCRA - Non Generators / No Longer Regulated
FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act
TRIS ..... Toxic Chemical Release Inventory System
SSTS ..... Section 7 Tracking Systems
ROD ..... Records Of Decision
RMP ..... Risk Management Plans
RAATS ..... RCRA Administrative Action Tracking System
PRP ..... Potentially Responsible Parties
PADS ..... PCB Activity Database System
ICIS ..... Integrated Compliance Information System
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ..... Material Licensing Tracking System
COAL ASH DOE ..... Steam-Electric Plant Operation Data
COAL ASH EPA ..... Coal Combustion Residues Surface Impoundments List

EXECUTIVE SUMMARY

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
FINDS	Facility Index System/Facility Registry System
DOCKET HWC	Hazardous Waste Compliance Docket Listing
ECHO	Enforcement & Compliance History Information
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
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
San Bern. Co. Permit	Hazardous Material Permits
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)
PROJECT	PROJECT (GEOTRACKER)
WDR	Waste Discharge Requirements Listing
CIWQS	California Integrated Water Quality System
CERS	CERS
NON-CASE INFO	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)
HWTS	Hazardous Waste Tracking System
MINES MRDS	Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Auto..... EDR Exclusive Historical Auto Stations
EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

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

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

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

STANDARD ENVIRONMENTAL RECORDS

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 approximately 1.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LUZ HARPER LAKE	***42524 LOCKHART ST***	***S 1 - 2 (1.051 mi.)***	***3***	***11***

Database: LUST REG 6V, Date of Government Version: 06/07/2005
Database: LUST, Date of Government Version: 05/13/2020
Status: Completed - Case Closed
Status: Case Closed
Global Id: T0607100720
Close Date: 9/8/1993

ADDITIONAL ENVIRONMENTAL RECORDS

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 1.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LUZ HARPER LAKE	***42524 LOCKHART ST***	***S 1 - 2 (1.051 mi.)***	***3***	***11***
Status: A				
Comp Number: 618				

Records of Emergency Release Reports

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 03/31/2020 has revealed that there are 2 CHMIRS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	43880 HARBOR LAKE RD	SSW 1/2 - 1 (0.618 mi.)	A1	9
OES Incident Number: 2-4592				
Not reported	43880 HARPER LANE RD	SSW 1/2 - 1 (0.618 mi.)	A2	10
OES Incident Number: 2-1227				

Other Ascertainable Records

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 03/23/2020 has revealed that there is 1 Cortese site within approximately 1.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LUZ HARPER LAKE	***42524 LOCKHART ST***	***S 1 - 2 (1.051 mi.)***	***3***	***11***
Cleanup Status: COMPLETED - CASE CLOSED				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 1.5 miles of the target property.

EXECUTIVE SUMMARY

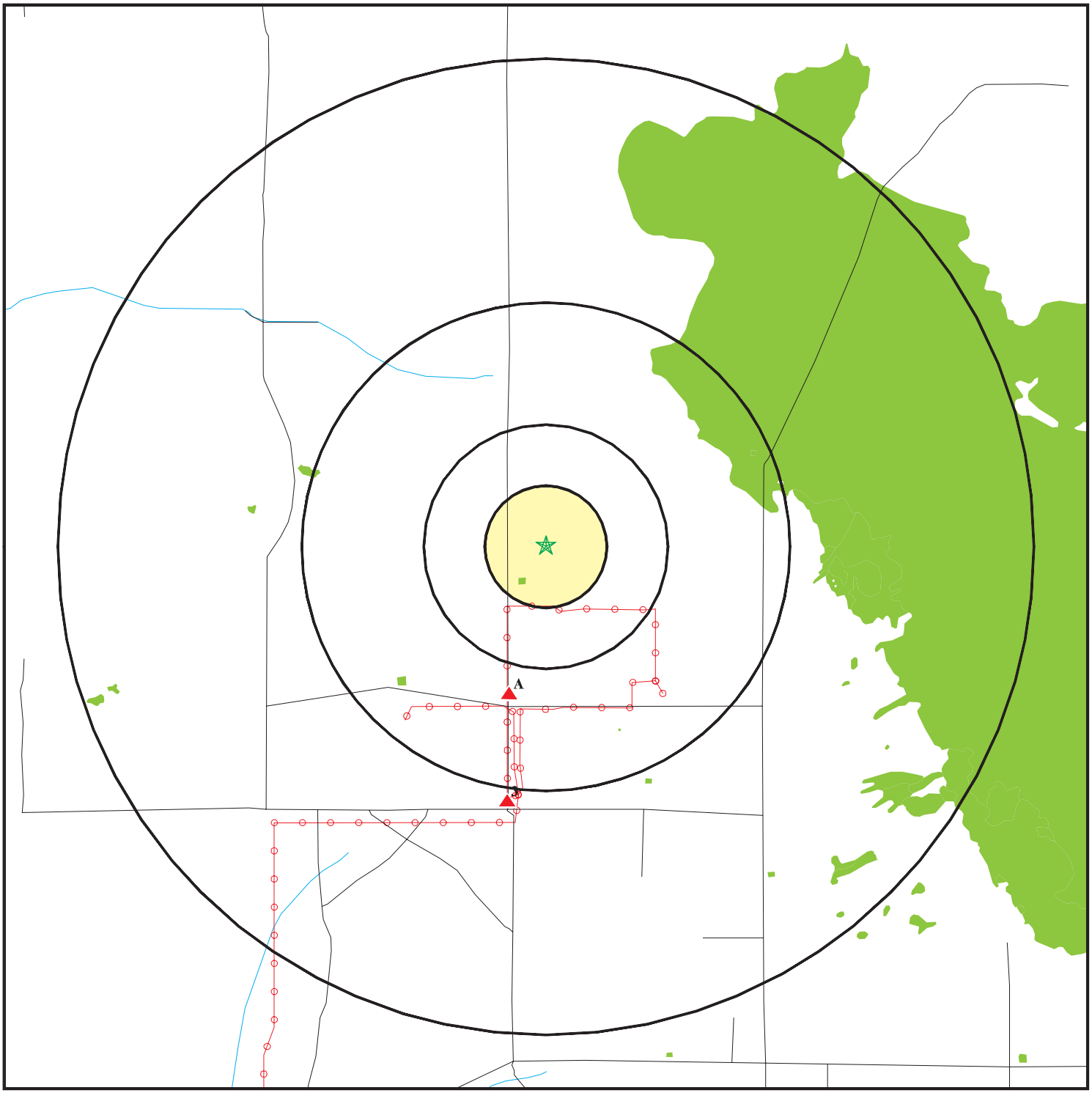
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LUZ HARPER LAKE Reg Id: 6B3600221T	***42524 LOCKHART ST***	***S 1 - 2 (1.051 mi.)***	***3***	***11***

EXECUTIVE SUMMARY

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

Site Name	Database(s)
	CDL

OVERVIEW MAP - 6149556.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

0 1/2 1 2 Miles

- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

N

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

SITE NAME:	Lockhart Solar II aka SEGS 10	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	APNs 049-022-333, 049-010-154, 049-010-156 Hinkley CA 92347	CONTACT:	Roy Zamarripa
		INQUIRY #:	6149556.2s
LAT/LONG:	35.041395 / 117.346231	DATE:	August 07, 2020 6:12 pm

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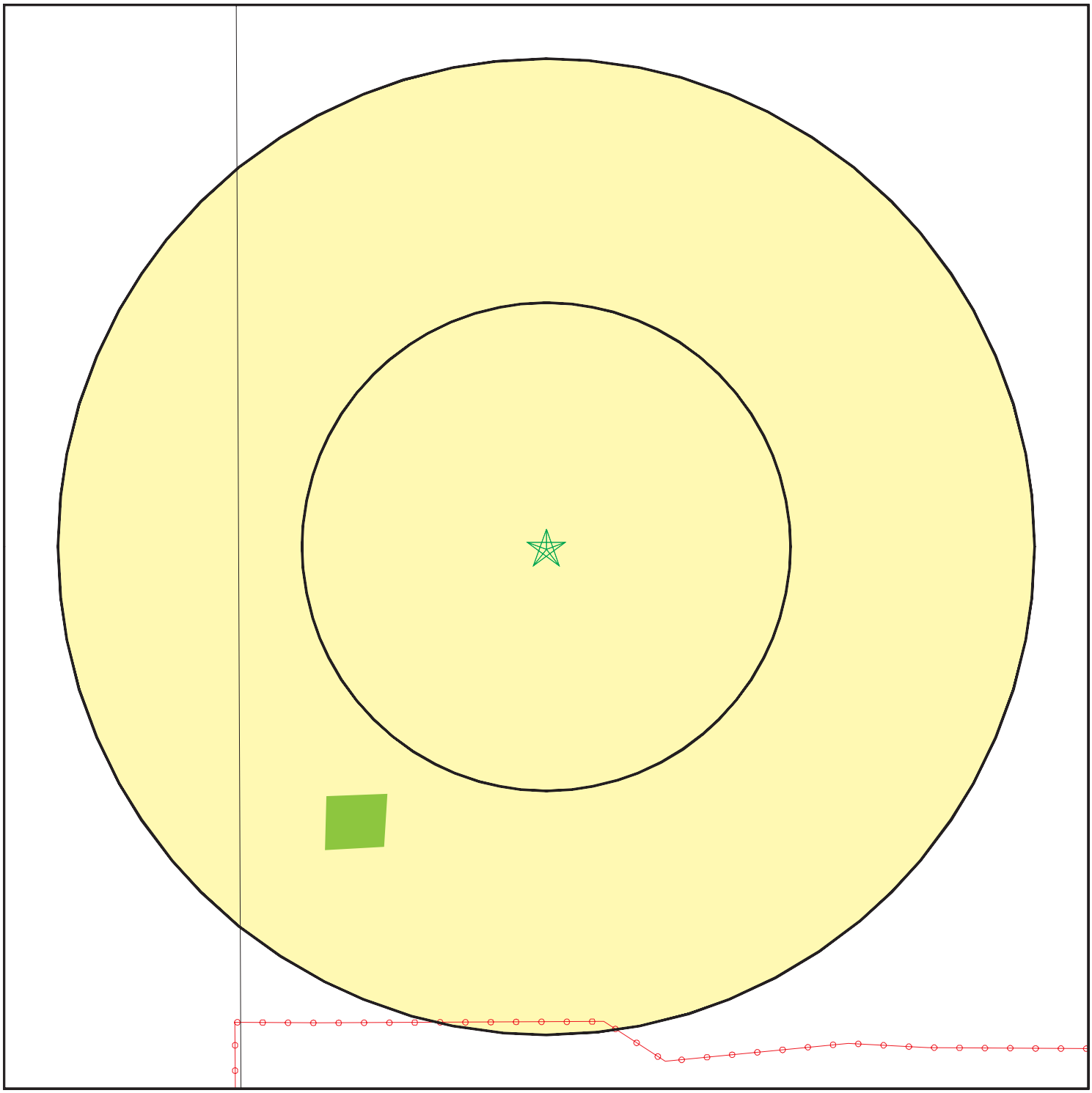
DETAIL MAP - 6149556.2S



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

0 1/16 1/8 1/4 Miles

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:	Lockhart Solar II aka SEGS 10	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	APNs 049-022-333, 049-010-154, 049-010-156 Hinkley CA 92347	CONTACT:	Roy Zamarripa
		INQUIRY #:	6149556.2s
LAT/LONG:	35.041395 / 117.346231	DATE:	August 07, 2020 6:14 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	2.000		0	0	0	0	0	0
Proposed NPL	2.000		0	0	0	0	0	0
NPL LIENS	2.000		0	0	0	0	0	0
Federal Delisted NPL site list								
Delisted NPL	2.000		0	0	0	0	0	0
Federal CERCLIS list								
FEDERAL FACILITY	1.500		0	0	0	0	0	0
SEMS	1.500		0	0	0	0	0	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	1.500		0	0	0	0	0	0
Federal RCRA CORRACTS facilities list								
CORRACTS	2.000		0	0	0	0	0	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	1.500		0	0	0	0	0	0
Federal RCRA generators list								
RCRA-LQG	1.250		0	0	0	0	0	0
RCRA-SQG	1.250		0	0	0	0	0	0
RCRA-VSQG	1.250		0	0	0	0	0	0
Federal institutional controls / engineering controls registries								
LUCIS	1.500		0	0	0	0	0	0
US ENG CONTROLS	1.500		0	0	0	0	0	0
US INST CONTROLS	1.500		0	0	0	0	0	0
Federal ERNS list								
ERNS	1.000		0	0	0	0	NR	0
State- and tribal - equivalent NPL								
RESPONSE	2.000		0	0	0	0	0	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	2.000		0	0	0	0	0	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	1.500		0	0	0	0	0	0
State and tribal leaking storage tank lists								
LUST	1.500		0	0	0	0	1	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	1.500		0	0	0	0	0	0
CPS-SLIC	1.500		0	0	0	0	0	0
State and tribal registered storage tank lists								
FEMA UST	1.250		0	0	0	0	0	0
UST	1.250		0	0	0	0	0	0
AST	1.250		0	0	0	0	0	0
INDIAN UST	1.250		0	0	0	0	0	0
State and tribal voluntary cleanup sites								
INDIAN VCP	1.500		0	0	0	0	0	0
VCP	1.500		0	0	0	0	0	0
State and tribal Brownfields sites								
BROWNFIELDS	1.500		0	0	0	0	0	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	1.500		0	0	0	0	0	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	1.500		0	0	0	0	0	0
SWRCY	1.500		0	0	0	0	0	0
HAULERS	1.000		0	0	0	0	NR	0
INDIAN ODI	1.500		0	0	0	0	0	0
DEBRIS REGION 9	1.500		0	0	0	0	0	0
ODI	1.500		0	0	0	0	0	0
IHS OPEN DUMPS	1.500		0	0	0	0	0	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	1.000		0	0	0	0	NR	0
HIST Cal-Sites	2.000		0	0	0	0	0	0
SCH	1.250		0	0	0	0	0	0
CDL	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	1.250		0	0	0	0	0	0
Toxic Pits	2.000		0	0	0	0	0	0
US CDL	1.000		0	0	0	0	NR	0
PFAS	1.500		0	0	0	0	0	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	1.250		0	0	0	0	1	1
HIST UST	1.250		0	0	0	0	0	0
CA FID UST	1.250		0	0	0	0	0	0
CERS TANKS	1.250		0	0	0	0	0	0
Local Land Records								
LIENS	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	1.000		0	0	0	0	NR	0
DEED	1.500		0	0	0	0	0	0
Records of Emergency Release Reports								
HMIRS	1.000		0	0	0	0	NR	0
CHMIRS	1.000		0	0	0	2	NR	2
LDS	1.000		0	0	0	0	NR	0
MCS	1.000		0	0	0	0	NR	0
SPILLS 90	1.000		0	0	0	0	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	1.250		0	0	0	0	0	0
FUDS	2.000		0	0	0	0	0	0
DOD	2.000		0	0	0	0	0	0
SCRD DRYCLEANERS	1.500		0	0	0	0	0	0
US FIN ASSUR	1.000		0	0	0	0	NR	0
EPA WATCH LIST	1.000		0	0	0	0	NR	0
2020 COR ACTION	1.250		0	0	0	0	0	0
TSCA	1.000		0	0	0	0	NR	0
TRIS	1.000		0	0	0	0	NR	0
SSTS	1.000		0	0	0	0	NR	0
ROD	2.000		0	0	0	0	0	0
RMP	1.000		0	0	0	0	NR	0
RAATS	1.000		0	0	0	0	NR	0
PRP	1.000		0	0	0	0	NR	0
PADS	1.000		0	0	0	0	NR	0
ICIS	1.000		0	0	0	0	NR	0
FTTS	1.000		0	0	0	0	NR	0
MLTS	1.000		0	0	0	0	NR	0
COAL ASH DOE	1.000		0	0	0	0	NR	0
COAL ASH EPA	1.500		0	0	0	0	0	0
PCB TRANSFORMER	1.000		0	0	0	0	NR	0
RADINFO	1.000		0	0	0	0	NR	0
HIST FTTS	1.000		0	0	0	0	NR	0
DOT OPS	1.000		0	0	0	0	NR	0
CONSENT	2.000		0	0	0	0	0	0
INDIAN RESERV	2.000		0	0	0	0	0	0
FUSRAP	2.000		0	0	0	0	0	0
UMTRA	1.500		0	0	0	0	0	0
LEAD SMELTERS	1.000		0	0	0	0	NR	0
US AIRS	1.000		0	0	0	0	NR	0
US MINES	1.250		0	0	0	0	0	0
ABANDONED MINES	1.250		0	0	0	0	0	0
FINDS	1.000		0	0	0	0	NR	0
DOCKET HWC	1.000		0	0	0	0	NR	0
ECHO	1.000		0	0	0	0	NR	0
UXO	2.000		0	0	0	0	0	0
FUELS PROGRAM	1.250		0	0	0	0	0	0
CA BOND EXP. PLAN	2.000		0	0	0	0	0	0
Cortese	1.500		0	0	0	0	1	1
CUPA Listings	1.250		0	0	0	0	0	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	1.250		0	0	0	0	0	0
EMI	1.000		0	0	0	0	NR	0
ENF	1.000		0	0	0	0	NR	0
Financial Assurance	1.000		0	0	0	0	NR	0
HAZNET	1.000		0	0	0	0	NR	0
ICE	1.000		0	0	0	0	NR	0
HIST CORTESE	1.500		0	0	0	0	1	1
HWP	2.000		0	0	0	0	0	0
HWT	1.250		0	0	0	0	0	0
MINES	1.250		0	0	0	0	0	0
MWMP	1.250		0	0	0	0	0	0
NPDES	1.000		0	0	0	0	NR	0
San Bern. Co. Permit	1.250		0	0	0	0	0	0
PEST LIC	1.000		0	0	0	0	NR	0
PROC	1.500		0	0	0	0	0	0
Notify 65	2.000		0	0	0	0	0	0
UIC	1.000		0	0	0	0	NR	0
UIC GEO	1.000		0	0	0	0	NR	0
WASTEWATER PITS	1.500		0	0	0	0	0	0
WDS	1.000		0	0	0	0	NR	0
WIP	1.250		0	0	0	0	0	0
MILITARY PRIV SITES	1.000		0	0	0	0	NR	0
PROJECT	1.000		0	0	0	0	NR	0
WDR	1.000		0	0	0	0	NR	0
CIWQS	1.000		0	0	0	0	NR	0
CERS	1.000		0	0	0	0	NR	0
NON-CASE INFO	1.000		0	0	0	0	NR	0
OTHER OIL GAS	1.000		0	0	0	0	NR	0
PROD WATER PONDS	1.000		0	0	0	0	NR	0
SAMPLING POINT	1.000		0	0	0	0	NR	0
WELL STIM PROJ	1.000		0	0	0	0	NR	0
HWTS	1.000		0	0	0	0	NR	0
MINES MRDS	1.000		0	0	0	0	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	2.000		0	0	0	0	0	0
EDR Hist Auto	1.125		0	0	0	0	0	0
EDR Hist Cleaner	1.125		0	0	0	0	0	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	1.000		0	0	0	0	NR	0
RGA LUST	1.000		0	0	0	0	NR	0
- Totals --		0	0	0	0	2	4	6

MAP FINDINGS SUMMARY

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

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **CHMIRS** **S105885992**
SSW **43880 HARBOR LAKE RD.** **N/A**
1/2-1 **HINKLEY, CA**
0.618 mi.
3263 ft. **Site 1 of 2 in cluster A**

Relative:
Higher

Actual:
2070 ft.

CHMIRS:

Name:	Not reported
Address:	43880 HARBOR LAKE RD.
City,State,Zip:	HINKLEY, CA
OES Incident Number:	2-4592
OES notification:	08/25/2002
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Contractor
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2002
Agency:	Luz Solar Partners
Incident Date:	8/25/200212:00:00 AM
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Yes
Site Type:	Other
E Date:	Not reported
Substance:	Sulfuric acid
Gallons:	2,000

(Continued) **S105885992**

Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	A hose from the holding tank broke causing the spill.

A2 **CHMIRS** **S105883153**
SSW **43880 HARPER LANE RD.** **N/A**
1/2-1 **HINKLEY, CA 92347**
0.618 mi.
3263 ft. **Site 2 of 2 in cluster A**

Relative:
Higher

Actual:
2070 ft.

CHMIRS:

Name:	Not reported
Address:	43880 HARPER LANE RD.
City,State,Zip:	HINKLEY, CA 92347
OES Incident Number:	2-1227
OES notification:	03/05/2002
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported

(Continued) **S105883153**

Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Responsible Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2002
Agency:	NRC
Incident Date:	3/2/200212:00:00 AM
Admin Agency:	San Bernardino County Health Department
Amount:	Not reported
Contained:	Yes
Site Type:	Merchant/Business
E Date:	Not reported
Substance:	Therminol VP 1
Gallons:	300
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Caller is reporting a failure of the weld in piping which caused a leak of heat transfer fluid and resulted in a fire.

3
South
> 1
1.051 mi.
5548 ft.

LUZ HARPER LAKE
42524 LOCKHART ST
HINKLEY, CA 92347

LUST
SWEEPS UST
Cortese
HIST CORTESE
CERS

S103659040
N/A

Relative:
Higher

Actual:
2082 ft.

LUST Region 6V:

Name:	LUZ HARPER LAKE
Address:	42524 LOCKHART ST
City:	HINKLEY
Region:	6V
Case Number:	6B3600221T
Leak Record:	1/8/1991
Report Date:	12/12/1990
Reported By Address:	Not reported
Responsible Party:	LUZ ENGINEERING CORPORATION
Operator:	Not reported
Cross Street:	Not reported

LUZ HARPER LAKE (Continued) **S103659040**

Local Agency:	36000L
Regional Board:	6V
Chemical:	Diesel
Case Type:	Soil only
Funding:	Not reported
Enforce Type:	EF
How Found:	Not reported
How Stopped:	Not reported
Cause of Leak:	UNK
Leak Source:	UNK
Global ID:	T0607100720
Stop Date:	Not reported
Leak Confirm:	Not reported
Submit Workplan:	Not reported
Prelim Assess:	Not reported
Pollution Char:	Not reported
Remed Plan:	12/12/1990
Remed Action:	Not reported
Monitoring:	Not reported
Close Date:	9/8/1993
Discovered:	11/20/1990
Enforce Date:	8/21/1992
Review Date:	1/13/2000
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
MTBE class:	*
Max MTBE Grnd Wtr:	Not reported
Max MTBE Soil:	Not reported
MTBE Counts:	0
MTBE Fuel:	0
MTBE Tested:	NRQ
Organization Name:	Not reported
Status:	Case Closed
Contact:	Not reported
Interim Action:	No
Pilot Program:	LUST
Lat/Long:	34.9290446 / -117.1843956
Staff Initials:	KD
Local Agency Staff:	CR2
Lead Agency:	Local Agency
Summary:	Not reported
Basin Number:	HARPER VALLEY (6-47)
Beneficial:	Not reported
Priority:	Not reported
UST Cleanup Fund ID:	Not reported
Suspended:	Not reported
Local Case Number:	90181
Amount:	Not reported
Abate Method:	Not reported
Water System:	Not reported
Well Name:	Not reported
Distance:	1467.27475
Wst Disch Reqrmnt Global ID:	Not reported
Wst Disch Reqrmnt Name:	Not reported

LUST:
Name: LUZ HARPER LAKE

LUZ HARPER LAKE (Continued) **S103659040**

Address:	42524 LOCKHART ST
City,State,Zip:	HINKLEY, CA 92347
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100720
Global Id:	T0607100720
Latitude:	35.0317194177263
Longitude:	-117.346873093286
Status:	Completed - Case Closed
Status Date:	09/08/1993
Case Worker:	CR2
RB Case Number:	6B3600221T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	90181
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0607100720
Contact Type:	Local Agency Caseworker
Contact Name:	CATHERINE RICHARDS
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	crichards@sbcfire.org
Phone Number:	9093868419

Global Id:	T0607100720
Contact Type:	Regional Board Caseworker
Contact Name:	JEHIEL CASS
Organization Name:	LAHONTAN RWQCB (REGION 6V)
Address:	15095 Armagosa Road, Building 2, Suite 210
City:	VICTORVILLE
Email:	jehiel.cass@waterboards.ca.gov
Phone Number:	7602412434

LUST:

Global Id:	T0607100720
Action Type:	Other
Date:	11/20/1990
Action:	Leak Discovery

Global Id:	T0607100720
Action Type:	ENFORCEMENT
Date:	08/21/1992
Action:	* Historical Enforcement

Global Id:	T0607100720
Action Type:	Other
Date:	12/12/1990
Action:	Leak Reported

LUST:

Global Id:	T0607100720
Status:	Open - Case Begin Date

LUZ HARPER LAKE (Continued) **S103659040**

Status Date: 11/20/1990

Global Id: T0607100720
Status: Open - Remediation
Status Date: 12/12/1990

Global Id: T0607100720
Status: Completed - Case Closed
Status Date: 09/08/1993

SWEEPS UST:

Name: SEG IX
Address: 42524 LOCKHART
City: HINKLEY
Status: Active
Comp Number: 618
Number: 3
Board Of Equalization: Not reported
Referral Date: 03-23-92
Action Date: 03-23-92
Created Date: 03-28-90
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

Name: SEG IX
Address: 42524 LOCKHART
City: HINKLEY
Status: Not reported
Comp Number: 618
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 36-000-000618-000001
Tank Status: Not reported
Capacity: 500
Active Date: Not reported
Tank Use: UNKNOWN
STG: PRODUCT
Content: UNKNOWN
Number Of Tanks: 2

Name: SEG IX
Address: 42524 LOCKHART
City: HINKLEY
Status: Not reported
Comp Number: 618

LUZ HARPER LAKE (Continued) **S103659040**

Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	36-000-000618-000002
Tank Status:	Not reported
Capacity:	500
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

CORTESE:

Name:	LUZ HARPER LAKE
Address:	42524 LOCKHART ST
City,State,Zip:	HINKLEY, CA 92347
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100720
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	LUZ HARPER LAKE
edr_fadd1:	42524 LOCKHART
City,State,Zip:	HINKLEY, CA 92347
Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	6B3600221T

CERS:

Name:	LUZ HARPER LAKE
Address:	42524 LOCKHART ST
City,State,Zip:	HINKLEY, CA 92347
Site ID:	241332
CERS ID:	T0607100720

LUZ HARPER LAKE (Continued) **S103659040**

CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Local Agency Caseworker
Entity Name: CATHERINE RICHARDS - SAN BERNARDINO COUNTY
Entity Title: Not reported
Affiliation Address: 620 SOUTH E STREET
Affiliation City: SAN BERNARDINO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9093868419

Affiliation Type Desc: Regional Board Caseworker
Entity Name: JEHIEL CASS - LAHONTAN RWQCB (REGION 6V)
Entity Title: Not reported
Affiliation Address: 15095 Armagosa Road, Building 2, Suite 210
Affiliation City: VICTORVILLE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7602412434

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HINKLEY	S118946766		LOCKHART RANCH RD, WEST OF HAR	92347	CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

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

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/12/2020
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: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

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

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

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

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

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

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/12/2020
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: 07/02/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

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

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

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

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/26/2020
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: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
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: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
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: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

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

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

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

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

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
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: 05/15/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 30

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

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

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

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

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

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

Date of Government Version: 03/22/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 86

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

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

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 04/28/2020
Date Made Active in Reports: 07/13/2020
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/27/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

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

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 04/28/2020
Date Made Active in Reports: 07/13/2020
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/27/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Quarterly

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

SWF/LF (SWIS): Solid Waste Information System

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

Date of Government Version: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/12/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

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

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

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

LUST: 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: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

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

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

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

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

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

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

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

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

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

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

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

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

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

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

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

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

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

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

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

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

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

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

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

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

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

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

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

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

Date of Government Version: 10/15/2019
Date Data Arrived at EDR: 12/17/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

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

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
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: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

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

Date of Government Version: 10/04/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
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: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
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: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

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

Date of Government Version: 10/10/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 67

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

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

Date of Government Version: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

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

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

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

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

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

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

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

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

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

Date of Government Version: 02/01/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/06/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Varies

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

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/20/2020
Number of Days to Update: 71

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

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

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/11/2020
Date Made Active in Reports: 05/26/2020
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

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

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

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

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

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

Date of Government Version: 10/10/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 67

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
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: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
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: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

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

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

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

Date of Government Version: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
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: 10/04/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/23/2020
Next Scheduled EDR Contact: 11/01/2020
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

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

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

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 10/05/2020
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: 04/27/2020
Date Data Arrived at EDR: 04/28/2020
Date Made Active in Reports: 07/13/2020
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/27/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

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

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

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing

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

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/05/2020
Number of Days to Update: 73

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
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: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

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

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

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/19/2020
Number of Days to Update: 70

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/15/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/23/2020
Number of Days to Update: 69

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

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

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

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

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

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

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

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

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

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

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/09/2020
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: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

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

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 04/28/2020
Date Made Active in Reports: 07/13/2020
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/27/2020
Next Scheduled EDR Contact: 11/09/2020
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: 12/31/2018
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Varies

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

Date of Government Version: 04/20/2020
Date Data Arrived at EDR: 04/21/2020
Date Made Active in Reports: 07/13/2020
Number of Days to Update: 83

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 09/07/2020
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: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/19/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 05/20/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/06/2020
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
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.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 05/04/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 72

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

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

Date of Government Version: 04/20/2020
Date Data Arrived at EDR: 04/21/2020
Date Made Active in Reports: 07/09/2020
Number of Days to Update: 79

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/03/2020
Date Data Arrived at EDR: 03/05/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 70

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
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: 02/27/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 86

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/23/2020
Next Scheduled EDR Contact: 10/05/2020
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: 03/31/2020
Date Data Arrived at EDR: 04/21/2020
Date Made Active in Reports: 07/09/2020
Number of Days to Update: 79

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/02/2020
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: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 1

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
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: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
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: 01/28/2020
Date Data Arrived at EDR: 02/19/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 85

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/19/2020
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: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/06/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/05/2020
Next Scheduled EDR Contact: 11/23/2020
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: 03/23/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/16/2020
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: 08/06/2020
Next Scheduled EDR Contact: 11/16/2020
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: 06/17/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 79

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 08/31/2020
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: 03/01/2020
Date Data Arrived at EDR: 04/21/2020
Date Made Active in Reports: 07/15/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 01/31/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 08/03/2020
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/15/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 11/16/2020
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: 10/09/2019
Date Data Arrived at EDR: 10/11/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 70

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/13/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 06/30/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/2019
Date Data Arrived at EDR: 10/25/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 82

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/20/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 42

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/05/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/06/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 06/24/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/27/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/21/2020
Number of Days to Update: 6

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/06/2020
Next Scheduled EDR Contact: 10/19/2020
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: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/07/2020
Next Scheduled EDR Contact: 10/19/2020
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: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data
Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/31/2020
Date Data Arrived at EDR: 04/01/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 50

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/11/2020
Date Data Arrived at EDR: 02/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 86

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 02/28/2020
Date Made Active in Reports: 05/22/2020
Number of Days to Update: 84

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
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: 03/05/2020
Date Data Arrived at EDR: 03/06/2020
Date Made Active in Reports: 05/29/2020
Number of Days to Update: 84

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/19/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 86

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/04/2020
Date Data Arrived at EDR: 04/07/2020
Date Made Active in Reports: 06/26/2020
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 07/02/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 09/07/2020
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: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 08/03/2020
Number of Days to Update: 76

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/19/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/05/2020
Number of Days to Update: 73

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: Varies

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 05/04/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 72

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/27/2020
Date Data Arrived at EDR: 02/28/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 69

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
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: 12/04/2019
Date Data Arrived at EDR: 01/29/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 71

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/25/2020
Date Data Arrived at EDR: 03/26/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 81

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
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: 06/24/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 59

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/16/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/03/2020
Date Data Arrived at EDR: 04/07/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 8

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 04/09/2020
Date Data Arrived at EDR: 04/10/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/14/2020
Date Data Arrived at EDR: 05/15/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 73

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/06/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 73

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

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

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/18/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 74

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 08/31/2020
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: 04/06/2020
Date Data Arrived at EDR: 04/08/2020
Date Made Active in Reports: 06/26/2020
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/07/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/19/2020
Number of Days to Update: 70

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
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: 02/12/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 72

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 05/12/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/28/2020
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/12/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 72

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/19/2020
Number of Days to Update: 70

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/12/2020
Date Data Arrived at EDR: 03/13/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 69

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/19/2020
Number of Days to Update: 70

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/19/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
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: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
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: 04/20/2020
Date Data Arrived at EDR: 04/21/2020
Date Made Active in Reports: 07/13/2020
Number of Days to Update: 83

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
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: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 07/01/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 04/09/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 08/02/2020
Next Scheduled EDR Contact: 10/18/2020
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/08/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List
The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/30/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 16

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/30/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/01/2020
Number of Days to Update: 13

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 06/30/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 03/27/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 04/01/2020
Date Data Arrived at EDR: 04/20/2020
Date Made Active in Reports: 07/06/2020
Number of Days to Update: 77

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 04/16/2020
Date Data Arrived at EDR: 04/20/2020
Date Made Active in Reports: 07/08/2020
Number of Days to Update: 79

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/07/2020
Date Data Arrived at EDR: 05/07/2020
Date Made Active in Reports: 07/23/2020
Number of Days to Update: 77

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/10/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/30/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/19/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 26

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/09/2020
Date Data Arrived at EDR: 04/10/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 82

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/05/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 73

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
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: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/20/2020
Date Data Arrived at EDR: 04/28/2020
Date Made Active in Reports: 07/14/2020
Number of Days to Update: 77

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/08/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 01/31/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 69

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 08/05/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 06/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/26/2020
Date Data Arrived at EDR: 03/26/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 81

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 06/30/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/13/2020
Date Data Arrived at EDR: 04/14/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 78

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/13/2020
Next Scheduled EDR Contact: 10/26/2020
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: 07/08/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/25/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 07/13/2020
Next Scheduled EDR Contact: 10/26/2020
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: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/25/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/25/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/25/2020
Date Data Arrived at EDR: 04/14/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 78

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/17/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/08/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 64

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
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: 02/24/2020
Date Data Arrived at EDR: 02/25/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 06/24/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 1

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2020
Date Data Arrived at EDR: 03/05/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 69

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 16

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 07/08/2020
Next Scheduled EDR Contact: 10/12/2020
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: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/07/2020
Date Made Active in Reports: 07/24/2020
Number of Days to Update: 78

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2020
Date Data Arrived at EDR: 05/08/2020
Date Made Active in Reports: 07/24/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2020
Date Data Arrived at EDR: 05/08/2020
Date Made Active in Reports: 07/24/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2020
Date Data Arrived at EDR: 05/05/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 73

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 11/16/2020
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: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
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: 03/10/2020
Date Data Arrived at EDR: 03/11/2020
Date Made Active in Reports: 05/20/2020
Number of Days to Update: 70

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 02/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 03/10/2020
Date Data Arrived at EDR: 03/11/2020
Date Made Active in Reports: 05/20/2020
Number of Days to Update: 70

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/02/2020
Next Scheduled EDR Contact: 10/12/2020
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: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/02/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 04/24/2020
Date Data Arrived at EDR: 04/28/2020
Date Made Active in Reports: 07/13/2020
Number of Days to Update: 76

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
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: 02/25/2020
Date Data Arrived at EDR: 02/26/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 71

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

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: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
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: 04/09/2020
Date Data Arrived at EDR: 04/10/2020
Date Made Active in Reports: 06/26/2020
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 05/04/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 72

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/08/2020
Date Data Arrived at EDR: 05/08/2020
Date Made Active in Reports: 08/03/2020
Number of Days to Update: 87

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/12/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 09/21/2020
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: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/08/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 04/22/2020
Date Data Arrived at EDR: 04/24/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 13

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
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: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
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: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/26/2020
Next Scheduled EDR Contact: 09/13/2020
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/04/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 71

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/23/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 02/25/2020
Date Data Arrived at EDR: 02/26/2020
Date Made Active in Reports: 03/11/2020
Number of Days to Update: 14

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/30/2020
Next Scheduled EDR Contact: 10/05/2020
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: 04/03/2020
Date Data Arrived at EDR: 04/08/2020
Date Made Active in Reports: 06/26/2020
Number of Days to Update: 79

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/04/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/06/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 01/23/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/08/2020
Number of Days to Update: 66

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 73

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 04/09/2020
Date Data Arrived at EDR: 04/10/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 05/14/2020
Date Data Arrived at EDR: 05/15/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 73

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 08/06/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/26/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/09/2020
Number of Days to Update: 77

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/20/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/24/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/26/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/09/2020
Number of Days to Update: 77

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/20/2020
Next Scheduled EDR Contact: 11/02/2020
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: 01/27/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/20/2020
Number of Days to Update: 71

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 04/01/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 77

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 06/24/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 79

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/09/2020
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: 05/12/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/12/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/10/2019
Number of Days to Update: 69

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/04/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

LOCKHART SOLAR II AKA SEGS 10
APNS 049-022-333, 049-010-154, 049-010-156
HINKLEY, CA 92347

TARGET PROPERTY COORDINATES

Latitude (North):	35.041395 - 35˚ 2' 29.02''
Longitude (West):	117.346231 - 117˚ 20' 46.43''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	468421.0
UTM Y (Meters):	3877490.8
Elevation:	2053 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5629422 LOCKHART, CA
Version Date:	2012
West Map:	5629462 THE BUTTES, 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).

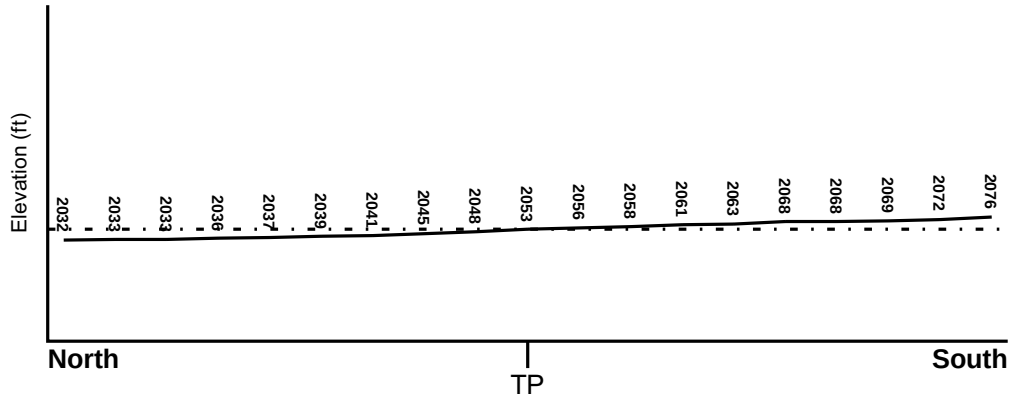
TOPOGRAPHIC INFORMATION

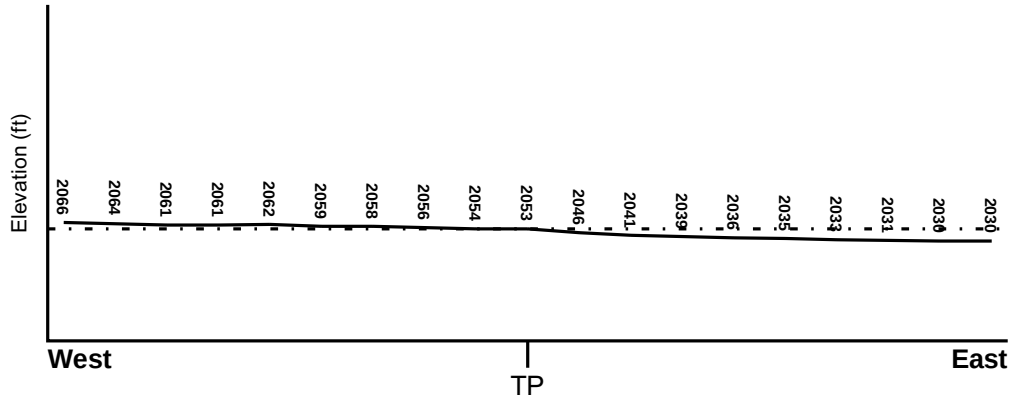
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 2053 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06071C3250F	FEMA Q3 Flood data

Additional Panels in search area:	FEMA Source Type
Not Reported	

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
LOCKHART	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

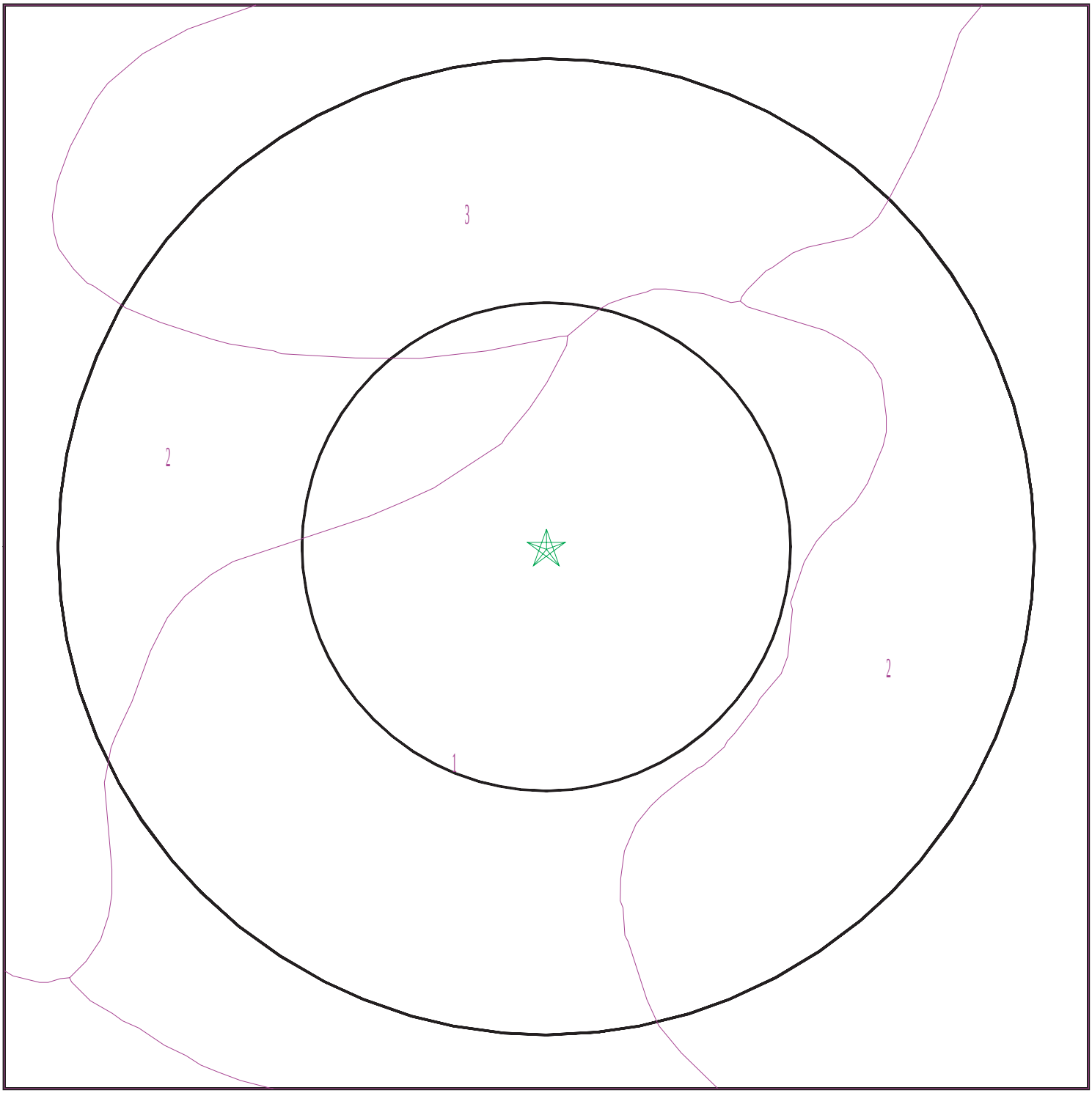
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed 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 - 6149556.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Lockhart Solar II aka SEGS 10	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	APNs 049-022-333, 049-010-154, 049-010-156 Hinkley CA 92347	CONTACT:	Roy Zamarripa
		INQUIRY #:	6149556.2s
LAT/LONG:	35.041395 / 117.346231	DATE:	August 07, 2020 6:15 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: CAJON

Soil Surface Texture:
Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
2	7 inches	20 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
3	20 inches	42 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
4	42 inches	59 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: NOROB

Soil Surface Texture:
Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
2	5 inches	33 inches		Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
3	33 inches	59 inches		Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: VICTORVILLE VARIANT

Soil Surface Texture:
Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 9 Min: 7.9
2	5 inches	42 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 9 Min: 7.9

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	42 inches	59 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 9 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000159917	1/4 - 1/2 Mile SSW
A2	USGS40000159906	1/4 - 1/2 Mile SSW
4	USGS40000159909	1/4 - 1/2 Mile SW
B5	USGS40000159891	1/4 - 1/2 Mile South
B6	USGS40000159882	1/2 - 1 Mile SSW
C7	USGS40000159938	1/2 - 1 Mile West
8	USGS40000159878	1/2 - 1 Mile SSW
D9	USGS40000159873	1/2 - 1 Mile South
E12	USGS40000160028	1/2 - 1 Mile NNW
14	USGS40000159870	1/2 - 1 Mile SSE
15	USGS40000159879	1/2 - 1 Mile SW
F18	USGS40000159852	1/2 - 1 Mile SSE
20	USGS40000159883	1/2 - 1 Mile SW
G21	USGS40000159869	1/2 - 1 Mile SE
H22	USGS40000160042	1/2 - 1 Mile NNE
I23	USGS40000160057	1/2 - 1 Mile North
J25	USGS40000159884	1/2 - 1 Mile SW
L28	USGS40000159851	1/2 - 1 Mile SE
K30	USGS40000159868	1/2 - 1 Mile SE
31	USGS40000159849	1/2 - 1 Mile SW
32	USGS40000159832	1/2 - 1 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

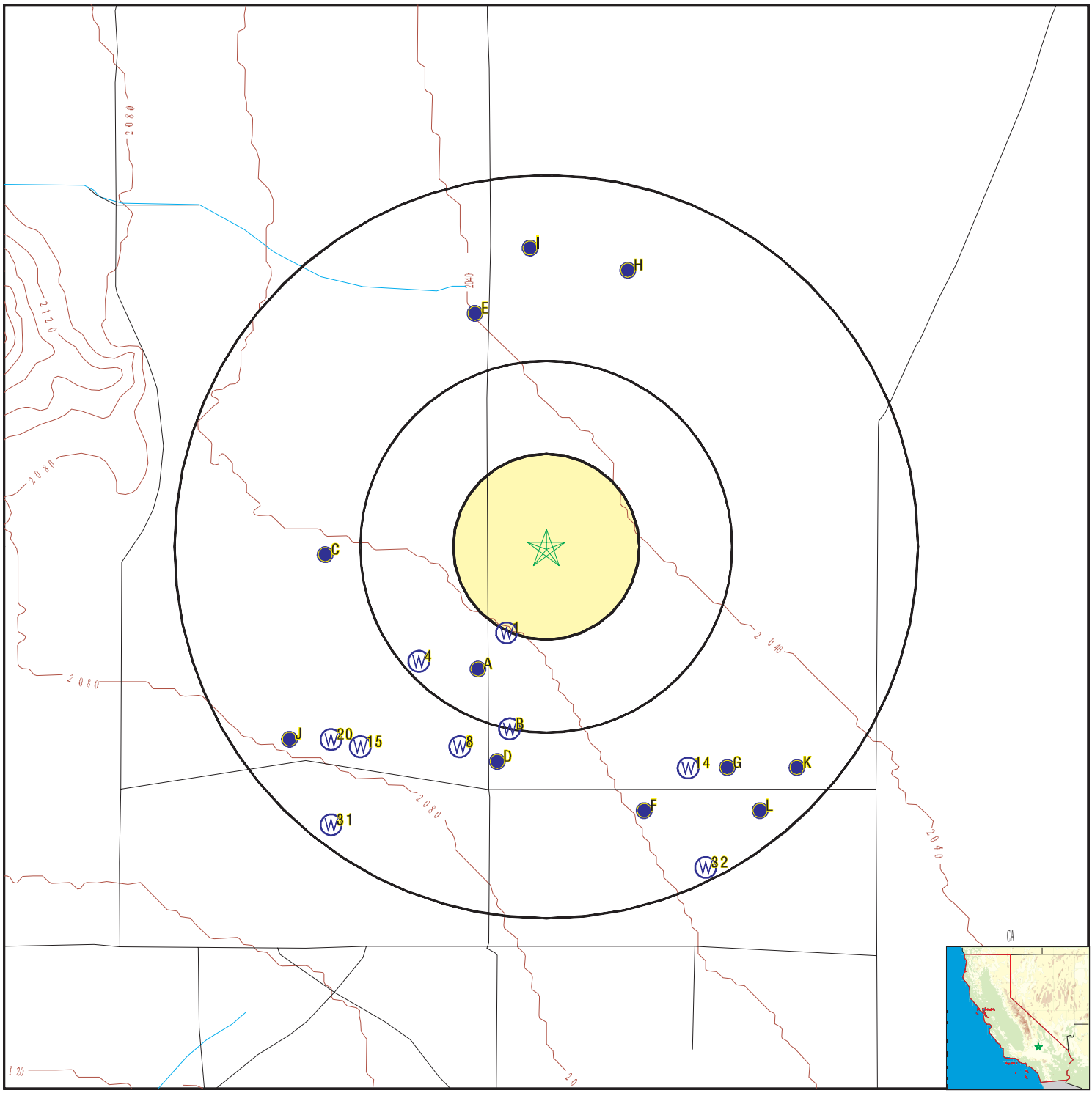
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	CADWR8000015528	1/4 - 1/2 Mile SSW
D10	CADWR8000015511	1/2 - 1 Mile SSW
C11	CADWR8000015554	1/2 - 1 Mile West
E13	CADWR8000015626	1/2 - 1 Mile NNW
F16	CADWR8000015494	1/2 - 1 Mile SSE
G17	CADWR8000015509	1/2 - 1 Mile SE
H19	CADWR8000015637	1/2 - 1 Mile NNE
I24	CADWR8000015651	1/2 - 1 Mile North
K26	CADWR8000015508	1/2 - 1 Mile SE
J27	CADWR8000015515	1/2 - 1 Mile SW
L29	CADWR8000015493	1/2 - 1 Mile SE

PHYSICAL SETTING SOURCE MAP - 6149556.2s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location
HD Closest Hydrogeological Data
Oil, gas or related wells

N

SITE NAME:	Lockhart Solar II aka SEGS 10	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	APNs 049-022-333, 049-010-154, 049-010-156 Hinkley CA 92347	CONTACT:	Roy Zamarripa
		INQUIRY #:	6149556.2s
LAT/LONG:	35.041395 / 117.346231	DATE:	August 07, 2020 6:15 pm

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Map ID Direction Distance Elevation	Database	EDR ID Number
1 **SSW** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000159917**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W19D001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19680101	Well Depth:	391
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

A2 **SSW** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000159906**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N005W24A001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19380101	Well Depth:	300
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	59	Level reading date:	1963-03-18
Feet below surface:	68.1	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1962-11-14	Feet below surface:	72.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-03-22	Feet below surface:	63.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-11-28	Feet below surface:	68.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-05-01	Feet below surface:	63.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-03-23	Feet below surface:	91.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1959-11-11	Feet below surface:	93.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1959-05-04	Feet below surface:	84.54

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1958-12-01	Feet below surface:	112.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1958-03-25	Feet below surface:	120.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-12-02	Feet below surface:	126.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-05-02	Feet below surface:	135.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-12-21	Feet below surface:	125.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-04-12	Feet below surface:	132.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-12-12	Feet below surface:	119.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-04-14	Feet below surface:	124.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-11-17	Feet below surface:	119.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-05-13	Feet below surface:	114.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-11-12	Feet below surface:	109.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-04-15	Feet below surface:	99.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-03-18	Feet below surface:	92.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-02-18	Feet below surface:	89.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-01-16	Feet below surface:	82.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-12-16	Feet below surface:	83.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-04-10	Feet below surface:	80.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-03-13	Feet below surface:	71.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-02-14	Feet below surface:	70.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-01-22	Feet below surface:	69.13
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1951-12-13	Feet below surface:	79.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-10-16	Feet below surface:	100.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-09-13	Feet below surface:	105.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-08-15	Feet below surface:	105.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-07-18	Feet below surface:	104.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-06-14	Feet below surface:	107.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-03-20	Feet below surface:	95.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-02-14	Feet below surface:	77.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-12-13	Feet below surface:	82.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-10-17	Feet below surface:	99.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-09-14	Feet below surface:	102.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-08-15	Feet below surface:	108.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-07-12	Feet below surface:	112.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-06-15	Feet below surface:	111.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-04-19	Feet below surface:	90.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-03-15	Feet below surface:	80.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-02-15	Feet below surface:	69.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-10-19	Feet below surface:	95.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-09-15	Feet below surface:	109.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-08-18	Feet below surface:	109.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-07-14	Feet below surface:	109.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1949-06-16	Feet below surface:	108.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-04-14	Feet below surface:	79.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-03-16	Feet below surface:	67.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-02-17	Feet below surface:	62.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-01-17	Feet below surface:	61.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1948-03-11	Feet below surface:	68.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1946-08-22	Feet below surface:	48.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1946-08-07	Feet below surface:	29.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1946-07-31	Feet below surface:	30.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1946-07-25	Feet below surface:	16.6
Feet to sea level:	Not Reported	Note:	Not Reported

A3
SSW **CA WELLS** **CADWR8000015528**
1/4 - 1/2 Mile
Higher

State Well #:	11N05W24A001S	Station ID:	30581
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

---

4
SW **FED USGS** **USGS40000159909**
1/4 - 1/2 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N005W24A002S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19380101	Well Depth:	250
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
B5 **South** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000159891**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W19E002S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill 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		

B6 **SSW** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000159882**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W19E003S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19510101	Well Depth:	500
Well Depth Units:	ft	Well Hole Depth:	500
Well Hole Depth Units:	ft		

C7 **West** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000159938**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N005W13Q001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	182
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	3	Level reading date:	1968-07-17
Feet below surface:	154.01	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1968-07-01	Feet below surface:	154.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-06-16	Feet below surface:	125.3
Feet to sea level:	Not Reported	Note:	Not Reported

8
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS40000159878**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N005W24H001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19380101	Well Depth:	300
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

D9
South
1/2 - 1 Mile
Higher

FED USGS **USGS40000159873**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W19E001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19510101	Well Depth:	500
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1953-06-12
Feet below surface:	178.7	Feet to sea level:	Not Reported
Note:	Not Reported		

D10
SSW
1/2 - 1 Mile
Higher

CA WELLS **CADWR8000015511**

State Well #:	11N04W19E001S	Station ID:	11199
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

Map ID Direction Distance Elevation	Database	EDR ID Number
C11 **West** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADWR8000015554**

State Well #:	11N05W13Q001S	Station ID:	11367
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

---

E12
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000160028**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N005W13H001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	286
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	37	Level reading date:	1969-04-11
Feet below surface:	97.6	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1968-11-15	Feet below surface:	100.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-07-17	Feet below surface:	104.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-07-01	Feet below surface:	104.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-30	Feet below surface:	98.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-12-07	Feet below surface:	97.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-03-31	Feet below surface:	95.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-11-17	Feet below surface:	95.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-05-05	Feet below surface:	93.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-12-08	Feet below surface:	83.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1965-05-14	Feet below surface:	88.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-12-03	Feet below surface:	81.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-04-21	Feet below surface:	81.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-01-17	Feet below surface:	75.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-03-18	Feet below surface:	73.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-11-14	Feet below surface:	76.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-03-22	Feet below surface:	68.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-11-28	Feet below surface:	70.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-05-01	Feet below surface:	68.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-03-23	Feet below surface:	71.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1959-11-11	Feet below surface:	74.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1959-05-04	Feet below surface:	79.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1958-12-01	Feet below surface:	87.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1958-03-25	Feet below surface:	83.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-12-03	Feet below surface:	86.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-05-02	Feet below surface:	91.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-12-21	Feet below surface:	86.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-04-12	Feet below surface:	88.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-12-12	Feet below surface:	82.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-04-14	Feet below surface:	84.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-11-17	Feet below surface:	84.50
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1954-05-13	Feet below surface:	85.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-11-12	Feet below surface:	81.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-06-17	Feet below surface:	84.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-04-15	Feet below surface:	77.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-03-18	Feet below surface:	66.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-10-30	Feet below surface:	64.0
Feet to sea level:	Not Reported	Note:	Not Reported

E13
NNW
1/2 - 1 Mile
Lower

CA WELLS **CADWR8000015626**

State Well #:	11N05W13H001S	Station ID:	30580
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

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14
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000159870**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W19F001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19510101	Well Depth:	500
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

15
SW
1/2 - 1 Mile
Higher

FED USGS **USGS40000159879**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N005W24G002S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		

Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19500101	Well Depth:	475
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

F16
SSE
1/2 - 1 Mile
Higher

CA WELLS **CADWR8000015494**

State Well #:	11N04W19L001S	Station ID:	30156
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

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G17
SE
1/2 - 1 Mile
Higher

CA WELLS **CADWR8000015509**

State Well #:	11N04W19G001S	Station ID:	11200
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

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F18
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000159852**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W19L001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19510101	Well Depth:	350
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	35	Level reading date:	1970-11-11
Feet below surface:	160.20	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1970-03-23	Feet below surface:	169.78
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1969-10-28	Feet below surface:	166.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-04-08	Feet below surface:	151.45
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1968-11-14	Feet below surface:	160.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-11	Feet below surface:	155.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-10-23	Feet below surface:	162.60
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1967-03-15	Feet below surface:	146.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-10-19	Feet below surface:	158.70
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1966-03-16	Feet below surface:	134.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-10-19	Feet below surface:	164.82
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1965-03-10	Feet below surface:	129.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-10-14	Feet below surface:	140.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-03-08	Feet below surface:	120.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-10-30	Feet below surface:	121.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-03-13	Feet below surface:	120.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-11-02	Feet below surface:	121.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-03-15	Feet below surface:	115.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-10-27	Feet below surface:	113.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-03-09	Feet below surface:	106.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-11-17	Feet below surface:	102.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-03-02	Feet below surface:	113.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1959-11-18	Feet below surface:	114.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1959-03-11	Feet below surface:	126.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1958-03-11	Feet below surface:	134.58
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1957-11-08	Feet below surface:	136.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-03-06	Feet below surface:	124.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-11-01	Feet below surface:	156.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-03-23	Feet below surface:	136.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-11-17	Feet below surface:	131.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-03-04	Feet below surface:	130.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-12-01	Feet below surface:	125.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-03-17	Feet below surface:	134.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-06-12	Feet below surface:	144.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-03	Feet below surface:	100
Feet to sea level:	Not Reported	Note:	Not Reported

H19
NNE
1/2 - 1 Mile
Lower

CA WELLS **CADWR8000015637**

State Well #:	11N04W18C001S	Station ID:	11198
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

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20
SW
1/2 - 1 Mile
Higher

FED USGS **USGS40000159883**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N005W24G001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19380101	Well Depth:	250
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
G21 **SE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000159869**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W19G001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19510101	Well Depth:	500
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	3	Level reading date:	1968-07-16
Feet below surface:	153.26	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1968-07-01	Feet below surface:	153.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-04	Feet below surface:	100
Feet to sea level:	Not Reported	Note:	Not Reported

H22 **NNE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000160042**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W18C001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	49
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1953-06-17
Feet below surface:	74.57	Feet to sea level:	Not Reported
Note:	Not Reported		

I23 **North** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000160057**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W18Z001S	Type:	Well

Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	105
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1919-01-01
Feet below surface:	25.00	Feet to sea level:	Not Reported
Note:	Not Reported		

I24
North
1/2 - 1 Mile
Lower

CA WELLS **CADWR8000015651**

State Well #:	11N04W18Z001S	Station ID:	30154
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

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J25
SW
1/2 - 1 Mile
Higher

FED USGS **USGS40000159884**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N005W24F001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19670101	Well Depth:	367
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1967-05-22
Feet below surface:	188	Feet to sea level:	Not Reported
Note:	Not Reported		

K26
SE
1/2 - 1 Mile
Lower

CA WELLS **CADWR8000015508**

State Well #:	11N04W19H002S	Station ID:	11201
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

Map ID Direction Distance Elevation	Database	EDR ID Number
J27 **SW** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADWR8000015515**

State Well #:	11N05W24F001S	Station ID:	30582
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

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L28 **SE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000159851**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W19Z001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	150
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1919-01-01
Feet below surface:	53.00	Feet to sea level:	Not Reported
Note:	Not Reported		

L29 **SE** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CADWR8000015493**

State Well #:	11N04W19Z001S	Station ID:	30157
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Harper Valley	Well Completion Rpt #:	Not Reported

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K30 **SE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000159868**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W19H002S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported

Construction Date:	19540101	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:	1	Level reading date:	1968-07-01
Feet below surface:	140.00	Feet to sea level:	Not Reported
Note:	Not Reported		

31
SW
1/2 - 1 Mile
Higher

FED USGS **USGS40000159849**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N005W24K001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill 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		

32
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000159832**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	011N004W19K001S	Type:	Well
Description:	Not Reported	HUC:	18090207
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92347	1	0

Federal EPA Radon Zone for SAN BERNARDINO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN BERNARDINO COUNTY, CA

Number of sites tested: 18

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.678 pCi/L	100%	0%	0%
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: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

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 D: QUALIFICATIONS

Education

Bachelor of Science, Geology, University of Texas at Austin

Highlights

29 years in the environmental assessment business
7 years performing Phase II Environmental Site Assessments and Remediation
10 years performing project management on local and nationwide commercial real estate transactions for multiple national clients
12 years performing Phase I Environmental Site Assessments, Transaction Screen Assessments, including Freddie Mac and Fannie Mae.

Experience Summary

Mr. Russell has 29 years of experience in the environmental service industry. He has significant experience in due diligence assessments for a variety of property types and the needs and requirements of varied number of reporting standards, including ASTM standards, EPA's All Appropriate Inquiry (AAI), and customized client formats. Specifically, Mr. Russell has performed Phase I Environmental Site Assessments, Environmental Transaction Screens, Phase II and III Subsurface Investigations, Remediation Design projects, Limited Asbestos Surveys, Lead-based Paint Surveys, Radon Studies, Mold Assessments, and Lead-in-water sampling and analysis.

Mr. Russell has managed numerous subsurface investigations to assess and cleanup the horizontal and vertical extent of soil and groundwater contamination. Mr. Russell has prepared Remediation Feasibility Studies, Work Plans and Remedial Action Plans for numerous projects that involved soil vapor extraction, LNAPL extraction and bioremediation. Mr. Russell conducted Preliminary Endangerment Assessments to evaluate potential contamination concerns on 10 proposed California public school sites. After review of report findings, the California Department of Toxic Substances Control determined all sites were suitable for developments. Mr. Russell has extensive experience conducting site assessments on large sections of vacant land for the purpose of evaluating and mapping planned developments. Mr. Russell has completed the California Desert Tortoise Environmental Awareness Training.

In addition, Mr. Russell has provided on behalf of clients interface with regulatory agencies and provided regulatory guidance and compliance with Cal-EPA, California Department of Toxic Substances Control (DTSC), California State Water Resources Control Board (SWRCB), and county and municipal regulations.

Finally, Mr. Russell's diversity across residential, industrial, municipal, and commercial environments are a major contribution to Partner Engineering and Science's Associate team in the Southwest region of the United States.

Project Experience

Wind Energy Development, Mojave Desert, Tehachapi Mountains, Colorado Desert, CA. Conducted Phase I ESA reports on over 30 new and previously existing wind turbine energy sites covering a total of approximately 40 square miles of land from the high desert Antelope Valley and Tehachapi Mountains in Kern County, CA, to sites in the area of Palm Desert and Palm Springs, CA.

Mojave Solar Project, Lockhart/Harper Lake, CA. Conducted Phase I ESA on the project Solar Energy Generating Station (SEGS) Harper Lake, which is designed to generate approximately 178 Megawatts of electricity from solar energy from two SEGS. When developed in 1990 it was the largest solar energy generation plant in the world. The SEGS are solar thermal plants, using reflective parabolic troughs (mirrors) to generate heat, then steam, then electrical power. The facility is comprised of approximately 1,000 acres of rows of parabolic troughs, two SEGS, and numerous operations support buildings.

DreamWorks Animation Campus, Glendale, CA. Conducted Phase I ESA on the world-famous DreamWorks Animation property. Developed in 1997, onsite operations consist of five buildings where DreamWorks creates and innovates 3D animated feature films, original TV series, and shorts, interactive media, live entertainment, themed experiences, consumer products, publishing, and technology. In addition to the current structures, the campus is improved with a restaurant, parking garage, manmade ponds and streams, courtyards, associated landscaping.

Meadowbrook Park & Tower Apartments, San Bernardino, California, CA. Conducted Phase I ESA Fannie Mae scope of work on the Housing and Urban Development (HUD) senior housing facility. The property consists of 267 residential apartment units in 18 buildings, including an 8-story tower apartment building. In addition to the current structures, the property is improved with a one-story office building, a one-story laundry building, two playgrounds, and three asphalt-paved surface parking lots, along with landscaped areas. The facility was developed in 1971. Historically, the southwest portion of the property was previously developed in 1972 with commercial buildings associated with the apartment development. In addition, the current parking lot on the southern portion of the subject property was previously developed with a parking structure that included surface parking and one level of subterranean parking.

Sarah Vosovic

Project Manager

Education

B.S., Environmental Science, California State University, Chico

Registrations

OSHA 40-Hour HAZWOPER
AHERA Building Inspector training
California Department of Health Services/USEPA Lead Inspector/Assessor training

Summary of Professional Experience

Ms. Vosovic has more than 14 years of experience in the environmental consulting field and has worked in various disciplines, including environmental due diligence, NEPA compliance, lead-based paint and asbestos assessment, and LUST monitoring and reporting. Ms. Vosovic has performed hundreds of Phase I ESAs. She has also served as senior reviewer for NEPA compliance documents, with thousands of reports reviewed. She has tracked and managed the regulatory compliance for hundreds of microwave sites for a major telecommunications carrier.

Ms. Vosovic is well versed in EPA's All Appropriate Inquiry and ASTM E1527-13. She is knowledgeable in due diligence reporting standards, including Fannie Mae DUS, Freddie Mac, and HUD. Ms. Vosovic has conducted Phase I ESAs on a wide range of properties. Site assessment experience includes agricultural properties, semiconductor manufacturing facilities, fueling and automobile repair facilities, chemical distribution facilities, landfills, oil well fields, telecommunications sites, and shopping centers with dry cleaning facilities. She has scoped projects, mentored field personnel, identified environmental risks, and regularly provides detailed reports within demanding deadlines.

Ms. Vosovic is responsible for conducting all aspects of Phase I Environmental Site Assessments including proposal writing, staffing projects, client liaison, site reconnaissance and record reviews. Ms. Vosovic also provides management and QA/QC review of Phase I ESAs and Transaction Screens, and is focused on providing exemplary client service. Ms. Vosovic is responsible for ensuring consistency and quality of due diligence services and ensuring that client-specific requirements are met, as well as the requirements of ASTM and AAI standards. Ms. Vosovic displays excellent technical writing and editing skills, attention to detail, and excels at providing concise, logical conclusions and recommendations.

Project experience for Ms. Vosovic includes the following:

- Provided senior review for thousands of NEPA Screening Reports, Environmental Assessments, Section 106 Reports, SHPO consultation packets, NEPA Audit Reports, and

other related documents for various telecommunications industry clients. NEPA Technical Manager for multiple telecommunications industry clients in the western United States. Served as the primary point of contact with multiple state and federal agencies.

- Assisted in subsurface investigations at heavily industrialized and commercially developed properties. Subsurface investigations included the installation of soil borings, characterization of soils, and subsequent sampling of soil and groundwater. Oversaw geophysical surveys.

- Evaluated proposed microwave installations, LTE installations and underlying support structures for compliance with environmental, FAA, and FCC regulations. Tracked and managed over 700 microwave sites in two markets. Worked closely with the client, construction managers, turf vendors, engineers, and RF safety engineers to obtain and track regulatory compliance documentation.

- Managed a database and scheduled quarterly reporting for 45 leaking underground storage tank (LUST) cases under regulatory direction. Prepared Groundwater Monitoring Reports, NPDES Quarterly Reports, Subsurface Investigation Reports, Remediation Work Plans, Sensitive Receptor Surveys, and UST Cleanup Fund submittals. Collected soil and groundwater samples for laboratory analysis.

- Performed regulatory compliance audits for a major telecommunications carrier. Provided solutions and established protocols for ensuring compliance.

- Laboratory Instructor for Introductory Geology and Environmental Science courses at California State University, Chico.

Education

Bachelor of Arts, Public Administration & Economics, San Diego State University
Executive MBA Program, 2000-2003

Highlights

Over 20 years of experience in the environmental and engineering consulting industry
Property Condition Assessments (PCAs)
Fannie Mae, Freddie Mac, and HUD due diligence

Experience Summary

Mr. Lambson is a true veteran of the commercial real estate services industry. He has over 20 years of experience managing and performing environmental and engineering consulting projects on a national level. Mr. Lambson serves as a Principal for Partner and is located in Partner's San Diego County office. Mr. Lambson currently provides client management and consulting to a nationwide client base and specializes in advising "equity" clients during the acquisition phase of commercial property transactions in the U.S., Mexico, and Canada.

Mr. Lambson has assisted clients on over 10,000 commercial real estate transactions throughout his career. His due diligence resume includes experience at all levels, and includes advising REITs, developers, property managers, retail companies, commercial real estate brokers, mortgage brokers, attorneys, lenders, universities, and real estate investment groups with the following nationwide services:

- Property Condition Assessments (PCAs)
- Individual Building System Inspections for Roof, Mechanical Electrical Plumbing (MEP), Elevator, Structure, Façade, and ADA/Accessibility
- Phase I Environmental Site Assessments (ESAs)
- Phase II Subsurface Investigations (Soil and groundwater sampling and analysis)
- Phase III Environmental Remediation Services
- Asbestos, Lead, Radon, Mold Sampling
- Seismic and Structural Assessments (PMLs)
- Energy Audits, Benchmarking, AB1103 Energy Disclosure, and LEED-related services
- Hydrology, Water Conservation and Efficiency
- Fannie Mae / Freddie Mac / HUD Due Diligence
- Geotechnical and Soils Reports
- Zoning Reports
- ALTA Surveys

Building Sciences

Property Condition Assessment, MEP Report, Roof Report, Elevator Report, Structural and Seismic Assessment for a high-profile Class A office campus acquisition in the San Francisco Bay Area

ADA Compliance and Accessibility Reviews for a national bank branch portfolio

Fannie Mae Property Condition / Physical Needs Assessment services for a 5400-unit multifamily portfolio in Nevada

Environmental Assessments
Phase I and Phase II Environmental Assessments for a 75-acre aerospace facility in the Northwest United States

Over 500 Phase I Environmental Site Assessments for a national fast-food chain

Environmental consulting for over 1 million acres of desert land in California, Nevada, and Arizona

Land Surveys
ALTA Surveys for 2400-unit apartment portfolio in the Midwest

Multi-Site Portfolios
113-site office portfolio acquisition for a national REIT

122-site hotel portfolio for a national lending institution

55-site hotel portfolio acquisition for a private investment group

68-site healthcare portfolio acquisition for a national REIT

50-site country club/golf course acquisition for a private investment group

Energy and Water Efficiency
Energy & Water consulting for a national property owner that operates and manages 30 retail and office centers on the West Coast and Texas

Affiliations

National Association of Real Estate Investment Trusts (NAREIT)
International Council of Shopping Centers (ICSC)
U.S Green Building Council (USGBC)
Society of Industrial and Office Realtors, San Diego County (SIOR)
National Association of Industrial & Office Parks, Southern California (NAIOP)
San Diego Habitat Conservancy, Board of Directors. 2010 - 2014

Speaking

Bisnow Conference, Panel Moderator, La Jolla, CA, October 2014. Moderated panel on Southern California Real Estate Trends.

Globestreet, ICSC Western States Conference, San Diego, CA May 2013. Video interview regarding retail real estate trends and due diligence.

Publications

Shopping Centers Today, 2010. Authored article on LEED applications for shopping centers and retail assets.

Contact

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