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# **Appendix G3**

## Phase II Environmental Site Assessment



# Phase II Environmental Site Assessment

Assessor's Parcel Number 319-020-04  
11495 Cypress Canyon Road  
San Diego, California 92131

The Phair Company  
3330 Bonita Road  
Chula Vista, CA 91910

**SCS ENGINEERS**

01214253.06 | January 22, 2020

8799 Balboa Avenue, Suite 290  
San Diego, CA 92123  
858-571-5500

January 22, 2020  
**Project Number: 01214253.06**

Mr. Austin Dias  
The Phair Company  
3330 Bonita Road  
Chula Vista, CA 91910

**Subject: Phase II Environmental Site Assessment (Subsurface Assessment)**

**Site: Assessor's Parcel Number 319-020-04  
11495 Cypress Canyon Road  
San Diego, California**

Dear Mr. Dias:

SCS Engineers (SCS) is pleased to present this report (Report) of the Subsurface Assessment of the above described Site that was conducted in order to evaluate the Site's current environmental conditions. The work described in this Report was performed by SCS in general accordance with Scope of Services Change 1 (SSC1) and Scope of Service Change 2 (SSC2) to Exhibit 06 to the Consulting Agreement (Contract) between SCS and The Phair Company (Client). SSC1 and SSC2 were fully executed on March 15, 2019 and November 4, 2019, respectively. The Contract is dated August 20, 2014.

SCS enjoyed working with you on this project. Providing economical environmental solutions to meet your needs is more than our goal—it is our mission and the measure of our success. If we may assist you in any way, now or in the future, please call our office at (858) 571-5500.

Sincerely,



Ian Jimeno  
Staff Professional  
**SCS ENGINEERS**



Luke Montague, MESM, PG 8071  
Senior Project Manager  
**SCS ENGINEERS**



Paul Damian, PhD, MPH, DABT, ERT  
Board Certified Toxicologist  
**Damian Applied Toxicology, LLC**



## Table of Contents

Section	Page
<b>1 Background.....</b>	<b>5</b>
<b>2 Objectives .....</b>	<b>6</b>
<b>3 Subsurface Assessment .....</b>	<b>6</b>
Preparation for Fieldwork .....	6
Preparation of Health and Safety Plan.....	6
Utility Search and Markout .....	7
Boring Permits .....	7
Physical Setting .....	7
Topography .....	7
Geology.....	7
Hydrogeology .....	9
Water Quality Survey .....	9
Field Activities.....	10
Soil Sampling and Analysis .....	10
March 2019.....	10
November 2019 .....	11
Disposal of Drummed Soil Cuttings and Decontamination Water .....	13
Soil Vapor Sampling and Analysis .....	13
Groundwater Sampling .....	13
<b>4 Subsurface Assessment - Findings .....</b>	<b>13</b>
Soil Sample Analytical Results .....	14
Total Petroleum Hydrocarbons (TPH) .....	14
Title 22 Metals.....	17
VOCs, SVOCs, OCPs, and PCBs.....	17
VOCs     17	
SVOCs    17	
OCPs     18	
PCBs     18	
Groundwater .....	18
Soil Vapor Analytical Results .....	18
VOCs     19	
Methane 19	
<b>5 Screening Health Risk Assessment .....</b>	<b>20</b>
Background Metals Screen .....	20
Determination of Exposure Point Concentrations.....	21
Direct Soil Contact Exposure Health Risks.....	22

	Vapor Intrusion Health Risks.....	23
	Methane .....	24
	Summary of Screening Health Risk Assessment.....	24
	Soil Summary.....	25
	Soil Vapor/VOCs Summary .....	25
<b>6</b>	<b>Discussion.....</b>	<b>25</b>
	Undocumented Fill Assessment and Mitigation.....	25
	Mitigation Planning Discussion .....	27
<b>7</b>	<b>Conclusions and Recommendations .....</b>	<b>28</b>
	Soil .....	28
	Groundwater .....	29
	Soil Vapor .....	30
	Additional Recommendations .....	30
<b>8</b>	<b>Likelihood Statements .....</b>	<b>31</b>
<b>9</b>	<b>Report Usage and Future Site Conditions.....</b>	<b>31</b>
<b>10</b>	<b>Special Contractual Conditions Between User and Environmental Professional .....</b>	<b>31</b>
<b>11</b>	<b>References.....</b>	<b>32</b>

## Tables

<b>1</b>	Soil Analytical Data for TPH, OCPs, VOCs, SVOCs, and PCBs
<b>2</b>	Soil Data for Title 22 Metals
<b>3</b>	Soil Vapor Analytical Results for VOCs and Methane
<b>4</b>	Residential Health Risk Screen of Chemicals Detected in Soil
<b>5</b>	Calculation of Vapor Intrusion Health Risks for Each Soil Vapor Location Based on Attenuation Factor (AF) of 0.03 and Assuming Residential Use
<b>6</b>	Methane in Soil Vapor
<b>7</b>	Health Risk Summary and Main Chemicals Contributing to Health Risks

## Figures

- 1 Site Location Map
- 2 Existing Site and Site Vicinity Plan with Boring Locations
- 3 Close-Up Existing Site Plan with Boring Locations
- 4 Soil Boring Analytical Results Including TPH, Lead, and Arsenic
- 5 Site Plan with Soil Vapor Analytical Data
- 6 Cross Section A to A'
- 7 Cross Section B to B'

## Appendices

- A Boring Construction Permit with the County of San Diego
- B Laboratory Analytical Results for Soil and Soil Vapor Samples
- C Probability Plots for Arsenic and Cobalt
- D ProUCL Output for Lead



# 1 BACKGROUND

SCS understands that the Site consists of approximately 40.76 acres of land located at 11495 Cypress Canyon Road in San Diego, California (Site) (Figure 1). The Site is currently developed with a single-family residence, several garage structures, and also is reported to contain approximately 300,000 cubic yards of undocumented fill soil and debris reportedly from former construction activities that occurred in the Site vicinity throughout the 1980s.

The Client is proposing to purchase and redevelop the Site with a residential land use. The proposed development will reportedly include the development of approximately 100 single-family residences to be constructed with slab-on-grade foundations. SCS recently completed a Phase I Environmental Site Assessment for the Site, dated April 12, 2019 (Phase I ESA), and recently conducted the Subsurface Assessment activities at the Site described herein on March 22, 2019 and between November 11 to November 15, 2019, to further assess the undocumented fill for environmental constituents of concern (CoCs). The undocumented fill was previously reported in the following Client provided documents:

- *C.W. La Monte Company Inc, Report of Limited Geotechnical Investigation*, dated February 16, 2005
- *Essentia, Limited Phase II Environmental Site Assessment Report*, dated April 2005 (2005 Phase II ESA)

The 2005 Phase II ESA included the excavation of four trenches and the advancement of 6 soil borings, which included the collection of 27 soil samples. The locations of trenches/borings completed by Essentia are depicted on Figures 2 and 3, and the associated laboratory results are presented on Tables 1 and 2. Essentia reported that the undocumented fill contains a large amount of buried debris/material (e.g., cobbles, boulders, organic debris, construction materials, asphalt, etc). These fills were reportedly placed with end-dump trucks intermittently over a three to five year period in the mid-1980s and included miscellaneous export material from nearby grading sites in the Scripps Ranch areas. Various CoCs were reported within samples collected of the undocumented fill soil, including low to moderate concentrations of total petroleum hydrocarbons (reported by Essentia to be possibly derived from either decaying organic matter or asphalt debris), metals such as arsenic and lead, and relatively low concentrations of semi-volatile organic compounds, volatile organic compounds, and organochlorine pesticides. Essentia recommended that a Health and Safety Plan be developed to address worker protection specific to management of soil during development of the Site, and preparation of a Soil Management Plan that would describe the characterization, management, and on-site reuse and disposal of excavated soil, as necessary. The Soil Management Plan should be prepared in consideration of the County of San Diego Department of Environmental Health (DEH) Site Assessment and Mitigation Manual.

In connection with the proposed redevelopment of the Site, geotechnical consultant Advanced Geotechnical Solutions, Inc. (AGS) is recommending that all of the undocumented fill be removed and recompacted during grading activities. Based on the unknown origin of the fill, and considering the large volume of undocumented fill present, SCS recommended additional soil sampling to attempt to further assess, at least on a gross level, the possible presence of CoCs in the fill material located at the Site. Overall, based on the large quantity of undocumented fill and the laboratory results received to date, our experience with similar sites, there are additional environmental

concerns with the undocumented fill. Soil sampling was conducted by SCS in March of 2019, and observations made during drilling indicated a significant amount of samples with miscellaneous debris, including construction debris, landscaping debris, and unknown debris. Therefore, additional soil sampling was recommended with a more intensive sampling frequency to better assess how extensive and consistent the impacts are. Also based on our experience with similar sites, SCS recommended collecting soil vapor samples to assess if there is a possible vapor intrusion risk (from either the organics or other possible unknown sources), and attempt to collect groundwater samples if groundwater was encountered.

Based on conversations with the Client, the scope of services developed for this Subsurface Assessment included soil and soil vapor sampling to further assess the extent and nature of previously identified CoCs. In addition, a human health risk screening was performed to assess for possible health implications to occupants of the Site from the undocumented fill soils. The data from these sampling efforts was collected to further assess the identified environmental concerns in order to further develop a baseline for subsequent remedial planning activities related to the redevelopment of the Site, and to identify the need for additional data gaps (i.e., additional soil, soil vapor, and/or groundwater sampling) that may need to be addressed.

## **2 OBJECTIVES**

The objectives of the scope of services were to:

- Further assess undocumented fill soil at the Site for previously identified CoCs, including total petroleum hydrocarbons (TPH), lead and arsenic as well as Title 22 metals, organochlorine pesticides, semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs).
- Provided that groundwater seepage is present at the base of the undocumented fill and groundwater samples can be collected, assess groundwater situated downgradient of the undocumented fill area for CoCs including TPH, VOCs, Title 22 metals, and organochlorine pesticides.
- Assess the possible presence and concentrations of VOCs and methane at the Site in connection with the presence of undocumented fill at the Site.
- Conduct a limited health risk screening assessment.

## **3 SUBSURFACE ASSESSMENT**

### **PREPARATION FOR FIELDWORK**

#### **Preparation of Health and Safety Plan**

A health and safety plan for work conducted at the Site and for workers within the “exclusion zone” is required pursuant to the regulations found in 29 Code of Federal Regulations Part 1910.120 and California Code of Regulations, Title 8, Section 5192. Therefore, a health and safety plan was prepared for the proposed work scope, which outlined the potential chemical and physical hazards that may be encountered during drilling and sampling activities. The appropriate personal protective equipment and emergency response procedures for the anticipated Site specific chemical and



physical hazards were detailed in this plan. SCS personnel involved with the field work were required to read and sign this document in order to encourage proper health and safety practices.

## Utility Search and Markout

For the initial subsurface work beginning March 22, 2019 that was overseen by AGS, AGS notified Underground Service Alert before the work was conducted as required by state law. For the most recent drilling activities conducted in November of 2019, SCS notified Underground Service Alert on October 31, 2019, as required by state law, prior to drilling and sampling activities and was issued ticket number A193040707-00A. In addition, a private utility locator, Subsurface Alert, was subcontracted to provide a clearance of the proposed boring locations for possible subsurface utility conflicts. These procedures are designed to minimize the likelihood of drilling into a subsurface utility. The soil boring and soil vapor locations were adjusted as necessary to avoid conflicts with identified subsurface utilities.

## Boring Permits

AGS acquired the necessary boring permits for the March 2019 drilling that was conducted for the Site, since AGS subcontracted the drill rig and oversaw sampling, and SCS collected samples from soil borings drilled under AGS. SCS applied for a boring construction permit for the scope of work to be done at the Site from November 11 through November 15, 2019. The permit was approved by the County of San Diego Department of Environmental Health (DEH) Monitoring Well Program on November 6, 2019 for the construction of 3 soil borings with an estimated depth of 70 feet to 120 feet below ground surface (bgs).

## PHYSICAL SETTING

### Topography

A topographic map for the Site vicinity was reviewed and is summarized in the following table

<b>Reported Elevation</b>	840 to 1040 feet above mean sea level
<b>Reported Slope Direction</b>	Generally to the northwest, and also slopes down to the north/northeast in the northeastern portion of the Site in the large undocumented fill area
<b>Source</b>	United States Geological Survey 7.5 Minute Topographic Map, Poway Quadrangle, California – San Diego County, 1967, photo-revised 1975

### Geology

A geological map for the Site vicinity was reviewed and is summarized in the following table.

<b>Primary Reported Formations</b>	Undocumented Fills (Qafu), Documented Fill (Qafd), Colluvium (no symbol), Alluvium (Qal), Slope Wash (no symbol), Questionable Landslide (Qls?), Residual Soil (no symbol), Poway Group (Tp, Tpm, Tmv)
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<p><b>Reported Description</b></p>	<p>Undocumented Fills (Qafu): investigation indicates the fills may exceed 85 feet in maximum vertical thickness. The fills encountered in our test excavations and borings typically consisted of loosely "end-dumped" material including silty sands and clayey sands and sandy clays with some gravel, cobble and rock fragments, concrete and over-size rock debris, and occasional pockets of construction demolition debris, brush material and timber. Other minor undocumented fills are scattered over the site and were used to construct building pads and roads.</p> <p>Documented Fill (Qafd): The north end of the canyon was filled with documented fills placed under the observation and testing of Pacific Soils Engineering. These fills are estimated to obtain a maximum thickness of 45 feet at the north central end of the property and may exceed 20 feet in maximum thickness were the controlled canyon fill abuts the toe of the undocumented fill slope near the center of the property. The upper 20 feet of these fills typically consist of tan, medium dense to dense, clayey sands with some gravel and cobble.</p> <p>Colluvium (no symbol): Colluvium occurs in localized areas on mid-to lower canyon slopes and are derived from erosion of the adjacent formational units. Colluvium generally consists of relatively loose clayey sands, silts and, and clays that are subject to creep.</p> <p>Alluvium (Qal): Alluvium, relatively loose stream deposited sediment is present in the bottom of most major drainages. These materials are typically composed of loose sands and clayey sands that may reach a thickness of 10 to 20 feet at the bottom of the small reservoir located in the southern portion of the site. Alluvium was reported to be removed from the north canyon bottom prior to filling.</p> <p>Poway Group (Tp, Tpm, Tmv): Underling the surficial deposits are sedimentary bedrock formations of the Poway Group. These formations include the Stadium Conglomerate, the Mission Valley Formation, the Pomerado Conglomerate, and the Miramar Sandstone. The formational materials generally consist of massively or horizontally bedded, very dense, tan and light brown, silty and clayey sandstones conglomerate.</p>
<p><b>Geotechnical Recommendations Regarding Removals and Recompaction</b></p>	<p>Artificial fill, topsoil, alluvium, colluvium, highly weathered terrace deposits and highly weathered Pomerado and Mission Valley formations should be removed in areas planned to receive fill or where exposed at final grade. The resulting undercuts should be replaced with engineered fill. In general, soils removed during remedial grading will be suitable for reuse in compacted fills provided they are properly moisture conditioned and do not contain deleterious materials.</p>



<b>Source</b>	<i>Summary of Preliminary Geotechnical Information &amp; General Grading Recommendations for the Cypress Point Project, San Diego California, prepared by AGS and dated January 11, 2020</i>
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## Hydrogeology

Data regarding depth to groundwater and flow direction for the Site were not readily available. In the absence of Site-specific data, depth to groundwater and flow direction information was estimated by reviewing topographic maps and based on observations made during drilling.

The Site was reported to have an intermittent stream present on the southwestern portion of the Site; however it was not depicted on the topographic map reviewed (Figure 1). The possible intermittent stream likely results in shallow groundwater measurements in this area; however, groundwater was not encountered during this Subsurface Investigation of the central/northeastern portions of the Site to the maximum depths drilled (i.e., 100 feet bgs) on the higher elevations at the Site.

The nearest intermittent stream or open water body to the Site depicted on the topographic map reviewed is Beeler Creek, situated approximately 0.8 miles to the east of the Site at an elevation of approximately 600 feet above mean sea level. Since the elevations at the Site are interpreted to range from approximately 840 to 1040 feet above mean sea level, groundwater is estimated to be greater than 100 feet bgs at the Site. Groundwater flow direction typically follows topography, which at the Site generally slopes down to the northwest, and also slopes down to the north/northeast in the northeastern portion of the Site in the large undocumented fill area.

## Water Quality Survey

The following table summarizes the reported water quality in the Site vicinity.

<b>Reported Hydrologic Subarea</b>	Not applicable
<b>Reported Hydrologic Area</b>	Poway (906.20)
<b>Reported Hydrologic Unit</b>	Penasquitos Hydrologic Unit (906.00)
<b>Reported Beneficial Use</b>	Municipal and agricultural (potential industrial)
<b>Source</b>	California RWQCB, San Diego Region, Water Quality Control Plan for the San Diego Basin, September 8, 1994, with amendments effective prior to April 25, 2007.



## FIELD ACTIVITIES

### Soil Sampling and Analysis

#### March 2019

SCS teamed with geotechnical consultant Advanced Geo-Solutions (AGS) on March 22, 2019, and drilled four soil borings (B1, B2, B3, and B4) with a hollow stem auger drill rig to further investigate the undocumented fill (Figures 2 and 3). The four soil borings were advanced to a maximum depth of 58 feet below ground surface (bgs) through the use of a hollow stem auger. Soil samples were collected from each boring via a split-spoon sampler at approximately 5 foot depths intervals. Note that due to the presence of dense debris and/or cobbles, practical refusal was encountered in each of the four borings that prevented drilling and sampling into formational materials. The below table summarizes the soil borings, rationale, and laboratory analysis.

Boring ID & Depth Drilled	Boring Location	Sample Depths
B1: 40 feet bgs	East portion of undocumented fill area	Soil samples were collected in 5 foot intervals (1, 5, 15, 20, 30, 35 feet bgs)
B2: 27 feet bgs	North portion of undocumented fill area	Soil samples were collected in 5 foot intervals (1, 5, 15, 20, 25 feet bgs)
B3: 32 feet bgs	Approximately 20 feet south southwest of B2	Soil samples were collected in 5 foot intervals (1, 5, 10, 15, 20, 25, 30 feet bgs)
B4: 58 feet bgs	West portion of undocumented fill area	Soil samples were collected in 5 foot intervals (1, 5, 10, 15, 20, 25, 30, 40, 45, 55 feet bgs)

**Notes:**

bgs: Below ground surface.

Soil samples were taken from the split-spoon sample casings and transferred into 4-ounce glass jars. Pursuant to our standard operating procedures, the sampling equipment was decontaminated on Site between soil samples to minimize the likelihood of “cross-contaminating” the samples and to minimize the potential for a “false positive” in the soil samples analyzed. The soil samples were properly labeled and placed in an iced cooler for shipment to a state-accredited off-Site laboratory (American Scientific Laboratories, LLC).

Soil samples were analyzed as follows:

- Twenty four soil samples were analyzed for lead in general accordance with U.S. Environmental Protection Agency (EPA) Method 6010B.
- Twenty nine soil samples were analyzed for total petroleum hydrocarbons (TPH) in general accordance with EPA Method 8015B.
- Fourteen soil samples were analyzed for Title 22 Metals in general accordance with EPA Methods 6010B and 7471A.
- Seventeen soil samples were analyzed for organochlorine pesticides (OCPs) in general accordance with EPA Method 8081
- Nine soil samples were analyzed for volatile organic compounds (VOCs) in general accordance with EPA Method 8260B.

- Nine soil samples were analyzed for semi-volatile organic compounds (SVOCs) in general accordance with EPA Method 8270C.
- Three soil samples were analyzed for polychlorinated biphenyls (PCBs) in general accordance with EPA Method 8082.
- One soil samples was analyzed for Soluble Threshold Limit Concentration (STLC) for lead and Toxicity Characteristic Leaching Procedure (TCLP) for lead.

## November 2019

Upon completion of the March 2019 soil sampling and review of the soil sampling results, SCS recommended additional soil sampling with a more intensive sampling frequency to better assess how extensive and consistent the impacts within the undocumented fill are, and to attempt to drill into native/formational soil and collect groundwater samples if groundwater was encountered. On November 11, 2019 through November 15, 2019, SCS teamed with AGS to advance a total of 8 borings (B5, B6, B7, B8, B9, B10, B11, and B12RR) (Figures 2 and 3) to a maximum depth of 100 feet bgs. Borings B9, B10, and B11 were advanced with a sonic drilling rig, borings B6, B7, and B8 were advanced with a hollow-stem auger drill rig, and borings B5 and B12RR were advanced with a limited access drilling setup.

Borings B5 and B12RR were drilled by Native Drilling using a hollow-stem auger limited access setup and subcontracted by AGS. The two borings were located to the north of the toe of the undocumented fill slope in the northern portion of the Site, in an area reported by C.W. La Monte to be in documented fill. Note that since refusal was encountered in boring B5 at a depth of approximately 9 feet bgs, additional boring B12RR was advanced approximately 40 feet to the north of boring B5 and was advanced to 10 feet bgs, where refusal was encountered, and only one sample was collected at the maximum depth drilled (i.e., 10 feet bgs).

Borings B6, B7, and B8 were drilled by Pacific Drilling using a hollow-stem auger and subcontracted by AGS. The three borings were located and advanced in additional and distinctly separate areas of potential undocumented fill in the northwestern (B6 and B7) and western (B8) portions of the Site.

Borings B9, B10, and B11 were drilled by BC2 using a sonic drill rig subcontracted by SCS. The three borings were located and advanced within the undocumented fill to a maximum depth of 100 feet bgs until native/formational soil was encountered. Note that native/formational soil was interpreted to have been encountered in each of these three borings; however, due to the presence of abundant and dense cobbles, the sonic rig was able to drill only into the upper approximately 1 to 2 feet of native soils, and samples had low overall recovery, but the presence of rounded cobbles were observed that closely resembled rounded cobbles observed in the nearby hillsides that were interpreted to be composed of native/formational soils. In addition, groundwater samples were not collected since groundwater was not encountered.

The table below summarizes the information on sample identification numbers and depths in feet bgs for the soil borings advanced, as well as laboratory analysis that was conducted for each of the borings.



Drilling Method, Boring ID, & Depth Drilled	Boring Location	Sample Depths (feet bgs)
<u>Limited access drilling</u> – B5-A and B5-B	Northeast of the undocumented fill within identified documented fill	Soil samples were collected at 2.5 foot depth intervals (approximately 2.5, 5, 7.5, 10 until refusal at the bottom of boring)
<u>Hollow stem auger</u> – B6, B7, and B8 (Approximately 20 to 30 foot deep borings)	Representative additional areas of the undocumented fill	Soil samples were collected at 2.5 foot depth intervals (approximately 2.5, 5, 7.5, 10, etc. to until refusal at the bottom of boring). Note samples were analyzed at 5 foot intervals, with the 2.5 foot intervals analyzed as needed based on the results for the 5 foot interval samples.
<u>Sonic drilling</u> B9: 30 feet bgs B10: 100 feet bgs B11: 60 feet bgs	Deep sections of the undocumented fill, attempting to drill into native soil and collect groundwater samples	

Notes:

BGS: Below ground surface.

The soil borings were advanced by use of a sonic or hollow stem auger drill rig, and the soil samples from the hollow stem auger were collected from a split spoon sampler and placed into 4-ounce glass jars or Ziploc bags. The soil samples from the sonic rig were collected in 10-foot long and 4-inch thick segments and placed into 4-ounce glass jars. The samples were labeled and placed in an ice-filled cooler for shipment to the laboratory. Chain-of-custody procedures were implemented for sample tracking.

Pursuant to SCS's standard operating procedures, the sampling equipment was decontaminated on Site between soil borings and soil samples to minimize the likelihood of cross-contaminating the samples and to minimize the potential for a false positive in the soil samples analyzed.

Soil samples were submitted to American Scientific Laboratories, LLC (ASL), a fixed-base, State-accredited laboratory. Soil samples were analyzed as follows:

- Sixty one soil samples were analyzed for TPH in general accordance with EPA Method 8015.
- Fifty four soil samples were analyzed for lead and arsenic in general accordance with EPA Method 6010B
- Twenty seven soil samples were analyzed for Title 22 Metals in general accordance with EPA Method 6010B
- Thirty two soil samples were analyzed for organochlorine pesticides (OCPs) in general accordance with EPA Method 8081
- Eighteen soil samples were analyzed for semi-volatile organic compounds (SVOCs) and volatile organic compounds (VOCs) in general accordance with EPA Method 8260
- Twelve soil samples were analyzed for polychlorinated biphenyls (PCBs) in general accordance with EPA Method 8082
- Two soil samples were analyzed for STLC for lead and TCLP for lead, and one soil sample was analyzed for STLC for arsenic.

## **Disposal of Drummed Soil Cuttings and Decontamination Water**

Soil boring cuttings and decontamination rinsate were placed in appropriate containers (55-gallon drums), labeled, and stored on Site until disposal under manifest to a certified facility. The 55-gallon drums are currently pending pickup from a licensed contractor.

## **Soil Vapor Sampling and Analysis**

SCS advanced eleven soil vapor borings to assess the possible presence and concentrations of VOCs and methane in the soil vapor in connection with the undocumented fill locations throughout the Site. Eight of the ten soil vapor borings were set using a direct push rig at depths of 5 feet bgs, and the two were set using a hand held rotohammer at depths of 5 feet bgs. The remaining soil vapor boring was nested (SV8-25 and SV8-50), with soil vapor implants set at depths of 25 feet and 50 feet bgs, respectively, within soil boring B11 after it was drilled to completion. All of the soil vapor probes were analyzed for VOCs in accordance with EPA Method 8260SV and methane in accordance with EPA Method 8015M.

The soil vapor sampling activities were conducted in general accordance with the Department of Toxic Substances Control (DTSC), Los Angeles RWQCB, and San Francisco RWQCB Advisory on Active Soil Gas Investigations, dated July 2015. A temporary vapor well, consisting of Nylaflo<sup>TM</sup> tubing attached to a soil gas probe tip, was installed for sampling. An appropriate sand pack a minimum of 12 inches thick were placed around the soil gas probe tip, with at least 6 inches of dry granular bentonite above the sand, topped with hydrated granular bentonite to the surface, to provide an appropriate seal. The soil vapor sampling probes were allowed to stabilize for at least 2 hours prior to sampling, followed by pulling the DTSC default three purge volumes, and performing a shut-in test and leak test.

Soil vapor samples were collected from the soil vapor sampling probes by placing soil vapor from the probes into laboratory-supplied Summa canisters subsequent to purging the DTSC default of three volumes of soil vapor. The soil vapor borings were backfilled with hydrated bentonite grout subsequent to the removal of the soil vapor sampling probes. Chain-of-custody procedures were implemented for sample tracking.

## **Groundwater Sampling**

No groundwater was encountered during the Subsurface Assessment at the Site; therefore, groundwater samples were not collected during this Subsurface Assessment.

## **4 SUBSURFACE ASSESSMENT - FINDINGS**

A summary of the laboratory results for TPH, arsenic, lead, Title 22 Metals, OCPs, SVOCs, VOCs, PCBs, STLC, and TCLP from the soil samples analyzed is presented below, as well as the soil vapor sampling results for VOCs and methane. The data is also presented in the Tables, and summarized on Figures 4 and 5. Cross sections of the large undocumented fill area are also depicted on Figure 6 and 7. A complete listing of the results is presented in the laboratory report included in the Appendices.



## SOIL SAMPLE ANALYTICAL RESULTS

### Total Petroleum Hydrocarbons (TPH)

Of the eighty five samples collected in March and November 2019 and analyzed for TPH as gasoline (TPHg), one of the samples was reported above the laboratory reporting limit for TPHg. Sample B2-15, collected on March 22, 2019, was reported with a concentration of 3.68 milligrams per kilogram (mg/kg) TPHg.

Of the eighty five samples collected in March and November 2019, twenty four were reported above the laboratory reporting limit for TPH as diesel (TPHd). During the March 2019 sampling event, the TPHd concentrations ranged from 10.1 mg/kg (B1-15) to 239 mg/kg (B2-15). During the November 2019 sampling event, the TPHd concentrations ranged from 18.6 mg/kg (B9-10) to 467 mg/kg (B10-65).

Of the eighty five samples collected in March and November 2019 and analyzed for TPH as oil (TPHo), sixteen were reported above the laboratory reporting limit for TPHo. During the March 2019 sampling event, the TPHo concentrations ranged from 390 mg/kg (B1-20) to 552 mg/kg (B2-1). During the November 2019 sampling event, the TPHo concentrations ranged from 69.7 mg/kg (B7-2.5) to 4,980 mg/kg (B10-65).

A summary of the petroleum hydrocarbon impacts reported by both Essentia in 2004 and by SCS in 2019 is tabulated below, including the boring ID of the representative soil boring reported with impacts, as well as the estimated thicknesses of significant petroleum hydrocarbon impacts discovered based on the presence of soil samples reported with TPH above 100 mg/kg.

Boring ID of Impacted Subsurface Feature	Depth(s) of Impacted Soil to a "Clean" Sample (feet below grade)	Maximum TPH Concentration (mg/kg) Depth in brackets	Approximate Thickness of Significant (> 100 mg/kg TPH) Petroleum Hydrocarbon Lenses Depth in feet below grade
<b>Large Undocumented Fill Area Borings</b>			
B-1 (Essentia 2004)	Not identified	TPHo: 6,640.0 [20] TPHd: 2,417.0 [20] TPHg: ND	At least 10 feet to at least 20 feet
B-2 (Essentia 2004)	Not identified	TPHo: 1,680.0 [20] TPHd: 893.0 [20] TPHg: 75.3 [20]	At least 20 feet to at least 30 feet
B-3 (Essentia 2004)	Not identified	TPHo: 259.0 [40] TPHd: 88.8 [40] TPHg: ND	At least 30 to at least 40 feet
B-4 (Essentia 2004)	Not identified	TPHo: 135.2 [15] TPHd: 38.7 [15] TPHg: ND	At least 15 to at least 20 feet
B-5 (Essentia 2004)	Not identified	TPHo: 12.8 [20] TPHd: 4.9 [20] TPHg: ND	Soil samples are below 100 mg/kg TPH

Boring ID of Impacted Subsurface Feature	Depth(s) of Impacted Soil to a "Clean" Sample (feet below grade)	Maximum TPH Concentration (mg/kg) Depth in brackets	Approximate Thickness of Significant (> 100 mg/kg TPH) Petroleum Hydrocarbon Lenses Depth in feet below grade
B-6 (Essentia 2004)	Not identified	TPHo: 603.0 [5 & 20] TPHd: 391.4 [20] TPHg: 7.16 [20]	At least 5 feet to at least 20 feet
B1 (SCS March 2019)	Not identified	TPHo: 411 [1] TPHd: 125 [30] TPHg: ND	1 feet to 5 feet, and at least 20 feet to at least 35 feet
B2 (SCS March 2019)	25 feet	TPHo: 552 [1] TPHd: 239 [15] TPHg: 3.68 [15]	1 to 5 feet, and 20 feet to at least 35 feet
B3 (SCS March 2019)	Not identified	TPHo: ND TPHd: 32.8 [25] TPHg: ND	Soil samples are below 100 mg/kg TPH
B4 (SCS March 2019)	50 feet	TPHo: ND TPHd: 183 [5] TPHg: ND	At least 5 feet to 10 feet
B6 (SCS November 2019)	5 feet	TPHo: 108 [2.5] TPHd: 151 [2.5] TPHg: ND	At least 2.5 feet to 5 feet
B9 (SCS November 2019)	15 feet	TPHo: ND TPHd: 18.6 [10] TPHg: ND	Soil samples are below 100 mg/kg TPH
B10 (SCS November 2019)	87.5 feet	TPHo: 4,980 [65] TPHd: 467 [65] TPHg: ND	At least 65 to 67.5 feet At least 75 to 77.5 feet At least 85 to 87.5 feet
B11 (SCS November 2019)	Not identified	TPHo: 956 [30] TPHd: 339 [40] TPHg: ND	At least 20 to 22.5 feet At least 25 to 50 feet
<b>Smaller Undocumented Fill Area Borings</b>			
B7 (SCS November 2019)	All soil samples below TPH laboratory reporting limits	TPHo: 69.7 [2.5] TPHd: 46.5 [2.5] TPHg: ND	Soil samples are below 100 mg/kg TPH
B8 (SCS November 2019)	15 feet	TPHo: ND TPHd: ND TPHg: ND	Soil samples are below 100 mg/kg TPH
<b>Documented Fill Soil Borings</b>			
B5 (SCS November 2019)	All soil samples below TPH laboratory reporting limits	TPHo: ND TPHd: ND TPHg: ND	Soil samples are below 100 mg/kg for TPHd and TPHo; below 10 mg/kg for TPHg
B12RR (SCS November 2019)	10 feet	TPHo: 87.1 [10] TPHd: 179 [10] TPHg: ND	Soil sample B12RR-10 was only soil sample collected at location and was greater than



Boring ID of Impacted Subsurface Feature	Depth(s) of Impacted Soil to a "Clean" Sample (feet below grade)	Maximum TPH Concentration (mg/kg) Depth in brackets	Approximate Thickness of Significant (> 100 mg/kg TPH) Petroleum Hydrocarbon Lenses Depth in feet below grade
			100 mg/kg TPH
ESLs – Tier 1			TPHo: 1,600 TPHd: 260 TPHg: 100
DEH Residual Saturation			TPHo: 14,000 TPHd: 10,000 TPHg: 5,600

**Notes:**

mg/kg: milligrams per kilogram

µg/kg: micrograms per kilogram

TPHo: TPH oil range organics

TPHd: TPH diesel range organics

TPHg: TPH gasoline range organics

ND: Not detected above laboratory reporting limits

NA: Not analyzed

NE: Not established

ESLs: San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, 2019 (Rev. 2)

DEH Residual Saturation - Petroleum residual non-aqueous phase liquids (NAPL) saturation levels for silty sand, from the County of San Diego Department of Environmental Health Site Assessment and Mitigation (SAM) Manual, Section 5, dated 1/20/2000

**Red font:** Reported concentration exceeds applicable screening criteria – either the ESLs and/or DEH Residual Saturation.

Overall, the results of the soil sampling indicate several samples were reported with relatively low to moderate concentrations of TPH as diesel and oil, some of which are above residential screening levels (discussed below). Based on our observations during drilling and the reported results, the petroleum hydrocarbons observed are interpreted to have been primarily derived from asphalt debris, and overall appeared to be distributed in a heterogeneous nature throughout the undocumented fill portion of the Site, likely due to the undocumented fill being deposited by dump trucks that were not likely consistent (Figure 3). Based on the reported concentrations and depths of TPH in each boring, it is interpreted that there has not been a definitive release of TPH at a particular depth within the undocumented fill, rather the TPH is likely from primarily dumped asphalt debris as discussed above.

Regarding applicable soil screening criteria, SCS used the San Francisco Bay Regional Water Quality Control Board, Tier 1 Environmental Screening Levels (ESLs), 2019 (Rev. 2), which are currently recommended for soil screening for TPH by the DEH. According to the results in Table 1, six of the soil samples analyzed (including soil samples collected by Essentia in 2004) were reported to be above the ESLs for TPHo, TPHd, and/or TPHg (Essentia samples B-1-10, B-1-20, B-2-20, and B-6-20; and SCS samples B10-65, and B11-30).

In addition, soil sample TPH results were compared to the residual saturation criteria for a silty sand to protect groundwater as developed by the DEH<sup>1</sup>, which are 14,000 mg/kg TPHo, 10,000 mg/kg

<sup>1</sup> Petroleum residual non-aqueous phase liquids (NAPL) saturation levels for silty sand, from the County of San Diego Department of Environmental Health Site Assessment and Mitigation (SAM) Manual, Section 5, dated

TPHd, and 2,000,000 µg/kg TPHg. None of the soil samples were reported to be above the residual saturation criteria for TPHo, TPHd, and/or TPHg. Therefore, groundwater has likely not been impacted by petroleum hydrocarbons from the Site considering that none of the soil samples were reported to exceed residual saturation criteria.

## Title 22 Metals

Metals reported above laboratory reporting limits by both Essentia and SCS include antimony, arsenic, beryllium, chromium, cobalt, copper, lead, molybdenum, nickel, vanadium, and zinc. However, metals are naturally occurring in soil.

For the metal lead, three soil samples collected by SCS were reported above the DTSC RSLs of 80 mg/kg. These samples include sample B2-15 (358 mg/kg lead), sample B10-45 (99.8 mg/kg lead), and sample B11-25 (92.9 mg/kg lead). Sample B2-15 was further analyzed for leachability using the WET and TLCP test methods, and was reported to exceed the STLC lead leachability threshold but was below the Maximum Contaminant Concentration Threshold Concentration (MCCTC), indicating that soil represented by this sample would be considered a California hazardous waste if exported from the site.

The metals arsenic, cobalt, and lead are further discussed in the “Screening Health Risk Assessment” section below to further assess for possible naturally occurring background concentration exceedances and/or potential human health risks.

## VOCs, SVOCs, OCPs, and PCBs

Various VOCs, SVOCs, and OCPs were reported in the samples analyzed for these constituents. Samples were chosen for OCP analysis for every approximate 10 foot depth interval in each boring, with additional depths analyzed based on the reported presence/concentration of OCPs reported in the first round of sample results. Samples analyzed for VOCs, SVOCs, and PCBs were chosen based on representation of depth intervals within a boring, field observations, laboratory sampling results (particularly for TPH or to further delineate the vertical extent of VOCs, SVOCs, OCPs, and PCBs), and/or PID readings.

### VOCs

The following VOCs were reported above laboratory reporting limits for the 32 samples analyzed by both Essentia and SCS:

- Acetone in 6 samples
- 2-Butanone in 5 samples
- Toluene in 1 sample

None of the reported VOCs had concentrations above their respective EPA RSLs.

### SVOCs

The following SVOCs were reported above laboratory reporting limits for the 31 samples analyzed by both Essentia and SCS:

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1/20/2000.



- ¾ methylphenol in 4 samples
- Benzoic acid in 2 samples
- Phenol in 3 samples
- Butyl benzyl phthalate in 2 samples
- Phenanthrene in 1 sample
- Bis (2-Ethylhexyl) Phthalate in 1 sample

None of the reported VOCs had concentrations above their respective EPA RSLs.

## OCPs

The following OCPs were reported above laboratory reporting limits for the 50 samples analyzed by both Essentia and SCS:

- Gamma chlordane in 1 sample
- Alpha chlordane in 3 samples
- 4,4'-Dichlorodipenyldichloroethylene (DDE) in 6 samples
- 4,4'- Dichlorodiphenyltrichloroethane (DDT) in 2 samples
- Dieldrin in 1 sample

None of the reported OCPs had concentrations above their respective EPA RSLs.

## PCBs

Fifteen soil samples were analyzed for PCBs by both SCS and Essentia. One of the soil samples was reported with the PCB known as Aroclor 1254 above the laboratory reporting limits in sample B11-40 at 120 µg/kg. However, this reported concentration is below the EPA RSL of 240 µg/kg.

## Groundwater

Attempts were made to collect groundwater to assess for the possible presence of CoCs in soil borings B5, B9, B10, B11, and B12RR; however, no groundwater was encountered.

Without groundwater sampling and analysis, SCS evaluated the concentrations of the primary CoCs (i.e. TPH, arsenic, and lead) that exceed either human health risk screening criteria and/or background concentrations ranges for metals in samples collected from the bottoms of the soil borings to assess the potential for migration of CoCs to groundwater. Metals are generally not leachable, and additionally, based on a review of the available data, the majority (with few exceptions) of metals concentrations reported in the bottom soil samples within the deeper soil borings (i.e., boring B-3 advanced by Essentia, and borings B4, B5, B10, and B11 advanced by SCS) are below San Diego Regional Water Quality Control Board Tier 1 Soil Screening Levels (SSLs) (2019). In addition, none of the soil samples analyzed for TPH were reported to be above the DEH residual saturation criteria for TPHo, TPHd, and/or TPHg. Therefore, there is a low likelihood that groundwater has been impacted from the undocumented fill present at the Site.

## Soil Vapor Analytical Results

Below is a summary of the results of soil vapor samples analyzed for VOCs and methane, which are also tabulated in Table 3 and depicted on Figure 5.

## VOCs

SCS conducted a soil vapor survey at the Site during the November 2019 Subsurface Assessment. A total of 12 soil vapor samples (SV1-5, SV2-5, SV3-5, SV4-5, SV5-5, SV6-5, SV7-5, SV8-25, SV8-50, SV9-5, SV10-5, and SV11-5) were analyzed for VOCs in general accordance with EPA Method 8260SV (Table 3). Four of the 12 soil vapor samples were reported with detectable concentrations of VOCs, including benzene, chloroform, and naphthalene.

Soil vapor samples SV3-5 and SV9-5 were reported with concentrations of benzene at 30 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and  $50 \mu\text{g}/\text{m}^3$ , respectively. None of the remaining soil vapor samples were reported with benzene above the laboratory reporting limit.

Soil vapor sample SV2-5 was reported with a concentration of chloroform at  $60 \mu\text{g}/\text{m}^3$ . None of the remaining soil vapor samples were reported with chloroform above the laboratory reporting limit.

Soil vapor sample SV8-50 was reported with a concentration of naphthalene at  $30 \mu\text{g}/\text{m}^3$ . None of the remaining soil vapor samples were reported with chloroform above the laboratory reporting limit.

A human health risk screening was conducted by a board certified toxicologist for concentrations of VOCs above the laboratory reporting limits in the "Screening Health Risk Assessment" section below.

## Methane

All twelve of the soil vapor samples were additionally analyzed for methane in connection with the presence of undocumented fill at the Site with prior observations of organic material. Of the twelve soil vapor samples analyzed for methane, four were reported above the laboratory reporting limit for methane ranging from 71 parts per million by volume (ppmv) (SV7-5) to 15,000 ppmv (SV9-5).

Below is a summary of the soil vapor samples with concentrations above the laboratory reporting limits for any VOCs and methane collected throughout the Site.

Soil Vapor ID with detectable concentrations of VOCs and/or Methane	Location at the Site (Figure 2)	Constituents reported above reporting limit and concentrations of VOCs (micrograms per cubic meter)	Maximum concentration of Methane (parts per million by volume)
SV2-5	Southeast corner of the northern garage	Chloroform: $60 \mu\text{g}/\text{m}^3$	No methane detected above laboratory reporting limits
SV3-5	Leveled soil approximately 150 feet west from auto storage in western portion of Site	Benzene: $30 \mu\text{g}/\text{m}^3$	No methane detected above laboratory reporting limits
SV7-5	Northern portion of leveled undocumented fill	No VOCs above laboratory reporting limits	71 ppmv
SV8-25	Within the B11 soil	No VOCs above	3,400 ppmv



Soil Vapor ID with detectable concentrations of VOCs and/or Methane	Location at the Site (Figure 2)	Constituents reported above reporting limit and concentrations of VOCs (micrograms per cubic meter)	Maximum concentration of Methane (parts per million by volume)
	boring at the southern portion of leveled undocumented fill	laboratory reporting limits	
SV8-50	Within the B11 soil boring at the southern portion of leveled undocumented fill	Naphthalene: 30 ug/m <sup>3</sup>	9,600 ppmv
SV9-5	The southeast corner of the leveled undocumented fill near auto trailers.	Benzene: 50 ug/m <sup>3</sup>	15,000 ppmv

## 5 SCREENING HEALTH RISK ASSESSMENT

Because various CoCs were reported above the laboratory reporting limits in the soil and soil vapor at the Site, a human health risk screening was conducted by a board certified toxicologist. The health risk screen was conducted for the Site based on the soil and soil vapor analytical data discussed previously in this Report. Chemicals included in the risk screen included metals, TPH, VOCs, SVOCs, and pesticides in soil; and VOCs and methane in soil vapor. Since the future intended use of the Site is as a residential housing development (approximately 100 homes), the risk screen assumed residential use. Cancer and non-cancer health risks related to direct soil contact and potential vapor intrusion were evaluated for a future resident. Direct soil contact includes exposure via inadvertent soil ingestion, direct dermal contact with soil, and inhalation of vapors or resuspended soil in outdoor air. Consistent with current DTSC guidance regarding screening health risk assessments (DTSC, 2015), the maximum detected concentration of each chemical was used as the basis for the risk calculations (except for lead, as discussed below). As an additional conservative step, the maximum soil concentration at any depth was used for the risk screen instead of the typically used maximum concentration between 0 and 10 ft. This additional conservative step was taken because it is expected that there will be significant earth moving as part of the Site redevelopment. The methods used to evaluate health risks related to direct soil contact, vapor intrusion, lead, TPH, and methane are discussed below.

### BACKGROUND METALS SCREEN

The initial step in the risk assessment was a background metals screen. Naturally occurring concentrations of arsenic in soil typically greatly exceed risk-based screening levels. For example, the most extensive survey of natural background concentrations of inorganic elements in California found a maximum arsenic concentration of 11 mg/kg (average of 3.5 mg/kg) in 50 benchmark soils

throughout California (Bradford et al., 1996). The current cancer risk-based DTSC RSL for arsenic (residential use) is 0.11 mg/kg. For this reason, in California and most other states, arsenic is typically screened out of site health risk calculations using a variety of statistical techniques. This policy has been articulated by CalEPA as follows with respect to California Human Health Screening Levels (CHHSLs) (CHHSLs are the previously used risk-based soil screening levels in California) (CalEPA, 2005):

Naturally occurring background concentrations of arsenic, beryllium, cadmium, chromium and other metals in soils may exceed their respective soil CHHSLs. Cal/EPA generally does not require cleanup of soil to below background levels. This issue is frequently encountered with arsenic. Natural background concentrations of arsenic in California are often well above the health-based, direct-exposure goals in soil of 0.07 mg/kg for residential land use and 0.24 mg/kg for commercial/industrial land use (e.g., Bradford et. al, 1996; LBNL 2002). Background concentrations of arsenic or other metals of potential concern at a site should be determined from analysis of site-specific samples in uncontaminated areas using guidance published by Cal/EPA and/or reference to published data for nearby sites (Cal/EPA 1997).

A variety of statistical techniques can be used to determine whether on-site metals concentrations are within background. Most commonly these involve a statistical comparison of on-site concentrations to unimpacted off-site concentrations. However, no off-site background concentrations are available for the Site and therefore a special statistical technique was used to determine whether Site concentrations are in the range of background based only on on-site data (Cook, 1998). In this method the on-site arsenic data (between 0 and 10 ft bgs) is plotted on a cumulative frequency normal or lognormal probability plot. If this plot shows a uniform slope through the data range then it can be assumed that all of the data fits a single distribution (i.e. is unimodal) and there is no evidence of a separate population due to anthropogenic contamination. The statistical software Minitab ([www.minitab.com](http://www.minitab.com)) was used to prepare the normal probability plot for arsenic. This plot is shown in **Appendix D**. With the exception of three outliers (only 1 at the high concentration end), this plot clearly shows a single slope throughout the data range and therefore demonstrates the presence of a single background population of arsenic on the Site.

The same method was also used to determine whether cobalt was also within background. The normal probability plot for cobalt (**Appendix D**) shows that all data points are well fit to a single slope and are within the 95 percent confidence interval, demonstrating that on-site cobalt concentrations are consistent with a single population of background-level cobalt.

Since both arsenic and cobalt are within background both of these chemicals were excluded from the risk calculations. Other metals were not screened against background as preliminary calculations indicated they did not contribute significantly to health risks.

## **DETERMINATION OF EXPOSURE POINT CONCENTRATIONS**

The next step of the risk screen was the determination of the exposure point concentrations (EPCs). The EPCs are the concentrations of detected chemicals used as the basis for the health risk calculations. As noted previously, the soil EPCs used were the maximum site-wide concentrations at any depth. The maximum concentrations for all chemicals detected in soil are shown in **Table 4**. In



the case of soil vapor, the maximum concentration at any depth was also used as the EPC at each soil vapor sampling location where VOCs were detected.

## DIRECT SOIL CONTACT EXPOSURE HEALTH RISKS

The non-cancer health risks, sometimes termed “non-cancer hazard”, for a particular chemical are expressed as the Hazard Quotient (HQ). The HQ is simply the ratio of the concentration of the chemical in soil to its safe screening level for long-term exposure. Per DTSC guidance, the maximum site concentration of the chemical is used to calculate the HQ, and the screening level used is the non-cancer-based DTSC Regional Screening Level (RSL<sub>NC</sub>) in soil (DTSC, 2015):

$$\text{Hazard Quotient} = \frac{\text{Max Conc}}{\text{RSL}_{NC}}$$

Units for both the maximum site concentration and the RSL are mg/kg. RSLs were obtained first from DTSC (2019a) if available, otherwise from USEPA (2019).

An HQ of 1 or less indicates a negligible potential for non-cancer health risks related to a particular chemical. To calculate the site-wide non-cancer health risks the HQs for each chemical are summed to obtain the Hazard Index (HI). The HI represents the cumulative potential for non-cancer health risk taking into consideration all of the chemicals on the site. An HI of 1 or less indicates that cumulative non-cancer health risks are negligible. An HI of 1 or less provides support for a DTSC “no further action” (NFA) (DTSC, 2015).

The HQs and HI for the direct soil contact exposure pathways are shown in **Table 4** for all chemicals detected in soil. The HI was calculated to be 0.5, demonstrating negligible risk of non-cancer health effects.

Cancer health risks were calculated using the following equation (DTSC, 2015):

$$\text{Cancer Risk} = \frac{\text{Max Conc}}{\text{RSL}_C} \times 10^{-6}$$

where RSL<sub>C</sub> is the DTSC or USEPA RSL based on cancer effects. As noted previously, the RSL<sub>C</sub> was obtained first from DTSC (2019a) if available, otherwise from USEPA (2019). A cancer risk of 1E-06 (one in a million) or less indicates that the cancer risk for a particular chemical is negligible. Cumulative cancer risk (CCR) is the sum of all the cancer risks for each carcinogenic chemical detected on the Site. If the CCR is 1E-06 or less the total cancer risks for the site are considered to be negligible and an NFA from DTSC is supported (DTSC, 2015).

Cancer risks for each carcinogenic chemical, and the CCR for all such chemicals detected in soil, are shown in **Table 4**. The CCR was calculated to be 1. 6E-07, approximately an order of magnitude below the negligible cancer risk benchmark of 1E-06.

Lead health risks are not evaluated as described above. Instead, and per DTSC risk guidance (DTSC, 2019b), potential health risks related to lead are evaluated by comparing the site-wide 95 percent

upper confidence limit of the mean (95UCLM) to the DTSC residential use screening level for lead of 80 mg/kg. A lead 95UCLM of 32 mg/kg was calculated using the USEPA statistical software *ProUCL* (USEPA, 2015). Since this value is well below the DTSC lead screening level, lead does not pose a significant health risk. *ProUCL* output for lead is provided in **Appendix E**.

In the absence of specific risk guidance from DTSC regarding evaluation of the health risks due to petroleum compounds, the potential for health risks related to these compounds was evaluated by comparison of the maximum concentrations to the San Francisco Bay Regional Water Quality Control Board (SBRWQCB) Environmental Screening Levels (ESLs). The residential use health-based ESLs for TPHg, TPHd, and TPHo are 430, 260, and 12,000 mg/kg, respectively (SBRWQCB, 2019). The maximum concentrations of TPHg, TPHd and TPHo were 75.3, 2417 and 6640 mg/kg, respectively. The maximum concentration of TPHd significantly exceeds its corresponding ESL.

## VAPOR INTRUSION HEALTH RISKS

Vapor intrusion occurs when volatile chemicals in soil rise through the soil column and enter buildings through cracks or seams in the building foundation. This results in inhalation exposure of building occupants to these chemicals in indoor air.

Since only one chemical was detected at each of several sampling locations, vapor intrusion risks were calculated separately for each sampling location. Potential vapor intrusion health risks were calculated in two steps: First, the maximum soil vapor concentration at a given sampling location (at any depth) was converted to an indoor air concentration based on an attenuation factor of 0.03 as follows (USEPA, 2015):

$$IA = AF \times SG_{conc}$$

IA	=	indoor air concentration ( $\mu\text{g}/\text{m}^3$ )
AF	=	attenuation factor of 0.03 (unitless)
$SG_{conc}$	=	maximum soil gas concentration ( $\mu\text{g}/\text{m}^3$ )

For non-cancer health risks the calculated indoor air concentration was then used in the following equation to calculate the HQ (DTSC, 2011):

$$HQ = \frac{IA \times ET \times EF \times ED}{AT_{nc} \times 365 \frac{\text{days}}{\text{year}} \times 24 \frac{\text{hours}}{\text{day}} \times RfC}$$

Where:

IA	=	Concentration in indoor air ( $\mu\text{g}/\text{m}^3$ )
ET	=	Exposure time (hr/day)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
$AT_{nc}$	=	Averaging time for non-cancer health effects (years)
RfC	=	Reference Concentration ( $\mu\text{g}/\text{m}^3$ )



For a future resident, *ET* is 24 hr, *EF* is 350 days/year, and *ED* and *AT<sub>nc</sub>* are both 26 years (DTSC, 2011). The *RfC* is the safe (with respect to non-cancer health risks) long-term concentration of a chemical in air. *RfCs* were obtained first from DTSC (2019c), otherwise from USEPA (2019).

Cancer risks due to vapor intrusion for a particular chemical were calculated per DTSC (2011) as follows:

$$\text{Cancer Risk} = \frac{IA \times ET \times EF \times ED \times IUR}{AT_c \times 365 \frac{\text{days}}{\text{year}} \times 24 \frac{\text{hours}}{\text{day}}}$$

*IUR* is the inhalation unit risk expressed in units of (µg/m<sup>3</sup>)<sup>-1</sup>. *IURs* for carcinogenic chemicals were obtained first from DTSC (2019c), otherwise USEPA (2019). The averaging time for carcinogenic chemicals, *AT<sub>c</sub>*, is 70 years (DTSC, 2011). All other parameters are as defined previously. Cancer risks for each carcinogenic chemical were then summed to derive the CCR due to vapor intrusion.

**Table 5** shows the cancer risks for each carcinogenic chemical and the CCR. The calculated CCR ranged from 9.3E-06 to 1.5E-05 for the various sampling locations. These values exceed the negligible CCR of 1E-06 by approximately an order of magnitude. The following samples and associated CCRs exceed the 1E-06 screening level for acceptable cancer risk:

- Sample SV2-5 reported with a CCR of 1.5E-05 for chloroform
- Sample SV3-5 reported with a CCR of 9.3E-06 for benzene
- Sample SV8-50 reported with a CCR of 1.1E-05 for naphthalene
- Sample SV9-5 reported with a CCR of 1.5E-05 for benzene

The chloroform in sample SV2-5 is likely due to exterior irrigation with municipal water.

## METHANE

Methane poses two types of health hazards. First, at very high concentrations in indoor air it acts as an asphyxiant. Second, it is also explosive. Methane concentrations detected in soil vapor ranged from 7 to 15,000 ppmv at 5' bgs (**Table 6**). Hazards related to methane are evaluated by comparison to regulatory screening levels. DTSC methane guidance states that levels of 5000 ppmv or higher may require a response action, for example, fixed gas sampling, measurement of barometric pressures, periodic monitoring, or a removal action (DTSC, 2005). This value is approximately 10 percent of the Lower Explosive Limit (LEL) for methane (53,000 ppmv). On-site levels of methane greatly exceed this level at two locations, SV8-50 (9,600 ppmv) and SV9-5 (15,000 ppmv), indicating a potential hazard due to methane that likely will require mitigation.

## SUMMARY OF SCREENING HEALTH RISK ASSESSMENT

A health risk screen was conducted to evaluate potential health risks to future residents on the Site. The risk screen evaluated non-cancer and cancer health risks due to direct contact with soil (via inadvertent soil ingestion, dermal contact, and inhalation) and due to vapor intrusion. The vapor intrusion risk assessment was based on the conversion of soil vapor sample concentrations to

indoor air concentrations using the current DTSC/USEPA-recommended soil vapor attenuation factor. Health risks due to soil contact and vapor intrusion are summarized in **Table 7**.

## Soil Summary

With respect to direct soil contact, non-cancer health risks were negligible ( $HI = 0.5$ ). Cancer risks due to soil contact were also negligible based on a cumulative cancer risk of  $1.6E-07$ .

TPHg and TPHo are well below their corresponding residential use ESLs, indicating no significant health risks related to these parameters, but the maximum concentration of TPHd (2417 mg/kg) is significantly above its corresponding ESL of 260 mg/kg.

With regard to lead health risks, the site-wide 95UCLM for lead was 32 mg/kg, well below the DTSC residential screening level for lead of 80 mg/kg, indicating negligible health risks due to lead.

## Soil Vapor/VOCs Summary

With respect to vapor intrusion from VOCs, non-cancer health risks were negligible ( $HI=0.5$ ). However, calculated cancer risks were significant, approximately  $1E-05$  for each soil vapor sampling location or an order of magnitude above the negligible cancer risk benchmark of  $1E-06$ . Vapor intrusion cancer risk was due to benzene, chloroform and naphthalene. However, chloroform in soil vapor is most likely due to exterior irrigation with municipal water.

Methane concentrations at two sampling locations were sufficiently high to warrant mitigation prior to development.

If the estimated risks are representative of Site conditions, based on SCS' experience and review of published literature, the installation of a vapor intrusion mitigation system (VIMS) (i.e., vapor barrier) in areas of vapor impacts will be adequate to mitigate the potential human health risk resulting from vapor intrusion for the future Site use. Based on current regulatory standards and guidance, SCS recommends that the Client consider options that include a vapor barrier that consists of a passive-vented system with the option to convert to an active system should the future need arise. The vapor barrier should conform to the general requirements and specifications presented by the DTSC in the Vapor Intrusion Mitigation Advisory Final Revision 1, dated October 2011.

However, SCS understands that geotechnical requirements for the proposed development require the removal and recompaction of the undocumented fill soils, including the segregation and likely removal of excessive organic and other deleterious materials during grading, which may either eliminate or will at a minimum will alter the vapor intrusion conditions and the associated risks and the need for VIMS at the Site. Therefore, SCS recommends that soil vapor sampling be re-conducted at the Site after grading is complete to re-assess for possible vapor intrusion risks and the associated possible need for VIMS beneath the proposed residences at the Site.

## 6 DISCUSSION

### UNDOCUMENTED FILL ASSESSMENT AND MITIGATION



To assess the possible presence and concentrations of petroleum products, VOCs, SVOCs, OCPs, PCBs, and Title metals in the soil and soil vapor of the undocumented fill, SCS chose locations within the undocumented fill as portrayed in the C.W. La Monte and the Essentia reports as described above. To further delineate the extent of CoCs in the undocumented fill, SCS advanced seven soil borings (B1, B2, B3, B4, B9, B10, and B11) and seven soil vapor borings in the largest portion of undocumented fill, two borings (B5 and B12RR) down gradient of the largest portion of the undocumented fill within a documented fill area, and advanced an additional three borings (B6, B7, and B8) within two smaller volumes of undocumented fill interpreted to be northwest and east northeast of the larger volume of fill soil. Based on the results of this Subsurface Assessment, the two smaller undocumented fill areas and the documented fill area investigated were reported with low concentrations of TPH below applicable human health screening levels, and there is a low likelihood that the two smaller undocumented fill locations investigated in the northwestern and western portions of the Site have significant impacts from CoCs.

The soil samples collected from the borings advanced in the larger undocumented fill area were observed to be heterogeneous and varied due to the nature of placement via dump trucks. The contents of the fill as documented in the boring logs included primarily soil, and also included cobbles and oversized rock, crushed gravel, metal debris, organic debris such as landscaping waste, concrete, asphalt, brick debris, and PVC debris. The concentrations of the various CoCs in the soil samples analyzed were similarly heterogeneous. The primary CoCs above their respective human health screening levels and/or naturally occurring background concentration ranges in the case of metals include arsenic, lead, and TPH.

Regarding petroleum hydrocarbon impacts at the Site, TPHd i significantly exceeds its corresponding ESL of 260 mg/kg in six of the samples analyzed from the Site, and TPHo is significantly above the corresponding ecological risk-based ESL of 1,600 mg/kg in three of the samples analyzed from the Site. Based on our observations made during drilling and sampling, visually the petroleum hydrocarbon impacts appear to consist primarily of dumped asphalt debris, which is recommended to be screened out from the fill that is reused at the Site during the proposed grading activities at the Site. In addition, none of the soil samples analyzed for TPH were reported to be above the DEH residual saturation criteria for TPHo, TPHd, and/or TPHg; therefore, groundwater has likely not been impacted by petroleum hydrocarbons from the Site.

Regarding arsenic, the screening human health risk assessment indicates that arsenic concentrations are within the range of background, therefore this chemical was excluded from the risk calculations.

Regarding lead, the screening human health risk assessment indicates that the site-wide 95UCLM for lead was 32 mg/kg, well below the DTSC residential screening level for lead of 80 mg/kg, indicating negligible health risks due to lead. Additionally, soil sample B2-15 was further analyzed for leachability using the WET and TCLP test methods, and was reported to exceed the STLC lead leachability threshold but was below the MCCTC, indicating that soil represented by this sample would be considered a California hazardous waste if exported from the site.

For the vapor intrusion sampling and risk assessment, reported concentrations of benzene, naphthalene, and methane exceed applicable screening criteria and warrant mitigation prior to development.



In connection with the proposed redevelopment of the Site, AGS is recommending that all of the undocumented fill be removed and recompacted during grading activities. Based on our experience with other large undocumented fill sites and our knowledge of the Site, it appears that at least one environmental monitor (and quite possibly 2 or more depending on the productivity of the graders) will be required during the grading of this project in order to properly segregate and screen debris and potential impacts for the proper management of soil for the duration of grading of the undocumented fill. Extensive field verification testing will most likely need to be conducted during grading as well. Additionally, mitigation measures will likely be required to mitigation vapor intrusion and methane risks; however, soil vapor and methane are recommended to be re-assessed on representative residential lots after grading is complete.

## MITIGATION PLANNING DISCUSSION

Although an extensive investigation was conducted at the Site through the advancement of several soil borings to a maximum depth of 100 feet, SCS cautions that subsurface features and/or high levels of CoCs may exist within the undocumented fill that may not be previously sampled and analyzed. The Client is cautioned that subsurface features or high levels of CoCs may still be present at the Site despite the investigations conducted at the Site. In our experience, the only way to comprehensively evaluate the possible presence of features of concern at the Site is to conduct extensive excavation, trenching, or grading operations.

The presence of CoC-bearing soils may result in certain disclosure requirements, and mitigation efforts may require appropriate regulatory agency oversight. Qualified legal counsel should be contacted to discuss disclosure or reporting obligations, if any.

In SCS' experience, soils containing elevated concentrations of metals (i.e., more than naturally occurring or background concentrations) and other CoCs that are expected to be excavated and reused and re-compacted at the Site will need to be monitored by an environmental professional. The reused undocumented fill soils may require or will conservatively warrant the placement of a clean soil cap of approximately 2 to 3 feet thick to reduce possible exposure pathways to the subsurface. While typically reuse of soils impacted with CoCs is allowed, if detected concentrations in soil are above hazardous waste criteria upon excavation, this soil may not be able to be reused on Site. Further, depending on regulatory requirements, placement of fill soils with CoCs may necessitate waste discharge requirements and/or adherence to the San Diego Regional Water Quality Control Board issued *Conditional Waivers of Waste Discharge Requirements for Low Threat Discharges in the San Diego Region* (2019).

A Site-specific soil management plan should be developed to account for Site development activities and integrate environmental issues into the Site development process. This plan specifically accounts for Site development activities and integrates environmental issues into the Site development process. For example, a typical plan condition is the future monitoring of soil grading/removal and the appropriate handling, characterization, and disposal and or on-Site reuse or burial of soil that is likely to be considered a non-hazardous regulated waste and/or a hazardous waste. Based on SCS' experience, it is often far more cost-effective to deal with environmental issues at the time of Site redevelopment.

In addition, a Community Health and Safety Plan should be prepared to address potential issues associated with possible impacts to the community in the Site vicinity, particularly the monitoring and suppression of dust and vapors, if any, generated by on-Site activities.

## 7 CONCLUSIONS AND RECOMMENDATIONS

Based on the data obtained and reviewed as part of this investigation, laboratory results, current regulatory guidelines, and our experience and professional judgment, SCS concludes the following:

### Soil

- SCS advanced a total of 12 soil borings further assess the possible presence and concentrations of total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), and Title 22 metals in the soil of the undocumented fill beyond what was investigated by Essentia in 2004. SCS advanced seven soil borings (B1, B2, B3, B4, B9, B10, and B11) in the largest portion of undocumented fill, two borings (B5 and B12RR) down gradient of the largest portion of the undocumented fill within a documented fill area, and advanced an additional three borings (B6, B7, and B8) within two smaller volumes of undocumented fill interpreted to be northwest and east northeast of the larger volume of fill soil.
- Based on the results of this Subsurface Assessment, the two smaller undocumented fill areas and the documented fill area investigated were reported with low concentrations of TPH below applicable human health screening levels, and there is a low likelihood that the two smaller undocumented fill locations investigated in the northwestern and western portions of the Site have significant impacts from CoCs.
- The soil samples collected from the borings advanced in the larger undocumented fill area were observed to be heterogeneous and varied due to the nature of placement via dump trucks. The contents of the fill primarily included soil, and also included cobbles and oversized rock, crushed gravel, metal debris, organic debris such as landscaping waste, concrete, asphalt, brick debris, and PVC debris. The concentrations of the various constituents of concern (CoCs) in the soil samples analyzed were similarly heterogeneous. Certain soil samples were reported with TPH, various OCPs, VOCs, and SVOCs above laboratory reporting limits, as well as PCBs in one sample.
- The primary CoCs within the larger undocumented fill area above their respective human health screening levels and/or naturally occurring background concentration ranges in the case of metals include arsenic, lead, and TPH.
  - Regarding petroleum hydrocarbon impacts in soil, the screening human health risk assessment indicates that TPH as diesel (TPHd) is significantly above the corresponding San Francisco Bay Regional Water Quality Control Board Tier 1 Environmental Screening Level (ESL) of 260 milligrams per kilogram (mg/kg) in six of the samples analyzed from the Site, and TPH as oil (TPHo) is significantly above the corresponding ESL of 1,600 mg/kg (based on ecological risk only) in three of the



samples analyzed from the Site. Based on our observations made during drilling and sampling, visually the petroleum hydrocarbon impacts appear to consist primarily of dumped asphalt debris, which is recommended to be screened out from the fill that is reused at the Site during the proposed grading activities at the Site.

- Regarding arsenic, the screening human health risk assessment indicates that arsenic concentrations are within the range of background, therefore this chemical was excluded from the risk calculations.
- Regarding lead, the screening human health risk assessment indicates that the site-wide 95 upper confidence level (UCL) for lead was 32 mg/kg, well below the DTSC residential screening level for lead of 80 mg/kg and indicating negligible health risks due to lead. Additionally, soil sample B2-15 was further analyzed for leachability using the waste extraction test (WET) and toxicity characteristic leaching procedure (TCLP) test methods, and was reported to exceed the soluble threshold limit concentration (STLC) lead leachability threshold but was below the Maximum Contaminant Concentration Threshold Concentration (MCCTC), indicating that soil represented by this sample would be considered a California hazardous waste if exported from the site.
- Since the geotechnical consultant Advanced Geotechnical Solutions Inc (AGS) is recommending that all of the undocumented fill be removed and recompacted during grading activities in connection with the development of approximately 100 single-family residences at the Site, SCS recommends the soil excavation and grading be overseen by an Environmental Monitor during the grading of this project in order to properly segregate and screen debris and potential impacts for the proper management of soil for the duration of grading of the undocumented fill. The reused undocumented fill soils may require or will conservatively warrant the placement of a clean soil cap of approximately 2 to 3 feet thick to reduce possible exposure pathways to the subsurface, and/or the upper 10 feet of soils below finished grade to be below residential human health risk screening criteria.

## Groundwater

- Attempts were made to collect groundwater to assess for the possible presence of CoCs in soil borings B5, B9, B10, B11, and B12RR; however, no groundwater was encountered. Without groundwater sampling and analysis, SCS evaluated the concentrations of the primary CoCs (i.e. TPH, arsenic, and lead) that exceed either human health risk screening criteria and/or background concentrations ranges for metals in samples collected from the bottoms of the soil borings to assess the potential for migration of CoCs to groundwater. Metals are generally not leachable, and additionally, based on a review of the available data, the majority (with few exceptions) of metals concentrations reported in the bottom soil samples within the deeper soil borings (i.e., boring B-3 advanced by Essentia, and borings B4, B5, B10, and B11 advanced by SCS) are below San Diego Regional Water Quality Control Board Tier 1 Soil Screening Levels (SSLs) (2019). In addition, none of the soil samples analyzed for TPH were reported to be above the County of San Diego Department of Environmental Health (DEH) residual saturation criteria for TPHo, TPHd, and/or TPHg. Therefore, there is a low likelihood that groundwater has been impacted from the undocumented fill present at the Site.



## Soil Vapor

- For the twelve soil vapor samples collected at the Site, volatile organic compound (VOC) constituents benzene, chloroform, and naphthalene were reported above their respective laboratory reporting limits. The highest concentrations were reported to be 50 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) of benzene in SV9-5, 60  $\mu\text{g}/\text{m}^3$  of chloroform in SV2-5, and 30  $\mu\text{g}/\text{m}^3$  of naphthalene in SV8-50. However, chloroform in soil vapor is most likely due to exterior irrigation with municipal water. The twelve soil vapor samples were additionally analyzed for methane. The concentrations of methane were reported to be within the range of 71 parts per million by volume (ppmv) (SV7-5) to 15,000 ppmv (SV9-5). Eight of the soil vapor samples were reported below the laboratory reporting limits for methane.
- The results of the vapor and methane intrusion screening health risk assessment indicate that non-cancer health risks were negligible ( $\text{HI}=0.5$ ). However, cancer risks were significant, approximately  $1\text{E-}05$  for each soil vapor sampling location or an order of magnitude above the negligible cancer risk benchmark of  $1\text{E-}06$ . Vapor intrusion cancer risk was due to benzene, chloroform and naphthalene reported in samples SV2-5, SV3-5, SV8-50, and SV9-5. Methane concentrations at two sampling locations (SV8-50 and SV9-5) were sufficiently high to warrant mitigation.
- If the estimated VOC vapor and methane risks are representative of Site conditions, based on SCS' experience and review of published literature, the installation of a vapor intrusion mitigation system (VIMS) (i.e., vapor barrier) in areas of vapor impacts will be adequate to mitigate the potential human health risk resulting from vapor intrusion for the future Site use. Based on current regulatory standards and guidance, SCS recommends that the Client consider options that include a vapor barrier that consists of a passive-vented system with the option to convert to an active system should the future need arise. The vapor barrier should conform to the general requirements and specifications presented by the DTSC in the Vapor Intrusion Mitigation Advisory Final Revision 1, dated October 2011.
- However, geotechnical requirements for the proposed development require the removal and recompaction of the undocumented fill soils, including the segregation and likely removal of excessive organic and other deleterious materials during grading, which may either eliminate or will at a minimum will alter the vapor intrusion conditions and the associated risks and the need for VIMS at the Site. Therefore, SCS recommends that soil vapor sampling be re-conducted at the Site after grading is complete to re-assess for possible vapor intrusion risks and the associated possible need for VIMS beneath the proposed residences at the Site.

## Additional Recommendations

- The presence of CoC-bearing soils may result in certain disclosure requirements, and mitigation efforts may require appropriate regulatory agency oversight. Qualified legal counsel should be contacted to discuss disclosure or reporting obligations, if any.
- A Site-specific soil management plan should be developed to account for Site development activities and integrate environmental issues into the Site development. In addition, a Community Health and Safety Plan should be prepared to address potential issues associated with possible impacts to the community in the Site vicinity, particularly the monitoring and suppression of dust and vapors, if any, generated by on-Site activities.

## **8 LIKELIHOOD STATEMENTS**

Statements of “likelihood” have been made in this report. Likelihood statements are based on professional judgments of SCS. The term “likelihood,” as used herein, pertains to the probability of a match between the prediction for an event and its actual occurrence. The likelihood statement assigns a measure for a “degree of belief” for the match between the prediction for the event and the actual occurrence of the event.

The likelihood statements in this Report are made qualitatively (expressed in words). The qualitative terms can be approximately related to quantitative percentages. The term “low likelihood” is used by SCS to approximate a percentage range of 10 to 20 percent; the term “moderate likelihood” refers to an approximate percentage range of 40 to 60 percent; and the term “high likelihood” refers to an approximate percentage range of 80 to 90 percent.

## **9 REPORT USAGE AND FUTURE SITE CONDITIONS**

This Report is intended for the sole usage of the Client and the Client’s authorized representatives. Use of this Report is subject to the provisions of the fully executed Contract between the Client and SCS. Any third party usage of this Report shall be subject to the provisions of the Contract, and any unauthorized misuse of or reliance upon the Report shall be without risk or liability to SCS.

The conclusions of this Report are judged to be relevant at the time the work described in this Report was conducted. Future conditions may differ and this Report should not be relied upon to represent future Site conditions unless a qualified consultant familiar with the practice of Phase II environmental assessments in San Diego County is consulted to assess the necessity of updating this Report.

Although this Assessment has attempted to assess the likelihood that the Site has been impacted by a hazardous material/waste release, potential sources of impact may have escaped detection for reasons which include, but are not limited to: 1) our reliance on inadequate or inaccurate information rightfully provided to SCS by third parties such as public agencies and other outside sources; 2) the limited scope of this Assessment; and 3) the presence of undetected, unknown, or unreported environmental releases.

## **10 SPECIAL CONTRACTUAL CONDITIONS BETWEEN USER AND ENVIRONMENTAL PROFESSIONAL**

There were no special contractual conditions between the user of this Assessment, the environmental professional, and SCS.



## 11 REFERENCES

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## TABLES



**Table 1**  
**Soil Analytical Data for TPH,**  
**OCs, VOCs, SVOCs, and PCBs**  
11495 Cypress Canyon Road  
San Diego, California

Sample	Date	Depth	TPHg	TPHd	TPHo	OCPs							VOCs				SVOCs							PCBs		
						gamma-Chlordane	alpha-Chlordane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Other OCPs	Acetone	2-Butanone	Toluene	Other VOCs	3/4 Methylph enol	Benzoic Acid	Phenol	Butyl Benzyl Phthalate	Phen-anthrene	Bis (2-Ethylhexyl) Phalate	Other SVOCs	Aroclor 1254	Other PCBs	
			mg/kg			µg/kg							µg/kg				µg/kg							µg/kg		
Samples collected by Essentia in December 2004																										
T-5-5	12/6/2004	5	ND	ND	0.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
T-6-15	12/6/2004	15	ND	ND	0.498	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
T-7-18	12/6/2004	18	ND	ND	0.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
T-8-5	12/6/2004	5	ND	50.9	209.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1-5	12/7/2004	5	ND	1.7	2.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1-10	12/7/2004	10	ND	407.8	1,084.0	ND	ND	ND	5.1	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1-15	12/7/2004	15	ND	206.4	546.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1-20	12/7/2004	20	ND	2,417.0	6,640.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2-15	12/9/2004	15	ND	11.3	31.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2-20	12/9/2004	20	75.3	893.0	1,680.0	--	--	--	--	--	--	--	<50.0	150	8.1	ND	13	<0.50	<0.50	0.7	<0.50	<0.50	<0.50	ND	--	--
B-2-30	12/9/2004	30	ND	206.4	546.0	--	--	--	--	--	--	--	420	100	<50.0	ND	<0.50	<0.50	0.7	<0.50	<0.50	<0.50	ND	--	--	
B-2-40	12/9/2004	40	--	--	--	--	--	--	--	--	--	--	170	59	<50.0	ND	<0.50	<0.50	<0.50	<0.50	<0.50	0.6	ND	--	--	
B-3-10	12/9/2004	10	ND	2.0	3.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3-20	12/9/2004	20	ND	22.2	69.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3-30	12/9/2004	30	ND	44.5	141.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3-40	12/9/2004	40	ND	88.8	259.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4-5	12/7/2004	5	ND	3.0	13.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4-10	12/7/2004	10	ND	25.9	95.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4-15	12/7/2004	15	ND	38.7	135.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4-20	12/7/2004	20	ND	33.1	108.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5-5	12/7/2004	5	ND	1.6	9.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5-10	12/7/2004	10	ND	2.6	8.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5-15	12/7/2004	15	ND	2.7	8.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5-20	12/7/2004	20	ND	4.9	12.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6-5	12/7/2004	5	ND	147.3	603.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6-10	12/7/2004	10	ND	41.9	154.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6-15	12/7/2004	15	ND	71.9	138.0	--	--	--	--	--	--	--	82	<50.0	<50.0	ND	--	--	--	--	--	--	--	--	--	--
B-6-20	12/7/2004	20	7.16	391.4	603.0	--	--	--	--	--	--	--	<50.0	100	<50.0	ND	--	--	--	--	--	--	--	--	--	--
Samples Collected by SCS Engineers in March 2019																										
B1-1	3/22/2019	1	< 0.500	< 20.0	411	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	4.34	ND	< 50.0	< 50.0	< 2.00	ND	< 1,320	< 6,800	< 1,320	< 1,320	< 1,320	< 1,320	< 1,320	ND	< 33.0	ND
B1-5	3/22/2019	5	< 0.500	47.5	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B1-15	3/22/2019	15	< 0.500	10.1	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B1-20	3/22/2019	20	< 0.500	< 20.0	399	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	2,520	< 6,800	< 1,320	< 1,320	< 1,320	< 1,320	< 1,320	ND	--	--
B1-30	3/22/2019	30	< 0.500	125	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	683	57.9	< 2.00	ND	3,920	7,940	1,140	< 330	< 330	< 330	< 330	ND	--	--
B1-35	3/22/2019	35	< 0.500	< 20.0	390	--	--	--	--	--	--	--	497	< 50.0	< 2.00	ND	3,100	16,200	1,010	< 990	< 990	< 990	< 990	ND	--	--
B2-1	3/22/2019	1	< 0.500	< 20.0	552	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 1,320	< 6,800	< 1,320	< 1,320	< 1,320	< 1,320	< 1,320	ND	< 33.0	ND
B2-5	3/22/2019	5	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B2-15	3/22/2019	15	3.68	239	< 100	< 2.00	< 2.00	< 4.00	15.6	13.2	< 4.00	ND	306	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	< 33.0	ND
B2-20	3/22/2019	20	< 0.500	149	< 50.0	< 2.00	< 2.00	< 4.00	28.2	5.97	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	--	--
B2-25	3/22/2019	25	< 0.500	81.2	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B3-1	3/22/2019	1	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B3-5	3/22/2019	5	< 0.500	< 20.0	< 100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B3-10	3/22/2019	10	< 0.500	< 20.0	< 100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B3-15	3/22/2019	15	< 0.500	< 20.0	< 100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B3-20	3/22/2019	20	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B3-25	3/22/2019	25	< 0.500	32.8	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B3-30	3/22/2019	30	< 0.500	26.4	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B4-1	3/22/2019	1	< 0.500	< 20.0	< 100	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B4-5	3/22/2019	5	< 0.500	183	< 100	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	509	< 330	< 330	ND	--	--	
B4-10	3/22/2019	10	< 0.500	12.2	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B4-15	3/22/2019	15	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table 1**  
**Soil Analytical Data for TPH,**  
**OCs, VOCs, SVOCs, and PCBs**  
 11495 Cypress Canyon Road  
 San Diego, California

Sample	Date	Depth	TPHg	TPHd	TPHo	OCPs							VOCs				SVOCs							PCBs	
						gamma-Chlordane	alpha-Chlordane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Other OCPs	Acetone	2-Butanone	Toluene	Other VOCs	3/4 Methylphenol	Benzoic Acid	Phenol	Butyl Benzyl Phthalate	Phenanthrene	Bis (2-Ethylhexyl) Phalate	Other SVOCs	Aroclor 1254	Other PCBs
B4-20	3/22/2019	20	< 0.500	< 20.0	< 100	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B4-25	3/22/2019	30	< 0.500	28.5	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B4-30	3/22/2019	40	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B4-40	3/22/2019	40	< 0.500	65.2	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B4-45	3/22/2019	45	< 0.500	84.3	< 50.0	--	--	--	--	--	--	--	< 50.0	< 50.0	< 2.00	ND	< 1,320	< 6,800	< 1,320	< 1,320	< 1,320	< 1,320	ND	--	--
B4-50	3/22/2019	50	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B4-55	3/22/2019	55	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
Samples Collected by SCS Engineers in November 2019																									
B5-2.5	11/14/2019	2.5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B5-5	11/14/2019	5	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	--
B5-7.5	11/14/2019	7.5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	< 33.0
B5-9	11/14/2019	9	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	< 33.0
B6-2.5	11/13/2019	2.5	< 0.500	151	108	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	--
B6-5	11/13/2019	5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B6-10	11/13/2019	10	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	< 33.0
B6-15	11/13/2019	15	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B6-20	11/13/2019	20	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B7-2.5	11/13/2019	2.5	< 0.500	46.5	69.7	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 8,250	< 42,500	< 8,250	< 8,250	< 8,250	< 8,250	< 8,250	ND	< 33.0
B7-5	11/13/2019	5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B7-10	11/13/2019	10	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	--
B7-15	11/13/2019	15	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B8-2.5	11/13/2019	2.5	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	< 33.0
B8-10	11/13/2019	10	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B9-2.5	11/12/2019	2.5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B9-5	11/12/2019	5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	--
B9-10	11/12/2019	10	< 0.500	18.6	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	< 33.0	ND
B9-15	11/12/2019	15	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B9-20	11/12/2019	20	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	--
B9-25	11/12/2019	25	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-2.5	11/11/2019	2.5	< 0.500	< 10.0	< 50.0	3.33	8.34	< 4.00	25.4	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-5	11/11/2019	5	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-10	11/11/2019	10	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	< 33.0
B10-15	11/11/2019	15	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-20	11/11/2019	20	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-25	11/11/2019	25	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-30	11/11/2019	30	< 0.500	< 10.0	< 50.0	< 2.00	2.54	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	--
B10-35	11/11/2019	35	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-40	11/11/2019	40	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-45	11/11/2019	45	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-50	11/11/2019	50	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-55	11/11/2019	55	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-57.5	11/11/2019	57.5	--	--	--	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-60	11/11/2019	60	< 0.500	< 10.0	< 50.0	< 2.00	2.04	< 4.00	11.2	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-62.5	11/11/2019	62.5	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-65	11/11/2019	65	< 0.500	467	4,980	--	--	--	--	--	--	--	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	< 330	ND	< 33.0
B10-67.5	11/11/2019	67.5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-70	11/11/2019	70	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-72.5	11/11/2019	72.5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-75	11/11/2019	75	< 0.500	193	1,130	--	--	--	--	--	--	--													



**Table 1**  
**Soil Analytical Data for TPH,**  
**OCPs, VOCs, SVOCs, and PCBs**  
11495 Cypress Canyon Road  
San Diego, California

Sample	Date	Depth	TPHg	TPHd	TPHo	OCPs							VOCs				SVOCs							PCBs	
						gamma-Chlordane	alpha-Chlordane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Other OCPs	Acetone	2-Butanone	Toluene	Other VOCs	3/4 Methylphenol	Benzoic Acid	Phenol	Butyl Benzyl Phthalate	Phenanthrene	Bis (2-Ethylhexyl) Phthalate	Other SVOCs	Aroclor 1254	Other PCBs
B10-90	11/11/2019	90	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-96	11/11/2019	96	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-100	11/11/2019	100	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B11-2.5	11/12/2019	2.5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B11-5	11/12/2019	5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B11-10	11/12/2019	10	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	ND	--	--
B11-12.5	11/12/2019	12.5	< 0.500	< 10.0	< 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B11-15	11/12/2019	15	< 0.500	< 10.0	<b>74.8</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B11-17.5	11/12/2019	17.5	< 0.500	< 10.0	< 50.0	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B11-20	11/12/2019	20	< 0.500	<b>196</b>	<b>747</b>	< 2.00	< 2.00	< 4.00	<b>27.1</b>	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	< 33.0	ND
B11-22.5	11/12/2019	22.5	< 0.500	< 10.0	<b>63.5</b>	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
B11-25	11/12/2019	25	< 0.500	<b>190</b>	<b>556</b>	--	--	--	--	--	--	--	< 50.0	< 50.0	< 2.00	ND	< 1320	< 6,800	< 1,320	< 1,320	< 1,320	< 1,320	ND	--	--
B11-27.5	11/12/2019	27.5	< 0.500	< 10.0	<b>669</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B11-30	11/12/2019	30	< 0.500	<b>279</b>	<b>956</b>	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	--	--	--	--	< 330	< 1,700	< 330	< 330	< 330	< 330	ND	< 33.0	ND
B11-37.5	11/12/2019	37.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 33.0	ND
B11-40	11/12/2019	40	< 0.500	<b>339</b>	<b>1,990</b>	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	<b>3,010</b>	< 330	ND	<b>120</b>	ND
B11-50	11/12/2019	50	< 0.500	<b>131</b>	<b>667</b>	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 1320	< 6,800	< 1,320	< 1,320	<b>1,970</b>	< 1,320	ND	--	--
B12RR-10	11/15/2019	10	< 0.500	<b>179</b>	<b>87.1</b>	< 2.00	< 2.00	< 4.00	< 4.00	< 4.00	< 4.00	ND	< 50.0	< 50.0	< 2.00	ND	< 330	< 1,700	< 330	< 330	< 330	< 330	ND	< 33.0	ND
SFRWQCB ESLs (Residential) or EPA RSLs (Residential)*			<b>100</b>	<b>260</b>	<b>1,600</b>	<b>1,700*</b>	<b>1,700*</b>	<b>1,900</b>	<b>2,000</b>	<b>1,900</b>	<b>34</b>		<b>61,000,000</b>	<b>27,000,000</b>	<b>4,900,000</b>		<b>NE</b>	<b>250,000,000</b>	<b>19,000,000</b>	<b>290,000</b>	<b>NE</b>	<b>39,000</b>		<b>240</b>	
DEH Residual Saturation			<b>5,600</b>	<b>10,000</b>	<b>14,000</b>																				

**Notes :**  
Soil samples collected by SCS Engineers on March 22, and November 11 through November 15, 2019, and analyzed for total petroleum hydrocarbons as gasoline (TPHg), as diesel (TPHd) and as oil (TPHo) in general accordance with EPA Method 8015B, for volatile organic compounds (VOCs) in general accordance with EPA Method 8260, for semi-volatile organic compounds (SVOCs) in general accordance with 8270C, for organochlorine pesticides (OCs) in general accordance with EPA Method 8081, and for polychlorinated biphenyls (PCBs) in general accordance with EPA Method 8082  
TPHg, TPHd, and TPHo are provided in milligrams per kilogram (mg/kg), and OCPs, VOCs, SVOCs, and PCBs are provided in micrograms per kilogram (µg/kg)  
< : result less than the indicated laboratory reporting limit  
**Bold** font indicates sample above the laboratory reporting limit  
ND = [Group of] constituents not reported above each respective laboratory limit. Please refer to the laboratory analytical report for a full listing of analytes and corresponding laboratory reporting limits.  
-- indicates sample was not analyzed for the constituent or group of constituents  
NE: Not established  
ESLs: San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, 2019 (Rev. 2)  
DEH Residual Saturation - Petroleum residual non-aqueous phase liquids (NAPL) saturation levels for silty sand, from the County of San Diego Department of Environmental Health Site Assessment and Mitigation (SAM) Manual, Section 5, dated 1/20/2000  
**Red font** = Reported concentration exceeds applicable screening criteria for ESLs.  
1: SFRWQCB ESLs were used for TPHg, TPHd, and TPHo thresholds  
\*: With the exception of the TPHg, TPHd, and TPHo values, Environmental Protection Agency Regional Screening Levels (EPA RSLs) for residential users, November 2019 were applied to the other constituents  
^: Constituents gamma-chlordane and alpha-chlordane were not listed on RSLs. The Soil Tier 1 ESL for chlordane was used (8.5 mg/kg)

**Table 2**  
**Soil Analytical Data for Title 22 Metals**  
11495 Cypress Canyon Road  
San Diego, California

Sample	Date	Depth	Antimony	Arsenic	Beryllium	Barium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Vanadium	Zinc	Other Metals	STLC, Lead	TCLP, Lead	STLC, Arsenic
			mg/kg													mg/L	mg/L	mg/L
Samples collected by Essentia in December 2004																		
T-5-5	12/6/2004	5	ND	2.13	1.18	80.0	3.18	4.85	3.96	5.16	ND	3.16	6.23	20.2	ND	--	--	--
T-6-15	12/6/2004	15	ND	2.95	0.957	178	3.48	3.18	3.52	7.86	ND	3.24	8.47	20.3	ND	--	--	--
T-7-18	12/6/2004	18	ND	3.75	0.986	430	3.10	2.38	3.30	5.93	ND	2.60	6.79	17.0	ND	--	--	--
T-8-5	12/6/2004	5	ND	4.00	0.913	149	5.87	5.44	6.77	8.56	ND	4.69	19.1	83.0	ND	--	--	--
B-1-5	12/7/2004	5	ND	6.32	0.412	88.9	4.16	3.79	4.56	6.15	ND	2.87	19.3	21.2	ND	--	--	--
B-1-10	12/7/2004	10	ND	7.11	0.309	62.7	12.4	4.24	7.82	12.2	ND	6.18	21.4	33.9	ND	--	--	--
B-1-15	12/7/2004	15	ND	7.44	0.523	104	7.64	4.13	21.2	30.6	ND	5.74	20.3	40.9	ND	--	--	--
B-1-20	12/7/2004	20	ND	5.51	ND	101	6.11	3.79	4.00	5.05	0.269	10.8	17.8	22.8	ND	--	--	--
B-2-15	12/9/2004	15	ND	6.44	0.934	155	4.59	6.69	7.41	9.55	ND	4.86	20.2	30.0	ND	--	--	--
B-2-20	12/9/2004	20	ND	ND	ND	33.3	10.1	3.02	4.22	14.3	ND	3.29	31.7	35.7	ND	--	--	--
B-2-30	12/9/2004	30	ND	6.76	0.371	84.5	7.91	5.40	7.32	22.7	ND	3.94	35.5	49.3	ND	--	--	--
B-3-10	12/9/2004	10	ND	1.79	ND	95.3	11.5	10.9	23.1	3.31	ND	7.82	51.2	28.8	ND	--	--	--
B-3-20	12/9/2004	20	ND	6.43	0.316	117	9.08	6.61	16.9	6.23	ND	5.95	31.8	26.1	ND	--	--	--
B-3-30	12/9/2004	30	ND	6.60	0.477	72.2	17.2	5.28	15.6	3.60	1.98	5.45	20.3	30.4	ND	--	--	--
B-3-40	12/9/2004	40	ND	7.52	ND	90.1	10.4	6.60	13.9	8.30	ND	6.16	30.6	29.4	ND	--	--	--
B-4-5	12/7/2004	5	ND	3.31	0.417	137	8.40	5.16	13.1	7.65	ND	4.64	22.5	27.1	ND	--	--	--
B-4-10	12/7/2004	10	ND	2.69	0.899	76.1	4.42	7.78	5.48	8.95	ND	5.32	11.0	25.6	ND	--	--	--
B-4-15	12/7/2004	15	ND	5.51	0.991	103	7.51	7.59	10.4	9.63	ND	6.27	20.0	43.6	ND	--	--	--
B-4-20	12/7/2004	20	ND	22.6	0.809	118	8.32	4.84	8.31	9.74	0.255	4.85	20.6	36.0	ND	--	--	--
B-5-5	12/7/2004	5	ND	4.71	0.468	64.2	6.03	3.97	4.44	4.49	ND	3.58	21.5	20.7	ND	--	--	--
B-5-10	12/7/2004	10	ND	7.97	0.594	124	3.56	5.72	4.87	9.55	ND	4.58	22.5	26.1	ND	--	--	--
B-5-15	12/7/2004	15	ND	7.16	0.703	122	5.43	5.65	5.66	8.64	ND	4.47	19.1	28.9	ND	--	--	--
B-5-20	12/7/2004	20	ND	6.49	0.665	107	4.85	5.11	5.32	8.11	ND	4.44	18.3	27.7	ND	--	--	--
B-6-5	12/7/2004	5	ND	4.74	0.309	58.4	4.97	3.05	4.90	7.68	ND	2.97	14.3	34.4	ND	--	--	--
B-6-10	12/7/2004	10	ND	6.97	0.953	99.4	4.79	6.24	5.52	9.07	ND	4.86	18.5	27.7	ND	--	--	--
B-6-15	12/7/2004	15	ND	6.82	0.702	93.1	6.24	6.16	7.78	11.1	ND	4.58	25.3	35.0	ND	--	--	--
B-6-20	12/7/2004	20	ND	4.23	0.331	92.4	11.5	5.84	8.62	48.9	ND	5.76	29.8	65.1	ND	--	--	--
Samples Collected by SCS Engineers in March 2019																		
B1-1	3/22/2019	1	< 0.500	2.18	< 0.500	73.7	12.8	7.38	16.2	6.54	< 0.500	7.23	35.3	31.8	Cadmium (0.768)	--	--	--
B1-5	3/22/2019	5	< 0.500	6.95	0.848	75.3	5.72	6.59	6.84	7.23	< 0.500	4.55	17.9	22.8	Cadmium (0.568)	--	--	--
B1-15	3/22/2019	15	--	0.995	--	--	--	--	--	6.36	--	--	--	--	--	--	--	--
B1-20	3/22/2019	20	< 0.500	5.00	< 0.500	221	23.1	5.06	14.9	25.7	2.01	6.74	29.4	49.9	Cadmium (0.893)	--	--	--
B1-30	3/22/2019	30	0.962	7.64	0.506	107	8.43	4.12	11.8	25.3	0.601	4.12	28.4	42.5	Cadmium (0.919)	--	--	--
B2-1	3/22/2019	1	1.22	9.80	< 0.500	192	9.86	5.08	10.7	5.68	0.509	5.62	29.3	27.7	Cadmium (0.854)	--	--	--
B2-5	3/22/2019	5	0.600	8.20	< 0.500	125	27.1	5.82	69.3	13.5	2.16	10.4	32.2	41.6	Cadmium (1.05)	--	--	--
B2-15	3/22/2019	15	0.766	6.60	< 0.500	416	15.1	5.11	13.6	358	0.898	5.78	31.1	384	Cadmium (1.99)	14.0	< 0.500	--
B2-20	3/22/2019	20	< 0.500	2.21	< 0.500	197	6.12	5.99	15.2	5.85	< 0.500	2.55	38.9	40.8	Cadmium (0.988)	--	--	--



**Table 2**  
**Soil Analytical Data for Title 22 Metals**  
11495 Cypress Canyon Road  
San Diego, California

Sample	Date	Depth	Antimony	Arsenic	Beryllium	Barium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Vanadium	Zinc	Other Metals	STLC, Lead	TCLP, Lead	STLC, Arsenic
			mg/kg													mg/L	mg/L	mg/L
B3-1	3/22/2019	1	--	--	--	--	--	--	--	6.49	--	--	--	--	--	--	--	--
B3-5	3/22/2019	5	--	--	--	--	--	--	--	5.1	--	--	--	--	--	--	--	--
B3-10	3/22/2019	10	--	--	--	--	--	--	--	12.2	--	--	--	--	--	--	--	--
B3-15	3/22/2019	15	--	--	--	--	--	--	--	12.3	--	--	--	--	--	--	--	--
B3-20	3/22/2019	20	--	--	--	--	--	--	--	27.8	--	--	--	--	--	--	--	--
B3-25	3/22/2019	25	--	--	--	--	--	--	--	5.47	--	--	--	--	--	--	--	--
B3-30	3/22/2019	30	--	--	--	--	--	--	--	7.82	--	--	--	--	--	--	--	--
B4-1	3/22/2019	1	< 0.500	4.60	0.968	110	6.73	5.05	6.87	6.29	< 0.500	4.21	21.8	15.9	Cadmium (0.549)	--	--	--
B4-5	3/22/2019	5	0.902	1.22	< 0.500	270	10.3	7.95	15.2	2.87	< 0.500	5.76	37.5	24.9	Cadmium (0.764)	--	--	--
B4-10	3/22/2019	10	< 0.500	6.57	< 0.500	118	9.30	5.82	11.3	5.32	0.612	4.92	28.2	29.0	Cadmium (0.776)	--	--	--
B4-15	3/22/2019	15	--	7.85	--	--	--	--	--	4.67	--	--	--	--	ND	--	--	--
B4-20	3/22/2019	20	< 0.500	3.78	< 0.500	55.1	15.2	3.57	7.42	9.85	1.83	3.50	21.2	25.4	Cadmium (0.652)	--	--	--
B4-25	3/22/2019	30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B4-30	3/22/2019	40	--	10.2	--	23.0	--	--	--	7.02	--	--	--	--	--	--	--	--
B4-40	3/22/2019	40	< 0.500	8.94	0.909	88.9	5.88	3.80	6.86	5.58	< 0.500	3.61	21.3	25.2	Cadmium (0.71)	--	--	--
B4-45	3/22/2019	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B4-50	3/22/2019	50	< 0.500	2.61	0.612	224	7.02	4.40	14.2	8.17	< 0.500	3.98	22.1	26.4	Cadmium (0.631)	--	--	--
B4-55	3/22/2019	55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Samples Collected by SCS Engineers in November 2019																		
B5-2.5	11/14/2019	2.5	--	2.62	--	--	--	--	--	3.25	--	--	--	--	--	--	--	--
B5-5	11/14/2019	5	< 0.500	3.82	1.24	181	2.69	2.17	3.75	5.57	< 0.500	2.11	4.95	10.3	ND	--	--	--
B5-7.5	11/14/2019	7.5	--	14.9	--	--	--	--	--	9.94	--	--	--	--	--	--	--	--
B5-9	11/14/2019	9	< 0.500	3.65	0.512	55.3	3.71	2.58	2.7	6.65	< 0.500	2.27	8.24	10.6	ND	--	--	--
B6-2.5	11/13/2019	2.5	< 0.500	3.42	< 0.500	110	60.5	3.30	15.1	6.86	8.64	9.78	8.75	19.4	ND	--	--	--
B6-5	11/13/2019	5	--	1.57	--	--	--	--	--	5.17	--	--	--	--	--	--	--	--
B6-10	11/13/2019	10	< 0.500	4.68	< 0.500	49.5	6.47	3.85	5.39	5.29	< 0.500	2.39	15.6	16.1	ND	--	--	--
B6-15	11/13/2019	15	--	4.84	--	--	--	--	--	6.39	--	--	--	--	--	--	--	--
B6-20	11/13/2019	20	< 0.500	0.485	1.30	186	2.63	3.14	2.20	6.49	< 0.500	1.66	5.80	13.5	ND	--	--	--
B7-2.5	11/13/2019	2.5	1.03	3.36	< 0.500	46.4	8.20	1.96	6.33	6.56	0.707	2.80	11.4	10.8	ND	--	--	--
B7-5	11/13/2019	5	--	4.17	--	--	--	--	--	7.21	--	--	--	--	--	--	--	--
B7-10	11/13/2019	10	1.22	4.06	< 0.500	136	8.86	2.17	5.11	5.49	1.13	2.22	8.75	16.7	ND	--	--	--
B7-15	11/13/2019	15	--	3.76	--	--	--	--	--	3.99	--	--	--	--	--	--	--	--
B8-2.5	11/13/2019	2.5	1.70	7.81	< 0.500	458	3.6	2.55	4.31	6.19	< 0.500	2.17	7.43	14.8	ND	--	--	--
B8-10	11/13/2019	10	< 0.500	2.55	< 0.500	168	4.69	2.34	4.97	8.34	< 0.500	2.87	5.96	18.0	ND	--	--	--
B9-5	11/12/2019	5	--	12.1	--	--	--	--	--	10.6	--	--	--	--	--	--	--	--
B9-7.5	11/12/2019	7.5	--	53.8	--	--	--	--	--	--	--	--	--	--	--	--	--	0.993
B9-10	11/12/2019	10	< 0.500	11.5	< 0.500	84.7	8.28	5.92	7.16	7.60	< 0.500	4.10	33.4	25.3	ND	--	--	--
B9-15	11/12/2019	15	--	4.63	--	--	--	--	--	5.73	--	--	--	--	--	--	--	--
B9-20	11/12/2019	20	0.790	8.45	< 0.500	184	7.65	2.93	8.69	29.3	0.759	3.40	21.9	29.9	ND	--	--	--
B9-25	11/12/2019	25	--	8.08	--	--	--	--	--	9.00	--	--	--	--	--	--	--	--

**Table 2**  
**Soil Analytical Data for Title 22 Metals**  
11495 Cypress Canyon Road  
San Diego, California

Sample	Date	Depth	Antimony	Arsenic	Beryllium	Barium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Vanadium	Zinc	Other Metals	STLC, Lead	TCLP, Lead	STLC, Arsenic
			mg/kg													mg/L	mg/L	mg/L
B10-2.5	11/11/2019	2.5	--	1.03	--	--	--	--	--	3.79	--	--	--	--	ND	--	--	--
B10-5	11/11/2019	5	--	1.69	--	--	--	--	--	4.79	--	--	--	--	ND	--	--	--
B10-10	11/11/2019	10	< 0.500	5.03	< 0.500	104	13.3	5.86	13.3	13.3	< 0.500	5.47	34.0	41.9	ND	--	--	--
B10-15	11/11/2019	15	--	2.23	--	--	--	--	--	2.66	--	--	--	--	ND	--	--	--
B10-20	11/11/2019	20	1.90	2.83	< 0.500	87.1	14.7	3.59	9.69	7.75	0.644	5.24	24.9	55.5	ND	--	--	--
B10-25	11/11/2019	25	--	2.19	--	--	--	--	--	8.25	--	--	--	--	ND	--	--	--
B10-30	11/11/2019	30	< 0.500	1.40	< 0.500	81.7	8.52	6.47	10.5	3.21	< 0.500	3.44	45.7	27.3	ND	--	--	--
B10-35	11/11/2019	35	--	4.93	--	--	--	--	--	6.20	--	--	--	--	ND	--	--	--
B10-40	11/11/2019	40	< 0.500	7.41	< 0.500	126	4.25	2.88	5.95	6.45	0.733	2.22	14.5	23.0	ND	--	--	--
B10-42.5	11/11/2019	42.5	--	--	--	--	--	--	--	2.37	--	--	--	--	--	--	--	--
B10-45	11/11/2019	45	--	4.73	--	--	--	--	--	99.8	--	--	--	--	--	1.62	< 0.500	--
B10-47.5	11/11/2019	47.5	--	--	--	--	--	--	--	19.6	--	--	--	--	--	--	--	--
B10-50	11/11/2019	50	< 0.500	2.93	< 0.500	99.7	11.4	5.01	11.6	7.67	0.966	4.54	30.1	33.0	ND	--	--	--
B10-55	11/11/2019	55	--	0.503	--	--	--	--	--	1.67	--	--	--	--	--	--	--	--
B10-60	11/11/2019	60	< 0.500	4.30	< 0.500	72.2	11.0	2.70	5.16	6.12	0.550	3.63	23.0	420	ND	--	--	--
B10-65	11/11/2019	65	--	3.05	--	--	--	--	--	2.58	--	--	--	--	--	--	--	--
B10-70	11/11/2019	70	< 0.500	2.90	< 0.500	82.4	12.5	4.11	6.55	7.40	< 0.500	3.05	44.9	20.6	ND	--	--	--
B10-75	11/11/2019	75	--	19.4	--	--	--	--	--	42.4	--	--	--	--	--	--	--	--
B10-77.5	11/11/2019	77.5	--	15.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-80	11/11/2019	80	0.519	5.56	< 0.500	77.5	4.82	4.17	6.04	8.75	< 0.500	3.73	19.6	27.4	ND	--	--	--
B10-85	11/11/2019	85	--	10.7	--	--	--	--	--	6.44	--	--	--	--	--	--	--	--
B10-90	11/11/2019	90	< 0.500	5.92	< 0.500	106	9.04	4.82	10.5	10.3	< 0.500	4.11	27.9	34.1	ND	--	--	--
B10-96	11/11/2019	96	--	6.16	--	--	--	--	--	8.89	--	--	--	--	--	--	--	--
B10-100	11/11/2019	100	< 0.500	6.58	< 0.500	103	16.2	5.06	10.3	8.62	2.58	5.35	25.6	46.6	ND	--	--	--
B11-5	11/12/2019	5	--	8.15	--	--	--	--	--	9.24	--	--	--	--	--	--	--	--
B11-10	11/12/2019	10	< 0.500	7.32	< 0.500	97.6	15.5	4.34	19.7	7.23	0.863	7.65	27.4	31.8	ND	--	--	--
B11-15	11/12/2019	15	--	9.30	--	--	--	--	--	11.7	--	--	--	--	--	--	--	--
B11-20	11/12/2019	20	< 0.500	3.98	< 0.500	111	26.1	10.2	15.6	47.4	0.509	8.14	62.6	130	ND	--	--	--
B11-22.5	11/12/2019	22.5	--	--	--	--	--	--	--	8.15	--	--	--	--	--	--	--	--
B11-25	11/12/2019	25	--	10.3	--	--	--	--	--	92.9	--	--	--	--	--	3.79	< 0.500	--
B11-27.5	11/12/2019	27.5	--	--	--	--	--	--	--	20.3	--	--	--	--	--	--	--	--
B11-30	11/12/2019	30	< 0.500	9.74	< 0.500	121	17.1	4.54	11.5	37.7	2.92	9.60	32.2	40.6	ND	--	--	--
B11-40	11/12/2019	40	2.51	5.71	< 0.500	56.4	9.43	3.29	14.7	51.4	0.720	8.16	16.3	30.8	Cadmium (0.578)	--	--	--
B11-50	11/12/2019	50	< 0.500	7.42	< 0.500	93.4	16.3	6.60	16.7	53.6	1.29	11.5	31.9	48.9	Cadmium (0.549)	--	--	--
B12RR-10	11/15/2019	10	< 0.500	6.75	1.56	188	21.4	6.06	5.46	8.17	0.893	5.82	9.62	18.3	Selenium (0.675)	--	--	--
<sup>1</sup> EPA RSLs (Residential)			31	0.68	160	15,000	120,000	23	3,100	80*	390	840	390	23,000				
<sup>2</sup> SFRWQCB ESLs (Residential)			100	260.0	1,600	--	--	--	--	--	--	--	--	--				



**Table 2**  
**Soil Analytical Data for Title 22 Metals**

11495 Cypress Canyon Road  
San Diego, California

Sample	Date	Depth	Antimony	Arsenic	Beryllium	Barium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Vanadium	Zinc	Other Metals	STLC, Lead	TCLP, Lead	STLC, Arsenic
mg/kg																mg/L	mg/L	mg/L

**Notes :**

Soil samples collected by SCS Engineers on March 22, and November 11 through November 15, 2019, and analyzed for Title 22 Metals in general accordance with EPA Method 6010.

Title 22 Metals results provided in milligrams per kilogram (mg/kg )

STLC: Soluble Threshold Limit Concentration

TCLP: Toxicity Characteristic Leaching Procedure

< : result less than the indicated laboratory reporting limit

**Bold** font indicates sample above the laboratory reporting limit

ND = [Group of] constituents not reported above each respective laboratory limit. Please refer to the laboratory analytical report for a full listing of analytes and corresponding laboratory reporting limits.

– indicates sample was not analyzed or not applicable for the constituent or group of constituents

\* = For lead, DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note, HERO HHRA Note Number: 3, April 2019 is used in lieu of an RSL.

**Red** font indicates sample above naturally occurring background concentrations for arsenic

**Highlighted** cells indicate sample is above the DTSC HERO Note 3 threshold for total lead and/or lead leachability (i.e. STLC) where indicated

1: EPA RSLs = Environmental Protection Agency Regional Screening Levels for residential users, November 2019

2: ESLs: San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, 2019 (Rev. 2)

With the exception of samples B9-5, B9-7.5, B10-75, and B10-77.5, reported arsenic detections are below 12 mg/kg and considered within naturally occurring background concentrations as a determination in the Southern California Regional Background Arsenic Concentration in Soil, by G. Chernoff, W. Bosan, D. Oudiz, and California Department of Toxic Substances Control, 2008 Society of Toxicology Annual Meeting.

**Table 3**  
**Soil Vapor Sample Analytical Results**  
11495 Cypress Canyon Road  
San Diego, California

Sample ID	Depth	Date	Benzene	Chloroform	Naphthalene	Other VOCs	Methane
			µg/m3				ppmv
SV1-5	5	11/14/2019	< 20	< 20	< 20	ND	< 10
SV2-5	5	11/14/2019	< 20	<b>60</b>	< 20	ND	< 10
SV3-5	5	11/14/2019	<b>30</b>	< 20	< 20	ND	< 10
SV4-5	5	11/14/2019	< 20	< 20	< 20	ND	< 10
SV5-5	5	11/14/2019	< 20	< 20	< 20	ND	< 10
SV6-5	5	11/14/2019	< 20	< 20	< 20	ND	< 10
SV7-5	5	11/14/2019	< 20	< 20	< 20	ND	<b>71</b>
SV8-25	25	11/14/2019	< 20	< 20	< 20	ND	<b>3,400</b>
SV8-50	50	11/14/2019	< 20	< 20	<b>30</b>	ND	<b>9,600</b>
SV9-5	5	11/14/2019	<b>50</b>	< 20	< 20	ND	<b>15,000</b>
SV10-5	5	11/14/2019	< 20	< 20	< 20	ND	< 10
SV11-5	5	11/14/2019	< 20	< 20	< 20	ND	< 10

**Notes :**

Soil vapor samples collected by SCS Engineers on November 14, 2019, and analyzed for volatile organic compounds (VOCs) in general accordance with EPA Method 8260SV. Soil vapor samples were also analyzed for methane in general accordance with EPA Method 8015M. Results provided in micrograms per cubic meter (µg/m3) for VOCs and parts per million in vapor (ppmv) for methane.

< : results less than the indicated laboratory reporting limit

**Bold** font indicates sample above the laboratory reporting limit.

ND = group of constituents not reported above each respective laboratory limit. Please refer to the laboratory analytical report for a full listing of analytes and corresponding laboratory reporting limits.



Table 4

## Residential Health Risk Screen of Chemicals Detected in Soil

11495 Cypress Canyon Road  
San Diego, California

Chemical	Max Site-Wide Conc	Residential Non-Cancer-Based RSL <sup>1</sup> (mg/kg)	Residential Cancer-Based RSL <sup>1</sup> (mg/kg)	Hazard Quotient	Cancer Risk
Metals (mg/kg)					
Antimony	2.5	3.1E+01	NC	8.1E-02	9.8E-10 2.2E-09        7.7E-10
Barium	458	1.5E+04	NC	3.1E-02	
Beryllium	1.56	1.6E+01	1.6E+03	9.8E-02	
Cadmium	1.99	7.1E+01	9.1E+02	2.8E-02	
Chromium (as III)	60.5	1.2E+05	NC	5.0E-04	
Copper	69.3	3.1E+03	NC	2.2E-02	
Lead	358	NA (See text)	NA (See text)		
Molybdenum	8.64	3.9E+02	NC	2.2E-02	
Nickel	11.5	8.2E+02	1.5E+04	1.4E-02	
Selenium	0.675	3.9E+02	NC	1.7E-03	
Vanadium	62.6	3.9E+02	NC	1.6E-01	
Zinc	420	2.3E+04	NC	1.8E-02	
Organic Chemicals ( µg/kg)					
Acetone	683	6.10E+04	NC	1.1E-05	1.8E-09 4.9E-09 2.0E-09 1.3E-08 6.9E-09 1.3E-07 1.5E-11
Benzoic acid	16,200	2.50E+05	NC	6.5E-05	
2-Butanone	57.9	2.70E+04	NC	2.1E-06	
Butyl benzyl phthalate	509	1.3E+04	2.9E+02	3.9E-05	
alpha-Chlordane	8.34	3.5E+01	1.7E+00	2.4E-04	
gamma-Chlordane	3.33	3.5E+01	1.7E+00	9.5E-05	
4,4'-DDE	25.4	2.3E+01	2.0E+00	1.1E-03	
DDT	13.2	3.7E+01	1.9E+00	3.6E-04	
Dieldrin	4.34	3.2E+00	3.4E-02	1.4E-03	
Diethylhexylphthalate	0.6	1.3E+03	3.9E+01	4.6E-07	
3- and 4-Methylphenol	3,920	3.2E+03	NC	1.2E-03	
Phenanthrene	1,970	NA			
Phenol	1,140	1.9E+04	NC	6.0E-05	
Toluene	8.1	1.1E+03	NC	7.4E-06	
Hazard Index <sup>2</sup>  Cumulative Cancer Risk <sup>3</sup>					
				4.8E-01	
					1.6E-07

NA = Not applicable or not available.

NC = Not carcinogenic.

<sup>1</sup>RSL = Regional Screening Level. Obtained first from DTSC (2019), otherwise from USEPA (2019).<sup>2</sup>A Hazard Index of 1 or less indicates negligible non-cancer health risks and is supportive of a "no further action" (NFA) decision by DTSC (DTSC, 2015).<sup>3</sup>A Cumulative Cancer Risk of 1E-06 or less indicates negligible cancer risks and is supportive of an NFA decision by DTSC (2015).

**Table 5**

**Calculation of Vapor Intrusion Health Risks for Each Soil Vapor Location Based on an Attenuation Factor (AF) of 0.03 and Assuming Residential Use**

**11495 Cypress Canyon Road  
San Diego, California**

Sample ID	Depth (ft)	Chemicals Detected	Soil Vapor Conc ( $\mu\text{g}/\text{m}^3$ )	Attenuation Factor	Calculated Indoor Air Conc ( $\mu\text{g}/\text{m}^3$ )	RfC <sup>2</sup> ( $\mu\text{g}/\text{m}^3$ )	IUR <sup>3</sup> ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Hazard Index <sup>4</sup>	Cumulative Cancer Risk <sup>5</sup>
SV2-5	5	Chloroform	60	0.03	1.8	98	2.3E-05	0.018	1.5E-05
SV3-5	5	Benzene	30	0.03	0.9	3	2.9E-05	0.288	9.3E-06
SV8-50	50	Naphthalene	30	0.03	0.9	3	3.4E-05	0.288	1.1E-05
SV9-5	5	Benzene	50	0.03	1.5	3	2.9E-05	0.479	1.5E-05

<sup>1</sup>Risks are only shown for soil vapor sampling locations where a chemical was detected in soil vapor. Only one chemical was detected at these sampling locations.

<sup>2</sup>RfC = Reference Concentration. Used to calculate non-cancer health risks (Hazard Index). Values obtained from DTSC (2019).

<sup>3</sup>IUR = Inhalation Unit Risk. Used to calculate cancer risks. Values obtained from DTSC (2019).

<sup>4</sup>A Hazard Index of 1 or less indicates no significant risk of non-cancer health risks and supports a DTSC No Further Action (NFA) (DTSC, 2015).

<sup>5</sup>A Cumulative Cancer Risk of 1E-06 indicates negligible cancer risk and supports a DTSC NFA (DTSC, 2015).

Yellow highlight indicates health risks above DTSC and OEHHA negligible risk benchmarks.



**Table 6**

**Methane in Soil Vapor**

**11495 Cypress Canyon Road  
San Diego, California**

<b>Sample ID</b>	<b>Depth (ft)</b>	<b>Methane (ppmv)</b>
SV1-5	5	< 10
SV2-5	5	< 10
SV3-5	5	< 10
SV4-5	5	< 10
SV5-5	5	< 10
SV6-5	5	< 10
SV7-5	5	<b>71</b>
SV8-25	25	<b>3,400</b>
SV8-50	50	<b>9,600</b>
SV9-5	5	<b>15,000</b>
SV10-5	5	< 10
SV11-5	5	< 10

**Table 7**

**Health Risk Summary and Main Chemicals Contributing to Health Risks**

**11495 Cypress Canyon Road  
San Diego, California**

Exposure Pathway	Hazard Index <sup>1</sup>	Cumulative Cancer Risk <sup>2</sup>
Direct Soil Contact	0.48	1.6E-07
Main chemical contributors to risk	none	none
Vapor Intrusion <sup>3</sup>	0.48	1.5E-05
Main chemical contributors to risk	none	benzene, chloroform, naphthalene
Total for All Exposure Pathways	1.0	1.6E-05

<sup>1</sup>A Hazard Index of 1 or less indicates negligible non-cancer health risks and is supportive of a "no further action" (NFA) decision by DTSC (DTSC, 2015).

<sup>2</sup>A Cumulative Cancer Risk of 1E-06 or less indicates negligible cancer risks and is supportive of an NFA decision by DTSC (2015).

<sup>3</sup>Vapor intrusion risks shown are the maximum at any location.

Yellow highlight indicates health risks above DTSC and OEHHA negligible risk benchmarks.

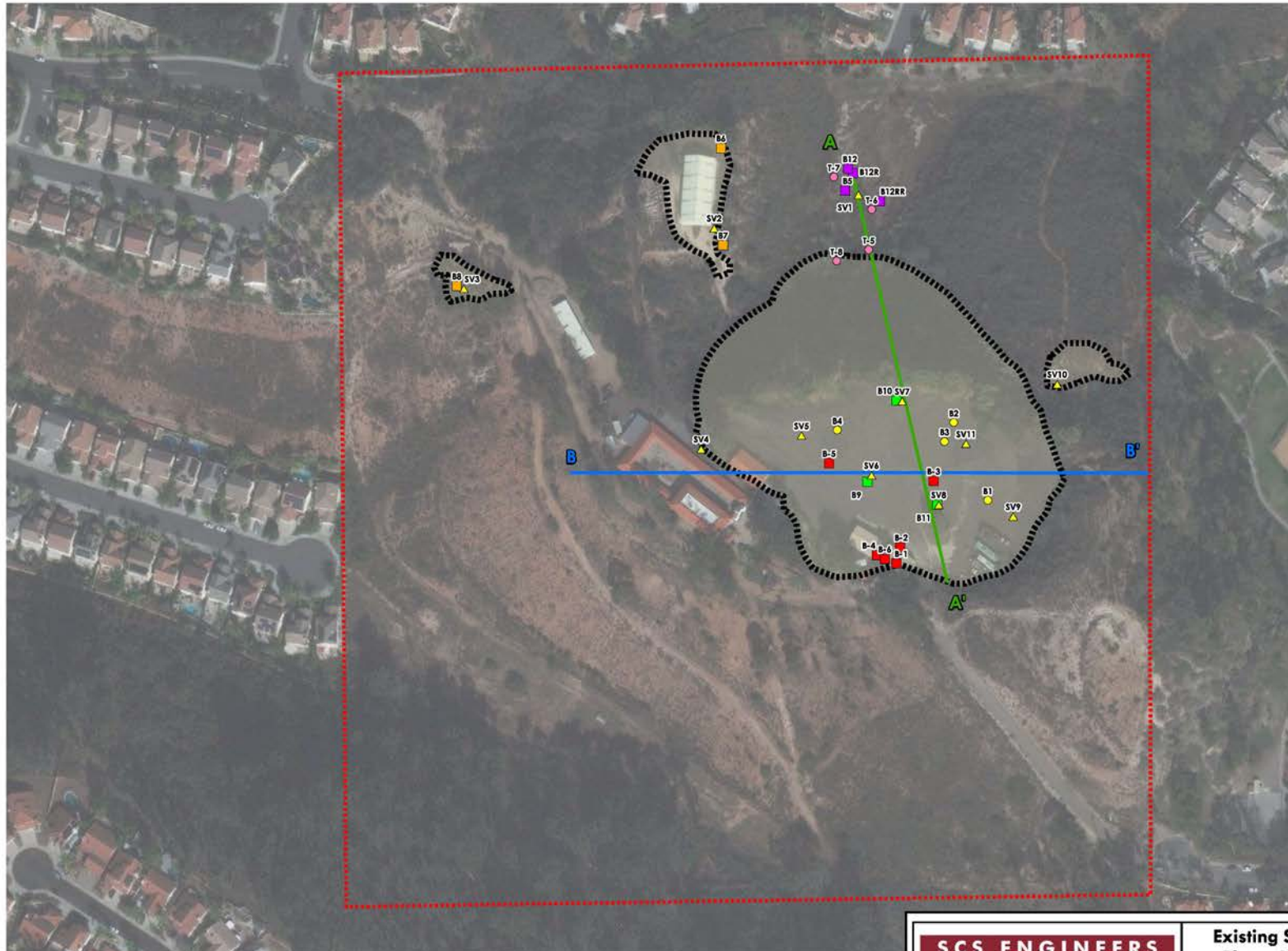


## FIGURES









### Legend

- Cross Section B to B'
- Cross Section A to A'
- Property Line
- Trench Soil Sample - Soil samples collected from excavated trenches by Essentia Management Services (Essentia) in December 2004
- Soil Boring Location - Soil samples collected by Essentia Management Services (Essentia) in December 2004
- Soil Boring Location - Soil samples drilled by Baja Exploration using a hollow-stem auger and collected by SCS Engineers on March 22, 2019
- Soil Boring Location - Soil samples drilled by BC2 using a sonic rig and collected by SCS Engineers on November 11 and 12, 2019
- Soil Boring Location - Soil samples drilled by Pacific Drilling and collected by SCS Engineers on November 13, 2019
- Soil Boring Location - Soil samples drilled by Native Drilling using a limited-access rig and collected by SCS Engineers on November 14 and 15, 2019
- Soil Vapor Location - Soil vapor samples installed and collected by H&P Mobile Geochemistry and collected by SCS Engineers on November 14, 2019
- Interpreted limits of undocumented fill as indicated by "Report of Limited Geotechnical Investigation", C.W. La Monte Company, 2005

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



<b>SCS ENGINEERS</b> Environmental Consultants 8799 Balboa Avenue, Suite 290 San Diego, California 92123	<b>Existing Site and Site Vicinity Plan with Boring Locations</b>		Project No.: 01214253.06
	The Phair Company 11495 Cypress Canyon Road San Diego, California		<b>Figure 2</b>
			Date Drafted: 1/21/2020





**SCS ENGINEERS**

Environmental Consultants  
8799 Balboa Avenue, Suite 290  
San Diego, California 92123

### Close-up Existing Site Plan With Boring Locations

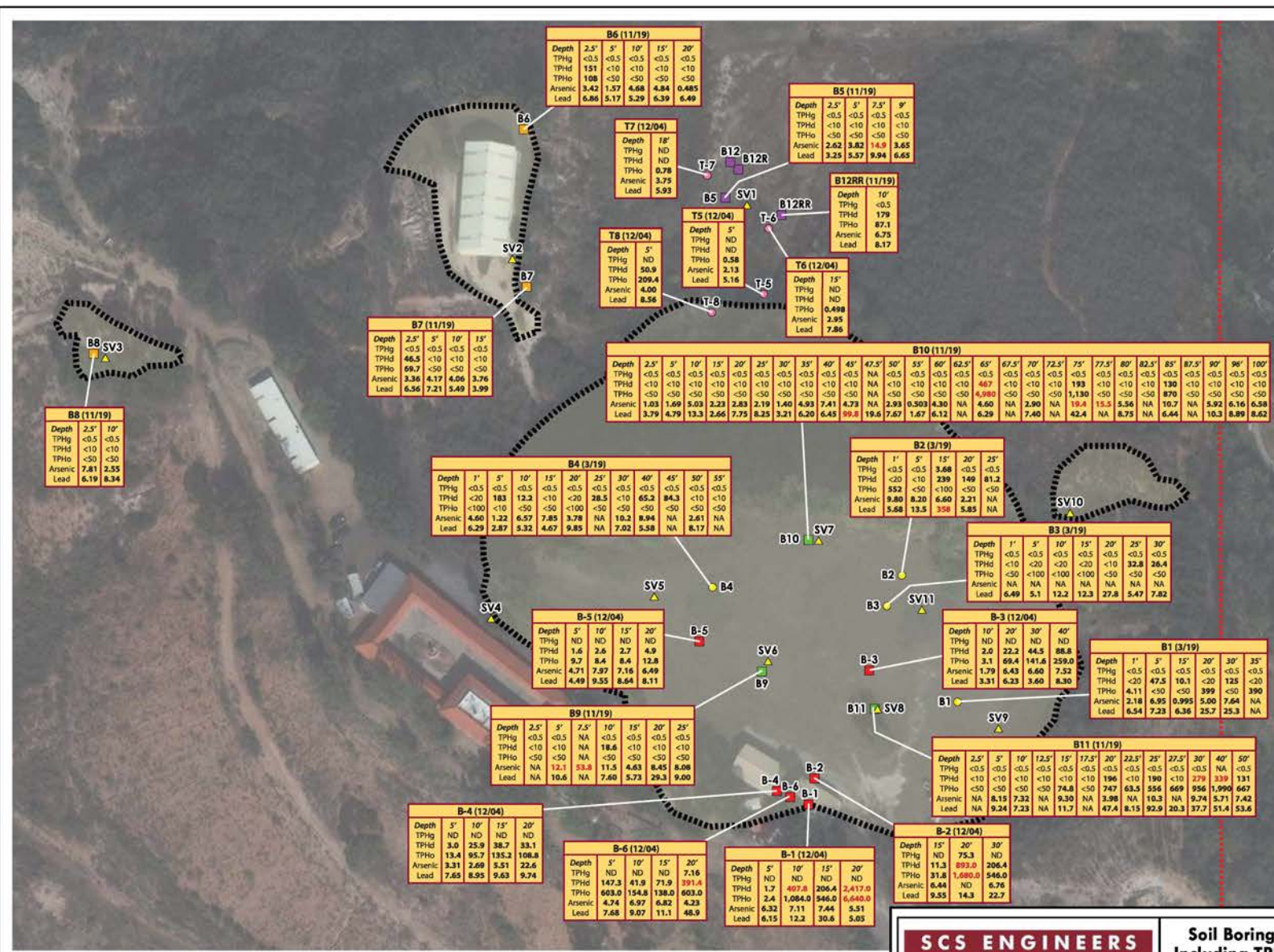
The Phair Company  
11495 Cypress Canyon Road  
San Diego, California

Project No.: 01214253.06

**Figure 3**

Date Drafted: 1/21/2020





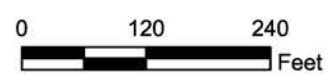
### Legend

- Property Line
- Trench Soil Sample - Soil samples collected from excavated trenches by Essentia Management Services (Essentia) in December 2004
- Soil Boring Location - Soil samples collected by Essentia Management Services (Essentia) in December 2004
- Soil Boring Location - Soil samples drilled by Baja Exploration using a hollow-stem auger and collected by SCS Engineers on March 22, 2019
- Soil Boring Location - Soil samples drilled by BC2 using a sonic rig and collected by SCS Engineers on November 11 and 12, 2019
- Soil Boring Location - Soil samples drilled by Pacific Drilling and collected by SCS Engineers on November 13, 2019
- Soil Boring Location - Soil samples drilled by Native Drilling using a limited-access rig and collected by SCS Engineers on November 14 and 15, 2019
- Soil Vapor Location - Soil vapor samples installed and collected by H&P Mobile Geochemistry and collected by SCS Engineers on November 14, 2019

Interpreted limits of undocumented fill as indicated by "Report of Limited Geotechnical Investigation", C.W. La Monte Company, 2005

Soil samples, with depth in feet below grade, analyzed for gasoline-, diesel-, and oil-range total petroleum hydrocarbons (TPHg, TPHd, TPHo, respectively) by EPA Method 8015B; Results for TPH reported in milligrams per kilogram (mg/kg). Results for VOCs reported in micrograms per kilogram (µg/kg). **Bold font** indicates sample results above the laboratory reporting limit. **Red font** for arsenic indicates sample results above naturally occurring background concentrations. **Red font** for TPH indicates sample results exceeds applicable screening criteria for San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, 2019 (Rev. 2). **Red font** for lead indicates sample results exceeds Department of Toxic Substances Control (DTSC) Human Environmental Risk Office (HERO), Note 3, threshold for total lead and/or leachability. < indicates results less than the laboratory reporting limit; number indicates individual analyte reporting limit. ND indicates concentration not detected above laboratory detection limits. NA indicates sample not analyzed.

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



## SCS ENGINEERS

Environmental Consultants  
8799 Balboa Avenue, Suite 290  
San Diego, California 92123

### Soil Boring Analytical Results Including TPH, Lead, and Arsenic

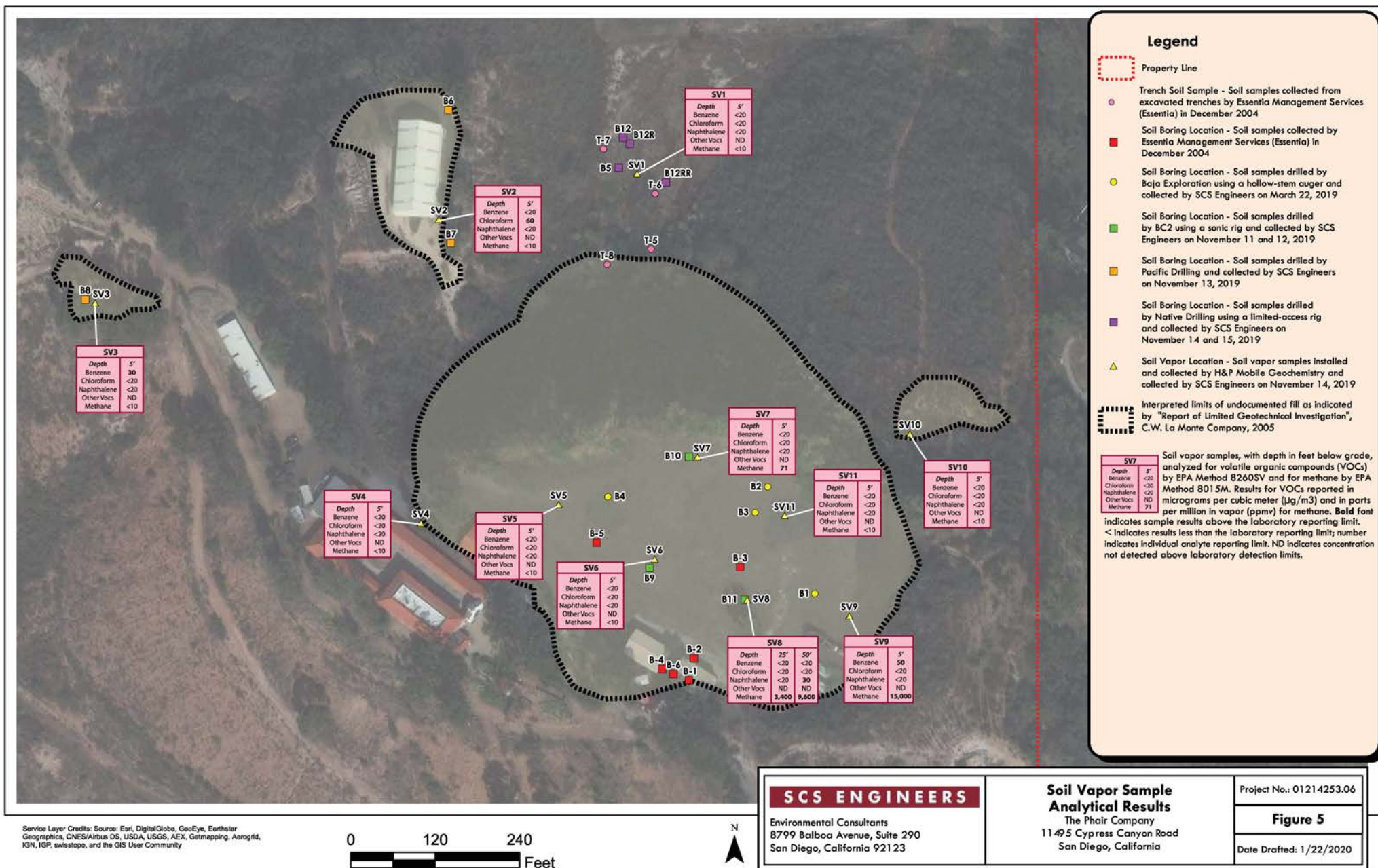
The Phair Company  
11495 Cypress Canyon Road  
San Diego, California

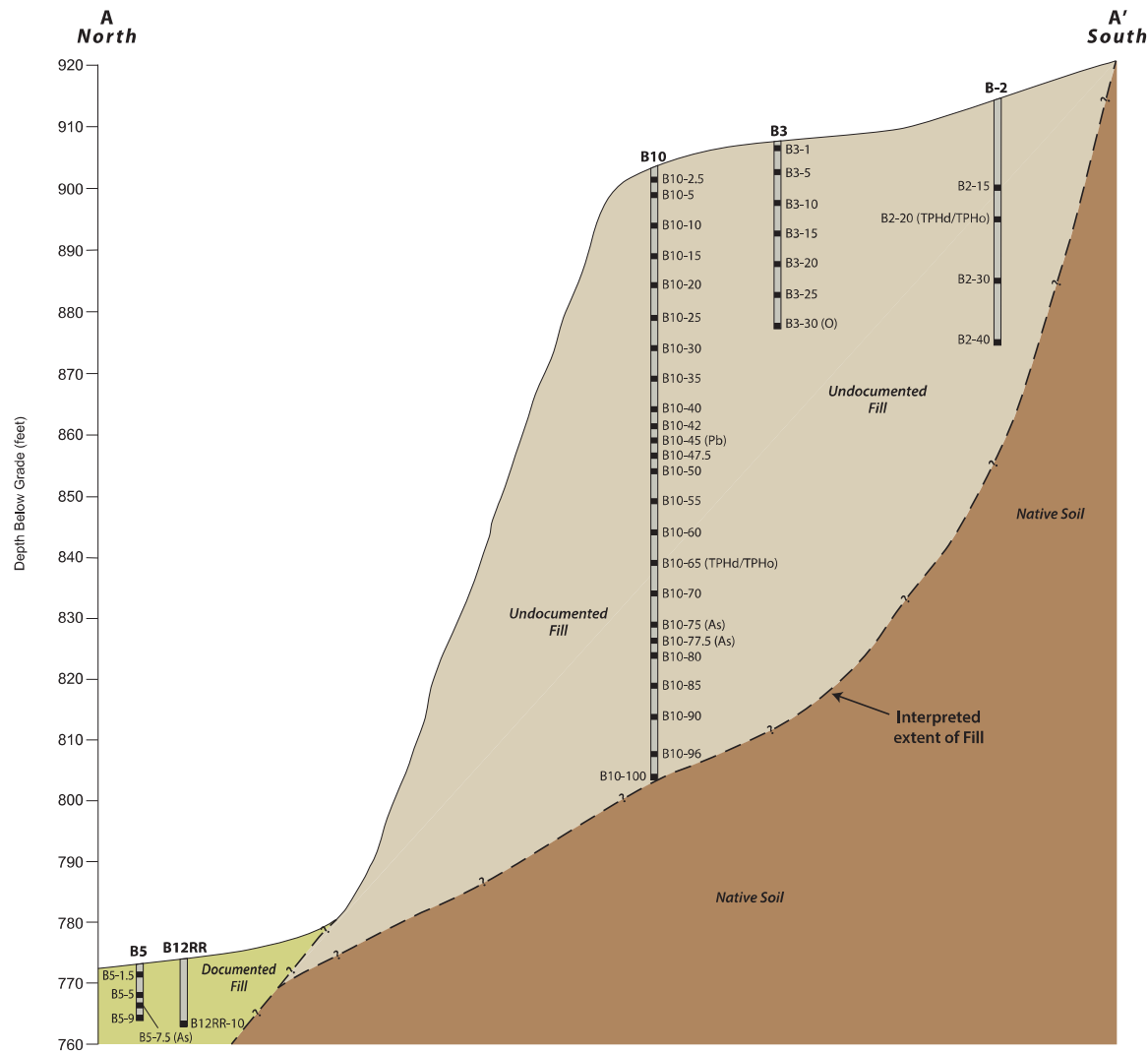
Project No.: 01214253.06

### Figure 4

Date Drafted: 1/22/2020







### LEGEND

**B3**  
B3-5 Location and designation of soil boring with sample collected at indicated depth

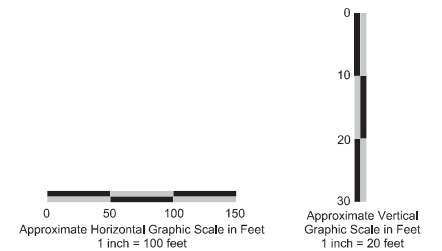
TPHd/TPHo = Total petroleum hydrocarbon concentrations exceeding San Francisco Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs), 2019

Pb = Sample reported with lead concentrations above the Department of Toxic Substances Control (DTSC) Human Environmental Risk Office (HERO) Note 3, Recommended Soil Screening Level (April 2019), of 80 milligrams per kilogram (mg/kg).

As = Sample reported with arsenic concentrations above the natural background levels (12 mg/kg).

O = Organic material was observed.

? = Queried where inferred



Disclaimer: This figure is based on available data. Actual conditions may differ. All locations and dimensions are approximate.

**SCS ENGINEERS**  
Environmental Consultants  
8799 Balboa Avenue, Suite 290  
San Diego, California 92123

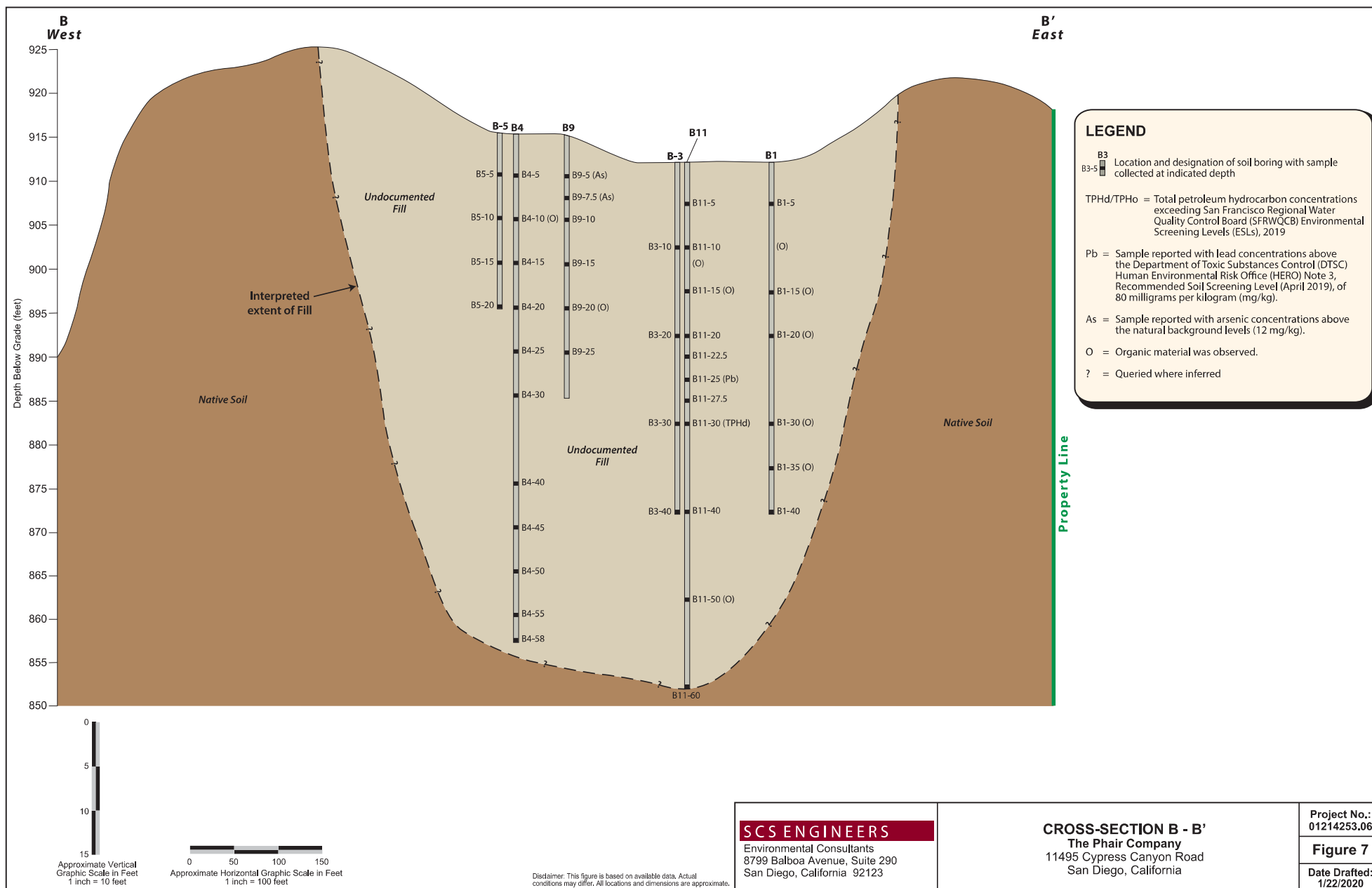
**CROSS-SECTION A - A'**  
**The Phair Company**  
11495 Cypress Canyon Road  
San Diego, California

**Project No.:**  
**01214253.06**

**Figure 6**

**Date Drafted:**  
**1/22/2020**





## APPENDICES

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APPENDIX A  
BORING CONSTRUCTION PERMIT WITH THE COUNTY  
OF SAN DIEGO

---



PERMIT #: LMWP-004230

A.P.N. #: 319-020-04

EST #: None

**COUNTY OF SAN DIEGO  
DEPARTMENT OF ENVIRONMENTAL HEALTH  
LAND AND WATER QUALITY DIVISION  
MONITORING WELL PROGRAM**

**BORING CONSTRUCTION PERMIT**

SITE NAME: 11495 CYPRESS CANYON ROAD

SITE ADDRESS: 11495 CYPRESS CANYON ROAD, SAN DIEGO 92131

PERMIT FOR: CONSTRUCTION OF SOIL BORINGS (3)

PERMIT APPROVAL DATE: 11/6/2019

PERMIT EXPIRES ON: 3/5/2020

RESPONSIBLE PARTY: THE PHAIR COMPANY

---

**PERMIT CONDITIONS:**

1. All borings must be sealed from the bottom of the boring to the ground surface with an approved sealing material as specified in California Well Standards Bulletin 74-90, Part III, Section 19.D. **Drill cuttings are not an acceptable fill material. Bentonite slurries are not an acceptable fill material in the unsaturated zone.**
2. All borings must be properly destroyed within 24 hours of drilling.
3. Placement of any sealing material at a depth greater than 30 feet must be done using the tremie method.
4. This work is not connected to any known unauthorized release of hazardous substances. Any contamination found in the course of drilling and sampling must be reported to DEH. All water and soil resulting from the activities covered by this permit must be managed, stored and disposed of as specified in the SAM Manual in Section 5, II, D-4. In addition, drill cuttings must be properly handled and disposed in compliance with the Stormwater Best Management Practices of the local jurisdiction.
5. Within 60 days of completing work, submit a well construction report, including all well and/or boring logs and laboratory data to the Well Permit Desk. This report must include all items required by the SAM Manual, Section 5, Pages 6 & 7.
6. This office must be given 24-hour notice of any drilling activity on this site and advanced notification of drilling cancellation. Please contact the Well Permit Desk at (858) 505-6688.

**NOTE:** This permit does not constitute approval of a work plan as defined in Section 2722 of Article 11 of C.C.R., Title 23. Work plans are required for all unauthorized release investigations in San Diego County.

APPROVED BY: \_\_\_\_\_

*Jon Senaha*  
Jon Senaha

DATE: 11/6/2019





**PERMIT APPLICATION  
GROUNDWATER  
AND VADOSE MONITORING WELLS  
AND EXPLORATORY OR TEST BORINGS**

**OFFICE USE ONLY**  
PERMIT LMWP# 004230  
SAM CASE Y/N # None  
DATE RECEIVED: 11/4/2019  
FEE PAID: \$380.00  
CHECK # Online

**A. RESPONSIBLE PARTY** The Phair Company E-mail austinwdias@gmail.com  
(The person, persons, or company responsible for the construction, maintenance, and destruction of the proposed borings and/or wells.)  
Mailing Address 3330 Bonita Road City Chula Vista State CA Zip 91910  
Contact Person Austin Dias Phone 619-253-4837 Ext. \_\_\_\_\_

**B. SITE ASSESSMENT PROJECT NUMBER – IF APPLICABLE #** \_\_\_\_\_

**C. CONSULTING FIRM** SCS Engineers  
Mailing Address 8799 Balboa Avenue, Suite 290 City San Diego State CA Zip 92123  
Registered Professional Luke Montague Phone 858-571-5500 Registration # 8071(PG)  
E-mail lmontague@scsengineers.com  
Contact Person Luke Montague Phone 858-583-7749 Ext. \_\_\_\_\_ Email lmontague@scsengineers.com

**D. DRILLING COMPANY** BC2 Environmental C57 1051275  
Contact Name Tracy Spilotro E-mail TSpilotro@bc2env.com  
Mailing Address 1150 West Trenton Avenue City Orange State CA Zip 92867  
Phone 714-744-2990 Ext. \_\_\_\_\_

**E. CONSTRUCTION INFORMATION**

TYPE OF WELLS/ BORINGS TO BE CONSTRUCTED	MATERIALS TO BE USED		PROPOSED CONSTRUCTION
#	CASING	SEAL/BORING BACKFILL	
<input type="checkbox"/> Groundwater _____	<b>Not Applicable</b> _____	<input type="checkbox"/> Neat Cement	Estimated Groundwater Depth: <u>100+</u> ft.
<input type="checkbox"/> Vadoses _____	Type <u>PVC</u>	<input type="checkbox"/> Cement & Bentonite	Estimated Depth of Boring: <u>70 to 120</u> ft.
<input checked="" type="checkbox"/> Boring <u>3</u>	Gauge _____	<input type="checkbox"/> Sand-Cement	Concrete Seal: <u>0 to 3</u>
<input type="checkbox"/> Soil Vapor _____	Diameter <u>3/4"</u>	<input type="checkbox"/> Bentonite	Annular Seal: _____ to _____
<input type="checkbox"/> Other _____	Screen Size <u>0.010</u>	<input type="checkbox"/> Other _____	Filter Pack: _____ to _____
	Filter Pack _____	Borehole diameter <u>6"</u>	Perforation: _____ to _____
<b>NUMBER OF WELLS TO BE DESTROYED</b>	<b>Drilling Method</b>		<b>NOTE: Attach a well construction diagram</b>
<input type="checkbox"/> Destruction _____	<input type="checkbox"/> Auger	<input type="checkbox"/> Air Rotary	
	<input type="checkbox"/> Direct Push	<input checked="" type="checkbox"/> Sonic	
	<input type="checkbox"/> Other _____	<input type="checkbox"/> Percussion	

I agree to comply with the requirements of the current Site Assessment and Mitigation Manual, and with all ordinances and laws of the County of San Diego and the State of California pertaining to well/boring construction and destruction.

DRILLER'S SIGNATURE SCOTT TRAVIS DATE 11-4-19

Within 60 days of completion, I will furnish the Monitoring Well Permit Desk (858) 505-6688 with a complete well/boring log. I will certify the design and construction or destruction of the well/borings in accordance with the permit application.

PG/RCE/CEG SIGNATURE LUKE MONTAGUE DATE 11-4-2019

**F. SITE INFORMATION - A Property Owner Consent agreement is required for all applications, except for onsite, open LOP/SAM site assessment cases, Caltrans properties and military properties. Submit a separate sheet for additional parcels.**

**1. ASSESSOR'S PARCEL NUMBER** 319-020-04

Site Name \_\_\_\_\_

Site Address 11495 Cypress Canyon Road City San Diego Zip 92131

**PROPERTY OWNER** Tom Renzulli

Phone \_\_\_\_\_ Ext. \_\_\_\_\_ Fax \_\_\_\_\_

Mailing Address 3383 La Junta Ave City San Diego State CA Zip 92117

**NUMBER OF WELLS** 3 soil borings

**TYPE OF WELLS** 2 temporary wells w/ PVC

**2. ASSESSOR'S PARCEL NUMBER** \_\_\_\_\_

Site Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

**PROPERTY OWNER** \_\_\_\_\_

Phone \_\_\_\_\_ Ext. \_\_\_\_\_ Fax \_\_\_\_\_

Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**NUMBER OF WELLS** \_\_\_\_\_

**TYPE OF WELLS** \_\_\_\_\_

**G. QUESTIONNAIRE: Please answer all applicable questions completely and submit any required supportive documentation.**

**1. What is the purpose of the well/boring investigation?**

- ☐ a. Part of an ongoing site assessment case in which a government regulator is the lead agency. If yes, indicate which government regulator is the lead agency and the case number.

☐ Department of Environmental Health \_\_\_\_\_

☐ Regional Water Quality Control Board \_\_\_\_\_

☐ Department of Toxic Substances Control \_\_\_\_\_

- ☒ b. Part of a Phase I investigation for property ownership transfer.

- ☐ c. Geotechnical investigation for proposed construction or land stabilization.

- ☐ d. Other: \_\_\_\_\_

**2. If wells are to be destroyed, provide a description of method of destruction** The 2 borings with temporary PVC casing will be removed and borings will be backfilled with hydrated bentonite and resurfaced

- 3. Are you proposing a variation from current SAM Manual Requirements for the construction or destruction of borings, Vadose and/or Groundwater Monitoring Wells? If yes, specify these variations and include a well construction diagram and all required supporting documentation. Refer to the [SAM Manual Appendix B](#) for monitoring well guidelines.** Yes ☐ No ☒

\_\_\_\_\_



JACK MILLER  
DIRECTOR

# County of San Diego

ELIZABETH POZZEBON  
ASSISTANT DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH  
LAND AND WATER QUALITY DIVISION  
P.O. BOX 129261, SAN DIEGO, CA 92112-9261  
(858)505-6688  
www.sdcdeh.org

## PROPERTY OWNER CONSENT

Proposed locations for subsurface work:

Property Address:

11495 Cypress Canyon Road

San Diego, CA 92131

Assessor's Parcel Number (APN):

319-020-04-00

I, Thomas Renzuli, owner of the property/properties listed above, give my permission to SCS Engineers (consulting company, contractor) to conduct the following work at the locations stated above.

☐ Install \_\_\_\_\_ monitoring wells      ☐ Destroy \_\_\_\_\_ monitoring wells      ☒ Drill 3 soil borings

I understand that Luke Montague (registered professional) of SCS Engineers (consulting company) and an authorized signer for BC2 Environmental (drilling company) have submitted a signed application to the Department of Environmental Health in which they have agreed to complete the above-stated work according the requirements of the current SAM Manual, all ordinances and laws of the County of San Diego and the State of California pertaining to well/boring construction and destruction. I have arranged with the Responsible Party, the person who causes to have monitoring wells/borings installed or existing wells destroyed on this property, to ensure proper closure of the monitoring wells/borings.

Property Owner Signature: Thomas Renzuli Date: 10-31-19

Print Name: THOMAS RENZULI Title: \_\_\_\_\_

Company: \_\_\_\_\_

Mailing Address: 3383 LA JUNTA AVE SAN DIEGO CA 92117





**Figure 1**

Proposed Permitted Soil Boring Location Map  
11495 Cypress Canyon Road, San Diego CA



Approximate Site boundaries



Approximate location of soil boring to be permitted.



North  
Not to scale

APPENDIX B  
LABORATORY ANALYTICAL REPORT

---



AMERICAN SCIENTIFIC LABORATORIES, LLC

*Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

03 April 2019

Luke Montague

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego, CA 92123

**Work Order #: 1903210**

**Project Name: CYPRESS**

**Project ID: 01214253.06**

**Site Address: 11495 Cypress Canyon San Diego, CA**

Enclosed are the results of analyses for samples received by the laboratory on March 25, 2019. If you have any questions concerning this report, please feel free to contact us.

**Wendy Lu**

**Laboratory Supervisor**

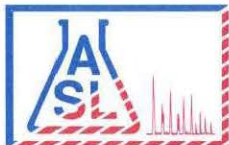
**Rojert G. Araghi**

**Laboratory Director**

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.





AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

Page 1 Of 4

COC# 82829

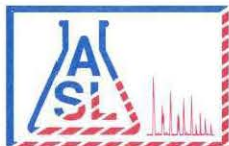
GLOBAL ID

E REPORT: ☒ PDF ☐ EDF ☐ EDD

ASL JOB# 1903210

Company: SCS ENGINEERS					Report To:					<p>ANALYSIS REQUESTED</p> <p>TITLE 22 METALS (6010B) LEAD + ARSENIC (6010B) CCPS (8081) TPH EXT (8015) (SILICA GEL)</p>									
Address: 8799 BALBOA AVE					Project Name: CYPRESS										Address:				
SAN DIEGO, CA					Site Address: 11495 CYPRESS CANYON										Invoice To:				
Telephone: 858 571-5500					SAN DIEGO, CA										Address:				
Fax: 858 571-5500																			
Special Instruction: *TPH EXT NEEDS SILICA GEL					Project ID: 01214253.06														
E-mail: LMONTAGUE@SCSENGINEERS.COM					Project Manager: LUKE MONTAGUE					P.O.#: 01214253.06									
ITEM	LAB USE ONLY		SAMPLE DESCRIPTION			Container(s)		Matrix	Preservation	Remarks									
	Lab ID	Sample ID	Date	Time	#	Type													
1	1903210-01	B1-1	3/22/19	0729	42	402 Jan	SOIL	ICE			X	X	X						
2	1903210-02	B1-5		0734						X	X	X							
3	1903210-03	B1-15		0751							X	X	X						
4	1903210-04	B1-20		0755						X	X	X							
5	1903210-05	B1-30		0804						X	X	X							
6	1903210-06	B1-35		0815								X							
7	1903210-07	B2-1		0907						X	X	X							
8	1903210-08	B2-5		0909						X	X	X							
9	1903210-09	B2-15		0920							X	X	X						
10	1903210-10	B2-20		0926						X	X	X							
Collected By: [Signature]			Date 3/22/19 Time 1620			Relinquished By: [Signature]			Date 3/22/19 Time 1620			<p>TAT</p> <p><input checked="" type="checkbox"/> Normal</p> <p><input type="checkbox"/> Rush</p>							
Relinquished By:			Date			Received For Laboratory: Janet Chen			Date 3-25-19 Time 9:00										
Received By:			Date			Condition of Sample: via GSO													





AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

Page 2 of 4COC# **82831**

GLOBAL ID \_\_\_\_\_

E REPORT: ☐ PDF ☐ EDF ☐ EDDASL JOB# 1903210

Company: <u>SCS</u>		Report To:	
Address:	Project Name: <u>CYPRESS</u>	Address:	<b>ANALYSIS REQUESTED</b> TITLE 22 (6010B) LEAD + ARSENIC (6010B) OCPs (8081) TP Hex (8015) (SILICA GEL)
	Site Address:	Invoice To:	
Telephone:		Address:	
Fax:			
Special Instruction:	Project ID:		
E-mail:	Project Manager:	P.O.#: <u>01214253.06</u>	

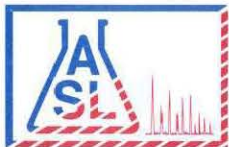
ITEM	LAB USE ONLY	SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation										Remarks		
	Lab ID	Sample ID	Date	Time	#	Type															
11	1903210-11	B2-25	3/22/19	0934	2	4oz Jar	SOIL	ICE													
		B3-1	↓	0959	2	↓	↓	↓											X		
		B3-5		1009	1																X
		B3-10		1013	2																X
		B3-15		1020	2																X
		B3-20		1029	2																X
		B3-25		1037	2																X
		B3-30		1046	2																X
12	1903210-12	B4-1		1115	2						X		X	X							
13	1903210-13	B4-5	↓	1120	2	↓	↓	↓			X		X	X							

Collected By: <u>[Signature]</u>	Date <u>3/22/19</u> Time <u>1620</u>	Relinquished By: <u>[Signature]</u>	Date <u>3/22/19</u> Time <u>1620</u>
Relinquished By:	Date _____ Time _____	Received For Laboratory <u>Janet Chen</u>	Date <u>3-25-19</u> Time <u>9:00</u>
Received By:	Date _____ Time _____	Condition of Sample: <u>via GSG</u>	

White - Report. Yellow - Laboratory. Pink - Client

CHAIN OF CUSTODY RECORD





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Environmental Testing Services

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Page 3 of 4

COC# **82827**

GLOBAL ID \_\_\_\_\_

E REPORT: ☐ PDF ☐ EDF ☐ EDD

ASL JOB# **1903210**

Company: <b>SCS</b>		Report To:	
Address:	Project Name: <b>CYPRESS</b>	Address:	
	Site Address:	Invoice To:	
Telephone:		Address:	
Fax:			
Special Instruction:	Project ID:		
E-mail:	Project Manager:	P.O.#: <b>01214253.06</b>	

ANALYSIS REQUESTED

TITLE 22 (6010B)  
LEAD + ARSENIC (6010B)  
OCPs (8081)  
TPH EXT (8015) SILICA GE

ARCHIVE

ITEM	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation											Remarks
	Lab ID	Sample ID	Date	Time	#	Type															
14	1903210-14	B4-10	3/22/19	1124	2	40Z JAR <del>SOIL</del>			SOIL <del>ICE</del>	ICE				X	X	X	X				
15	1903210-15	B4-15	3/22/19	1130	2									X		X					
16	1903210-16	B4-20		1137	2								(15)	X	X	X	X				
17	1903210-17	B4-25		1144	2												X				
18	1903210-18	B4-30		1156	2									X	X	X					
19	1903210-19	B4-40		1203	2								(15)	X	X	X	X				
20	1903210-20	B4-45		1212	2												X				
21	1903210-21	B4-50		1220	2								(15)	X	X	X	X				
22	1903210-22	B4-55		1242	2												X				
		DR-1		1336	1																X

Collected By: <b>Jio</b>	Date <b>3/22/19</b> Time <b>1620</b>	Relinquished By: <b>Jio</b>	Date <b>3/22/19</b> Time <b>1620</b>
Relinquished By:	Date _____ Time _____	Received For Laboratory <b>Tarut Chun</b>	Date <b>3-25-19</b> Time <b>9:00</b>
Received By:	Date _____ Time _____	Condition of Sample:	

TAT  
☒ Normal  
☐ Rush







Job# 1903210

## ASL Sample Receipt Form

Client: SCS Engineers

Date: 3-25-19

### Sample Information:

Temperature: 5.3°C

☐ Blank ☒ Sample

Custody Seal:

☐ Yes ☒ No ☐ Not Available

Received Within Holding Time:

☒ Yes ☐ No

### Container:

Proper Containers and Sufficient Volume:

☒ Yes ☐ No

Soil: ☒ 4oz ☐ 8oz ☐ Sleeve ☐ VOA

Water: ☐ 500AG ☐ 1AG ☐ 125PB ☐ 250PB ☐ 500PB ☐ VOA ☐ Other

Air: ☐ Tedlar®

Sample Containers Intact:

☒ Yes ☐ No

Trip Blank

☐ Yes ☒ No

### Chain-of-Custody (COC):

Received:

☒ Yes ☐ No

Samplers Name:

☒ Yes ☐ No

Container Labels match COC:

☒ Yes ☐ No

COC documents received complete:

☒ Yes ☐ No

Proper Preservation Noted:

☒ Yes ☐ No

Completed By: Tanet Chin





AMERICAN SCIENTIFIC LABORATORIES, LLC  
*Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123

Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
**Reported:**  
04/03/2019 17:23

**ANALYTICAL SUMMARY REPORT**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1-1	1903210-01	Solid	03/22/2019 07:29	03/25/2019 09:00
B1-5	1903210-02	Solid	03/22/2019 07:34	03/25/2019 09:00
B1-15	1903210-03	Solid	03/22/2019 07:51	03/25/2019 09:00
B1-20	1903210-04	Solid	03/22/2019 07:55	03/25/2019 09:00
B1-30	1903210-05	Solid	03/22/2019 08:04	03/25/2019 09:00
B1-35	1903210-06	Solid	03/22/2019 08:15	03/25/2019 09:00
B2-1	1903210-07	Solid	03/22/2019 09:07	03/25/2019 09:00
B2-5	1903210-08	Solid	03/22/2019 09:09	03/25/2019 09:00
B2-15	1903210-09	Solid	03/22/2019 09:20	03/25/2019 09:00
B2-20	1903210-10	Solid	03/22/2019 09:26	03/25/2019 09:00
B2-25	1903210-11	Solid	03/22/2019 09:34	03/25/2019 09:00
B4-1	1903210-12	Solid	03/22/2019 11:15	03/25/2019 09:00
B4-5	1903210-13	Solid	03/22/2019 11:20	03/25/2019 09:00
B4-10	1903210-14	Solid	03/22/2019 11:24	03/25/2019 09:00
B4-15	1903210-15	Solid	03/22/2019 11:30	03/25/2019 09:00
B4-20	1903210-16	Solid	03/22/2019 11:37	03/25/2019 09:00
B4-25	1903210-17	Solid	03/22/2019 11:44	03/25/2019 09:00
B4-30	1903210-18	Solid	03/22/2019 11:56	03/25/2019 09:00
B4-40	1903210-19	Solid	03/22/2019 12:03	03/25/2019 09:00
B4-45	1903210-20	Solid	03/22/2019 12:12	03/25/2019 09:00
B4-50	1903210-21	Solid	03/22/2019 12:20	03/25/2019 09:00
B4-55	1903210-22	Solid	03/22/2019 12:42	03/25/2019 09:00

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Wendy Lu, Laboratory Supervisor

**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

**Reported:**

04/03/2019 17:23

**Analytical Results****Client Sample ID: B1-1****Laboratory Sample ID: 1903210-01 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059			Prepared: 03/29/2019 10:15			
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060			Prepared: 03/29/2019 10:21			
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	2.18		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	73.7		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.768		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	12.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	7.38		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	16.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	6.54		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	7.23		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	35.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	31.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90061			Prepared: 03/27/2019 09:00			
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 00:20	DAA	8015B
Surrogate: Bromofluorobenzene			98.4 %	70-120		5030A	03/28/2019 00:20	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827			Prepared: 03/26/2019 12:34			
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Dieldrin	4.34		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A

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Wendy Lu, Laboratory Supervisor



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
**Environmental Testing Services**

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
 8799 Balboa Avenue, Suite 290  
 San Diego CA, 92123

Project: CYPRESS  
 Project Number: 01214253.06  
 Project Manager: Luke Montague

Work Order No: 1903210  
 Reported:  
 04/03/2019 17:23

**Analytical Results**

**Client Sample ID: B1-1**

**Laboratory Sample ID: 1903210-01 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Surrogate: Decachlorobiphenyl			80.7 %	43-169		3545	03/26/2019 14:21	AY	8081A

**Analytical Results**

**Client Sample ID: B1-5**

**Laboratory Sample ID: 1903210-02 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	6.95		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	75.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	0.848		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.568		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	5.72		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	6.59		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	6.84		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	7.23		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	4.55		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	17.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	22.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 00:48	DAA	8015B
Surrogate: Bromofluorobenzene			107 %	70-120		5030A	03/28/2019 00:48	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A

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*Wendy Lu*

Wendy Lu, Laboratory Supervisor





# AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

## Analytical Results

Client Sample ID: B1-5

Laboratory Sample ID: 1903210-02 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Surrogate: Decachlorobiphenyl			81.6 %	43-169		3545	03/26/2019 14:37	AY	8081A

## Analytical Results

Client Sample ID: B1-15

Laboratory Sample ID: 1903210-03 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Arsenic	0.995		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	6.36		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 01:15	DAA	8015B
Surrogate: Bromofluorobenzene			107 %	70-120		5030A	03/28/2019 01:15	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A

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Wendy

Wendy Lu, Laboratory Supervisor

**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210

**Reported:**  
04/03/2019 17:23**Analytical Results****Client Sample ID: B1-15****Laboratory Sample ID: 1903210-03 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Surrogate: Decachlorobiphenyl			78.6 %	43-169		3545	03/26/2019 15:00	AY	8081A

**Analytical Results****Client Sample ID: B1-20****Laboratory Sample ID: 1903210-04 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	5.00		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	221		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.893		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	23.1		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.06		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	14.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	25.7		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

**Analytical Results****Client Sample ID: B1-20****Laboratory Sample ID: 1903210-04 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060			Prepared: 03/29/2019 10:21			
<b>Molybdenum</b>	<b>2.01</b>		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Nickel</b>	<b>6.74</b>		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Vanadium</b>	<b>29.4</b>		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Zinc</b>	<b>49.9</b>		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057			Prepared: 03/27/2019 09:00			
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 01:42	DAA	8015B
Surrogate: Bromofluorobenzene		S-01	172 %	70-120		5030A	03/28/2019 01:42	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827			Prepared: 03/26/2019 12:34			
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Surrogate: Decachlorobiphenyl			118 %	43-169		3545	03/26/2019 15:21	AY	8081A

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

**Analytical Results****Client Sample ID: B1-30****Laboratory Sample ID: 1903210-05 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	0.962		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	7.64		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	107		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	0.506		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.919		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	8.43		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	4.12		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	11.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	25.3		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	0.601		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	4.12		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	28.4		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	42.5		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 02:10	DAA	8015B
Surrogate: Bromofluorobenzene			98.8 %		70-120	5030A	03/28/2019 02:10	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

**Analytical Results****Client Sample ID: B1-30****Laboratory Sample ID: 1903210-05 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Surrogate: Decachlorobiphenyl			87.5 %	43-169		3545	03/26/2019 15:42	AY	8081A

**Analytical Results****Client Sample ID: B1-35****Laboratory Sample ID: 1903210-06 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 02:38	DAA	8015B
Surrogate: Bromofluorobenzene			83.1 %	70-120		5030A	03/28/2019 02:38	DAA	8015B

**Analytical Results****Client Sample ID: B2-1****Laboratory Sample ID: 1903210-07 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	1.22		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	9.80		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	192		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.854		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	9.86		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.08		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	10.7		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	5.68		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	0.509		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	5.62		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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## Environmental Testing Services

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

### Analytical Results

Client Sample ID: B2-1

Laboratory Sample ID: 1903210-07 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	29.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	27.7		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 03:06	DAA	8015B
Surrogate: Bromofluorobenzene			90.5 %	70-120		5030A	03/28/2019 03:06	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Surrogate: Decachlorobiphenyl			107 %	43-169		3545	03/26/2019 16:02	AY	8081A

### Analytical Results

Client Sample ID: B2-5

Laboratory Sample ID: 1903210-08 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A

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Wendy

Wendy Lu, Laboratory Supervisor





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Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
Reported:  
04/03/2019 17:23

## Analytical Results

Client Sample ID: B2-5

Laboratory Sample ID: 1903210-08 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060			Prepared: 03/29/2019 10:21			
Antimony	0.600		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	8.20		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	125		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	1.05		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	27.1		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.82		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	69.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	13.5		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	2.16		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	10.4		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	32.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	41.6		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057			Prepared: 03/27/2019 09:00			
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 03:33	DAA	8015B
Surrogate: Bromofluorobenzene		S-01	186 %		70-120	5030A	03/28/2019 03:33	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827			Prepared: 03/26/2019 12:34			
Aldrin	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A

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Wendy

Wendy Lu, Laboratory Supervisor



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

### Analytical Results

Client Sample ID: B2-5

Laboratory Sample ID: 1903210-08 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Surrogate: Decachlorobiphenyl			99.0 %	43-169		3545	03/29/2019 09:47	AY	8081A

### Analytical Results

Client Sample ID: B2-15

Laboratory Sample ID: 1903210-09 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Arsenic	6.60		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	358		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	3680		500	ug/kg	1	5030A	03/28/2019 04:00	DAA	8015B
Surrogate: Bromofluorobenzene		S-01	396 %	70-120		5030A	03/28/2019 04:00	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
4,4'-DDE	15.6		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
4,4'-DDT	13.2		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A

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Wendy

Wendy Lu, Laboratory Supervisor





# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

### Analytical Results

Client Sample ID: B2-15

Laboratory Sample ID: 1903210-09 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Surrogate: Decachlorobiphenyl			90.2 %	43-169		3545	03/26/2019 20:11	AY	8081A

### Analytical Results

Client Sample ID: B2-20

Laboratory Sample ID: 1903210-10 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	2.21		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	197		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.988		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	6.12		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.99		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	15.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	5.85		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	2.55		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	38.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	40.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 04:28	DAA	8015B
Surrogate: Bromofluorobenzene		S-01	372 %	70-120		5030A	03/28/2019 04:28	DAA	8015B

<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A

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Wendy

Wendy Lu, Laboratory Supervisor



**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke MontagueWork Order No: 1903210  
**Reported:**  
04/03/2019 17:23**Analytical Results****Client Sample ID: B2-20****Laboratory Sample ID: 1903210-10 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
4,4'-DDE	28.2		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
4,4'-DDT	5.97		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Surrogate: Decachlorobiphenyl			97.4 %	43-169		3545	03/26/2019 17:05	AY	8081A

**Analytical Results****Client Sample ID: B2-25****Laboratory Sample ID: 1903210-11 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 16:27	DAA	8015B
Surrogate: Bromofluorobenzene			S-01	138 %	70-120	5030A	03/27/2019 16:27	DAA	8015B

**Analytical Results****Client Sample ID: B4-1****Laboratory Sample ID: 1903210-12 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	4.60		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy Lu, Laboratory Supervisor

**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke MontagueWork Order No: 1903210  
**Reported:**  
04/03/2019 17:23**Analytical Results****Client Sample ID: B4-1****Laboratory Sample ID: 1903210-12 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060			Prepared: 03/29/2019 10:21			
Barium	110		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	0.968		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.549		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	6.73		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.05		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	6.87		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	6.29		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	4.21		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	21.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	15.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057			Prepared: 03/27/2019 09:00			
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 16:55	DAA	8015B
Surrogate: Bromofluorobenzene			110 %	70-120		5030A	03/27/2019 16:55	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827			Prepared: 03/26/2019 12:34			
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A

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Wendy Lu, Laboratory Supervisor



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Environmental Testing Services

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

## Analytical Results

Client Sample ID: B4-1

Laboratory Sample ID: 1903210-12 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Surrogate: Decachlorobiphenyl			113 %	43-169		3545	03/26/2019 17:25	AY	8081A

## Analytical Results

Client Sample ID: B4-5

Laboratory Sample ID: 1903210-13 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	0.902		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	1.22		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	270		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.764		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	10.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	7.95		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	15.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	2.87		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	5.76		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	37.5		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	24.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

## Total Petroleum Hydrocarbons(TPH-g)

Batch ID: BD90057

Prepared: 03/27/2019 09:00

Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 17:22	DAA	8015B
Surrogate: Bromofluorobenzene		S-01	171 %	70-120		5030A	03/27/2019 17:22	DAA	8015B

## Organochlorine Pesticides

Batch ID: BC90827

Prepared: 03/26/2019 12:34

Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A

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Wendy Lu, Laboratory Supervisor





# AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

## Analytical Results

Client Sample ID: B4-5

Laboratory Sample ID: 1903210-13 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Surrogate: Decachlorobiphenyl			102 %	43-169		3545	03/26/2019 17:46	AY	8081A

## Analytical Results

Client Sample ID: B4-10

Laboratory Sample ID: 1903210-14 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	6.57		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	118		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.776		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	9.30		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.82		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	11.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	5.32		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	0.612		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	4.92		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy

Wendy Lu, Laboratory Supervisor



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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

**Analytical Results**

**Client Sample ID: B4-10**

**Laboratory Sample ID: 1903210-14 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Vanadium</b>	<b>28.2</b>		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Zinc</b>	<b>29.0</b>		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 17:51	DAA	8015B
Surrogate: Bromofluorobenzene			87.9 %		70-120	5030A	03/27/2019 17:51	DAA	8015B

<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Surrogate: Decachlorobiphenyl			80.9 %		43-169	3545	03/26/2019 18:07	AY	8081A

**Analytical Results**

**Client Sample ID: B4-15**

**Laboratory Sample ID: 1903210-15 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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*Wendy*

Wendy Lu, Laboratory Supervisor

**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

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SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke MontagueWork Order No: 1903210  
Reported:  
04/03/2019 17:23**Analytical Results****Client Sample ID: B4-15****Laboratory Sample ID: 1903210-15 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Arsenic	7.85		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	4.67		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 18:19	DAA	8015B
Surrogate: Bromofluorobenzene			94.8 %	70-120		5030A	03/27/2019 18:19	DAA	8015B

**Analytical Results****Client Sample ID: B4-20****Laboratory Sample ID: 1903210-16 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	3.78		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	55.1		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.652		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	15.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	3.57		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	7.42		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	9.85		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	1.83		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	3.50		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	21.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	25.4		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 18:47	DAA	8015B
Surrogate: Bromofluorobenzene			91.0 %	70-120		5030A	03/27/2019 18:47	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A

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Wendy Lu, Laboratory Supervisor



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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

**Analytical Results****Client Sample ID: B4-20****Laboratory Sample ID: 1903210-16 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Surrogate: Decachlorobiphenyl			108 %	43-169		3545	03/26/2019 18:27	AY	8081A

**Analytical Results****Client Sample ID: B4-25****Laboratory Sample ID: 1903210-17 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 19:15	DAA	8015B
Surrogate: Bromofluorobenzene			102 %	70-120		5030A	03/27/2019 19:15	DAA	8015B

**Analytical Results****Client Sample ID: B4-30****Laboratory Sample ID: 1903210-18 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Arsenic	10.2		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	7.02		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy Lu, Laboratory Supervisor



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**Environmental Testing Services**

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

**Analytical Results**

**Client Sample ID: B4-30**

**Laboratory Sample ID: 1903210-18 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 19:42	DAA	8015B
Surrogate: Bromofluorobenzene			105 %		70-120	5030A	03/27/2019 19:42	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Surrogate: Decachlorobiphenyl			79.0 %		43-169	3545	03/26/2019 18:48	AY	8081A

**Analytical Results**

**Client Sample ID: B4-40**

**Laboratory Sample ID: 1903210-19 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	8.94		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	88.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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*Wendy Lu*

Wendy Lu, Laboratory Supervisor



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

### Analytical Results

Client Sample ID: B4-40

Laboratory Sample ID: 1903210-19 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>									
				Batch ID:	BD90060	Prepared: 03/29/2019 10:21			
Beryllium	0.909		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.710		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	5.88		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	3.80		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	6.86		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	5.58		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	3.61		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	21.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	25.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>									
				Batch ID:	BD90057	Prepared: 03/27/2019 09:00			
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 20:10	DAA	8015B
Surrogate: Bromofluorobenzene		S-01	141 %	70-120		5030A	03/27/2019 20:10	DAA	8015B
<b>Organochlorine Pesticides</b>									
				Batch ID:	BC90827	Prepared: 03/26/2019 12:34			
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 19:09	AY	8081A

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Wendy

Wendy Lu, Laboratory Supervisor



**AMERICAN SCIENTIFIC LABORATORIES, LLC****Environmental Testing Services**

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

**Reported:**

04/03/2019 17:23

**Analytical Results****Client Sample ID: B4-40****Laboratory Sample ID: 1903210-19 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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**Organochlorine Pesticides**

Batch ID: BC90827

Prepared: 03/26/2019 12:34

Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
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Surrogate: Decachlorobiphenyl			109 %	43-169		3545	03/26/2019 19:09	AY	8081A
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**Analytical Results****Client Sample ID: B4-45****Laboratory Sample ID: 1903210-20 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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**Total Petroleum Hydrocarbons(TPH-g)**

Batch ID: BD90061

Prepared: 03/27/2019 09:00

Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 20:38	DAA	8015B
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Surrogate: Bromofluorobenzene			88.8 %	70-120		5030A	03/27/2019 20:38	DAA	8015B
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**Analytical Results****Client Sample ID: B4-50****Laboratory Sample ID: 1903210-21 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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**Total Mercury (CVAA)**

Batch ID: BD90059

Prepared: 03/29/2019 10:15

Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
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**Total ICP Metals**

Batch ID: BD90060

Prepared: 03/29/2019 10:21

Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Arsenic	2.61		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Barium	224		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Beryllium	0.612		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Cadmium	0.631		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Chromium	7.02		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Cobalt	4.40		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Copper	14.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Lead	8.17		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Nickel	3.98		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Vanadium	22.1		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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Zinc	26.4		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
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**Total Petroleum Hydrocarbons(TPH-g)**

Batch ID: BD90057

Prepared: 03/27/2019 09:00

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Wendy Lu, Laboratory Supervisor



AMERICAN SCIENTIFIC LABORATORIES, LLC  
Environmental Testing Services

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SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123

Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
Reported:  
04/03/2019 17:23

Analytical Results

Client Sample ID: B4-50

Laboratory Sample ID: 1903210-21 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 21:06	DAA	8015B
Surrogate: Bromofluorobenzene			112 %		70-120	5030A	03/27/2019 21:06	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Surrogate: Decachlorobiphenyl			97.2 %		43-169	3545	03/26/2019 19:30	AY	8081A

Analytical Results

Client Sample ID: B4-55

Laboratory Sample ID: 1903210-22 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 21:33	DAA	8015B
Surrogate: Bromofluorobenzene			120 %		70-120	5030A	03/27/2019 21:33	DAA	8015B

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Wendy Lu, Laboratory Supervisor



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*Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

### Total Mercury (CVAA) - Quality Control Report

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch BD90059 - 7471A - 7471A

##### Blank (BD90059-BLK1)

Prepared: 03/29/201 Analyzed: 04/01/201

Mercury ND 0.0500 mg/kg

##### LCS (BD90059-BS1)

Prepared: 03/29/201 Analyzed: 04/01/201

Mercury 102 50.0 mg/kg 100 102 80-120

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Wendy Lu, Laboratory Supervisor





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Environmental Testing Services

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

**Total ICP Metals - Quality Control Report**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch BD90060 - 3050B - SW846 6010B**

**Blank (BD90060-BLK1)**

Prepared: 03/29/201 Analyzed: 04/01/201

Antimony	ND	0.500	mg/kg
Arsenic	ND	0.250	"
Barium	ND	0.500	"
Beryllium	ND	0.500	"
Cadmium	ND	0.500	"
Chromium	ND	0.500	"
Cobalt	ND	0.500	"
Copper	ND	0.500	"
Lead	ND	0.250	"
Molybdenum	ND	0.500	"
Nickel	ND	0.500	"
Selenium	ND	0.500	"
Silver	ND	0.500	"
Thallium	ND	0.500	"
Vanadium	ND	0.500	"
Zinc	ND	0.500	"

**LCS (BD90060-BS1)**

Prepared: 03/29/201 Analyzed: 04/01/201

Antimony	92.7	1.00	mg/kg	100	92.7	80-120
Arsenic	92.9	0.500	"	100	92.9	80-120
Barium	101	1.00	"	100	101	80-120
Beryllium	109	1.00	"	100	109	80-120
Cadmium	93.0	1.00	"	100	93.0	80-120
Chromium	94.1	1.00	"	100	94.1	80-120
Cobalt	94.4	1.00	"	100	94.4	80-120
Copper	99.0	1.00	"	100	99.0	80-120
Lead	94.5	0.500	"	100	94.5	80-120
Molybdenum	92.0	1.00	"	100	92.0	80-120
Nickel	91.1	1.00	"	100	91.1	80-120
Selenium	90.7	1.00	"	100	90.7	80-120
Silver	69.3	1.00	"	100	69.3	80-120
Thallium	95.0	1.00	"	100	95.0	80-120
Vanadium	97.8	1.00	"	100	97.8	80-120
Zinc	95.9	1.00	"	100	95.9	80-120

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

**Total Petroleum Hydrocarbons(TPH-g) - Quality Control Report**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch BD90057 - 5030A - 8015B**

**Blank (BD90057-BLK1)**

Prepared & Analyzed: 03/27/201

Gasoline Range Organics	ND	500	ug/kg							J
Surrogate: Bromofluorobenzene	11.2		"	10.0		112	70-120			

**Matrix Spike (BD90057-MS1)**

Source: 1903210-12

Prepared & Analyzed: 03/27/201

Gasoline Range Organics	492		ug/kg	500	26.7	93.1	75-120			
Surrogate: Bromofluorobenzene	36.0		"	10.0		360	70-120			S-01

**Matrix Spike Dup (BD90057-MSD1)**

Source: 1903210-12

Prepared & Analyzed: 03/27/201

Gasoline Range Organics	562		ug/kg	500	26.7	107	75-120	13.3	15	
Surrogate: Bromofluorobenzene	44.9		"	10.0		449	70-120			S-01

**Batch BD90061 - 5030A - 8015B**

**Blank (BD90061-BLK1)**

Prepared & Analyzed: 03/27/201

Gasoline Range Organics	ND	500	ug/kg							
Surrogate: Bromofluorobenzene	10.0		"	10.0		100	70-120			

**Matrix Spike (BD90061-MS1)**

Source: 1903210-20

Prepared & Analyzed: 03/27/201

Gasoline Range Organics	492		ug/kg	500	16.3	95.1	75-120			
Surrogate: Bromofluorobenzene	36.0		"	10.0		360	70-120			S-01

**Matrix Spike Dup (BD90061-MSD1)**

Source: 1903210-20

Prepared & Analyzed: 03/27/201

Gasoline Range Organics	449		ug/kg	500	16.3	86.5	75-120	9.22	15	
Surrogate: Bromofluorobenzene	32.5		"	10.0		325	70-120			S-01

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SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123

Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
Reported:  
04/03/2019 17:23

Organochlorine Pesticides - Quality Control Report

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch BC90827 - 3545 - 8081A

Blank (BC90827-BLK1)

Prepared & Analyzed: 03/26/201

Aldrin	ND	2.00	ug/kg
alpha-BHC	ND	2.00	"
beta-BHC	ND	2.00	"
gamma-Chlordane	ND	2.00	"
alpha-Chlordane	ND	2.00	"
4,4'-DDD	ND	4.00	"
4,4'-DDE	ND	4.00	"
4,4'-DDT	ND	4.00	"
delta-BHC	ND	2.00	"
Dieldrin	ND	4.00	"
Endosulfan I	ND	2.00	"
Endosulfan II	ND	4.00	"
Endosulfan sulfate	ND	4.00	"
Endrin	ND	4.00	"
Endrin aldehyde	ND	4.00	"
Endrin ketone	ND	4.00	"
gamma-BHC, Lindane	ND	2.00	"
Heptachlor	ND	2.00	"
Heptachlor Epoxide	ND	2.00	"
Methoxychlor	ND	4.00	"
Toxaphene	ND	170	"
Chlordane (total)	ND	100	"

Surrogate: Decachlorobiphenyl 21.5 " 16.7 129 43-169

LCS (BC90827-BS1)

Prepared & Analyzed: 03/26/201

Aldrin	12.2	2.00	ug/kg	16.7	73.0	42-122
4,4'-DDT	14.3	4.00	"	16.7	86.0	25-160
Dieldrin	13.1	4.00	"	16.7	78.4	36-146
Endrin	16.6	4.00	"	16.7	99.6	30-147
gamma-BHC, Lindane	12.1	2.00	"	16.7	72.8	32-127
Heptachlor	12.9	2.00	"	16.7	77.2	34-111

Surrogate: Decachlorobiphenyl 16.4 " 16.7 98.2 43-169

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Wendy Lu, Laboratory Supervisor





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*Environmental Testing Services*

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/03/2019 17:23

**Organochlorine Pesticides - Quality Control Report**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC90827 - 3545 - 8081A**

**LCS Dup (BC90827-BSD1)**

Prepared & Analyzed: 03/26/201

Aldrin	12.1	2.00	ug/kg	16.7		72.3	42-122	0.895	30	
4,4'-DDT	14.0	4.00	"	16.7		83.9	25-160	2.49	30	
Dieldrin	13.0	4.00	"	16.7		78.2	36-146	0.255	30	
Endrin	16.8	4.00	"	16.7		101	30-147	0.871	30	
gamma-BHC, Lindane	12.2	2.00	"	16.7		72.9	32-127	0.110	30	
Heptachlor	12.8	2.00	"	16.7		76.7	34-111	0.710	30	
Surrogate: Decachlorobiphenyl	16.7		"	16.7		100	43-169			

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Wendy Lu, Laboratory Supervisor



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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

**Reported:**

04/03/2019 17:23

### Notes and Definitions

S-01	The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the practical quantitation limit (PQL)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



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04 April 2019

Luke Montague

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego, CA 92123

**Work Order #: 1903210**

**Project Name: CYPRESS**

**Project ID: 01214253.06**

**Site Address: 11495 Cypress Canyon San Diego, CA**

Enclosed are the results of analyses for samples received by the laboratory on March 25, 2019. If you have any questions concerning this report, please feel free to contact us.

**Wendy Lu**

**Laboratory Supervisor**

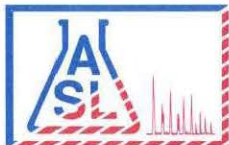
**Rojert G. Araghi**

**Laboratory Director**

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.





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Page 1 Of 4

COC# 82829

GLOBAL ID

E REPORT: ☒ PDF ☐ EDF ☐ EDD

ASL JOB# 1903210

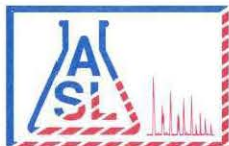
Company: SCS ENGINEERS					Report To:					<p>ANALYSIS REQUESTED</p> <p>TITLE 22 METALS (6010B) LEAD + ARSENIC (6010B) CCPS (8081) TPH EXT (8015) (SILICA GEL)</p>									
Address: 8799 BALBOA AVE					Project Name: CYPRESS										Address:				
SAN DIEGO, CA					Site Address: 11495 CYPRESS CANYON										Invoice To:				
Telephone: 858 571-5500					SAN DIEGO, CA										Address:				
Fax: 858 571-5500																			
Special Instruction: *TPH EXT NEEDS SILICA GEL					Project ID: 01214253.06														
E-mail: LMONTAGUE@SCSENGINEERS.COM					Project Manager: LUKE MONTAGUE					P.O.#: 01214253.06									

ITEM	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation								Remarks
	Lab ID	Sample ID	Date	Time	#	Type												
1	1903210-01	B1-1	3/22/19	0729	42	402 Jan	SOIL	ICE			X	X	X					
2	1903210-02	B1-5		0734							X	X	X					
3	1903210-03	B1-15		0751								X	X	X				
4	1903210-04	B1-20		0755							X	X	X					
5	1903210-05	B1-30		0804							X	X	X					
6	1903210-06	B1-35		0815									X					
7	1903210-07	B2-1		0907							X	X	X					
8	1903210-08	B2-5		0909							X	X	X					
9	1903210-09	B2-15		0920								X	X	X				
10	1903210-10	B2-20		0926							X	X	X					

Collected By: [Signature]	Date: 3/22/19	Time: 1620	Relinquished By: [Signature]	Date: 3/22/19	Time: 1620
Relinquished By:	Date:	Time:	Received For Laboratory: Janet Chen	Date: 3-25-19	Time: 9:00
Received By:	Date:	Time:	Condition of Sample: via GSO		

CHAIN OF CUSTODY RECORD





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Environmental Testing Services

2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

Page 2 Of 4COC# **82831**

GLOBAL ID \_\_\_\_\_

E REPORT: ☐ PDF ☐ EDF ☐ EDDASL JOB# 1903210

Company: <u>SCS</u>		Report To:	
Address:	Project Name: <u>CYPRESS</u>	Address:	<b>ANALYSIS REQUESTED</b> TITLE 22 (6010B) LEAD + ARSENIC (6010B) OCPs (8081) TP Hex (8015) (SILICA GEL)
	Site Address:	Invoice To:	
Telephone:		Address:	
Fax:			
Special Instruction:	Project ID:		
E-mail:	Project Manager:	P.O.#: <u>01214253.06</u>	

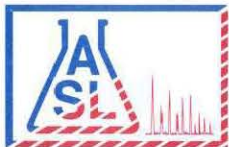
ITEM	LAB USE ONLY	SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation										Remarks		
	Lab ID	Sample ID	Date	Time	#	Type															
11	1903210-11	B2-25	3/22/19	0934	2	4oz Jar	SOIL	ICE													
		B3-1	↓	0959	2	↓	↓	↓											X		
		B3-5		1009	1																X
		B3-10		1013	2																X
		B3-15		1020	2																X
		B3-20		1029	2																X
		B3-25		1037	2																X
		B3-30		1046	2																X
12	1903210-12	B4-1		1115	2						X		X	X							
13	1903210-13	B4-5	↓	1120	2	↓	↓	↓			X		X	X							

Collected By: <u>[Signature]</u>	Date <u>3/22/19</u> Time <u>1620</u>	Relinquished By: <u>[Signature]</u>	Date <u>3/22/19</u> Time <u>1620</u>
Relinquished By:	Date _____ Time _____	Received For Laboratory <u>Janet Chen</u>	Date <u>3-25-19</u> Time <u>9:00</u>
Received By:	Date _____ Time _____	Condition of Sample: <u>via GSG</u>	

White - Report. Yellow - Laboratory. Pink - Client

CHAIN OF CUSTODY RECORD





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Page 3 of 4

COC# **82827**

GLOBAL ID \_\_\_\_\_

E REPORT: ☐ PDF ☐ EDF ☐ EDD

ASL JOB# **1903210**

Company: <b>SCS</b>		Report To:	
Address:	Project Name: <b>CYPRESS</b>	Address:	
	Site Address:	Invoice To:	
Telephone:		Address:	
Fax:			
Special Instruction:	Project ID:		
E-mail:	Project Manager:	P.O.#: <b>01214253.06</b>	

ANALYSIS REQUESTED

TITLE 22 (6010B)  
LEAD + ARSENIC (6010B)  
OCPs (8081)  
TPH EXT (8015) SILICA GE

ARCHIVE

ITEM	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation											Remarks
	Lab ID	Sample ID	Date	Time	#	Type															
14	1903210-14	B4-10	3/22/19	1124	2	40Z JAR <del>SOIL</del>			SOIL <del>ICE</del>	ICE				X	X	X	X				
15	1903210-15	B4-15	3/22/19	1130	2									X		X					
16	1903210-16	B4-20		1137	2								(15)	X	X	X	X				
17	1903210-17	B4-25		1144	2												X				
18	1903210-18	B4-30		1156	2									X	X	X					
19	1903210-19	B4-40		1203	2								(15)	X	X	X	X				
20	1903210-20	B4-45		1212	2												X				
21	1903210-21	B4-50		1220	2								(15)	X	X	X	X				
22	1903210-22	B4-55		1242	2												X				
		DR-1		1336	1																X

Collected By: <b>[Signature]</b>	Date <b>3/22/19</b> Time <b>1620</b>	Relinquished By: <b>[Signature]</b>	Date <b>3/22/19</b> Time <b>1620</b>
Relinquished By:	Date _____ Time _____	Received For Laboratory <b>Tarut Chun</b>	Date <b>3-25-19</b> Time <b>9:00</b>
Received By:	Date _____ Time _____	Condition of Sample:	

TAT  
☒ Normal  
☐ Rush







Job# 1903210

## ASL Sample Receipt Form

Client: SCS Engineers

Date: 3-25-19

### Sample Information:

Temperature: 5.3°C

☐ Blank ☒ Sample

Custody Seal:

☐ Yes ☒ No ☐ Not Available

Received Within Holding Time:

☒ Yes ☐ No

### Container:

Proper Containers and Sufficient Volume:

☒ Yes ☐ No

Soil: ☒ 4oz ☐ 8oz ☐ Sleeve ☐ VOA

Water: ☐ 500AG ☐ 1AG ☐ 125PB ☐ 250PB ☐ 500PB ☐ VOA ☐ Other \_\_\_\_\_

Air: ☐ Tedlar®

Sample Containers Intact:

☒ Yes ☐ No

Trip Blank

☐ Yes ☒ No

### Chain-of-Custody (COC):

Received:

☒ Yes ☐ No

Samplers Name:

☒ Yes ☐ No

Container Labels match COC:

☒ Yes ☐ No

COC documents received complete:

☒ Yes ☐ No

Proper Preservation Noted:

☒ Yes ☐ No

Completed By: Tanet Chin



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SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123

Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
**Reported:**  
04/04/2019 16:50

**ANALYTICAL SUMMARY REPORT**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1-1	1903210-01	Solid	03/22/2019 07:29	03/25/2019 09:00
B1-5	1903210-02	Solid	03/22/2019 07:34	03/25/2019 09:00
B1-15	1903210-03	Solid	03/22/2019 07:51	03/25/2019 09:00
B1-20	1903210-04	Solid	03/22/2019 07:55	03/25/2019 09:00
B1-30	1903210-05	Solid	03/22/2019 08:04	03/25/2019 09:00
B1-35	1903210-06	Solid	03/22/2019 08:15	03/25/2019 09:00
B2-1	1903210-07	Solid	03/22/2019 09:07	03/25/2019 09:00
B2-5	1903210-08	Solid	03/22/2019 09:09	03/25/2019 09:00
B2-15	1903210-09	Solid	03/22/2019 09:20	03/25/2019 09:00
B2-20	1903210-10	Solid	03/22/2019 09:26	03/25/2019 09:00
B2-25	1903210-11	Solid	03/22/2019 09:34	03/25/2019 09:00
B4-1	1903210-12	Solid	03/22/2019 11:15	03/25/2019 09:00
B4-5	1903210-13	Solid	03/22/2019 11:20	03/25/2019 09:00
B4-10	1903210-14	Solid	03/22/2019 11:24	03/25/2019 09:00
B4-15	1903210-15	Solid	03/22/2019 11:30	03/25/2019 09:00
B4-20	1903210-16	Solid	03/22/2019 11:37	03/25/2019 09:00
B4-25	1903210-17	Solid	03/22/2019 11:44	03/25/2019 09:00
B4-30	1903210-18	Solid	03/22/2019 11:56	03/25/2019 09:00
B4-40	1903210-19	Solid	03/22/2019 12:03	03/25/2019 09:00
B4-45	1903210-20	Solid	03/22/2019 12:12	03/25/2019 09:00
B4-50	1903210-21	Solid	03/22/2019 12:20	03/25/2019 09:00
B4-55	1903210-22	Solid	03/22/2019 12:42	03/25/2019 09:00

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Wendy Lu, Laboratory Supervisor



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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

**Analytical Results****Client Sample ID: B1-1****Laboratory Sample ID: 1903210-01 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059			Prepared: 03/29/2019 10:15			
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060			Prepared: 03/29/2019 10:21			
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	2.18		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	73.7		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.768		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	12.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	7.38		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	16.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	6.54		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	7.23		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	35.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	31.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90061			Prepared: 03/27/2019 09:00			
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 00:20	DAA	8015B
Surrogate: Bromofluorobenzene			98.4 %		70-120	5030A	03/28/2019 00:20	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90958			Prepared: 03/28/2019 09:00			
Diesel range organics	ND		20.0	mg/kg	2	3550B	03/28/2019 20:04	DAA	8015B
Oil Range Organics	411		100	mg/kg	2	3550B	03/28/2019 20:04	DAA	8015B
Surrogate: Chlorobenzene			79.7 %		70-120	3550B	03/28/2019 20:04	DAA	8015B

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Wendy Lu, Laboratory Supervisor

**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke MontagueWork Order No: 1903210  
**Reported:**  
04/04/2019 16:50**Analytical Results****Client Sample ID: B1-1****Laboratory Sample ID: 1903210-01 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
<b>Dieldrin</b>	<b>4.34</b>		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 14:21	AY	8081A
<i>Surrogate: Decachlorobiphenyl</i>			80.7 %	43-169		3545	03/26/2019 14:21	AY	8081A

**Analytical Results****Client Sample ID: B1-5****Laboratory Sample ID: 1903210-02 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	<b>6.95</b>		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	<b>75.3</b>		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	<b>0.848</b>		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	<b>0.568</b>		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	<b>5.72</b>		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy Lu, Laboratory Supervisor

**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

**Reported:**

04/04/2019 16:50

**Analytical Results****Client Sample ID: B1-5****Laboratory Sample ID: 1903210-02 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Cobalt	6.59		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	6.84		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	7.23		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	4.55		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	17.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	22.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 00:48	DAA	8015B
Surrogate: Bromofluorobenzene			107 %	70-120		5030A	03/28/2019 00:48	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BD90040		Prepared: 03/29/2019 09:00				
Diesel range organics	47.4		10.0	mg/kg	1	3550B	03/29/2019 13:43	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/29/2019 13:43	DAA	8015B
Surrogate: Chlorobenzene			92.8 %	70-120		3550B	03/29/2019 13:43	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 14:37	AY	8081A

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Wendy Lu, Laboratory Supervisor



**AMERICAN SCIENTIFIC LABORATORIES, LLC****Environmental Testing Services**

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

**Analytical Results****Client Sample ID: B1-5****Laboratory Sample ID: 1903210-02 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 14:37	AY	8081A
Surrogate: Decachlorobiphenyl			81.6 %	43-169		3545	03/26/2019 14:37	AY	8081A

**Analytical Results****Client Sample ID: B1-15****Laboratory Sample ID: 1903210-03 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Arsenic	0.995		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	6.36		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 01:15	DAA	8015B
Surrogate: Bromofluorobenzene			107 %	70-120		5030A	03/28/2019 01:15	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90906		Prepared: 03/27/2019 09:00				
Diesel range organics	10.1		10.0	mg/kg	1	3550B	03/27/2019 22:40	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/27/2019 22:40	DAA	8015B
Surrogate: Chlorobenzene			78.0 %	70-120		3550B	03/27/2019 22:40	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A

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Wendy Lu, Laboratory Supervisor



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

### Analytical Results

Client Sample ID: B1-15

Laboratory Sample ID: 1903210-03 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 15:00	AY	8081A
Surrogate: Decachlorobiphenyl			78.6 %	43-169		3545	03/26/2019 15:00	AY	8081A

### Analytical Results

Client Sample ID: B1-20

Laboratory Sample ID: 1903210-04 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	5.00		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	221		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.893		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	23.1		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.06		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	14.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	25.7		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	2.01		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	6.74		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	29.4		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	49.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 01:42	DAA	8015B
Surrogate: Bromofluorobenzene			S-01	172 %	70-120	5030A	03/28/2019 01:42	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90964		Prepared: 03/29/2019 09:00				
Diesel range organics	ND		20.0	mg/kg	2	3550B	03/29/2019 15:15	DAA	8015B
Oil Range Organics	399		100	mg/kg	2	3550B	03/29/2019 15:15	DAA	8015B

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Wendy

Wendy Lu, Laboratory Supervisor



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2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

**Analytical Results****Client Sample ID: B1-20****Laboratory Sample ID: 1903210-04 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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**Total Petroleum Hydrocarbons(TPH DROORO)**

Batch ID: BC90964

Prepared: 03/29/2019 09:00

Surrogate: Chlorobenzene

79.2 %

70-120

3550B

03/29/2019 15:15

DAA

8015B

**Organochlorine Pesticides**

Batch ID: BC90827

Prepared: 03/26/2019 12:34

Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 15:21	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 15:21	AY	8081A

Surrogate: Decachlorobiphenyl

118 %

43-169

3545

03/26/2019 15:21

AY

8081A

**Analytical Results****Client Sample ID: B1-30****Laboratory Sample ID: 1903210-05 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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**Total Mercury (CVAA)**

Batch ID: BD90059

Prepared: 03/29/2019 10:15

Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
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**Total ICP Metals**

Batch ID: BD90060

Prepared: 03/29/2019 10:21

Antimony	0.962		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	7.64		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	107		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	0.506		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy Lu, Laboratory Supervisor





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Environmental Testing Services

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123

Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
Reported:  
04/04/2019 16:50

## Analytical Results

Client Sample ID: B1-30

Laboratory Sample ID: 1903210-05 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Cadmium	0.919		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	8.43		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	4.12		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	11.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	25.3		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	0.601		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	4.12		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	28.4		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	42.5		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 02:10	DAA	8015B
Surrogate: Bromofluorobenzene			98.8 %	70-120		5030A	03/28/2019 02:10	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90957		Prepared: 03/28/2019 09:00				
Diesel range organics	125		10.0	mg/kg	1	3550B	03/28/2019 17:04	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/28/2019 17:04	DAA	8015B
Surrogate: Chlorobenzene			101 %	70-120		3550B	03/28/2019 17:04	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A

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Wendy

Wendy Lu, Laboratory Supervisor

**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke MontagueWork Order No: 1903210  
**Reported:**  
04/04/2019 16:50**Analytical Results****Client Sample ID: B1-30****Laboratory Sample ID: 1903210-05 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 15:42	AY	8081A
Surrogate: Decachlorobiphenyl			87.5 %	43-169		3545	03/26/2019 15:42	AY	8081A

**Analytical Results****Client Sample ID: B1-35****Laboratory Sample ID: 1903210-06 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 02:38	DAA	8015B
Surrogate: Bromofluorobenzene			83.1 %	70-120		5030A	03/28/2019 02:38	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90958		Prepared: 03/28/2019 09:00				
Diesel range organics	ND		20.0	mg/kg	2	3550B	03/28/2019 20:47	DAA	8015B
Oil Range Organics	390		100	mg/kg	2	3550B	03/28/2019 20:47	DAA	8015B
Surrogate: Chlorobenzene			81.1 %	70-120		3550B	03/28/2019 20:47	DAA	8015B

**Analytical Results****Client Sample ID: B2-1****Laboratory Sample ID: 1903210-07 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	1.22		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	9.80		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	192		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.854		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	9.86		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.08		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	10.7		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	5.68		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	0.509		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy Lu, Laboratory Supervisor



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SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke MontagueWork Order No: 1903210  
**Reported:**  
04/04/2019 16:50**Analytical Results****Client Sample ID: B2-1****Laboratory Sample ID: 1903210-07 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Nickel	5.62		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	29.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	27.7		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 03:06	DAA	8015B
Surrogate: Bromofluorobenzene		90.5 %		70-120		5030A	03/28/2019 03:06	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90964		Prepared: 03/29/2019 09:00				
Diesel range organics	ND		20.0	mg/kg	2	3550B	03/29/2019 16:41	DAA	8015B
Oil Range Organics	552		100	mg/kg	2	3550B	03/29/2019 16:41	DAA	8015B
Surrogate: Chlorobenzene		80.9 %		70-120		3550B	03/29/2019 16:41	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 16:02	AY	8081A
Surrogate: Decachlorobiphenyl		107 %		43-169		3545	03/26/2019 16:02	AY	8081A

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Wendy Lu, Laboratory Supervisor



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SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke MontagueWork Order No: 1903210  
Reported:  
04/04/2019 16:50**Analytical Results****Client Sample ID: B2-5****Laboratory Sample ID: 1903210-08 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059			Prepared: 03/29/2019 10:15			
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060			Prepared: 03/29/2019 10:21			
Antimony	0.600		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	8.20		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	125		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	1.05		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	27.1		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.82		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	69.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	13.5		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	2.16		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	10.4		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	32.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	41.6		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057			Prepared: 03/27/2019 09:00			
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 03:33	DAA	8015B
Surrogate: Bromofluorobenzene		S-01	186 %		70-120	5030A	03/28/2019 03:33	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90907			Prepared: 03/27/2019 09:00			
Diesel range organics	ND		10.0	mg/kg	1	3550B	03/28/2019 05:54	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/28/2019 05:54	DAA	8015B
Surrogate: Chlorobenzene			91.4 %		70-120	3550B	03/28/2019 05:54	DAA	8015B

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Wendy Lu, Laboratory Supervisor



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Environmental Testing Services

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

## Analytical Results

Client Sample ID: B2-5

Laboratory Sample ID: 1903210-08 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/29/2019 09:47	AY	8081A
Surrogate: Decachlorobiphenyl			99.0 %	43-169		3545	03/29/2019 09:47	AY	8081A

## Analytical Results

Client Sample ID: B2-15

Laboratory Sample ID: 1903210-09 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Arsenic	6.60		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	358		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	3680		500	ug/kg	1	5030A	03/28/2019 04:00	DAA	8015B
Surrogate: Bromofluorobenzene			S-01	396 %	70-120	5030A	03/28/2019 04:00	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90964		Prepared: 03/29/2019 09:00				
Diesel range organics	239		20.0	mg/kg	2	3550B	03/29/2019 17:24	DAA	8015B
Oil Range Organics	ND		100	mg/kg	2	3550B	03/29/2019 17:24	DAA	8015B

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Wendy

Wendy Lu, Laboratory Supervisor

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

**Analytical Results****Client Sample ID: B2-15****Laboratory Sample ID: 1903210-09 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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**Total Petroleum Hydrocarbons(TPH DROORO)**

Batch ID: BC90964

Prepared: 03/29/2019 09:00

Surrogate: Chlorobenzene

79.0 %

70-120

3550B

03/29/2019 17:24

DAA

8015B

**Organochlorine Pesticides**

Batch ID: BC90827

Prepared: 03/26/2019 12:34

Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
4,4'-DDE	15.6		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
4,4'-DDT	13.2		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 20:11	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 20:11	AY	8081A

Surrogate: Decachlorobiphenyl

90.2 %

43-169

3545

03/26/2019 20:11

AY

8081A

**Analytical Results****Client Sample ID: B2-20****Laboratory Sample ID: 1903210-10 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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**Total Mercury (CVAA)**

Batch ID: BD90059

Prepared: 03/29/2019 10:15

Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
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**Total ICP Metals**

Batch ID: BD90060

Prepared: 03/29/2019 10:21

Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	2.21		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	197		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy Lu, Laboratory Supervisor





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## Environmental Testing Services

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

### Analytical Results

Client Sample ID: B2-20

Laboratory Sample ID: 1903210-10 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Cadmium	0.988		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	6.12		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.99		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	15.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	5.85		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	2.55		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	38.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	40.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/28/2019 04:28	DAA	8015B
Surrogate: Bromofluorobenzene		S-01	372 %	70-120		5030A	03/28/2019 04:28	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BD90040		Prepared: 03/29/2019 09:00				
Diesel range organics	149		10.0	mg/kg	1	3550B	03/29/2019 15:17	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/29/2019 15:17	DAA	8015B
Surrogate: Chlorobenzene			95.4 %	70-120		3550B	03/29/2019 15:17	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
4,4'-DDE	28.2		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
4,4'-DDT	5.97		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A

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Wendy

Wendy Lu, Laboratory Supervisor

**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke MontagueWork Order No: 1903210  
**Reported:**  
04/04/2019 16:50**Analytical Results****Client Sample ID: B2-20****Laboratory Sample ID: 1903210-10 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 17:05	AY	8081A
Surrogate: Decachlorobiphenyl			97.4 %	43-169		3545	03/26/2019 17:05	AY	8081A

**Analytical Results****Client Sample ID: B2-25****Laboratory Sample ID: 1903210-11 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 16:27	DAA	8015B
Surrogate: Bromofluorobenzene			S-01	138 %	70-120	5030A	03/27/2019 16:27	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BD90040		Prepared: 03/29/2019 09:00				
Diesel range organics	81.2		10.0	mg/kg	1	3550B	03/29/2019 15:59	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/29/2019 15:59	DAA	8015B
Surrogate: Chlorobenzene			89.8 %	70-120		3550B	03/29/2019 15:59	DAA	8015B

**Analytical Results****Client Sample ID: B4-1****Laboratory Sample ID: 1903210-12 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	4.60		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	110		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	0.968		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.549		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	6.73		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	5.05		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	6.87		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	6.29		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy Lu, Laboratory Supervisor





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## Environmental Testing Services

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

### Analytical Results

Client Sample ID: B4-1

Laboratory Sample ID: 1903210-12 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Nickel	4.21		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	21.8		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	15.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 16:55	DAA	8015B
Surrogate: Bromofluorobenzene		110 %		70-120		5030A	03/27/2019 16:55	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90964		Prepared: 03/29/2019 09:00				
Diesel range organics	ND		20.0	mg/kg	2	3550B	03/29/2019 18:07	DAA	8015B
Oil Range Organics	ND		100	mg/kg	2	3550B	03/29/2019 18:07	DAA	8015B
Surrogate: Chlorobenzene		77.4 %		70-120		3550B	03/29/2019 18:07	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 17:25	AY	8081A
Surrogate: Decachlorobiphenyl		113 %		43-169		3545	03/26/2019 17:25	AY	8081A

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Wendy

Wendy Lu, Laboratory Supervisor





AMERICAN SCIENTIFIC LABORATORIES, LLC  
Environmental Testing Services

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123

Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
Reported:  
04/04/2019 16:50

Analytical Results

Client Sample ID: B4-5

Laboratory Sample ID: 1903210-13 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059			Prepared: 03/29/2019 10:15			
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060			Prepared: 03/29/2019 10:21			
Antimony	0.902		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	1.22		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	270		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.764		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	10.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	7.95		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	15.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	2.87		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	5.76		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	37.5		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	24.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057			Prepared: 03/27/2019 09:00			
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 17:22	DAA	8015B
Surrogate: Bromofluorobenzene		S-01	171 %		70-120	5030A	03/27/2019 17:22	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90964			Prepared: 03/29/2019 09:00			
Diesel range organics	183		20.0	mg/kg	2	3550B	03/29/2019 18:50	DAA	8015B
Oil Range Organics	ND		100	mg/kg	2	3550B	03/29/2019 18:50	DAA	8015B
Surrogate: Chlorobenzene			76.7 %		70-120	3550B	03/29/2019 18:50	DAA	8015B

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Wendy Lu, Laboratory Supervisor



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Environmental Testing Services

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SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123

Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
Reported:  
04/04/2019 16:50

## Analytical Results

Client Sample ID: B4-5

Laboratory Sample ID: 1903210-13 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 17:46	AY	8081A
Surrogate: Decachlorobiphenyl			102 %	43-169		3545	03/26/2019 17:46	AY	8081A

## Analytical Results

Client Sample ID: B4-10

Laboratory Sample ID: 1903210-14 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	6.57		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	118		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.776		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	9.30		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy



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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

### Analytical Results

Client Sample ID: B4-10

Laboratory Sample ID: 1903210-14 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Cobalt	5.82		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	11.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	5.32		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	0.612		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	4.92		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	28.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	29.0		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 17:51	DAA	8015B
Surrogate: Bromofluorobenzene			87.9 %		70-120	5030A	03/27/2019 17:51	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90906		Prepared: 03/27/2019 09:00				
Diesel range organics	12.2		10.0	mg/kg	1	3550B	03/28/2019 00:49	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/28/2019 00:49	DAA	8015B
Surrogate: Chlorobenzene			77.4 %		70-120	3550B	03/28/2019 00:49	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 18:07	AY	8081A

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Wendy

Wendy Lu, Laboratory Supervisor



**AMERICAN SCIENTIFIC LABORATORIES, LLC****Environmental Testing Services**

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke MontagueWork Order No: 1903210  
**Reported:**  
04/04/2019 16:50**Analytical Results****Client Sample ID: B4-10****Laboratory Sample ID: 1903210-14 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 18:07	AY	8081A
Surrogate: Decachlorobiphenyl			80.9 %	43-169		3545	03/26/2019 18:07	AY	8081A

**Analytical Results****Client Sample ID: B4-15****Laboratory Sample ID: 1903210-15 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Arsenic	7.85		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	4.67		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 18:19	DAA	8015B
Surrogate: Bromofluorobenzene			94.8 %	70-120		5030A	03/27/2019 18:19	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90907		Prepared: 03/27/2019 09:00				
Diesel range organics	ND		10.0	mg/kg	1	3550B	03/28/2019 00:19	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/28/2019 00:19	DAA	8015B
Surrogate: Chlorobenzene			92.2 %	70-120		3550B	03/28/2019 00:19	DAA	8015B

**Analytical Results****Client Sample ID: B4-20****Laboratory Sample ID: 1903210-16 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	3.78		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	55.1		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.652		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	15.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	3.57		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	7.42		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy Lu, Laboratory Supervisor



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

### Analytical Results

Client Sample ID: B4-20

Laboratory Sample ID: 1903210-16 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>									
					Batch ID: BD90060	Prepared: 03/29/2019 10:21			
Lead	9.85		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	1.83		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	3.50		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	21.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	25.4		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>									
					Batch ID: BD90057	Prepared: 03/27/2019 09:00			
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 18:47	DAA	8015B
Surrogate: Bromofluorobenzene			91.0 %	70-120		5030A	03/27/2019 18:47	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>									
					Batch ID: BC90964	Prepared: 03/29/2019 09:00			
Diesel range organics	ND		20.0	mg/kg	2	3550B	03/29/2019 19:34	DAA	8015B
Oil Range Organics	ND		100	mg/kg	2	3550B	03/29/2019 19:34	DAA	8015B
Surrogate: Chlorobenzene			75.2 %	70-120		3550B	03/29/2019 19:34	DAA	8015B
<b>Organochlorine Pesticides</b>									
					Batch ID: BC90827	Prepared: 03/26/2019 12:34			
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 18:27	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 18:27	AY	8081A

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Wendy

Wendy Lu, Laboratory Supervisor

**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

**Reported:**

04/04/2019 16:50

**Analytical Results****Client Sample ID: B4-20****Laboratory Sample ID: 1903210-16 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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**Organochlorine Pesticides**

Batch ID: BC90827

Prepared: 03/26/2019 12:34

Surrogate: Decachlorobiphenyl

108 %

43-169

3545

03/26/2019 18:27

AY

8081A

**Analytical Results****Client Sample ID: B4-25****Laboratory Sample ID: 1903210-17 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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**Total Petroleum Hydrocarbons(TPH-g)**

Batch ID: BD90057

Prepared: 03/27/2019 09:00

Gasoline Range Organics

ND

500

ug/kg

1

5030A

03/27/2019 19:15

DAA

8015B

Surrogate: Bromofluorobenzene

102 %

70-120

5030A

03/27/2019 19:15

DAA

8015B

**Total Petroleum Hydrocarbons(TPH DROORO)**

Batch ID: BD90040

Prepared: 03/29/2019 09:00

Diesel range organics

28.5

10.0

mg/kg

1

3550B

03/29/2019 17:23

DAA

8015B

Oil Range Organics

ND

50.0

mg/kg

1

3550B

03/29/2019 17:23

DAA

8015B

Surrogate: Chlorobenzene

90.6 %

70-120

3550B

03/29/2019 17:23

DAA

8015B

**Analytical Results****Client Sample ID: B4-30****Laboratory Sample ID: 1903210-18 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
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**Total ICP Metals**

Batch ID: BD90060

Prepared: 03/29/2019 10:21

Arsenic

10.2

0.250

mg/kg

1

3050B

04/01/2019 12:19

LVE

SW846 6010B

Lead

7.02

0.250

mg/kg

1

3050B

04/01/2019 12:19

LVE

SW846 6010B

**Total Petroleum Hydrocarbons(TPH-g)**

Batch ID: BD90057

Prepared: 03/27/2019 09:00

Gasoline Range Organics

ND

500

ug/kg

1

5030A

03/27/2019 19:42

DAA

8015B

Surrogate: Bromofluorobenzene

105 %

70-120

5030A

03/27/2019 19:42

DAA

8015B

**Total Petroleum Hydrocarbons(TPH DROORO)**

Batch ID: BC90907

Prepared: 03/27/2019 09:00

Diesel range organics

ND

10.0

mg/kg

1

3550B

03/28/2019 01:01

DAA

8015B

Oil Range Organics

ND

50.0

mg/kg

1

3550B

03/28/2019 01:01

DAA

8015B

Surrogate: Chlorobenzene

93.7 %

70-120

3550B

03/28/2019 01:01

DAA

8015B

**Organochlorine Pesticides**

Batch ID: BC90827

Prepared: 03/26/2019 12:34

Aldrin

ND

2.00

ug/kg

1

3545

03/26/2019 18:48

AY

8081A

alpha-BHC

ND

2.00

ug/kg

1

3545

03/26/2019 18:48

AY

8081A

beta-BHC

ND

2.00

ug/kg

1

3545

03/26/2019 18:48

AY

8081A

gamma-Chlordane

ND

2.00

ug/kg

1

3545

03/26/2019 18:48

AY

8081A

alpha-Chlordane

ND

2.00

ug/kg

1

3545

03/26/2019 18:48

AY

8081A

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Wendy Lu, Laboratory Supervisor



**AMERICAN SCIENTIFIC LABORATORIES, LLC***Environmental Testing Services*

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210

**Reported:**  
04/04/2019 16:50**Analytical Results****Client Sample ID: B4-30****Laboratory Sample ID: 1903210-18 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 18:48	AY	8081A
Surrogate: Decachlorobiphenyl			79.0 %	43-169		3545	03/26/2019 18:48	AY	8081A

**Analytical Results****Client Sample ID: B4-40****Laboratory Sample ID: 1903210-19 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	8.94		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	88.9		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	0.909		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.710		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	5.88		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	3.80		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	6.86		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	5.58		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	3.61		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

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Wendy Lu, Laboratory Supervisor

**AMERICAN SCIENTIFIC LABORATORIES, LLC****Environmental Testing Services**

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke MontagueWork Order No: 1903210  
Reported:  
04/04/2019 16:50**Analytical Results****Client Sample ID: B4-40****Laboratory Sample ID: 1903210-19 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	21.3		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	25.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 20:10	DAA	8015B
Surrogate: Bromofluorobenzene		S-01	141 %	70-120		5030A	03/27/2019 20:10	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BD90040		Prepared: 03/29/2019 09:00				
Diesel range organics	65.2		10.0	mg/kg	1	3550B	03/29/2019 16:41	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/29/2019 16:41	DAA	8015B
Surrogate: Chlorobenzene			88.9 %	70-120		3550B	03/29/2019 16:41	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 19:09	AY	8081A
Surrogate: Decachlorobiphenyl			109 %	43-169		3545	03/26/2019 19:09	AY	8081A

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Wendy Lu, Laboratory Supervisor





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Environmental Testing Services

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SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123

Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
Reported:  
04/04/2019 16:50

Analytical Results

Client Sample ID: B4-45

Laboratory Sample ID: 1903210-20 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90061		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 20:38	DAA	8015B
Surrogate: Bromofluorobenzene			88.8 %	70-120		5030A	03/27/2019 20:38	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BD90040		Prepared: 03/29/2019 09:00				
Diesel range organics	84.3		10.0	mg/kg	1	3550B	03/29/2019 18:05	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/29/2019 18:05	DAA	8015B
Surrogate: Chlorobenzene			94.2 %	70-120		3550B	03/29/2019 18:05	DAA	8015B

Analytical Results

Client Sample ID: B4-50

Laboratory Sample ID: 1903210-21 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Mercury (CVAA)</b>			Batch ID: BD90059		Prepared: 03/29/2019 10:15				
Mercury	ND		0.0500	mg/kg	1	7471A	04/01/2019 11:16	LVE	7471A
<b>Total ICP Metals</b>			Batch ID: BD90060		Prepared: 03/29/2019 10:21				
Antimony	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Arsenic	2.61		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Barium	224		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Beryllium	0.612		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cadmium	0.631		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Chromium	7.02		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Cobalt	4.40		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Copper	14.2		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Lead	8.17		0.250	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Molybdenum	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Nickel	3.98		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Selenium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Silver	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Thallium	ND		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Vanadium	22.1		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B
Zinc	26.4		0.500	mg/kg	1	3050B	04/01/2019 12:19	LVE	SW846 6010B

<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 21:06	DAA	8015B
Surrogate: Bromofluorobenzene			112 %	70-120		5030A	03/27/2019 21:06	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90907		Prepared: 03/27/2019 09:00				
Diesel range organics	ND		10.0	mg/kg	1	3550B	03/28/2019 02:25	DAA	8015B

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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

### Analytical Results

Client Sample ID: B4-50

Laboratory Sample ID: 1903210-21 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90907		Prepared: 03/27/2019 09:00				
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/28/2019 02:25	DAA	8015B
Surrogate: Chlorobenzene			89.1 %		70-120	3550B	03/28/2019 02:25	DAA	8015B
<b>Organochlorine Pesticides</b>			Batch ID: BC90827		Prepared: 03/26/2019 12:34				
Aldrin	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
alpha-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
beta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
gamma-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
alpha-Chlordane	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
4,4'-DDD	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
4,4'-DDE	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
4,4'-DDT	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
delta-BHC	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Dieldrin	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endosulfan I	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endosulfan II	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endosulfan sulfate	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endrin	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endrin aldehyde	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Endrin ketone	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
gamma-BHC, Lindane	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Heptachlor	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Heptachlor Epoxide	ND		2.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Methoxychlor	ND		4.00	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Toxaphene	ND		170	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Chlordane (total)	ND		100	ug/kg	1	3545	03/26/2019 19:30	AY	8081A
Surrogate: Decachlorobiphenyl			97.2 %		43-169	3545	03/26/2019 19:30	AY	8081A

### Analytical Results

Client Sample ID: B4-55

Laboratory Sample ID: 1903210-22 (Solid)

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH-g)</b>			Batch ID: BD90057		Prepared: 03/27/2019 09:00				
Gasoline Range Organics	ND		500	ug/kg	1	5030A	03/27/2019 21:33	DAA	8015B
Surrogate: Bromofluorobenzene			120 %		70-120	5030A	03/27/2019 21:33	DAA	8015B
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90907		Prepared: 03/27/2019 09:00				
Diesel range organics	ND		10.0	mg/kg	1	3550B	03/28/2019 03:07	DAA	8015B
Oil Range Organics	ND		50.0	mg/kg	1	3550B	03/28/2019 03:07	DAA	8015B

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Wendy

Wendy Lu, Laboratory Supervisor



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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

**Analytical Results**

**Client Sample ID: B4-55**

**Laboratory Sample ID: 1903210-22 (Solid)**

Analyte	Result	Notes	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
<b>Total Petroleum Hydrocarbons(TPH DROORO)</b>			Batch ID: BC90907			Prepared: 03/27/2019 09:00			
Surrogate: Chlorobenzene	93.0 %			70-120		3550B	03/28/2019 03:07	DAA	8015B

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### Total Mercury (CVAA) - Quality Control Report

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch BD90059 - 7471A - 7471A

##### Blank (BD90059-BLK1)

Prepared: 03/29/201 Analyzed: 04/01/201

Mercury ND 0.0500 mg/kg

##### LCS (BD90059-BS1)

Prepared: 03/29/201 Analyzed: 04/01/201

Mercury 102 50.0 mg/kg 100 102 80-120

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SCS Engineers

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Reported:

04/04/2019 16:50

**Total ICP Metals - Quality Control Report**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch BD90060 - 3050B - SW846 6010B****Blank (BD90060-BLK1)**

Prepared: 03/29/201 Analyzed: 04/01/201

Antimony	ND	0.500	mg/kg
Arsenic	ND	0.250	"
Barium	ND	0.500	"
Beryllium	ND	0.500	"
Cadmium	ND	0.500	"
Chromium	ND	0.500	"
Cobalt	ND	0.500	"
Copper	ND	0.500	"
Lead	ND	0.250	"
Molybdenum	ND	0.500	"
Nickel	ND	0.500	"
Selenium	ND	0.500	"
Silver	ND	0.500	"
Thallium	ND	0.500	"
Vanadium	ND	0.500	"
Zinc	ND	0.500	"

**LCS (BD90060-BS1)**

Prepared: 03/29/201 Analyzed: 04/01/201

Antimony	92.7	1.00	mg/kg	100	92.7	80-120
Arsenic	92.9	0.500	"	100	92.9	80-120
Barium	101	1.00	"	100	101	80-120
Beryllium	109	1.00	"	100	109	80-120
Cadmium	93.0	1.00	"	100	93.0	80-120
Chromium	94.1	1.00	"	100	94.1	80-120
Cobalt	94.4	1.00	"	100	94.4	80-120
Copper	99.0	1.00	"	100	99.0	80-120
Lead	94.5	0.500	"	100	94.5	80-120
Molybdenum	92.0	1.00	"	100	92.0	80-120
Nickel	91.1	1.00	"	100	91.1	80-120
Selenium	90.7	1.00	"	100	90.7	80-120
Silver	69.3	1.00	"	100	69.3	80-120
Thallium	95.0	1.00	"	100	95.0	80-120
Vanadium	97.8	1.00	"	100	97.8	80-120
Zinc	95.9	1.00	"	100	95.9	80-120

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SCS Engineers

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Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

**Total Petroleum Hydrocarbons(TPH-g) - Quality Control Report**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch BD90057 - 5030A - 8015B****Blank (BD90057-BLK1)**

Prepared &amp; Analyzed: 03/27/201

Gasoline Range Organics	ND	500	ug/kg							J
Surrogate: Bromofluorobenzene	11.2		"	10.0		112	70-120			

**Matrix Spike (BD90057-MS1)**

Source: 1903210-12

Prepared &amp; Analyzed: 03/27/201

Gasoline Range Organics	492		ug/kg	500	26.7	93.1	75-120			
Surrogate: Bromofluorobenzene	36.0		"	10.0		360	70-120			S-01

**Matrix Spike Dup (BD90057-MSD1)**

Source: 1903210-12

Prepared &amp; Analyzed: 03/27/201

Gasoline Range Organics	562		ug/kg	500	26.7	107	75-120	13.3	15	
Surrogate: Bromofluorobenzene	44.9		"	10.0		449	70-120			S-01

**Batch BD90061 - 5030A - 8015B****Blank (BD90061-BLK1)**

Prepared &amp; Analyzed: 03/27/201

Gasoline Range Organics	ND	500	ug/kg							
Surrogate: Bromofluorobenzene	10.0		"	10.0		100	70-120			

**Matrix Spike (BD90061-MS1)**

Source: 1903210-20

Prepared &amp; Analyzed: 03/27/201

Gasoline Range Organics	492		ug/kg	500	16.3	95.1	75-120			
Surrogate: Bromofluorobenzene	36.0		"	10.0		360	70-120			S-01

**Matrix Spike Dup (BD90061-MSD1)**

Source: 1903210-20

Prepared &amp; Analyzed: 03/27/201

Gasoline Range Organics	449		ug/kg	500	16.3	86.5	75-120	9.22	15	
Surrogate: Bromofluorobenzene	32.5		"	10.0		325	70-120			S-01

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Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
Reported:  
04/04/2019 16:50

**Total Petroleum Hydrocarbons(TPH DROORO) - Quality Control Report**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch BC90906 - 3550B - 8015B**

<b>Blank (BC90906-BLK1)</b>				Prepared & Analyzed: 03/27/201						
Diesel range organics	ND	10.0	mg/kg							J
Oil Range Organics	ND	50.0	"							
Surrogate: Chlorobenzene	83.4		"	100		83.4	70-120			
<b>Matrix Spike (BC90906-MS1)</b>				Source: 1903176-19 Prepared & Analyzed: 03/27/201						
Diesel range organics	412		mg/kg	500	6.99	81.0	75-120			
Surrogate: Chlorobenzene	91.7		"	100		91.7	70-120			
<b>Matrix Spike Dup (BC90906-MSD1)</b>				Source: 1903176-19 Prepared & Analyzed: 03/27/201						
Diesel range organics	421		mg/kg	500	6.99	82.7	75-120	2.04	15	
Surrogate: Chlorobenzene	93.8		"	100		93.8	70-120			

**Batch BC90907 - 3550B - 8015B**

<b>Blank (BC90907-BLK1)</b>				Prepared & Analyzed: 03/27/201						
Diesel range organics	ND	10.0	mg/kg							J
Oil Range Organics	ND	50.0	"							
Surrogate: Chlorobenzene	87.4		"	100		87.4	70-120			
<b>Matrix Spike (BC90907-MS1)</b>				Source: 1903176-23 Prepared & Analyzed: 03/27/201						
Diesel range organics	544		mg/kg	500	46.9	99.4	75-120			
Surrogate: Chlorobenzene	98.7		"	100		98.7	70-120			
<b>Matrix Spike Dup (BC90907-MSD1)</b>				Source: 1903176-23 Prepared & Analyzed: 03/27/201						
Diesel range organics	539		mg/kg	500	46.9	98.3	75-120	1.00	15	
Surrogate: Chlorobenzene	98.5		"	100		98.5	70-120			

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Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

**Total Petroleum Hydrocarbons(TPH DROORO) - Quality Control Report**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch BC90957 - 3550B - 8015B****Blank (BC90957-BLK1)**

Prepared &amp; Analyzed: 03/28/201

Diesel range organics	ND	10.0	mg/kg							J
Oil Range Organics	ND	50.0	"							
Surrogate: Chlorobenzene	93.3		"	100		93.3	70-120			

**Matrix Spike (BC90957-MS1)**

Source: 1903175-01

Prepared &amp; Analyzed: 03/28/201

Diesel range organics	602		mg/kg	500	0.00	120	75-120			
Surrogate: Chlorobenzene	104		"	100		104	70-120			

**Matrix Spike Dup (BC90957-MSD1)**

Source: 1903175-01

Prepared &amp; Analyzed: 03/28/201

Diesel range organics	594		mg/kg	500	0.00	119	75-120	1.22	15	
Surrogate: Chlorobenzene	104		"	100		104	70-120			

**Batch BC90958 - 3550B - 8015B****Blank (BC90958-BLK1)**

Prepared &amp; Analyzed: 03/28/201

Diesel range organics	ND	10.0	mg/kg							J
Oil Range Organics	ND	50.0	"							
Surrogate: Chlorobenzene	81.2		"	100		81.2	70-120			

**Matrix Spike (BC90958-MS1)**

Source: 1903198-05

Prepared &amp; Analyzed: 03/28/201

Diesel range organics	448	10.0	mg/kg	500	7.02	88.1	75-120			
Surrogate: Chlorobenzene	93.2		"	100		93.2	70-120			

**Matrix Spike Dup (BC90958-MSD1)**

Source: 1903198-05

Prepared &amp; Analyzed: 03/28/201

Diesel range organics	462	10.0	mg/kg	500	7.02	91.1	75-120	3.25	15	
Surrogate: Chlorobenzene	96.0		"	100		96.0	70-120			

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SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123

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Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
Reported:  
04/04/2019 16:50

**Total Petroleum Hydrocarbons(TPH DROORO) - Quality Control Report**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC90964 - 3550B - 8015B**

<b>Blank (BC90964-BLK1)</b>				Prepared & Analyzed: 03/29/201						
Diesel range organics	ND	10.0	mg/kg							J
Oil Range Organics	ND	50.0	"							
Surrogate: Chlorobenzene	74.5		"	100		74.5	70-120			
<b>Matrix Spike (BC90964-MS1)</b>				Source: 1903212-01 Prepared & Analyzed: 03/29/201						
Diesel range organics	445		mg/kg	500	7.41	87.5	75-120			
Surrogate: Chlorobenzene	87.9		"	100		87.9	70-120			
<b>Matrix Spike Dup (BC90964-MSD1)</b>				Source: 1903212-01 Prepared & Analyzed: 03/29/201						
Diesel range organics	440		mg/kg	500	7.41	86.5	75-120	1.06	15	
Surrogate: Chlorobenzene	91.4		"	100		91.4	70-120			

**Batch BD90040 - 3550B - 8015B**

<b>Blank (BD90040-BLK1)</b>				Prepared & Analyzed: 03/29/201						
Diesel range organics	ND	10.0	mg/kg							J
Oil Range Organics	ND	50.0	"							
Surrogate: Chlorobenzene	86.3		"	100		86.3	70-120			
<b>Matrix Spike (BD90040-MS1)</b>				Source: 1903210-02 Prepared & Analyzed: 03/29/201						
Diesel range organics	579		mg/kg	500	47.4	106	75-120			
Surrogate: Chlorobenzene	95.8		"	100		95.8	70-120			
<b>Matrix Spike Dup (BD90040-MSD1)</b>				Source: 1903210-02 Prepared & Analyzed: 03/29/201						
Diesel range organics	609		mg/kg	500	47.4	112	75-120	5.14	15	
Surrogate: Chlorobenzene	97.5		"	100		97.5	70-120			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Wendy Lu, Laboratory Supervisor



AMERICAN SCIENTIFIC LABORATORIES, LLC  
Environmental Testing Services

2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

SCS Engineers  
8799 Balboa Avenue, Suite 290  
San Diego CA, 92123

Project: CYPRESS  
Project Number: 01214253.06  
Project Manager: Luke Montague

Work Order No: 1903210  
Reported:  
04/04/2019 16:50

Organochlorine Pesticides - Quality Control Report

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch BC90827 - 3545 - 8081A

Blank (BC90827-BLK1)

Prepared & Analyzed: 03/26/201

Aldrin	ND	2.00	ug/kg
alpha-BHC	ND	2.00	"
beta-BHC	ND	2.00	"
gamma-Chlordane	ND	2.00	"
alpha-Chlordane	ND	2.00	"
4,4'-DDD	ND	4.00	"
4,4'-DDE	ND	4.00	"
4,4'-DDT	ND	4.00	"
delta-BHC	ND	2.00	"
Dieldrin	ND	4.00	"
Endosulfan I	ND	2.00	"
Endosulfan II	ND	4.00	"
Endosulfan sulfate	ND	4.00	"
Endrin	ND	4.00	"
Endrin aldehyde	ND	4.00	"
Endrin ketone	ND	4.00	"
gamma-BHC, Lindane	ND	2.00	"
Heptachlor	ND	2.00	"
Heptachlor Epoxide	ND	2.00	"
Methoxychlor	ND	4.00	"
Toxaphene	ND	170	"
Chlordane (total)	ND	100	"

Surrogate: Decachlorobiphenyl 21.5 " 16.7 129 43-169

LCS (BC90827-BS1)

Prepared & Analyzed: 03/26/201

Aldrin	12.2	2.00	ug/kg	16.7	73.0	42-122
4,4'-DDT	14.3	4.00	"	16.7	86.0	25-160
Dieldrin	13.1	4.00	"	16.7	78.4	36-146
Endrin	16.6	4.00	"	16.7	99.6	30-147
gamma-BHC, Lindane	12.1	2.00	"	16.7	72.8	32-127
Heptachlor	12.9	2.00	"	16.7	77.2	34-111

Surrogate: Decachlorobiphenyl 16.4 " 16.7 98.2 43-169

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Wendy Lu, Laboratory Supervisor





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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

Reported:

04/04/2019 16:50

### Organochlorine Pesticides - Quality Control Report

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

#### Batch BC90827 - 3545 - 8081A

##### LCS Dup (BC90827-BSD1)

Prepared & Analyzed: 03/26/201

Aldrin	12.1	2.00	ug/kg	16.7		72.3	42-122	0.895	30	
4,4'-DDT	14.0	4.00	"	16.7		83.9	25-160	2.49	30	
Dieldrin	13.0	4.00	"	16.7		78.2	36-146	0.255	30	
Endrin	16.8	4.00	"	16.7		101	30-147	0.871	30	
gamma-BHC, Lindane	12.2	2.00	"	16.7		72.9	32-127	0.110	30	
Heptachlor	12.8	2.00	"	16.7		76.7	34-111	0.710	30	
Surrogate: Decachlorobiphenyl	16.7		"	16.7		100	43-169			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Wendy Lu, Laboratory Supervisor



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SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego CA, 92123

Project: CYPRESS

Project Number: 01214253.06

Project Manager: Luke Montague

Work Order No: 1903210

**Reported:**

04/04/2019 16:50

### Notes and Definitions

S-01	The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the practical quantitation limit (PQL)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



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09 April 2019

Luke Montague

SCS Engineers

8799 Balboa Avenue, Suite 290

San Diego, CA 92123

**Work Order #: 1904049**

**Project Name: CYPRESS**

**Project ID: 01214253.06**

**Site Address: 11495 Cypress Canyon San Diego, CA**

Enclosed are the results of analyses for samples received by the laboratory on April 05, 2019. If you have any questions concerning this report, please feel free to contact us.

**Wendy Lu**

**Laboratory Supervisor**

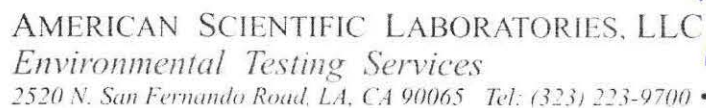
**Rojert G. Araghi**

**Laboratory Director**

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.





Rush TAT, Report Due: (4-9-19)

Page 1 Of 4

GLOBAL ID

E REPORT: ☒ PDF ☐ EDF ☐ EDD

NEW JOB # 1904049  
ASL JOB# 1903210

Company: SCS ENGINEERS

Address: 8799 BALBOA AVE

SAN DIEGO, CA

Telephone: 858 571-5500

Special Instruction: \*TPH EXT NEEDS SILICA GEL

E-mail: L.MONTAGNE@SCSENGINEERS.COM

Project Name: CYPRESS

Site Address: 11495 CYPRESS CANYON

SAN DIEGO, CA

Project ID: 01214253.06

Project Manager: LUKE MONTAGNE

Report To:

Address:

Invoice To:

Address:

P.O.#: 01214253.06

ANALYSIS REQUESTED

TITLE 22 METALS (6010B)

LEAD + ARSENIC (6010B)

OCPS (8081)

TPH EXT (8015) (SILICA GEL)

STLC + TCLP - lead

4-5-19

4-5-19 VOCs (8260B)

4-5-19 SVOCs (8270C)

4-5-19 PCBs (8082)

Additional

ITEM	LAB USE ONLY	SAMPLE DESCRIPTION					Container(s)		Matrix	Preservation							Remarks	
	Lab ID	Sample ID	Date	Time	#	Type												
1	1903210-01	B1-1	3/22/19	0729	#2	402 Jan	Soil	ICE			X	X	X	✓	✓	✓	New I.D. 1904049-0	
2	1903210-02	B1-5		0734							X	X	X					
3	1903210-03	B1-15		0751								X	X	X				
4	1903210-04	B1-20		0755							X	X	X	✓	✓		1904049-02	
5	1903210-05	B1-30		0804							X	X	X	✓	✓		1904049-03	
6	1903210-06	B1-35		0815									X	✓	✓		1904049-04	
7	1903210-07	B2-1		0907							X	X	X	✓	✓	✓	1904049-05	
8	1903210-08	B2-5		0909							X	X	X					
9	1903210-09	B2-15		0920							✓	X	X	X	✓	✓	✓	1904049-06
10	1903210-10	B2-20		0926							X	X	X	✓	✓		1904049-07	

Collected By: [Signature]

Relinquished By: [Signature]

Received For Laboratory: Janet Chen

Condition of Sample: via GSD

Date 3/22/19 Time 1620

Date 3/22/19 Time 1620

Date 3.25.19 Time 9:00

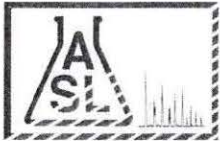
TAT

Normal

Rush

White - Report      Yellow - Laboratory      Pink - Client





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Page 2 Of 4

COC# **82831**

GLOBAL ID \_\_\_\_\_

E REPORT: ☐ PDF ☐ EDF ☐ EDD

NEW JOB # 1904049  
ASL JOB# 1903210

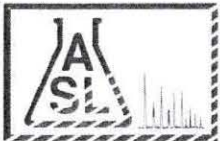
Company: <b>SCS</b>		Report To:		ANALYSIS REQUESTED	
Address:		Project Name: <b>CYPRESS</b>		Address:	
		Site Address:		Invoice To:	
Telephone:				Address:	
Fax:					
Special Instruction:		Project ID:			
E-mail:		Project Manager:		P.O.#: <b>01214253.06</b>	

ITEM	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation								Remarks
	Lab ID	Sample ID	Date	Time	#	Type												
11	1903210-11	B2-25	3/22/19	0934	2	4oz jar	SOIL	ICE										New ID
		B3-1		0959	2													1904049-08
		B3-5		1009	1													1904049-09
		B3-10		1013	2													1904049-10
		B3-15		1020	2													1904049-11
		B3-20		1029	2													1904049-12
		B3-25		1037	2													1904049-13
		B3-30		1046	2													1904049-14
12	1903210-12	B4-1		1115	2							X	X	X				
13	1903210-13	B4-5		1120	2							X	X	X				1904049-15

Collected By: <i>[Signature]</i>	Date: 3/22/19	Time: 1620	Relinquished By: <i>[Signature]</i>	Date: 3/22/19	Time: 1620	<input checked="" type="checkbox"/> TAT <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush
Relinquished By:	Date:	Time:	Received For Laboratory: <i>Janet chin</i>	Date: 3-25-19	Time: 9:00	
Received By:	Date:	Time:	Condition of Sample:	via GSC		



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Environmental Testing Services

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Page 3 Of 4

COC# **82827**

GLOBAL ID \_\_\_\_\_

E REPORT: ☐ PDF ☐ EDF ☐ EDD

NEW JOB # 1904049  
ASL JOB# 1903210

Company: <b>SCS</b>		Report To:		ANALYSIS REQUESTED	
Address:		Project Name: <b>CYPRESS</b>		Address:	
Site Address:		Invoice To:		Address:	
Telephone:		Project ID:		P.O.#: <b>01214253.06</b>	
Fax:		Project Manager:		P.O.#: <b>01215</b>	
Special Instruction:		Project ID:		P.O.#: <b>01215</b>	
E-mail:		Project Manager:		P.O.#: <b>01215</b>	

ITEM	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation	TITLE 22 (6010B)	LEAD + ARSENIC (6010B)	OCPs (8081)	TPH EXT (8015) (SILKAGE)	VOCs (8260B)	SVOCs (8270C)	ARCHIVE	Remarks
	Lab ID	Sample ID	Date	Time	#	Type												
14	1903210-14	B4-10	3/22/19	1124	2	40Z JAR <del>SOIL</del>	SOIL <del>ICE</del>	ICE	(15)	X	X	X	X					
15	1903210-15	B4-15	3/22/19	1130	2				(15)	X	X	X	X					
16	1903210-16	B4-20		1137	2				(15)	X	X	X	X					
17	1903210-17	B4-25		1144	2				(15)	X	X	X	X					
18	1903210-18	B4-30		1156	2				(15)	X	X	X	X					
19	1903210-19	B4-40		1203	2				(15)	X	X	X	X					
20	1903210-20	B4-45		1212	2				(15)	X	X	X	X					
21	1903210-21	B4-50		1220	2				(15)	X	X	X	X					
22	1903210-22	B4-55		1242	2								X					
		DR-1		1336	1													X

Collected By: <b>Rejo</b>	Date <b>3/22/19</b>	Time <b>1620</b>	Relinquished By: <b>Rejo</b>	Date <b>3/22/19</b>	Time <b>1620</b>	TAT
Relinquished By:	Date	Time	Received For Laboratory <b>Tanet Chun</b>	Date <b>3-25-19</b>	Time <b>9:00</b>	<input checked="" type="checkbox"/> Normal
Received By:	Date	Time	Condition of Sample:			<input type="checkbox"/> Rush