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**Phase I and
Phase II
Environmental
Site Assessment**

**PHASE I AND II ENVIRONMENTAL SITE
ASSESSMENT REPORT**

**1190 ISLAND VIEW LANE AND
1220-1240 MELBA ROAD
ENCINITAS, CALIFORNIA**



GEOCON
INCORPORATED

GEOTECHNICAL
ENVIRONMENTAL
MATERIALS

PREPARED FOR

**TORREY PACIFIC CORPORATION
ENCINITAS, CALIFORNIA**

**MARCH 15, 2021
PROJECT NO. G2438-62-02**



Project No. G2438-62-02
March 15, 2021

Torrey Pacific Corporation
171 Saxony Road, Suite 109
Encinitas, California 92024

Attention: Brian Staver

Subject: PHASE I AND II ENVIRONMENTAL SITE ASSESSMENT REPORT
1190 ISLAND VIEW LANE AND 1220 - 1240 MELBA ROAD
ENCINITAS, CALIFORNIA

Dear Mr. Staver:

In accordance with your request and our agreement (Proposal No. LE-19291) executed December 10, 2020, we have performed a Phase I and II Environmental Site Assessment (ESA) of the property and improvements at 1190 Island View Lane and 1220 – 1240 Melba Road (the Site) in Encinitas, California.

We performed the Phase I ESA to provide information regarding the potential for existing hazardous substances and/or petroleum product impacts at the Site to satisfy City of Encinitas requirements. We performed the Phase II ESA to assess soil at the Site for the potential presence of pesticides and associated metals. The accompanying report presents the details of our Phase I and II ESA.

We appreciate the opportunity to have performed this Phase I and II ESA for Torrey Pacific Corporation. Please contact us if you have any questions concerning this report or if we may be of further service.

Very truly yours,

GEOCON INCORPORATED

Mitchell H. Wagner
Senior Staff Scientist

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Senior Geologist

MHW:TKR:arm

(e-mail) Addressee

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PHASE I AND II ENVIRONMENTAL SITE ASSESSMENT REPORT

1. INTRODUCTION

Geocon, Inc. (Geocon) has performed a Phase I and II Environmental Site Assessment (ESA) of the property located at 1190 Island View Lane and 1220 – 1240 Melba Road (the Site) in Encinitas, California. Torrey Pacific Corporation (the Client) requested the Phase I and II ESA to provide information regarding the potential for existing hazardous substances and/or petroleum product impacts at the Site to satisfy City of Encinitas requirements. This report describes the methodology and procedures and present the findings of the Phase I and II ESA.

1.1 Purpose and Objectives

The purpose of the Phase I ESA was to identify evidence or indications of ‘recognized environmental conditions’ (REC) as defined by the American Society for Testing and Materials (ASTM) *Designation E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Section 1.1.1 of *ASTM Designation E 1527-13* defines an REC as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.” De minimis conditions are those that generally do not present a threat to human health or the environment and that generally would not be the subject of enforcement action if brought to the attention of appropriate governmental agencies.

ASTM Designation E 1527-13 also defines ‘Historical’ and ‘Controlled’ RECs. They define an ‘Historical REC’ (HREC) as “A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).” ASTM defines a ‘Controlled REC’ (CREC) as “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).” An HREC is not an REC if a property meets current standards for unrestricted use. A CREC remains an REC by definition when the property does not meet the unrestricted use requirements unconditionally.

We also conducted the Phase I ESA in general accordance with the requirements of 40 Code of Federal Regulations (CFR) Part 312 titled *Standards and Practices for All Appropriate Inquiries*, as required under Sections 101(35)(B)(ii) and (iii) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The purpose of conducting an all appropriate inquiries investigation into the previous ownership and uses of a property is to meet the provisions necessary for the landowner, contiguous property owner, and/or bona fide prospective purchaser to qualify for certain landowner liability protections under CERCLA.

The following principles are an integral part of ASTM *Designation E1527-13*:

- **“Uncertainty Not Eliminated** - No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property, and this practice recognizes reasonable limits of time and cost.”
- **“Not Exhaustive** - All Appropriate Inquiries does not mean an exhaustive assessment of a property. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an environmental site assessment and the reduction of uncertainty about unknown conditions resulting from additional information.”
- **“Level of Inquiry is Variable** - Not every property will warrant the same level of assessment. Consistent with good commercial and customary practice, the appropriate level of environmental site assessment will be guided by the type of property subject to assessment, the expertise and risk tolerance of the user, and the information developed in the course of the inquiry.”

1.2 Scope of Services

We performed the scope of services outlined in our Proposal No. LE-19291 dated August 6, 2019, with the exception that we did not review Sanborn fire insurance maps, as Environmental Data Resources, Inc. (EDR) indicated that there are none available for the Site or surrounding vicinity. The main components of the Phase I ESA and their objectives, as specified by the referenced standards, include the following:

- **Physical Setting Review:** we reviewed physical setting references for information concerning the topographic, geologic, and hydrogeologic characteristics of the Site and vicinity. Such information may be indicative of pathways (i.e., direction and/or extent) that a contaminant could migrate along in the event of a spill or release.
- **Regulatory Agency Records Review:** we reviewed publicly available Federal, State, and local regulatory agency records for information regarding the use, storage, and disposal of

hazardous substances and/or petroleum products at the Site and facilities and properties adjoining or within ¼ mile of the Site. Such records may identify RECs at or potentially affecting the Site.

- **Site History Review:** we reviewed information regarding the historical uses of the Site and adjoining and nearby facilities and properties back to the Site's and other properties' first use or 1940, whichever is earlier, that could have led to RECs on or near the Site. Historical sources reviewed included aerial photographs, topographic maps, and city directories. In addition, we conducted interviews with persons who were expected to be reasonably knowledgeable about historical and/or current conditions at and uses of the Site.
- **Site Reconnaissance:** we performed a site reconnaissance to observe site conditions and activities for evidence of RECs. The site reconnaissance was for the Site only. We viewed offsite properties and features solely from the vantage of the Site and public thoroughfares.

1.3 Report Limitations

We prepared this report exclusively for the Client. The information obtained is only relevant for the dates of the records reviewed and the latest site visit. Therefore, the information contained herein is only valid as of the date of the report and may require an update after 180 days to reflect updated records and another reconnaissance to assess current site conditions.

The Client should recognize that this report is not a comprehensive site characterization and should not be construed as such. The findings and conclusions presented in this report are predicated on the site reconnaissance, information in the specified regulatory records, and information regarding the historical usage of the Site, as presented in this report. The Client should also understand that wetlands, asbestos-containing building materials, lead-containing paint, lead in drinking water, radon, mercury related to mining activities, methane, and mold surveys were not included in the scope of services for this report. Assessment for potential naturally occurring hazards such as asbestos and arsenic was also not included.

Therefore, the report should only be deemed conclusive with respect to the information obtained. No guarantee or warranty of the results of this assessment is implied within this report or any subsequent reports, correspondence or consultation, either express or implied. We strived to conduct the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.

1.4 Data Gaps

A data gap is defined by ASTM *Designation E 1527-13* as “a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information.” Data gaps could include such things as insufficient historical information, the inability to interview persons with direct site knowledge (e.g., the owner(s), past owner(s), tenants, workers,

etc.) or the lack of access to all parts of a site during the site reconnaissance. As indicated in Section 1.2, we did not review Sanborn fire insurance maps for the Site and surrounding vicinity because there are none for the Site and vicinity. We do not consider this a significant data gap however, because of other available historical information we reviewed.

2. SITE DESCRIPTION

This section provides information regarding the location and physical characteristics of the Site including its size, topography, geologic, soil, and hydrogeologic conditions.

2.1 Location and Legal Description

The 6.57-acre Site is located at 1190 Island View Lane and 1220, 1230, and 1240 Melba Road in Encinitas, California (Figure 1). The Site is depicted in the southwestern quarter of Section 14 of Township 13 South, Range 4 West, San Bernardino Base and Meridian on the United States Geological Survey's (USGS) *Encinitas, California, 7.5-minute topographic map* (USGS, 2012).

The San Diego County assessor's parcel numbers (APNs) for the Site are 259-180-09, -10, -16, -33, and 259-181-02 through -04. A copy of the parcel map is in Appendix A.

2.2 Site and Vicinity General Characteristics

The Site consists of several single-family residences located in a residential neighborhood. The surrounding vicinity includes single-family residences, churches, a horse stable, and a middle school. Figure 2 depicts the site boundaries and features and surrounding properties. Further site description is provided in Sections 2.4 and 6.

2.2.1 Topography

The Site is located on a broad marine terrace. The Site gently slopes and drains to the west-southwest. The USGS *Encinitas, California, 7.5-minute topographic map* (USGS, 2012), depicts the site elevation as ranging from approximately 340 to 390 feet above mean sea level.

2.2.2 Geologic and Soil Conditions

The Site is located in the Peninsular Ranges geomorphic province of Southern California (Norris and Webb, 1990). This geomorphic province extends approximately 900 miles from its northern terminus against the Transverse Ranges and Los Angeles Basin, south to the tip of Baja California. In general, the province is characterized by rugged mountains in Mesozoic igneous and metamorphic rocks to the east, with a dissected coastal plain on Cenozoic sediments to the west. The Peninsular Ranges vary in

width from approximately 30 to 100 miles, and are traversed fault zones trending roughly northwest-southeast.

The *Geologic Map of the Oceanside 30' X 60' Quadrangle, San Diego County, California* (USGS, 2005) indicates that the Site is underlain by middle- to early-Pleistocene Very Old Paralic Deposits-Unit 10, which are typically poorly sorted, moderately permeable, interfingered strandline, beach, estuarine, and colluvial deposits composed of siltstone, sandstone and conglomerate.

The United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>) indicates that site soil is Carlsbad gravelly, loamy sand, which is moderately well drained and has high infiltration rates.

2.2.3 Hydrologic and Hydrogeologic Conditions

Groundwater quality and occurrence information available from the California Department of Water Resources and the California State Water Resources Control Board (SWRCB) indicates that the Site is located in the San Marcos Hydrologic Area (904.50) of the Carlsbad Hydrologic Unit (904.00). Groundwater in the San Marcos Hydrologic Area has existing beneficial use designations for municipal, agricultural, and industrial water supply purposes (SWRCB, 2016).

Site-specific groundwater information is not available. Therefore, in an effort to assess local groundwater conditions, we reviewed information available on the SWRCB's GeoTracker online database (<http://geotracker.waterboards.ca.gov>) for nearby facilities with groundwater monitoring well arrays. Eleven groundwater monitoring wells were installed approximately ¼ mile northeast of the Site at 1355 Encinitas Boulevard between 2005 and 2014 related to assessment of County of San Diego Department of Environmental Health (DEH) Leaking Underground Storage Tank (LUST) case H12862-003. GHD reported in their September 2015 Groundwater Monitoring Report (GHD, 2015) that depth to groundwater within the wells ranged from 41.02 to 67.90 feet and groundwater flow was the west-northwest.

2.3 Current and Planned Uses of the Site

The Site is currently used for residential and small-scale (i.e. non-commercial) agricultural purposes. The Client reported that they plan to develop the Site with 27 single-family residences. Further description of the Site is provided in Section 6.

2.4 Descriptions of Structures, Roads, Other Improvements on the Site

The Site is developed with five single-family residences. The residences at 1220, 1230A, 1230B, and 1240 Melba Road are all currently occupied, while the residence at 1190 Island View Lane is vacant and

dilapidated. Other structures on the Site include two greenhouses, a guest house at 1240 Melba Road, and several sheds. Island View Lane, a private driveway is in the western portion of the Site and connects the northern portion of the Site to Balour Drive. Further description of the Site is provided in Section 6.3.

2.5 Current Uses of Adjoining Properties

Current uses of adjoining properties are primarily single-family residential to the east, south, and west, and institutional (Oak Crest Middle School) to the north. A farm and horse stable, (Seaview Farm), is adjacent to the west of the Site. Further information regarding adjoining properties is provided in Section 6.4.

3. USER-PROVIDED INFORMATION

This section summarizes site information provided by the Client – the “user” of this Phase I ESA. Also provided are responses to inquiries to the Client via a “user” questionnaire for information pertaining to the Site. Brian Staver with Torrey Pacific Corporation completed the questionnaire (Appendix B).

3.1 Title, Appraisal and Sale Agreement Records

Mr. Staver provided a Preliminary Title Report (PTR) for the Site prepared by First American Title Company and dated December 21, 2020. The PTR indicates that the site parcels are owned by Torrey Pacific Corporation. The PTR identifies no issues regarding the environmental condition of the Site.

3.2 Environmental Liens or Activity and Use Limitations

Mr. Staver indicated that he has no knowledge of environmental liens on or activity and use limitations for the Site.

3.3 Specialized Knowledge

Mr. Staver indicated he has no specialized knowledge of the Site.

3.4 Commonly Known or Reasonably Ascertainable Information

Mr. Staver indicated he is not aware of commonly known or reasonably ascertainable information pertaining to the Site other than that the Site was used for agriculture.

3.5 Owner, Property Manager, and Occupant Information

Mr. Staver indicated the Site is owned by Torrey Pacific Corporation and that Ashcraft Investment Company manages the Site.

3.6 Valuation Reduction for Environmental Issues

According to Mr. Staver, the monetary value of the Site has not been reduced due to environmental issues.

3.7 Reason for Performing the Phase I ESA

We performed the Phase I ESA to provide the Client with information regarding the potential for existing hazardous substance and/or petroleum product impacts at the Site as part of The City of Encinitas' requirements prior to applying for development permits.

3.8 Client Provided Documents and Reports

Mr. Staver provided a Phase I ESA and Limited Soil Sampling report prepared by SCS Engineers in June 2019 for the northern portion of the Site at 1190 Island View Lane (Appendix C). At the time of their report, 1190 Island View Lane consisted of a vacant and dilapidated single-family residence with several freestanding additions and undeveloped land.

SCS identified the Site as having been used for agricultural purposes, with use as an orchard from approximately 1947 to 1953 and developed with greenhouses from approximately 1980 to 1991. SCS concluded that the former agricultural use of the Site could suggest that pesticides and associated metals are present in shallow soil at the Site. SCS also identified the potential for pesticides to be present in soil adjacent to the residential structure from potential previous applications of termiticides and for lead to be in soil from deteriorating lead-based paint around the structures.

SCS collected soil samples from six locations at 1190 Island View Lane and had the samples analyzed for lead, arsenic, and organochlorine pesticides (OCPs). Laboratory analysis of the soil samples indicated that the pesticides chlordane and dieldrin were present in soil adjacent to the residence at 1190 Island View Lane at concentrations exceeding regulatory health-based screening levels for residential soil. SCS recommended collecting additional soil samples to delineate pesticide impacts around the structure. Lead was below the respective screening level for residential soil and arsenic was within the normal background concentration for California soils.

The presence of pesticides in soil in the northern portion of the Site at concentrations exceeding regulatory screening levels is considered an REC. We collected additional soil samples around the structures at 1190 Island View Lane as part of our Phase II ESA. The findings of our Phase II ESA are described in Section 9.

4. RECORDS REVIEW

This section summarizes information we obtained from readily available agency records for the Site and properties and facilities in the surrounding vicinity.

4.1 Standard Environmental Record Sources

EDR searched federal, state, and local databases regarding the use, storage, disposal, or release of hazardous substances and/or petroleum products for the Site and area within one mile of the Site. The databases that list the Site and/or properties/facilities within one mile of the Site and the number of properties/facilities listed are summarized in the table below. A copy of *The EDR Radius Map™ Report with GeoCheck*, dated December 10, 2020, is in Appendix D.

Database Name	Search Radius (Mile)	Number of Listings
FEDERAL DATABASES		
RCRA-SQG (Small Quantity Generators)	¼	1
STATE AND LOCAL DATABASES		
CA ENVIROSTOR (Department of Toxic Substance Control Database)	1	4
SAN DIEGO CO. SAM (Diego County Site Assessment and Mitigation Program)	½	8
LUST (Leaking Underground Storage Tanks)	½	9
CA SLIC (Spills, Leaks, Investigation, and Cleanup Program)	½	13
RCRA-NonGen (Resource Conservation and Recovery Act – Non-Generators)	½	10
CA HIST CORTESE (Historic Hazardous Waste & Substances Site List)	½	5
CORTESE	½	3
EDR HIGH RISK HISTORICAL DATABASES AND EDR RECOVERED GOVERNMENT ARCHIVES		
EDR Historical Cleaner	¼	1

4.1.1 Site

The Site is not listed on any of the databases searched by EDR.

4.1.2 Offsite Properties

The following table summarizes information provided by various databases and presented in EDR's report for listed properties/facilities located less than ⅛ mile (or ¼ mile for LUST facilities) from the Site, their status, and their potential, if any, to cause (or have caused) an REC at the Site. Information for properties/facilities in excess of ⅛ mile (or ¼ mile for LUST facilities) of the Site is not included in the table. Distances reported by EDR may differ from actual distances.

Property Name and Address	Approximate Distance, Direction, and Hydraulic Gradient Position	Databases	Pertinent Information
San Dieguito Union High School District/Oak Crest Middle School 675 Balour Drive	338 feet west-northwest (adjacent), cross-gradient	RCRA NonGen-NLR RCRA-SQG ECHO	This facility was listed as a small quantity generator of unspecified hazardous waste in 1987. The facility is currently listed as a non-generator of hazardous waste. The lack of inclusion on any release-related databases ¹ suggest that this facility is unlikely to have caused an REC at the Site.
CESN Melba 1150 Melba Road	365 feet southwest, upgradient	San Diego Co. SAM CPS-SLIC CIWQS CERS	These database listings relate to DEH case H39694-001 which was opened in November 2009 for oversight during remediation of pesticide impacted soil at the former plant nursery. Approximately 3,600 cubic yards of pesticide-impacted soil were excavated and disposed of offsite. The DEH granted regulatory case closure in March 2011. Given the soils-only release and the closed status of the case, this facility is unlikely to have caused an REC at the Site.
Stanert & Sons 1145 Melba Road	425 feet southwest, upgradient	EDR Historical Cleaner	This database listing indicates that this facility operated as a garment pressing and cleaners from 2001 to 2005. The facility appears to be located at a residence and it was likely a home-based business. The lack of inclusion on any release-related databases ¹ suggests that this facility is unlikely to have caused an REC at the Site.
Nathan Padilla-Bowen 1017 San Andrade Drive	454 feet west, cross-gradient	RCRA NonGen/NLR	This database listing indicates that this facility does not currently generate hazardous waste. The lack of inclusion on any release-related databases ¹ and the distance from the Site suggests that this facility is unlikely to have caused an REC at the Site.
Nancy Martin 1016 San Andrade Drive	551 feet west-northwest, downgradient	RCRA NonGen/NLR	This database listing indicates that this facility does not currently generate hazardous waste. The lack of inclusion on any release-related databases ¹ and the distance from the Site suggests that this facility is unlikely to have caused an REC at the Site.
Laurel Cove 720 San Andrade Drive	574 feet west-northwest, downgradient	CPS-SLIC CERS	This database listing relates to DEH case DEG2015-LSAM-000306. The case was opened in March 2015 in order for the DEH to review a Phase II ESA performed at the facility. The facility was historically used for agriculture, and 12 soil samples were collected from a greenhouse. The soil samples did not contain pesticides, lead, or arsenic at concentrations exceeding regulatory screening levels. Therefore, the DEH granted regulatory case closure in June 2015. The closed status of the case and the distance from the Site suggest that this facility is unlikely to have caused an REC at the Site.

¹ "Release" refers to an unauthorized release of a petroleum product or hazardous substance to the environment - i.e. the ground surface, soil, soil vapor, groundwater, or surface water on a property. "Release-related database" refers to those which provide information regarding an unauthorized release. "Non-release-related database" refers to those that may report use, storage, or disposal of hazardous substances and/or petroleum products or other environmental conditions, but do not report releases of such.

4.1.3 Orphan Summary

EDR's Orphan Summary identifies properties with incomplete address information and therefore cannot be accurately plotted. No properties are identified in the Orphan Summary.

4.2 Additional Environmental Record Sources

This section summarizes information from additional, readily available environmental record sources regarding the Site and properties/facilities within one mile from the Site.

4.2.1 GeoTracker and EnviroStor Databases

We reviewed GeoTracker and the California Department of Toxic Substance Control's (DTSC) EnviroStor online database (<http://www.envirostor.dtsc.ca.gov/public/>) for information regarding the Site and nearby properties/facilities that are within ¼ mile of the Site. GeoTracker lists two Cleanup Program Facilities within ¼ mile of the Site, both of which have been granted regulatory closure. Information regarding these two facilities is summarized in Section 4.1.2. EnviroStor does not have information pertaining to any properties/facilities within ¼ mile of the Site.

4.2.2 State of California Department of Conservation, Geologic Energy Management Division

We reviewed the California Geologic Energy Management Division (CalGem) website (<https://maps.conservation.ca.gov/doggr/wellfinder>) to evaluate the potential for existing/former oil, gas, or geothermal wells on the Site or properties proximal to the Site. CalGem information indicates that no former or current wells are or were located within one mile of the Site.

4.2.3 County of San Diego Department of Agriculture, Weights and Measures

We submitted a request to the County of San Diego, Department of Agriculture, Weights and Measures (DAWM), Pesticide Use Enforcement Division regarding possible use of restricted pesticides/herbicides at the Site. That office maintains such records for approximately 4 years. The DAWM indicated that no record of restricted pesticide/herbicide use was reported for the site APNs for the period of 2016 through 2020.

4.2.4 San Diego Air Pollution Control District

We submitted a request to the San Diego Air Pollution Control District (APCD) for records pertaining to the Site. The APCD indicated that no records are on file for the site APNs.

4.2.5 County of San Diego Department of Environmental Health

We submitted a request to the DEH for records pertaining to the Site. The DEH indicated that no records are on file for the site APNs.

4.2.6 San Diego Gas and Electric Company

Pole-mounted transformers are present on the Site. Documented discussions with San Diego Gas & Electric Company (SDG&E) representatives regarding transformers indicate that SDG&E has never specified polychlorinated biphenyl (PCB)-containing transformers for its electrical distribution system. Regardless, SDG&E has determined that some older (pre-1980s) mineral transformers were inadvertently contaminated with PCBs by the manufacturer. Based on a statistical sampling and testing program reportedly performed by SDG&E, it is unlikely that transformers found within its service area contain PCBs.

5. HISTORICAL USE

This section summarizes information we obtained from a variety of sources regarding the historical uses of the Site in an effort to identify those uses that could have led to RECs. The sources included historical aerial photographs, historical topographic maps, and an abstract of city directories provided by EDR.

5.1 Aerial Photographs

We reviewed historical aerial photographs for the years 1928, 1939, 1946, 1953, 1964, 1966, 1970, 1979, 1985, 1990, 1994, 1997, 2002, 2005, 2009, 2012 and 2016 (Appendix E) for indications of past land uses that had the potential to have impacted the Site through the use, storage or disposal of hazardous substances and/or petroleum products. The following table summarizes our observations of the Site and adjacent properties.

Year	Observations	
	Site	Adjacent Properties
1928 (1" = 500')	The majority of the Site appears to have been undeveloped land. Unimproved roads or trails extended across the northeastern and southern portions of the Site.	Undeveloped land was present adjacent to the north, east, and west. An unimproved road appeared to have been present adjacent to the south, beyond which were agricultural fields.
1939 (1" = 500')	The approximate southern two-thirds of the Site appeared to have been used for agriculture and planted with an orchard. Residences were present near the southern site boundary and in the eastern portion of the Site. Present-day Island View Lane appeared to have been an unimproved road in the western portion of the Site.	Conditions appear to have been similar to those observed on the 1928 aerial photograph except properties adjacent to the east and west appeared to have been used for agriculture (row crops). Orchards were present adjacent to the south of the Site.

Year	Observations	
	Site	Adjacent Properties
1946 (1" = 500')	Conditions appear to have been similar to those observed on the 1939 aerial photograph except the northern portion of the Site appears to have been graded.	Conditions appear to have been similar to those observed on the 1939 aerial photograph except the properties adjacent to the east and west no longer appear to have been used for agriculture. A residence was present adjacent to the west of the Site.
1953 (1" = 500')	Conditions appear to have been similar to those observed on the 1946 aerial photograph except additional residences were present in the northern and southern portions of the Site.	Conditions appear to have been similar to those observed on the 1946 aerial photograph except additional residences were present adjacent to the southeast of the Site.
1964 (1" = 500')	Conditions appear to have been similar to those observed on the 1953 aerial photograph.	Oak Crest Middle School was present adjacent to the north of the Site. Single-family residences were present adjacent to the east, south, and west of the Site. A stable and horse track were also present adjacent to the west. Present-day Melba Road was present along the southern site boundary.
1966 (1" = 500')	Conditions appear to have been similar to those observed on the 1964 aerial photograph.	Conditions appear to have been similar to those observed on the 1964 aerial photograph except what appear to have been approximately 25 greenhouses were present adjacent to the south of Island View Lane.
1970 (1" = 500')	Conditions appear to have been similar to those observed on the 1966 aerial photograph.	Conditions appear to have been similar to those observed on the 1966 aerial photograph except additional residences were present adjacent to the east of the Site.
1979 (1" = 500')	Conditions appear to have been similar to those observed on the 1970 aerial photograph except the orchard was no longer present. Several greenhouses appeared to have been present in the central portion of the Site. The northeastern and northwestern portions of the Site appear to have been plowed and possibly used for agriculture.	Conditions appear to have been similar to those observed on the 1970 aerial photograph.
1985 (1" = 500')	Conditions appear to have been similar to those observed on the 1979 aerial photograph except additional greenhouses were present in the central portion of the Site.	Conditions appear to have been similar to those observed on the 1979 aerial photograph.
1990 (1" = 500')	Conditions appear to have been similar to those observed on the 1985 aerial photograph.	Conditions appear to have been similar to those observed on the 1985 aerial photograph.
1994 (1" = 500')	Conditions appear to have been similar to those observed on the 1990 aerial photograph except the northern portion of the Site no longer appears to have been used for agriculture.	Conditions appear to have been similar to those observed on the 1990 aerial photograph.
1997 (1" = 500')	Conditions appear to have been similar to those observed on the 1994 aerial photograph.	Conditions appear to have been similar to those observed on the 1994 aerial photograph.

Year	Observations	
	Site	Adjacent Properties
2002 (1" = 500')	Conditions appear to have been similar to those observed on the 1997 aerial photograph except only two greenhouses were present in the central portion of the Site.	Conditions appear to have been similar to those observed on the 1997 aerial photograph.
2005 (1" = 500')	Conditions appear to have been similar to those observed on the 2002 aerial photograph.	Conditions appear to have been similar to those observed on the 2002 aerial photograph.
2009 (1" = 500')	Conditions appear to have been similar to those observed on the 2005 aerial photograph.	Conditions appear to have been similar to those observed on the 2005 aerial photograph.
2012 (1" = 500')	Conditions appear to have been similar to those observed on the 2009 aerial photograph.	Conditions appear to have been similar to those observed on the 2009 aerial photograph except the greenhouses adjacent to the south of Island View Lane were no longer present and residences were in their place.
2016 (1" = 500')	Conditions appear to have been similar to those observed on the 2012 aerial photograph.	Conditions appear to have been similar to those observed on the 2012 aerial photograph.

The past agricultural use of the Site since approximately 1939 (orchards, agricultural fields, and greenhouses) suggests that pesticides and arsenic (commonly associated with pesticides) may have been used on the Site. Given the planned residential redevelopment and the limited regulation of these materials during a period when the Site was used for agriculture, soil samples should be collected and analyzed for pesticides and arsenic in the shallow soil on the Site. The nature and extent of pesticides and arsenic in soil (if present) would be used to determine if a potential health risk for future site residents exists and if further action to mitigate that risk is warranted.

5.2 Topographic Maps

We reviewed historical topographic maps for the years 1893, 1898, 1901, 1947, 1948, 1949, 1968, 1975, 1997 and 2012 (Appendix F). The following table summarizes observations of the Site and adjacent properties on the historical topographic maps.

Year	Observations	
	Site	Adjacent Properties
1893 (1:62,500)	No structures or land use are depicted on the Site.	No structures or land use are depicted on the adjacent properties. A structure is depicted approximately ¼ mile northwest of the Site.
1898 (1:62,500)	Conditions depicted are similar to those on the 1893 topographic map.	Conditions depicted are similar to those on the 1893 topographic map.
1901 (1:62,500)	Conditions depicted are similar to those on the 1898 topographic map.	Conditions depicted are similar to those on the 1898 topographic map.

Year	Observations	
	Site	Adjacent Properties
1947 (1:62,500)	Four structures are depicted in the southern portion of the Site.	An unimproved road is depicted adjacent to the south of the Site. Several structures are depicted adjacent to the south and west.
1948 (1:31,680)	Conditions depicted are similar to those on the 1947 topographic map except a structure is depicted in the northern portion of the Site. Island View Lane is depicted as an unimproved road in the western portion of the Site. The northeastern portion of the Site is shaded green indicating native vegetative coverage.	Conditions depicted are similar to those on the 1947 topographic map except an orchard is depicted adjacent to the south of the Site. Melba Road is depicted as a light-duty road.
1949 (1:24,000)	Conditions depicted are similar to those on the 1948 topographic map.	Conditions depicted are similar to those on the 1948 topographic map.
1968 (1:24,000)	Conditions depicted are similar to those on the 1949 topographic map.	Conditions depicted are similar to those on the 1949 topographic map except Oak Crest Middle School is depicted adjacent to the north of the Site. Additional residences are depicted adjacent to the east, south, and west.
1975 (1:24,000)	Conditions depicted are similar to those on the 1968 topographic map.	Conditions depicted are similar to those on the 1968 topographic map except the properties adjacent to the east are shaded pink indicating an urban setting.
1996 (1:24,000)	The Site is shaded pink indicating an urban setting.	Adjacent properties are shaded pink, indicating an urban setting.
2012 (1:24,000)	No shading or structures are depicted.	No shading or structures are depicted.

The historical topographic maps depict no conditions, structures, or uses on the Site or adjacent properties that would suggest the presence of RECs.

5.3 City Directories

EDR prepared an abstract of city directories including city, cross-reference, and telephone directories summarized in the *EDR-City Directory Image Report* dated December 14, 2020. The directories were reviewed at approximately 5-year intervals, if available, from 1969 to 2017. A copy of the EDR city directory abstract including information regarding offsite facilities is in Appendix G.

Residents are listed at the Site at 1220, 1230, and 1240 Melba Road and at 1190 Island View Lane from 1992 to 2017. Several likely home based businesses, including Accounting by the Sea, Terri's Bookkeeping Service, and 3 Marine, are listed at the Site in 1995 and 2005. Staver Bros Greenhouses is listed at the Site at 1230 Melba Road from 1992 to 2000. The former agricultural use of the Site is described in Section 5.1. Residents are listed on adjacent properties from 1992 to 2017.

6. SITE RECONNAISSANCE

This section summarizes observations of the Site and surrounding properties made during the site reconnaissance.

6.1 Methodology and Limiting Conditions

Mitchell Wagner, Senior Staff Scientist with Geocon, performed the site reconnaissance accompanied by Brian Staver on December 21, 2020, by walking the Site. Mr. Wagner performed the offsite survey by observing adjacent properties from the Site and adjacent public streets. Weather on the day of the site reconnaissance was clear with temperatures in the mid-60s. Photographs of various site features and offsite properties are appended. Figure 2 is a Site Plan illustrating selected site features.

6.2 General Site Setting

The Site is located in an area of predominantly single-family residential and institutional (a middle school and churches) uses.

6.3 Onsite Survey

The southern half of the Site is developed with four occupied single-family residences (Photograph Nos. 1 through 4). The residences at 1220, 1230A, 1230B, and 1240 Melba Road appeared to have been well maintained and in good condition. The central portion of the Site contains remnants of former greenhouses, two active greenhouses, and a dilapidated structure (Photograph Nos. 5 through 9). Mr. Staver reported that this structure was formerly used as an office for the former Staver Bros Greenhouse business. The two active greenhouses are reportedly used by the tenant at 1240 Melba Road for personal use. We observed irrigation and fertilizer systems in these greenhouses (Photograph No. 10). The former and current use of the Site for agricultural purposes is described in Section 5.1.

The northern portion of the Site is situated atop a hill and consists of undeveloped land and a vacant single-family residence (Photograph Nos. 11 and 12). The residence consists of a main structure, several freestanding additions and an outhouse that appeared to have been connected to a septic tank (Photograph No. 13). We also observed an approximate 250-gallon propane tank on the exterior of the residence (Photograph No. 14).

The far western portion of the Site includes Island View Lane, a private driveway (Photograph No. 15). We observed a pole-mounted transformer along Island View Lane (Photograph No. 16).

We observed no odors, pools of liquid, stained soil or distressed vegetation on the Site. We observed no other evidence of RECs on the Site.

6.4 Offsite Survey

Properties within the site vicinity include:

- **North:** Oak Crest Middle School (Photograph No. 17);
- **South:** Melba Road, beyond which are single family residences (Photograph No. 18);
- **East:** Single-family residences (Photograph No. 19);
- **West:** Single-family residences and a horse stable (Photograph No. 20).

We observed no evidence of RECs on the surrounding properties.

7. INTERVIEWS

The current property owner representative, Brian Staver, reported via a site owner/occupant questionnaire (Appendix B) that the Site has been occupied by residents since at least the 1950's. Mr. Staver reported that 1190 Island View Lane was used for small-scale agriculture in the 1970's and that 1230 Melba Road was used for small-scale agriculture in the 1980's and 1990's. Mr. Staver also indicated that small quantities of legal pesticides have been used at the Site related to the former agricultural use. Additionally, Mr. Staver reported that the soil adjacent to the residence contains concentrations of pesticides exceeding regulatory screening levels for residential soil, which is considered an REC.

8. SUMMARY OF FINDINGS

The following table summarizes our findings and opinions regarding the Site, including known or suspect RECs, CRECs, HRECs, and de minimis environmental conditions.

Assessment Category	Observed (Y/N)	(REC/ CREC/ HREC/ DM or None)	Recommended Actions	Report Section(s)
Hazardous Substances/Petroleum Products	N	N	NFA	
Hazardous Wastes	N	N	NFA	
Non-Hazardous Wastes	N	N	NFA	
Aboveground/Underground Storage Tanks	N	N	NFA	
Unidentified Substance Containers	N	N	NFA	
Equipment Potentially Containing PCBs	Y	N	NFA	6.3
Wastewater Systems	N	N	NFA	
Evidence of Releases	N	N	NFA	
Pools of Liquid, Pits, Ponds, Lagoons	N	N	NFA	
Wells	N	N	NFA	
Other Site Issues	N	N	NFA	
Nearby Properties	N	N	NFA	
Historical Land Use – Site	Y	REC	AA	3.8, 5.1, 7, 9
Historical Land Use – Nearby Properties	N	N	NFA	

Recommended Action:

AA = Additional action recommended.

NFA = No further action required at this time.

DM = De minimis condition where additional activities do not appear warranted at this time.

As described in Section 5.1, the Site was used for agriculture as an orchard from approximately 1939 to 1979 and has been developed with greenhouses since approximately 1979. This suggests that pesticides may have been used at the Site. If so, persistent pesticides and arsenic may be present in soil on the Site. Given the planned residential use of the Site, the former use of the Site as an orchard and greenhouses suggests the potential to have caused an REC at the Site.

As described in Section 3.8, SCS Engineers prepared a Phase I ESA and Limited Soil Sampling report in June 2019 to assess soil at 1190 Island View Lane (the northern portion of the Site) for the presence of pesticides and associated metals related to the former agricultural use of the Site. SCS also collected soil samples adjacent to the residence at 1190 Island View Lane to assess for impacts to soil from the potential previous application of termiticides and from deteriorating lead-based paint. Laboratory analysis of the soil samples indicated that OCPs (chlordane and dieldrin) are present in soil adjacent to the residence at concentrations exceeding regulatory screening levels. SCS recommended collecting additional soil samples to define the extent of contamination. The presence of OCPs in soil adjacent to the structures at 1190 Island View Lane at concentrations exceeding regulatory screening levels is considered an REC.

9. PHASE II ESA

We performed a Phase II ESA to assess for the potential presence of pesticides and arsenic in soil related to the former agricultural use of the Site. A Phase I ESA and Limited Soil Sampling report prepared by SCS Engineers for the portion of the Site at 1190 Island View Lane was provided to us after our initial sampling event. After reviewing this report, we collected additional soil samples adjacent to the structures at 1190 Island View Lane to delineate the horizontal limits of soil that may contain concentrations of OCPs that exceed regulatory health-based screening levels for residential soil.

9.1 Scope of Investigation

The scope of the Phase II ESA consisted of the following tasks:

- Pre-field Activities: Retained Enthalpy Analytical, LLC (EA), a state-certified laboratory, to perform laboratory analysis of soil samples and planned soil sample locations;
- Field Activities: collected soil samples from the planned locations;
- Laboratory analysis of soil samples; and
- Prepared this report describing the assessment and its findings.

9.2 Previous Soil Sampling

On May 21, 2019, SCS collected ten soil samples from the former agricultural fields and adjacent to the vacant single-family residence at 1190 Island View Lane. The samples were collected at depths ranging from 0.5 to 3 feet and were analyzed for OCPs, arsenic and lead. The samples collected from the fields east and west of the residence did not contain OCPs and lead at concentrations exceeding regulatory health-based screening levels for residential soils, and arsenic was detected within normal background concentrations for California soils. The samples collected from adjacent to the residential structure contained the OCPs chlordane and dieldrin at concentrations exceeding residential screening levels. SCS suggested that the concentrations of these OCPs in soil around the structure were likely from previous application of termiticides and recommended collecting additional samples to delineate the horizontal extent of contamination.

9.3 Field Activities

Soil sample collection was performed in two sampling phases. The first consisted of collecting surface soil samples from the former agriculture areas shown on the historical aerial photographs, and greenhouse areas. The second phase consisted of collecting surface soil samples adjacent to the structures at 1190 Island View Lane.

Former Agricultural and Greenhouse Areas

On December 21, 2020, we collected 14 discrete surface soil samples (S1 to S14) from the former agricultural and greenhouse areas at the approximate locations shown on Figure 3. The samples were collected using a decontaminated trowel and then transferred into laboratory-provided 4-ounce jars. The jars were capped with Teflon-lined lids and placed in a chilled cooler for transport to the laboratory under chain-of-custody protocol.

1190 Island View Lane

Several soil sampling collection events were performed between January 13 and February 23, 2021, from around the existing structures at 1190 Island View Lane as shown on Figure 4. These events, which included collecting additional step-out soil samples, resulted in collecting a total of 98 discrete surface samples (S15 to S112) to delineate the horizontal limits of OCP-impacted soil. The samples were collected using the same methods as described above.

9.4 Analytical Testing

EA analyzed each sample for OCPs by United States Environmental Protection Agency (USEPA) Test Method 8081A and samples S1 to S14 for arsenic by USEPA Test Method 6010B. The results of laboratory analysis of the soil samples (S1 to S112) are provided in the attached Table 1 and are also summarized below. A copy of EA's laboratory analysis report and chain-of-custody documents are in Appendix H.

9.5 Findings

9.5.1 Observations

Surface soil at the Site was predominately loose, dry, dark-brown to reddish-brown, silty, sand. We observed no obvious indications of contamination such as odors or soil discoloration during sampling.

9.5.2 Laboratory Analysis Results

Former Agricultural and Greenhouse Area Samples

OCPs

The OCPs DDT, DDE, heptachlor epoxide, alpha-BHC, and chlordane were detected in one or more of our samples collected from the former agricultural and greenhouse areas. However, reported concentrations for each constituent are less than their respective San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs) for residential soil.

Arsenic

Arsenic was detected in each of the 14 samples analyzed at concentrations ranging from 0.99 to 3.1 milligrams per kilogram (mg/kg). Arsenic is a natural mineralogical component of soil and its naturally occurring or “background” concentrations in California soils typically range from 0.6 to 12 mg/kg and much higher in some areas depending on the mineralogy of the soil’s parent material. Therefore, regulatory agencies allow comparison of arsenic concentrations in soil to naturally occurring background arsenic concentrations instead of calculated screening levels. The reported arsenic concentrations found in the samples are within the range of naturally occurring (background) arsenic concentrations for soil.

1190 Island View Lane

OCPs

As shown on Table 1, the OCP chlordane was detected in each of the 94 soil samples at concentrations ranging from 57 to 43,000 micrograms per kilogram ($\mu\text{g}/\text{kg}$). Eighty of the samples exceeded the ESL for chlordane in residential soil of 480 $\mu\text{g}/\text{kg}$.

The OCP dieldrin was detected in 21 of the 94 soil samples at concentrations ranging from 5.6 to 270 $\mu\text{g}/\text{kg}$. Thirteen of the samples exceeded the ESL for dieldrin in residential soil of 37 $\mu\text{g}/\text{kg}$.

The OCP Dichlorodiphenyldichloroethylene (DDE) was detected in 51 of the 94 soil samples at concentrations ranging from 10 to 11,000 $\mu\text{g}/\text{kg}$. Three of the samples exceeded the ESL for DDE in residential soil of 1,800 $\mu\text{g}/\text{kg}$.

The OCP Heptachlor epoxide was detected in 39 of the 94 soil samples at concentrations ranging from 5.1 to 150 $\mu\text{g}/\text{kg}$. Ten of the samples exceeded the ESL for heptachlor epoxide in residential soil of 62 $\mu\text{g}/\text{kg}$.

The OCP Delta-BHC, dichlorodiphenyltrichloroethane (DDT), dichlorodiphenyldichloroethane (DDD), heptachlor, endrin ketone, endosulfan I, and methoxychlor were detected in one or more of the soil samples at concentrations less than their respective ESL for residential soil, where established. The laboratory reporting limits were less than their respective ESLs, where established, with the exception of toxaphene. On several occasions, the laboratory reporting limit exceeded the ESL for toxaphene of 510 $\mu\text{g}/\text{kg}$. However, toxaphene was not detected in any of the samples at concentrations exceeding the reporting limit and is therefore not considered to be a contaminant of concern for the Site.

10. CONCLUSIONS AND RECOMMENDATIONS

We have performed a Phase I and II ESA, in general conformance with the scope and limitations of ASTM E 1527-13, of the 6.57-acre property at 1220 – 1240 Melba Road and 1190 Island View Lane in Encinitas, California. The San Diego County APNs for the Site are 259-180-09, -10, -16, -33, and 259-181-02 through -04.

The Site was used for agriculture (small-scale orchards) from approximately 1939 to 1979 and has been developed with greenhouses since approximately 1979. We collected 14 soil samples in the areas of the former orchards, the former greenhouses, and the active greenhouses to be analyzed for OCPs and arsenic. Laboratory analysis results did not detect OCPs at concentrations exceeding their respective ESLs for residential soil, and arsenic was detected within normal background concentrations. Therefore, the former and current agricultural use of the Site does not appear to have caused an REC at the Site, and further investigation into these uses does not appear warranted at this time.

The OCPs chlordane, dieldrin, DDE, and heptachlor epoxide were detected adjacent to the structures at 1190 Island View Lane at concentrations exceeding their respective ESLs for residential soil, which is likely related to the application of termiticides. Based on our experience with similar properties, OCP impacts are typically confined to the upper 2.5 feet of soil. The estimated horizontal limits of the OCP-impacted soil that exceeds the ESLs for residential soil is shown on Figure 4. Therefore, based on the analytical test results and assumptions made, it is estimated that approximately 1,800 cubic yards of OCP-impacted soil will need to be either disposed of at a suitable landfill facility or encapsulated onsite beneath a clean soil cap, if possible. Depending on the remediation method (i.e. disposal/burial), additional soil sample collection and analysis will likely be required to further characterize the soil as “non-hazardous” or “hazardous” and to further define the vertical and horizontal limits of the OCP-impacted soil.

Based on our experience working on projects in the City of Encinitas, a Soil Remediation Plan/Soil Removal Plan, as well as a Community Health and Safety Plan, will likely need to be prepared and submitted to the DEH as part of the Voluntary Assistance Program for oversight of remediation of the OCP-impacted soils identified at the Site.

11. REFERENCES

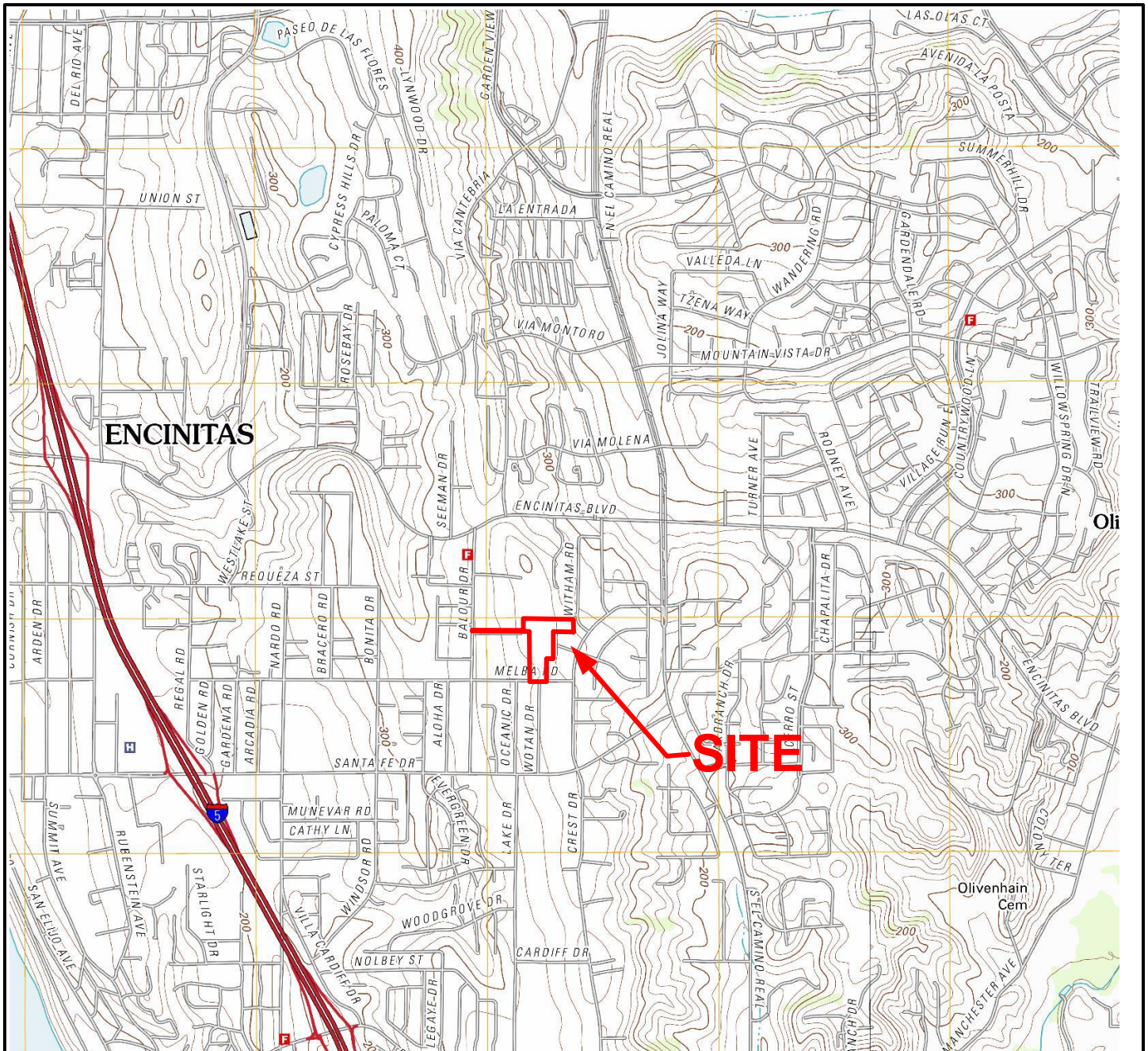
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12. QUALIFICATIONS

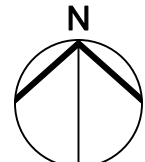
This Phase I ESA report was prepared by Mitchell H. Wagner with oversight by Troy K. Reist, CEG. We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR Part 312. We have the specific qualifications based on education, training, and experience, to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Mr. Wagner has a BS degree in Environmental Science. Mr. Wagner has prepared numerous Phase I and II ESAs for properties in Southern California. He has experience monitoring grading and performing density tests throughout San Diego County. Mr. Wagner also has experience performing Lead Based Paint and Asbestos surveys.

Mr. Reist is a Professional Geologist and Certified Engineering Geologist, with a BS degree in Geology and has over 23 years of experience in the geotechnical and environmental consulting industry in California. Mr. Reist investigates, remediates and manages geotechnical and environmental issues on residential, commercial, industrial, and agricultural properties throughout southern California.



Base Map:
 USGS Topographic Map, 7.5-minute Series
 Encinitas, CA



NO SCALE

VICINITY MAP

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1190 ISLAND VIEW LANE AND
 1220 - 1240 MELBA ROAD
 ENCINITAS, CALIFORNIA

MHW

MARCH 2021

PROJECT NO. G2438-62-02

FIG. 1



APPROXIMATE
SITE BOUNDARY

OAK CREST MIDDLE
SCHOOL

FIELDS

FIELDS

ISLAND VIEW LANE

1190 ISLAND VIEW LANE

1240 MELBA ROAD

STABLES

RESIDENTIAL

RESIDENTIAL

BALOUR DRIVE

1230 MELBA ROAD

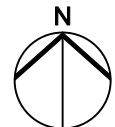
1220 MELBA ROAD

MELBA ROAD

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GEOCON LEGEND

20 - APPROXIMATE LOCATION AND DIRECTION OF PHOTOGRAPH



NOT TO SCALE

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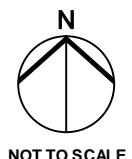
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FIGURE 2
DATE MARCH 2021

SITE PLAN



GEOCON LEGEND

S14 ● - APPROXIMATE SOIL SAMPLE LOCATION



NOT TO SCALE

**SOIL SAMPLE LOCATION MAP -
FORMER AGRICULTURAL AND
GREENHOUSE AREAS**



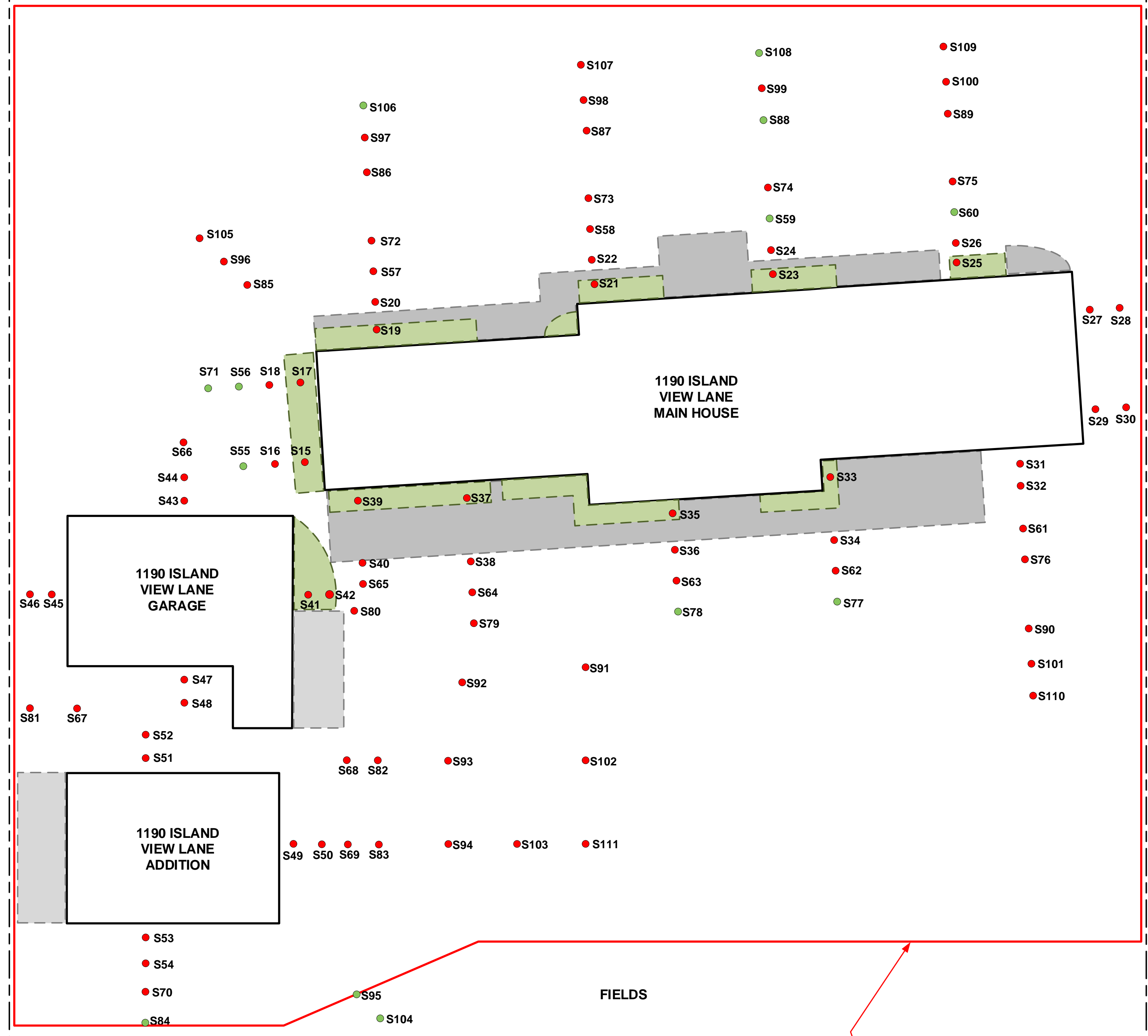
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 FIGURE 3
 DATE MARCH 2021

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APPROXIMATE
PROPERTY LINE

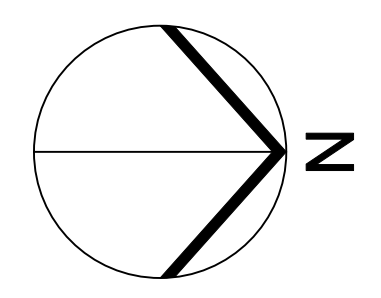
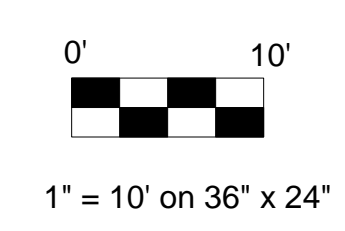
APPROXIMATE
PROPERTY LINE

FIELDS



GEOCON LEGEND

- S111 - APPROX LOCATION OF SOIL SAMPLE THAT EXCEEDED RESIDENTIAL ESLs FOR OCPS
- S112 - APPROX LOCATION OF SOIL SAMPLE THAT DID NOT EXCEED RESIDENTIAL ESLs FOR OCPS
- APPROXIMATE LOCATION OF PLANTER BOXES
- APPROXIMATE AREA COVERED BY CONCRETE



SOIL SAMPLE LOCATION MAP-
1190 ISLAND VIEW LANE



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FIGURE 4
DATE MARCH 2021

ESTIMATED LIMITS OF
OCP-IMPACTED SOIL

TABLE 1
 SUMMARY OF SOIL ANALYTICAL DATA - PESTICIDES AND ARSENIC
 1190 ISLAND VIEW LANE AND 1220 - 1240 MELBA ROAD
 ENCINITAS, CALIFORNIA

Sample ID	Sample Date	Arsenic (mg/kg)	Organochlorine Pesticides (µg/kg)												
			Chlordane	Delta-BHC	DDT	DDE	DDD	Dieldrin	Heptachlor	Heptachlor Epoxide	Endrin Ketone	Endosulfan I	Endosulfan Sulfate	Methoxychlor	Other Pesticides
Agriculture Area Samples															
S1	12/21/2020	1.5	180	-	-	-	-	-	-	-	-	-	-	-	-
S2	12/21/2020	2.0	120	-	-	-	-	-	-	-	-	-	-	-	-
S3	12/21/2020	1.4	110	-	-	-	-	-	-	-	-	-	-	-	-
S4	12/21/2020	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-
S5	12/21/2020	1.2	200	-	-	-	-	-	-	-	-	-	-	-	-
S6	12/21/2020	0.99	-	-	-	-	-	-	-	-	-	-	-	-	-
S7	12/21/2020	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-
S8	12/21/2020	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-
S9	12/21/2020	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-
S10	12/21/2020	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-
S11	12/21/2020	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-
S12	12/21/2020	1.8	-	-	20	44	-	9.6	-	-	-	-	-	-	-
S13	12/21/2020	2.3	-	-	20	33	-	10	-	-	-	-	-	-	-
S14	12/21/2020	1.8	-	-	-	15	-	-	-	-	-	-	-	-	-
1190 Island View Lane Residential Area Samples															
S15	1/13/2021	NA	3,900	-	50	150	-	-	-	18	10	-	-	-	-
S16	1/13/2021	NA	2,400	-	19	39	-	-	-	-	-	-	-	-	-
S17	1/13/2021	NA	680	-	-	36	-	-	-	-	-	-	-	-	-
S18	1/13/2021	NA	2,000	35	17	60	-	-	-	-	-	-	-	-	-
S19	1/13/2021	NA	23,000	-	110	710	-	270	120	150	-	-	-	28	-
S20	1/13/2021	NA	9,500	-	180	700	-	140	-	67	-	-	-	33	-
S21	1/13/2021	NA	16,000	-	53	770	-	-	-	78	-	-	-	25	-
S22	1/13/2021	NA	2,900	-	14	130	-	-	-	31	-	-	-	-	-
S23	1/13/2021	NA	13,000	-	120	52	-	-	11	98	-	-	-	-	-

TABLE 1
 SUMMARY OF SOIL ANALYTICAL DATA - PESTICIDES AND ARSENIC
 1190 ISLAND VIEW LANE AND 1220 - 1240 MELBA ROAD
 ENCINITAS, CALIFORNIA

Sample ID	Sample Date	Arsenic (mg/kg)	Organochlorine Pesticides (µg/kg)													
			Chlordane	Delta-BHC	DDT	DDE	DDD	Dieldrin	Heptachlor	Heptachlor Epoxide	Endrin Ketone	Endosulfan I	Endosulfan Sulfate	Methoxychlor	Other Pesticides	
S49	1/13/2021	NA	990	-	-	-	-	-	-	-	-	-	-	-	-	-
S50	1/13/2021	NA	1,500	-	-	25	-	-	-	-	-	-	-	-	-	-
S51	1/13/2021	NA	1,800	-	-	-	-	-	-	-	-	-	-	-	-	-
S52	1/13/2021	NA	2,400	-	-	-	-	-	-	-	-	-	-	-	-	-
S53	1/13/2021	NA	1,200	560	29	39	-	-	-	-	-	-	-	-	-	-
S54	1/13/2021	NA	500	600	-	30	-	-	-	-	-	-	-	-	-	-
S55	1/28/2021	NA	140	-	-	-	-	-	-	-	-	-	-	-	-	-
S56	1/28/2021	NA	130	-	-	-	-	-	-	-	-	-	-	-	-	-
S57	1/28/2021	NA	2,200	-	14	75	-	38	-	24	-	-	-	-	-	-
S58	1/28/2021	NA	1,100	-	-	20	-	10	-	-	-	-	-	-	-	-
S59	1/28/2021	NA	370	-	-	-	-	-	-	-	-	-	-	-	-	-
S60	1/28/2021	NA	120	-	-	-	-	-	-	-	-	-	-	-	-	-
S61	1/28/2021	NA	1,500	-	9.4	55	-	8.5	-	18	-	-	-	-	-	-
S62	1/28/2021	NA	1,400	-	17	45	-	-	-	13	-	-	-	-	-	-
S63	1/28/2021	NA	1,200	-	-	19	-	-	-	19	-	-	-	-	-	-
S64	1/28/2021	NA	1,600	-	-	42	-	14	-	10	-	-	-	-	-	-
S65	1/28/2021	NA	1,100	-	6.9	21	-	9.5	-	7.4	-	-	-	-	-	-
S66	1/28/2021	NA	490	-	-	-	-	-	-	-	-	-	-	-	-	-
S67	1/28/2021	NA	1,600	-	74	30	-	-	-	-	-	-	-	-	-	-
S68	1/28/2021	NA	3,500	-	-	17	-	24	-	-	-	-	-	-	-	-
S69	1/28/2021	NA	580	-	-	17	-	-	-	-	-	-	-	-	-	-
S70	1/28/2021	NA	880	-	14	-	-	-	-	-	-	-	-	-	-	-
S71	1/28/2021	NA	370	6.1	-	-	-	5.6	-	-	-	-	-	-	-	-
S72	1/28/2021	NA	1,400	-	-	-	-	-	-	-	-	-	-	-	-	-
S73	1/28/2021	NA	1,700	-	5.9	-	-	-	-	8.6	-	-	-	-	-	-

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			Chlordane	Delta-BHC	DDT	DDE	DDD	Dieldrin	Heptachlor	Heptachlor Epoxide	Endrin Ketone	Endosulfan I	Endosulfan Sulfate	Methoxychlor	Other Pesticides
S99	2/23/2021	NA	1,300	-	-	-	-	-	-	-	-	-	-	-	-
S100	2/23/2021	NA	5,800	-	11	-	-	-	-	5.6	-	-	-	-	-
S101	2/23/2021	NA	1,700	-	-	-	-	-	-	-	-	-	-	-	-
S102	2/23/2021	NA	660	-	-	-	-	-	-	-	-	-	-	-	-
S103	2/23/2021	NA	980	-	-	-	-	-	-	-	-	-	-	-	-
S104	2/23/2021	NA	69	-	-	-	-	-	-	-	-	-	-	-	-
S105	2/23/2021	NA	1,100	-	-	-	-	-	-	-	-	-	-	-	-
S106	2/23/2021	NA	460	-	-	-	-	-	-	5.1	-	12	6.8	-	-
S107	2/23/2021	NA	4,300	5.1	20	-	-	-	-	25	-	-	-	-	-
S108	2/23/2021	NA	360	-	-	-	-	-	-	-	-	-	-	-	-
S109	2/23/2021	NA	4,100	-	-	-	-	-	-	-	-	-	-	-	-
S110	2/23/2021	NA	700	-	-	-	-	-	-	-	-	-	-	-	-
S111	2/23/2021	NA	1,100	-	-	-	-	-	-	-	-	-	-	-	-
S112	2/23/2021	NA	57	14	-	-	-	-	-	-	-	-	-	-	-
Residential ESLs		0.067	480	N/A	1,900	1,800	2,700	37	120	62	N/A	420,000	N/A	350,000	Various
Background Levels		12 ⁽¹⁾	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

- = Less than laboratory reporting limit

NA = Not analyzed

ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Level for a residential shallow soil exposure scenario, May 2019

(1) Based upon the report prepared by the Department of Toxic Substances Control titled Determination of a Southern California Regional Background Arsenic Concentration in Soil, dated March 2008



Photograph #1
Single-family residence at 1220 Melba Road.



Photograph #2
Single-family residence at 1230A Melba Road.

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1190 ISLAND VIEW LANE AND
1220 – 1240 MELBA ROAD
ENCINITAS, CALIFORNIA

PROJECT NO. G2438-62-02



Photograph #3
Single-family residence at 1230B Melba Road.



Photograph #4
Single-family residence at 1240 Melba Road.

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Photograph #5

View to the northwest of former greenhouse locations in central portion of the Site.



Photograph #6

View to the northeast of former greenhouse locations in eastern portion of the Site.

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Photograph #7
Former greenhouse in central portion of the Site.



Photograph #8
Greenhouse in central portion of the Site.

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Photograph #9
Greenhouse in central portion of the Site.



Photograph #10
Fertilizer system in greenhouse.

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Photograph #11
Undeveloped land in northeastern portion of the Site.



Photograph #12
Dilapidated residence at 1190 Island View Lane.

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Photograph #13
Outhouse at 1190 Island View Lane.



Photograph #14
Propane tank on exterior of residence at 1190 Island View Lane.

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Photograph #15
View to the west of Island View Lane.



Photograph #16
Pole-mounted transformer in northern portion of the Site.

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Photograph #17
View to the north of adjacent Oak Crest Middle School.



Photograph #18
View to the south of Melba Road, beyond which are single-family residences.

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Photograph #19
View to the east of adjacent single-family residences.



Photograph #20
View to the west of adjacent single-family residences and horse stable.

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