

Date: July 25, 2022  
Project No.: 118-128-3

Prepared For: Ms. Carolyn Neer  
**DAVID J. POWERS & ASSOCIATES**  
1871 The Alameda, Suite 200  
San Jose, California 95126

Re: Soil and Soil Vapor Sampling Services  
Proposed Public Library  
Assessor Parcel Number 063-240-490  
Pulgas Avenue  
East Palo Alto, California

Dear Ms. Neer:

Cornerstone Earth Group, Inc. (Cornerstone) is pleased to present this letter summarizing the results of the soil and soil vapor sampling performed at assessor parcel number (APN) 063-240-490 located at Pulgas Avenue in East Palo Alto, California (Site, Figures 1 and 2). This work was performed for David J. Powers & Associates in accordance with our April 27, 2022 Agreement (Agreement) and in accordance with our Work Plan dated May 5, 2022 that was approved by the San Francisco Bay Regional Water Quality Control Board (Water Board) in their email correspondence dated June 10, 2022. David J. Powers & Associates is preparing an Initial Study for the City of East Palo Alto (The City) for a proposed new public library project.

## Project Background

### Site History

Based on Cornerstone's Phase I Environmental Site Assessment (ESA) report dated November 19, 2021 (Cornerstone, 2021), the Site was historically used for agricultural purposes. A small structure, possibly a residence, was present on the southern corner of the Site that was removed by the early 1960s. The Site has subsequently remained undeveloped. Bains Moving & Storage, which occupied the northeasterly adjacent building at 2470 Pulgas Avenue from the mid-1970s until at least 2004, reportedly used the Site for truck and trailer parking and storage. Other past occupants of the 2470 Pulgas Avenue building also appear to have utilized the Site, likely for vehicle parking and/or exterior storage purposes. In 2004, a small fenced and paved area on the southwest portion of the Site reportedly was occupied by Guzman Ornamental Iron for fabrication of iron gates. This area reportedly was previously occupied by a sign company and used to cut, paint, and assemble wooden signs.

### General Regulatory Setting

The Site is located within the "Ravenswood Industrial Area," a portion of a designated redevelopment area in the City of East Palo Alto subject to Site Cleanup Requirements Orders 92-037 and 92-086 for the "East Palo Alto Industrial Area" issued by the Water Board. The East Palo Alto Industrial Area consists of a number of privately owned parcels, including the Site, historically used for agricultural and industrial purposes that are collectively regulated by the Water Board for redevelopment. The Site is an open Site Cleanup Program case that is under Water Board oversight.

Additionally, arsenic releases from the 1990 Bay Road property have impacted multiple parcels in the general Site vicinity, including the northwesterly adjacent property at 1950 Bay Road (currently occupied by the East Palo Alto Performing Arts Center) and off-Site portions of the Bains property (2470 Pulgas Avenue) that borders the Site to the northeast and southeast. Portions of these arsenic-impacted properties have been capped with asphalt and are subject to recorded deed restrictions.

### **Prior On-Site Studies**

Prior environmental studies completed in 2004 (Lowney Associates) and 2015 (SCA Environmental) included the collection and analyses of soil, soil vapor, and groundwater samples. Low levels of total petroleum hydrocarbons (TPH) as diesel (TPHd) and oil (TPHo), volatile organic compounds (VOCs), organochlorine pesticides (OCPs), and various metals have been detected in soil. Most of the detected contaminant concentrations in soil were below established residential or commercial Environmental Screening Levels (ESLs) established by the Water Board (2019), except for the OCP compound dieldrin, which was sporadically detected above residential and commercial ESLs. Arsenic was also detected at concentrations exceeding the regional background concentration of 11 mg/kg (Duverge, 2011) in one sample.

In groundwater, low concentrations of TPHg and TPHd were detected in 2004 along with VOCs; trichloroethene (TCE) was reported at concentrations up to 8 micrograms per liter ( $\mu\text{g/L}$ ). In 2015, TCE was detected in groundwater at concentrations up to 2.3  $\mu\text{g/L}$ . The Water Board's residential and commercial ESLs for TCE in groundwater are 1.2 and 7.5  $\mu\text{g/L}$ , respectively.

Analyses of soil vapor samples collected at the Site in 2004 detected a variety of VOCs, some of which exceeded residential or commercial ESLs. TCE was detected at concentrations up to 96 micrograms per cubic meter ( $\mu\text{g/m}^3$ ) and tetrachloroethene (PCE) was detected at concentrations up to 4,400  $\mu\text{g/m}^3$ . For comparison, the residential and commercial ESLs for TCE in soil vapor are 16  $\mu\text{g/m}^3$  and 100  $\mu\text{g/m}^3$ , respectively. The residential and commercial ESLs for PCE in soil vapor are 15  $\mu\text{g/m}^3$  and 67  $\mu\text{g/m}^3$ , respectively. One soil vapor sample was collected from the Site in 2015 and benzene was detected at a concentration of 3.8  $\mu\text{g/m}^3$ , which is slightly above the residential ESL of 3.2  $\mu\text{g/m}^3$  but below the commercial ESL of 14  $\mu\text{g/m}^3$ . All other VOC concentrations detected in this soil vapor sample were below their respective residential or commercial ESLs.

### **Selected Relevant Off-Site Studies**

During the early 1990s, soil with arsenic concentrations greater than 500 mg/kg was removed from the adjacent properties to the northwest and northeast. Soil with arsenic concentrations greater than 70 mg/kg reportedly was capped by a three-layer asphalt pavement section.

Elevated arsenic concentrations also were identified in soil along the former railroad right-of-way, located off-Site and adjacent to the southern border of the Site. During the early 1990s, similar soil removal and capping was performed along this former railroad right-of-way. A deed restriction (San Mateo County Recorder's Office document number 93213452) was recorded on December 8, 1993, that appears to pertain to the 30-foot wide off-Site parcel (i.e., the former railroad right-of-way). StarLink Logistics, Inc. (StarLink) is identified as the responsible party for the asphalt capped area subject to this deed restriction. An approximately 20-foot wide section of asphalt pavement is present on-Site and along the southern Site boundary shared with the

adjacent railroad right-of-way. According to information provided by S.S. Papadopoulos & Associates (SSPA), on behalf of StarLink, the Site is not subject to the deed restriction.

Several other soil and groundwater investigations have been performed in the Site vicinity including by the US Environmental Protection Agency (USEPA) Brownfield Initiative, as part of property redevelopment activities, and in association with nearby infrastructure improvement projects. SSPA on behalf of StarLink has performed groundwater monitoring primarily on adjacent properties to the northwest and northeast since the mid-1980s. The predominant groundwater flow direction has been to the southeast (SSPA, 2021). Grab groundwater sampling performed on the adjacent property to the north (SCA Environmental, 2015) and in the public right-of-way for Pulgas Avenue and Bay Road (Ninyo & Moore, 2015) revealed PCE and TCE up to 44 µg/L and 150 µg/L, respectively. During development of the northern adjacent parcel with the East Palo Alto Performing Arts Center, naturally occurring asbestos (NOA) also was detected in shallow soil at the property.

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## Soil and Soil Vapor Sampling

### Exploratory Borings

On June 28, 2022, Cornerstone's field geologist directed a subsurface investigation and advanced nine exploratory borings (SG-1 through SG-6, and SS-7 through SS-9) to approximate depths of 5 feet for soil sample collection. Borings SG-1 through SG-6 were converted to temporary soil vapor probes as discussed below. The approximate boring locations are shown on Figure 2.

The exploratory borings were advanced using direct push technology equipped with a Dual Wall Sampling System and were continuously logged in general accordance with the Unified Soil Classification System (ASTM D-2488). The Dual Wall Sampling System is comprised of two main components: an exterior steel casing and an inner sample barrel. The outer casing has a 2-inch outer diameter (OD) and a 1.5-inch inner diameter (ID). The sample barrel is 5 feet in length with a 1.375 inch outside diameter (OD) and a 1-inch inner diameter (ID). The Dual Wall sample barrel was loaded with a 5-foot acetate liner and installed inside the outer casing. The outer drive casing and inner sample barrel was hydraulically pushed to a depth of approximately 5 feet. As these tools were advanced, the inner sampling barrel collected the soil core sample. This sampler was then retrieved while the outer casing remained in place, protecting the integrity of the hole.

### Subsurface Materials

Cornerstone field geologist recorded lithologic observations on the boring logs attached to this letter. Exploratory borings SG-1 through SG-6 were advanced within the undeveloped portion of the Site. The upper approximately 2 to 2 ½ feet of surface materials at these locations consisted of fill, characterized as brown silt with gravels, sand, and trace clay. The fill was underlain by dark brown lean clay with varying levels of sand and trace fine gravels. Exploratory borings SS-7 through SS-9 were advanced within the asphalt pavement area. The upper approximately 6 to 7 inches consisted of asphalt, which was underlain by an approximately 1 to 2-inch thick chipseal layer. The underlying material consisted of fill, characterized as a dark brown lean clay with varying amounts of sand and gravel. This transitioned to a dark brown lean clay with fine sand at approximately 3 feet below surface.

grade. Within boring SS-8 and SS-9, the dark brown lean clay became brown at approximately 4 feet below surface grade. Groundwater was not encountered during our investigation.

### **Vapor Probe Construction**

The subsurface probes consisted of a stainless-steel expendable vapor tip installed at approximate depths of 5 feet below surface grade with screens affixed to ¼-inch Teflon™ tubing. The probes were constructed by first placing approximately 2 inches of coarse aquarium sand into the bottom of the borehole using a tremie pipe. The stainless-steel tip and Teflon™ tubing were lowered into the borehole via a tremie pipe. Additional sand is then placed in the borehole via tremie to create an approximately 1-foot sand pack interval around the vapor tip. Approximately 1 foot of granular bentonite (Benseal™) was placed on top of the sand pack via the tremie pipe. Bentonite “gel” was placed via tremie pipe on top of the dry granular bentonite to the bottom depth of the upper-sand pack hosting the shallower vapor tip. Prior to installing the upper-sand pack, an approximately 1-foot layer of dry granular bentonite was placed on top of the hydrated bentonite (using a tremie pipe) to help prevent settling of the upper-sand pack. The Teflon™ tubing was labeled with depth of placement and capped utilizing a vapor tight Swagelok tube cap.

### **Soil Sample Collection and Analysis**

Soil samples were collected from the upper approximate 1 foot of fill and from the underlying native soil at approximate depths ranging from 1½ feet to 3 feet. Soil samples were collected in clean (unused) acetate liners, ends of the soil samples were covered in a Teflon film, fitted with plastic end caps, and labeled with a unique sample identification number. Soil samples were placed in an ice-chilled cooler and transported to a state certified laboratory under chain of custody control.

The soil samples from SG-1 through SG-6 were analyzed on a dry-weight basis for OCPs (EPA Test Method 8081), polychlorinated biphenyls (PCBs, EPA Test Method 8082), and arsenic (EPA Test Method 6010B). The fill sample collected from each boring was also analyzed for asbestos using polarized light microscopy (PLM) 400-point count with a California Air Resources Board (CARB) 435 preparation method. Selected soil samples from SS-7 through SS-9 were analyzed on a dry-weight basis for arsenic (EPA Test Method 6010B).

### **Soil Vapor Sample Collection and Analysis**

Approximately 48 hours after vapor probe construction, Cornerstone personnel remobilized to the Site to collect the soil vapor samples. The tubing emanating from the vapor points was affixed to a sample shutoff valve in the “off” position during the time needed to reach equilibrium (at least 2 hours). A 167 milliliters-per-minute flow regulator inclusive of particulate filter was fitted to the shutoff valve and the other end to a “T” fitting. One end of the “T” was connected to the sampling summa canister. The other end of the “T” was affixed to a digital vacuum gauge and a 1-liter summa canister utilized for purging.

A minimum 10-minute vacuum tightness test was performed on the manifold and connections by opening and closing the 6-liter purge canister valve and applying and monitoring a vacuum on the vacuum gauge. The sample shut-off valve on the downhole side of the sampling manifold remained in the “off” position. When gauge vacuum had maintained for at least 10 minutes without any noticeable decrease (less than approximately 0.1 inches of mercury [Hg])

for properly connected fittings), purging began. The downhole shut off valve was opened, and three pore volumes were removed utilizing the purging summa canister. Purge volumes of vapor were removed and verified by the calculated pressure drop in the 6-liter summa canister utilized for purging. The purge volume was calculated based on the length and inner diameter of the sampling probe and the connected sampling tubing and equipment. Assuming the vapor probe was properly sealed, the borehole sand pack vapor space equilibrated with the surrounding vapors following the 48-hour equilibration period. Thus, the sand pack vapor space was not included in the purge volume calculation.

Isopropyl alcohol was utilized as a leak detection compound during sampling by applying between 5 to 6 drops to cotton gauze and placing the moistened gauze near the borehole. Sampling began by opening the summa canister valve. Immediately upon opening the sampling valve, a shroud was placed over and enclosed the atmosphere of the borehole and entire sampling train including all connections.

Sampling continued until the vacuum gauge indicated approximately 6.5 inches of Hg remaining. A datalogging organic vapor meter (OVM) utilized during sampling to monitor the atmosphere inside the shroud through a bulkhead fitting. The logged data (at minimum 1-minute intervals) was corrected to parts per million by volume isopropyl alcohol concentrations and utilized to evaluate the integrity of the sampling train. To confirm the isopropyl alcohol atmosphere, one confirmation sample was collected from the shroud atmosphere at probe SG-2 through the sampling port for the OVM.

The six soil vapor samples were analyzed for VOCs (EPA Test Method TO-15) and the fixed gasses oxygen, carbon dioxide, and methane (ASTM D-1946). In addition, one air sample was collected from the shroud atmosphere and analyzed for isopropyl alcohol.

## Analytical Results

Data summary tables, analytical data sheets, and chain of custody documentation are attached to this letter. Cornerstone compared detected soil and soil vapor data to residential and commercial ESLs (2019). Consistent with the ESL guidance document (2019), the 99th percentile upper estimate arsenic concentration published by Duvergé (2011) of 11 mg/kg was substituted for the ESL. Asbestos results were compared to the California Air Resources Board (CARB) asbestos Airborne Toxic Control Measure (ATCM) regulatory threshold of 0.25 percent for construction and grading projects.

### Soil Vapor Sample Integrity

At soil vapor probes SG-1 through SG-6, immediately upon opening the valve to the 1-liter sample Summa canister, a shroud was placed over and enclosed the atmosphere of the borehole and the entire sampling train, including all connections, for sample integrity evaluation purposes. Isopropyl alcohol (2-propanol, 91 percent) was utilized as a leak detection compound during sampling by applying between 5 and 6 drops to a cotton gauze and placing the moistened gauze near the borehole beneath the shroud. The concentration of isopropyl alcohol was monitored during sampling with a data logging organic vapor meter (OVM). Analysis of soil vapor samples SG-1 through SG-6, detected 2-propanol in 5 of the 6 soil vapor probes ranging from 27 to 47 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ); 2-propanol was not detected in SG-1; the reporting limit was 49 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ).

To help confirm the sampling trains were sufficiently tight and the soil vapor data is representative of subsurface conditions, one confirmation sample of the shroud atmosphere was collected from the exhaust port of the OVM and into a Tedlar bag during sampling at subsurface soil vapor location SG-2. Laboratory analyses of the shroud atmosphere sample detected isopropyl alcohol (i.e., 2-propanol) at 96,000  $\mu\text{g}/\text{m}^3$ . During the same sampling period, 2-propanol levels within the shroud atmosphere were measured by the OVM to range from 41,289  $\mu\text{g}/\text{m}^3$  to 74,320  $\mu\text{g}/\text{m}^3$  with an average concentration of approximately 60,299  $\mu\text{g}/\text{m}^3$ . The OVM appeared to underestimate the shroud atmosphere.

The detected concentration of 2-propanol in soil vapor sample SG-2 was 47  $\mu\text{g}/\text{m}^3$  and the average concentration as measured by the OVM was 60,299  $\mu\text{g}/\text{m}^3$ , sample SG-2 would have a maximum possible leakage rate of less than 0.078 percent (%). This data indicates that the sample trains were sufficiently tight, and no significant leakage occurred.

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## Conclusions and Recommendations

### General Soil Quality

Laboratory analyses of the soil samples collected during this investigation did not detect OCPs, PCBs, arsenic, and/or NOA above their respective environmental screening criteria except for dieldrin and arsenic in a few soil samples. As shown in Table 1, dieldrin was detected in the native soil sample collected from boring SG-3 at an approximate depth of 2½ to 3 feet; reported concentration exceeded its residential ESL but was less than its commercial ESL. In the same soil sample, arsenic was detected at a concentration of 26.6 mg/kg. Arsenic was detected above 11 mg/kg in two other soil samples at concentrations of 13.8 mg/kg (SS-7) and 14.9 mg/kg (SS-8). This data appears consistent with prior studies at the Site where elevated concentrations of dieldrin and arsenic were sporadically detected at the Site. Figure 3 presents selected arsenic and dieldrin data.

### General Soil Vapor Quality

During this investigation, soil vapor samples were collected from six temporary vapor probes installed at the Site. As shown in Table 2, none of the detected VOCs exceeded their respective residential ESL except for benzene, PCE, and TCE. Consistent with prior soil vapor data collected by Lowney (2004), the greatest concentrations of PCE and TCE were detected in vapor probe SG-1 installed near the northwest corner of the Site. Figure 4 presents the PCE and TCE analytical data. For comparison, prior data reported by Lowney and SCA Environmental are also included on Figure 4.

### Corrective Action / Risk Management Plan

Based on the data obtained to date, remedial measures appear required to facilitate the planned development and ensure proper management of the impacted soil, soil vapor and groundwater and to limit potential health risks to future Site occupants and construction workers. Prior to future development, we recommend that an appropriate corrective action/risk management plan (e.g., Site Management Plan [SMP]) be prepared that reflects the results of the on-Site investigations. The corrective action/risk management plan should describe mitigation measures necessary to protect the health and safety of future Site occupants, and establish appropriate management practices for handling and monitoring of impacted soil, soil vapor and groundwater. The corrective action/risk management plan should be prepared by an

Environmental Professional and submitted to the Water Board for review and approval prior to commencing construction activities.

In addition to soil, soil vapor and groundwater management protocols, it is anticipated that the Water Board will require that the corrective action/risk management plan include 1) an Air Monitoring Plan that assesses the potential for exposure of construction workers and neighboring occupants adjoining the property to contaminants of concern during construction activities, 2) a Vapor Intrusion Mitigation Plan (VIMP) that describes the measures to be implemented to prevent exposure of future Site occupants to VOCs in indoor air as a result of vapor intrusion, and 3) an Operations, Maintenance, and Monitoring Plan (OMMP) that presents the actions to be taken following construction to maintain and monitor the vapor intrusion mitigation system. A Health and Safety Plan (HSP) also should be prepared to establish health and safety protocols for construction personnel working at the Site. All mitigation measures will need to be completed under Water Board oversight and meet all applicable federal, state, and local laws, regulations, and requirements.

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### Closing

This letter, an instrument of professional service, was prepared for the sole use of David J. Powers & Associates and the City of East Palo Alto and may not be reproduced or distributed without written authorization from Cornerstone. The chemical data presented in this letter may change over time and are only valid for this time and location. Cornerstone makes no warranty, expressed or implied, except that our services have been performed in accordance with the environmental principles generally accepted at this time and location.

Should you have any questions regarding this letter, or if we may be of further service, please contact us at your convenience.

Sincerely,

**Cornerstone Earth Group, Inc.**

DRAFT

Michael F. Chang, P.E.  
Project Engineer

DRAFT

Kurt M. Soenen, P.E.  
Senior Principal Engineer

Attachments:   References  
                      Figures  
                      Data Tables  
                      Boring Logs  
                      Laboratory Analytical Reports

## References

- California Code of Regulations, 2002. Title 17, Section 93105, Final Regulation Order, Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations, November 19, 2002
- Cornerstone Earth Group. November 19, 2021. *Phase I Environmental Site Assessment Proposed Public Library (APN 063-240-490) Pulgas Avenue East Palo Alto, California.*
- Duvergé, Dylan Jacques. December 2011. *Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region.*
- Lowney Associated. November 2005. *Soil, Ground Water, and Soil Vapor Quality Evaluation Peck & O'Connor Trust (Formerly Bishop), Bains, Ravenswood Investments, Chang Properties, and Peterson Property East Palo Alto, California.*
- Ninyo & Moore. April 2015. *Phase II Environmental Site Assessment Report Bay Road Improvements Projects, Phases 2 and 3 Bay Road and Pulgas Avenue East Palo Alto, California.*
- U.S. Environmental Protection Agency, Region IX. December 1996. *Soil and Groundwater Investigation at the Ravenswood Industrial Area East Palo Alto, California.*
- San Francisco Bay, Regional Water Quality Control Board. Revised January 2019. *Environmental Screening Levels.*  
<http://www.waterboards.ca.gov/sanfranciscobay/waterissues/programs/esl.shtml>
- SCA Environmental. June 2015. *Phase II Environmental Site Assessment Report Proposed East Palo Alto Youth Center Project Site East Palo Alto, California.*
- S.S. Papadopoulos & Associates, Inc. January 2021. *2020 Annual Summary and Groundwater Monitoring Report 1990 Bay Road Site East Palo Alto, California.*



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**Vicinity Map**

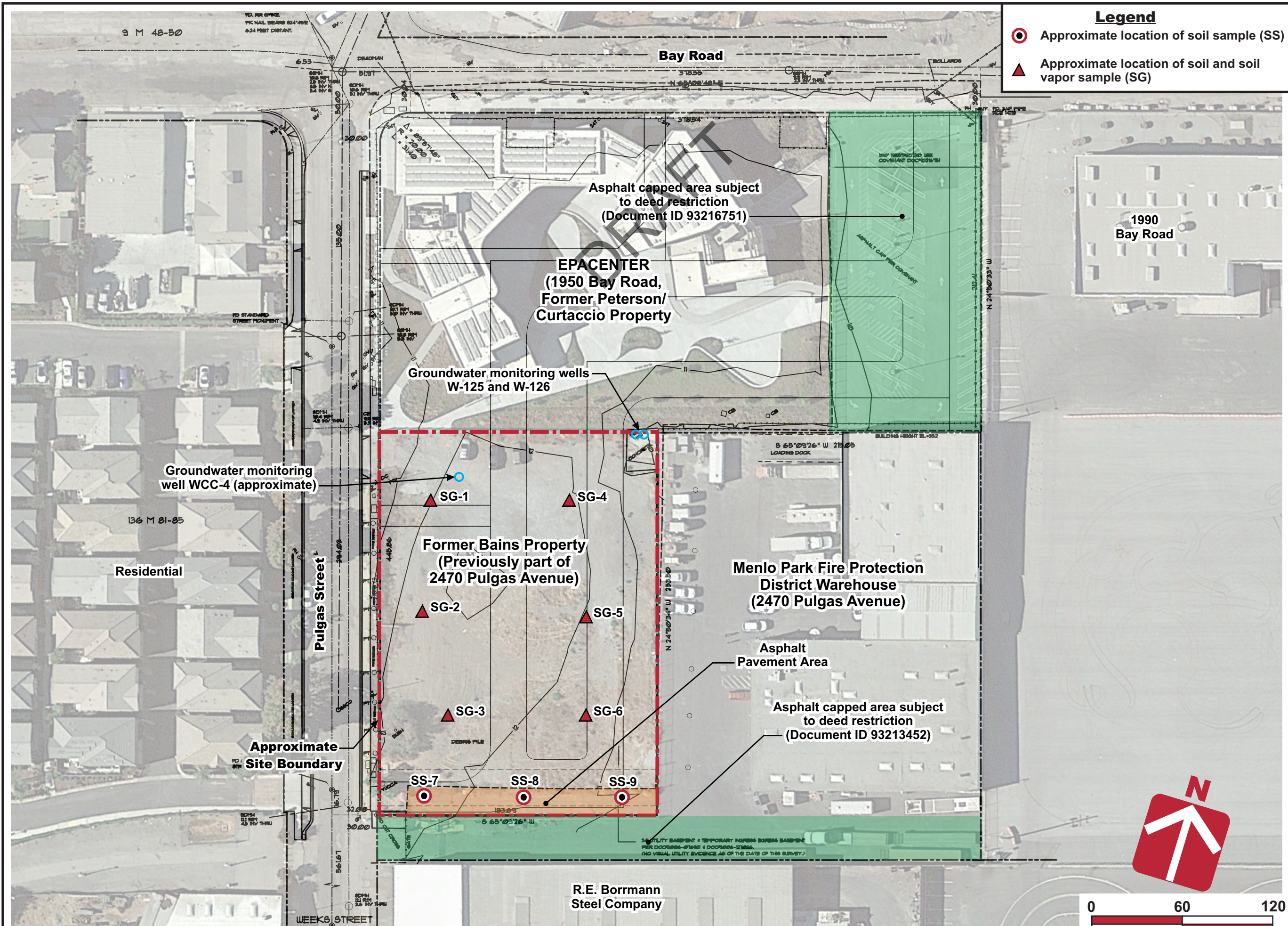
**East Palo Alto Library  
2474 Pulgas Avenue  
East Palo Alto, CA**

Project Number  
118-128-3

Figure Number  
Figure 1

Date  
June 2022

Drawn By  
RRN



Project Number  
118-128-3

Figure Number  
Figure 2

Date  
June 2022

Drawn By  
RRN

Site Plan

East Palo Alto Library  
2474 Pulgas Avenue  
East Palo Alto, CA

**CORNERSTONE EARTH GROUP**

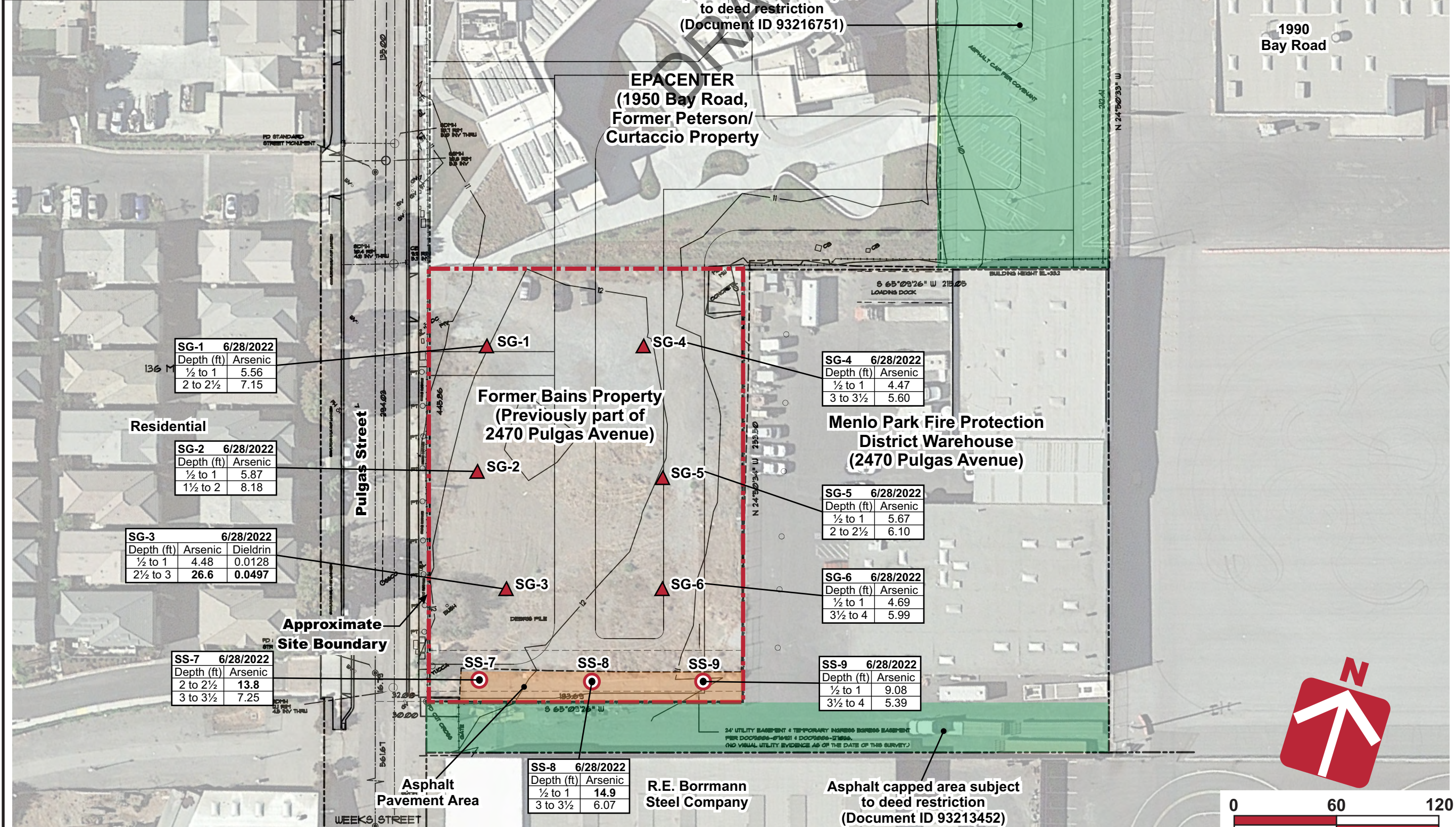
**Screening Levels**

Arsenic	11 mg/kg <sup>1</sup>
Dieldrin	0.037 mg/kg <sup>2</sup>

Concentration measured in mg/kg

- Duverge, 2011. Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region.
- Residential Environmental Screening Level (ESL), RWQCB, San Francisco Bay Region - January 2019.

**BOLD** Concentration exceeds Residential ESL or TTLC background value.



**Legend**

- Approximate location of soil sample (SS)
- ▲ Approximate location of soil and soil vapor sample (SG)

SG-1 6/28/2022

Depth (ft)	Arsenic
½ to 1	5.56
2 to 2½	7.15

Residential

SG-2 6/28/2022

Depth (ft)	Arsenic
½ to 1	5.87
1½ to 2	8.18

SG-3 6/28/2022

Depth (ft)	Arsenic	Dieldrin
½ to 1	4.48	0.0128
2½ to 3	<b>26.6</b>	<b>0.0497</b>

SS-7 6/28/2022

Depth (ft)	Arsenic
2 to 2½	<b>13.8</b>
3 to 3½	7.25

Former Bains Property (Previously part of 2470 Pulgas Avenue)

SG-2

SG-4 6/28/2022

Depth (ft)	Arsenic
½ to 1	4.47
3 to 3½	5.60

Menlo Park Fire Protection District Warehouse (2470 Pulgas Avenue)

SG-5 6/28/2022

Depth (ft)	Arsenic
½ to 1	5.67
2 to 2½	6.10

SG-6 6/28/2022

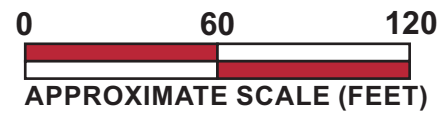
Depth (ft)	Arsenic
½ to 1	4.69
3½ to 4	5.99

SS-9 6/28/2022

Depth (ft)	Arsenic
½ to 1	9.08
3½ to 4	5.39

SS-8 6/28/2022

Depth (ft)	Arsenic
½ to 1	<b>14.9</b>
3 to 3½	6.07



Base by Google Earth, dated 09/27/2021  
 Overlay by Mid Coast Engineering, Inc., Topographic Survey - Sheet 1, dated 2/24/2016

Project Number: 118-128-3  
 Figure Number: Figure 3  
 Date: July 2022  
 Drawn By: RRN

Site Plan with Selected Arsenic and Dieldrin Soil Analytical Results

East Palo Alto Library  
 2474 Pulgas Avenue  
 East Palo Alto, CA

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**Screening Levels**

	<b>Residential ESL<sup>1</sup></b>
Benzene	3.2 µg/m <sup>3</sup>
PCE	15 µg/m <sup>3</sup>
TCE	16 µg/m <sup>3</sup>

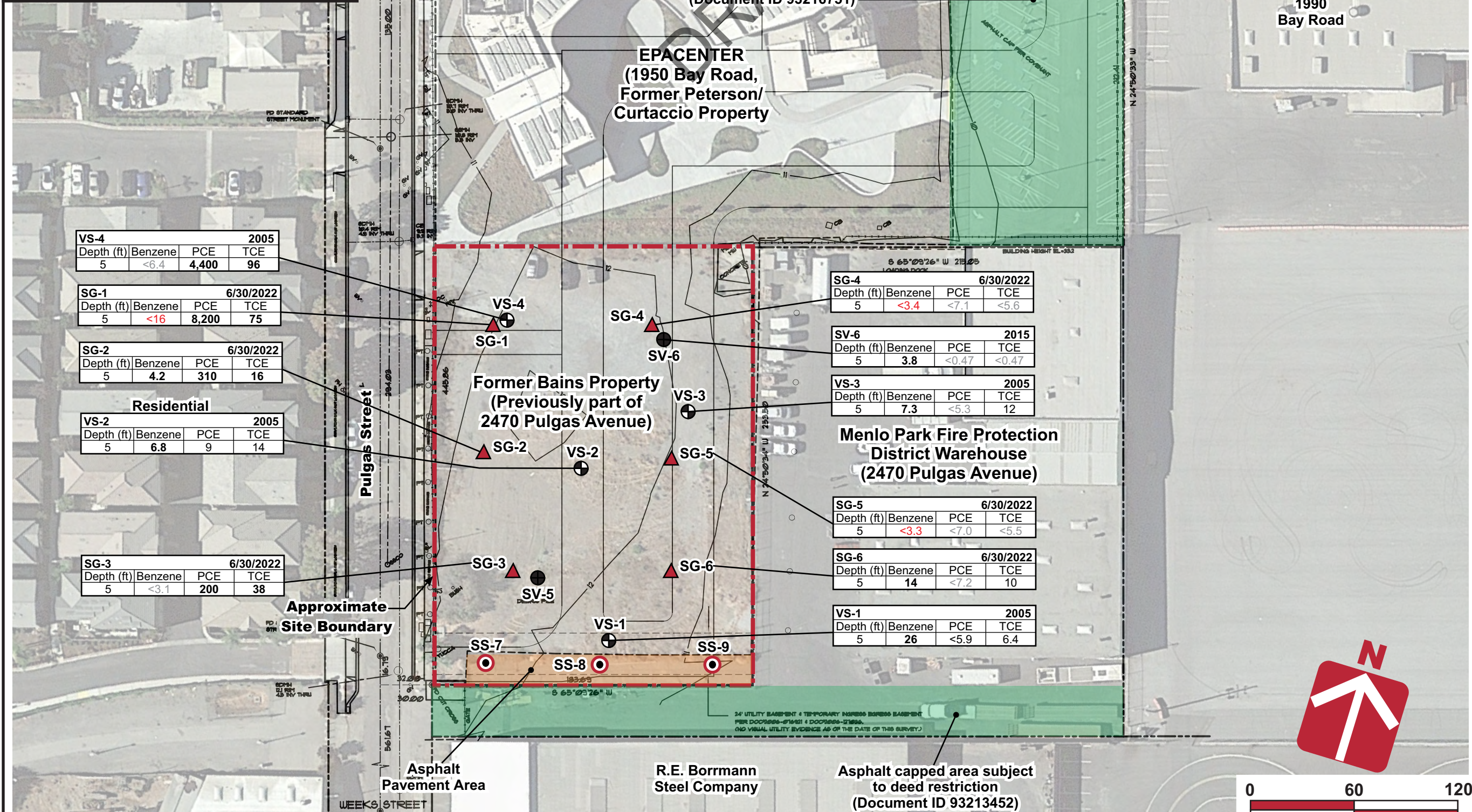
Concentration measured in µg/m<sup>3</sup>

<sup>1</sup> Residential Environmental Screening Level (ESL), RWQCB, San Francisco Bay Region - January 2019.

< Not detected at or above laboratory reporting limit.

**BOLD** Concentration exceeds Residential ESL.

**Red Font** Laboratory reporting limit shown exceeds one or more of the selected screening levels.

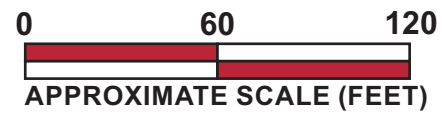


Base by Google Earth, dated 09/27/2021  
 Overlay by Mid Coast Engineering, Inc., Topographic Survey - Sheet 1, dated 2/24/2016

Project Number: 118-128-3  
 Figure Number: Figure 4  
 Date: July 2022  
 Drawn By: RRN

Site Plan with Selected Soil Vapor Analytical Results  
 East Palo Alto Library  
 2474 Pulgas Avenue  
 East Palo Alto, CA

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**Table 1. Analytical Results of Selected Soil Samples**  
(Concentrations in mg/kg; unless otherwise stated)

Boring Location	Boring ID	Sample ID	Date	Depth (feet)	OCPs															PCBs	Arsenic	Asbestos (%)
					4,4' -DDD	4,4' -DDE	4,4' -DDT	DDT Total	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Endrin aldehyde	gamma-BHC	Heptachlor epoxide	alpha-Chlordane	gamma-Chlordane	Technical Chlordane				
Undeveloped	SG-1	SG-1 (0.5-1)	6/28/2022	½-1	0.00994 J	0.0948	0.0929	0.19764	0.00176 J	0.00545 J	0.00226 J	0.0148 J	<0.0016	0.00303 J	0.00226 J	0.0207 J	0.0281	0.199 J	ND	5.56	<0.25	
		SG-1 (2-2.5)	6/28/2022	2-2½	<0.0062	0.0101 J	0.0168 J	0.0269	<0.0014	<0.0035	<0.0017	0.0096 J	0.00188 J	<0.0017	<0.00086	0.0032 J	0.0055 J	0.029 J	ND	7.15	---	
	SG-2	SG-2 (0.5-1)	6/28/2022	½-1	0.00815 J	0.0454	0.0452	0.09875	<0.0013	<0.0033	<0.0016	0.0114 J	0.00197 J	<0.0016	0.00125 J	0.0115 J	0.0142 J	0.101 J	ND	5.87	<0.25	
		SG-2 (1.5-2)	6/28/2022	1½-2	<0.0063	<0.0022	<0.0014	NC	0.00298 J	0.0273	<0.0017	0.0102 J	<0.0017	<0.0018	<0.00087	<0.0019	<0.0018	<0.024	ND	8.18	---	
	SG-3	SG-3 (0.5-1)	6/28/2022	½-1	<0.012	0.0905	0.0719	0.1624	<0.0026	<0.0066	0.00493 J	0.0128 J	<0.0031	<0.0033	<0.0016	0.0152 J	0.0198 J	0.128 J	ND	4.48	<0.25	
		SG-3 (2.5-3)	6/28/2022	2½-3	<0.0063	0.0277	0.0362	0.0639	<0.0014	<0.0035	<0.0017	<b>0.0497</b>	<0.0017	<0.0018	<0.00087	0.00282 J	0.00345 J	0.0241 J	ND	<b>26.6</b>	---	
	SG-4	SG-4 (0.5-1)	6/28/2022	½-1	<0.012	0.0819	0.0304 J	0.1123	<0.0027	<0.0066	<0.0033	<b>0.0233 J</b>	<0.0032	<0.0033	<0.0016	0.00903 J	0.0106 J	0.0669 J	ND	4.47	<0.25	
		SG-4 (3-3.5)	6/28/2022	3-3½	<0.0067	0.015 J	0.0169 J	0.0319	<0.0015	<0.0037	<0.0018	<0.0017	<0.0018	<0.0019	<0.00092	<0.002	0.00251 J	<0.025	ND	5.6	---	
	SG-5	SG-5 (0.5-1)	6/28/2022	½-1	0.0149 J	0.102	0.0968	0.2137	<0.0027	<0.0068	<0.0033	0.0367 J	<0.0032	<0.0034	0.00261 J	0.0283 J	0.0312 J	0.246 J	ND	5.67	<0.25	
		SG-5 (2-2.5)	6/28/2022	2-2½	<0.0064	0.0196 J	0.032	0.0516	<0.0014	<0.0036	<0.0018	0.0026 J	<0.0017	<0.0018	<0.00089	0.0116 J	0.00589 J	0.051 J	ND	6.1	---	
	SG-6	SG-6 (0.5-1)	6/28/2022	½-1	0.0129 J	0.144	0.136	0.2929	<0.0013	0.00674 J	<0.0016	0.0154 J	<0.0016	0.00319 J	0.00366 J	0.0299	0.0425	0.267	ND	4.69	<0.25	
		SG-6 (3.5-4)	6/28/2022	3½-4	<0.0063	0.0167 J	0.0171 J	0.0338	<0.0014	<0.0035	<0.0017	<b>0.00423 J</b>	<0.0017	<0.0018	<0.00087	0.00256 J	0.0044 J	<0.024	ND	5.99	---	
Asphalt Paved	SS-7	SS-7 (2-2.5)	6/28/2022	2-2½	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<b>13.8</b>	---	
		SS-7 (3-3.5)	6/28/2022	3-3½	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.25	---
	SS-8	SS-8 (0.5-1)	6/28/2022	½-1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<b>14.9</b>	---
		SS-8 (3-3.5)	6/28/2022	3-3½	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.07	---
	SS-9	SS-9 (0.5-1)	6/28/2022	½-1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9.08	---
SS-9 (3.5-4)	6/28/2022	3½-4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.39	---	
Maximum Detection					0.0149 J	0.144	0.136	0.2929	0.00298 J	0.0273	0.00493 J	<b>0.0497</b>	0.00197 J	0.00319 J	0.00366 J	0.0299	0.0425	0.267	ND	<b>26.6</b>	<0.25	
ESL <sup>1</sup> Direct Exposure (Residential)					2.7	1.8	1.9	1 <sup>2</sup>	0.086 <sup>3</sup>	0.3 <sup>3</sup>	NE	0.037	NE	0.55	0.062	0.48	0.48	0.48	Variable	11 <sup>4</sup>	0.25 <sup>5</sup>	
ESL <sup>1</sup> Direct Exposure (Commercial)					12	8.3	8.5		0.16	2.5	0.28	2.2		2.2	2.2	2.2	Variable					

1 Environmental Screening Level (ESL), RWQCB, San Francisco Bay Region - January 2019.  
2 Total Threshold Limit Concentration (TTL) - California Code of Regulations, Title 22.  
3 Regional Screening Level (RSL), USEPA Region 9 - May 2022  
4 Duverge, 2011. Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region.  
5 California Air Resources Board (CARB) - Asbestos Toxic Control Measure (ATCM) regulatory threshold screening level.  
< Not detected at or above laboratory reporting limit shown  
NE Not Established  
NC Not Calculated  
--- Not analyzed  
**BOLD** Concentration exceeds selected Environmental Screening Criteria  
J Estimated concentration between Method Detection Limit (MDL) and Reporting Limit (RL)

DRAFT

**Table 2. Analytical Results of Selected Soil Vapor Samples**  
 (Concentrations in  $\mu\text{g}/\text{m}^3$ , unless otherwise specified)

Sample ID	Date	Depth (feet)	VOCs									Fixed Gases		
			Benzene	Acetone	Chlorobenzene	Dichlorodifluoromethane	Isopropanol	PCE	TCE	1,2-DCE	Trichlorofluoromethane	Ethanol	Carbon Dioxide %	Oxygen %
SG-1	6/30/2022	5	<16	<120	<23	<25	<49	<b>8,200</b>	<b>75</b>	<20	<28	<94	5.1	16
SG-2	6/30/2022	5	<b>4.2</b>	46	<4.8	5.4	47	<b>310</b>	16	<4.1	<5.8	37	3	19
SG-3	6/30/2022	5	<3.1	53	10	<4.9	28	<b>200</b>	<b>38</b>	<3.9	12	34	5.7	16
SG-4	6/30/2022	5	<3.4	34	<4.8	<5.2	43	<7.1	<5.6	<4.2	45	41	12	2.9
SG-5	6/30/2022	5	<3.3	38	<4.7	<5.1	27	<7.0	<5.5	<4.1	26	38	11	7.6
SG-6	6/30/2022	5	<b>14</b>	36	<4.8	<5.2	28	<7.2	10	<4.2	7.6	37	4.2	18
Maximum Detection			<b>14</b>	53	10	5.4	96,000	<b>8,200</b>	<b>75</b>	<20	45	41	12	19
ESL <sup>1</sup> Direct Exposure (Residential)			3.2	1,100,000	1,700	3,300 <sup>2</sup>	7,000 <sup>2</sup>	15	16	280	NE	NE	NE	NE

- 1 Environmental Screening Level (ESL), RWQCB, San Francisco Bay Region - January 2019.  
 2 ESL is not established, value is calculated soil vapor screening level using residential indoor air Regional Screening Level (RSL), USEPA Region 9 - May 2022 and an attenuation factor = 0.03  
 < Not detected at or above laboratory reporting limit shown  
 NE Not Established  
**BOLD** Concentration exceeds selected Environmental Screening Criteria  
 Red Font **Red font** indicates the laboratory reporting limit shown exceeds one or more of the selected screening levels.



# CORNERSTONE EARTH GROUP

## BORING NUMBER SG-1

PAGE 1 OF 1

PROJECT NAME East Palo Alto Library Phase 2  
 PROJECT NUMBER 118-128-3  
 PROJECT LOCATION East Palo Alto, CA  
 DATE STARTED 6/28/22 DATE COMPLETED 6/28/22  
 GROUND ELEVATION \_\_\_\_\_ BORING DEPTH 5 ft.  
 DRILLING CONTRACTOR Penecore LATITUDE \_\_\_\_\_ LONGITUDE \_\_\_\_\_  
 DRILLING METHOD Geoprobe 7822DT GROUND WATER LEVELS:  
 LOGGED BY KLH  AT TIME OF DRILLING Not Encountered  
 AT END OF DRILLING Not Encountered  
 NOTES \_\_\_\_\_

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sample Type and Interval	Sample Submitted for Laboratory Analysis	Percent Recovery (%)	OMV Reading (ppm)	Odors or Discoloration	Notes
	0.0		<b>Silty Sand with Gravel (SM) [Fill]</b> moist, gray brown, fine to coarse sand, fine to coarse subangular gravel			x	50			
	2.5		<b>Lean Clay with Sand (CL)</b> moist, dark brown, fine to medium sand			x	75			
	5.0		Bottom of Boring at 5.0 feet.			x				



PROJECT NAME East Palo Alto Library Phase 2  
 PROJECT NUMBER 118-128-3  
 PROJECT LOCATION East Palo Alto, CA  
 DATE STARTED 6/28/22 DATE COMPLETED 6/28/22  
 GROUND ELEVATION \_\_\_\_\_ BORING DEPTH 5 ft.  
 DRILLING CONTRACTOR Penecore LATITUDE \_\_\_\_\_ LONGITUDE \_\_\_\_\_  
 DRILLING METHOD Geoprobe 7822DT GROUND WATER LEVELS:  
 LOGGED BY KLH  AT TIME OF DRILLING Not Encountered  
 AT END OF DRILLING Not Encountered  
 NOTES \_\_\_\_\_

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sample Type and Interval	Sample Submitted for Laboratory Analysis	Percent Recovery (%)	OMV Reading (ppm)	Odors or Discoloration	Notes
0.0	0.0		<b>Silty Sand with Gravel (SM) [Fill]</b> moist, gray brown, fine to coarse sand, fine to coarse angular gravel			x				
			<b>Lean Clay (CL)</b> moist, dark brown, some fine sand, trace fine gravel			x	63			
2.5						x	63			
5.0	5.0		Bottom of Boring at 5.0 feet.							





PROJECT NAME East Palo Alto Library Phase 2  
 PROJECT NUMBER 118-128-3  
 PROJECT LOCATION East Palo Alto, CA  
 DATE STARTED 6/28/22 DATE COMPLETED 6/28/22  
 GROUND ELEVATION \_\_\_\_\_ BORING DEPTH 5 ft.  
 DRILLING CONTRACTOR Penecore LATITUDE \_\_\_\_\_ LONGITUDE \_\_\_\_\_  
 DRILLING METHOD Geoprobe 7822DT GROUND WATER LEVELS:  
 LOGGED BY KLH  AT TIME OF DRILLING Not Encountered  
 AT END OF DRILLING Not Encountered

NOTES \_\_\_\_\_

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sample Type and Interval	Sample Submitted for Laboratory Analysis	Percent Recovery (%)	OMV Reading (ppm)	Odors or Discoloration	Notes
0.0	0.0		<b>Silty Sand with Gravel (SM) [Fill]</b> moist, gray brown, fine to coarse sand, fine to coarse angular gravel			x	50			
2.5	2.5		<b>Lean Clay (CL)</b> moist, dark brown, some fine sand, trace fine gravel			x	50			
5.0	5.0		Bottom of Boring at 5.0 feet.							



# CORNERSTONE EARTH GROUP

## BORING NUMBER SG-4

PAGE 1 OF 1

**PROJECT NAME** East Palo Alto Library Phase 2  
**PROJECT NUMBER** 118-128-3  
**PROJECT LOCATION** East Palo Alto, CA  
**DATE STARTED** 6/28/22      **DATE COMPLETED** 6/28/22  
**GROUND ELEVATION** \_\_\_\_\_      **BORING DEPTH** 5 ft.  
**DRILLING CONTRACTOR** Penecore  
**LATITUDE** \_\_\_\_\_      **LONGITUDE** \_\_\_\_\_  
**DRILLING METHOD** Geoprobe 7822DT  
**GROUND WATER LEVELS:**  
 **AT TIME OF DRILLING** Not Encountered  
 **AT END OF DRILLING** Not Encountered  
**LOGGED BY** KLH  
**NOTES** \_\_\_\_\_

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sample Type and Interval	Sample Submitted for Laboratory Analysis	Percent Recovery (%)	OMV Reading (ppm)	Odors or Discoloration	Notes
	0.0		2 inches gravel							
			<b>Clayey Gravel with Sand (GC) [Fill]</b> moist, brown, fine to coarse angular gravel, fine to coarse sand			x				
			<b>Lean Clay with Sand (CL)</b> moist, dark brown, fine sand				63			
	2.5					x				
	5.0		Bottom of Boring at 5.0 feet.							



# CORNERSTONE EARTH GROUP

## BORING NUMBER SG-5

PAGE 1 OF 1

PROJECT NAME East Palo Alto Library Phase 2

PROJECT NUMBER 118-128-3

PROJECT LOCATION East Palo Alto, CA

DATE STARTED 6/28/22 DATE COMPLETED 6/28/22

GROUND ELEVATION \_\_\_\_\_ BORING DEPTH 5 ft.

DRILLING CONTRACTOR Penecore

LATITUDE \_\_\_\_\_ LONGITUDE \_\_\_\_\_

DRILLING METHOD Geoprobe 7822DT

GROUND WATER LEVELS:

LOGGED BY KLH

AT TIME OF DRILLING Not Encountered

NOTES \_\_\_\_\_

AT END OF DRILLING Not Encountered

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sample Type and Interval	Sample Submitted for Laboratory Analysis	Percent Recovery (%)	OMV Reading (ppm)	Odors or Discoloration	Notes
0.0			<b>Clayey Gravel with Sand (GC) [Fill]</b> moist, brown, fine to coarse angular gravel, fine to coarse sand			x	75			
2.5			<b>Lean Clay with Sand (CL)</b> moist, dark brown, fine sand, trace fine gravel			x	75			
5.0			Bottom of Boring at 5.0 feet.			x				



PROJECT NAME East Palo Alto Library Phase 2

PROJECT NUMBER 118-128-3

PROJECT LOCATION East Palo Alto, CA

DATE STARTED 6/28/22 DATE COMPLETED 6/28/22

GROUND ELEVATION \_\_\_\_\_ BORING DEPTH 5 ft.

DRILLING CONTRACTOR Penecore

LATITUDE \_\_\_\_\_ LONGITUDE \_\_\_\_\_

DRILLING METHOD Geoprobe 7822DT

GROUND WATER LEVELS:

LOGGED BY KLH

AT TIME OF DRILLING Not Encountered

NOTES \_\_\_\_\_

AT END OF DRILLING Not Encountered

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sample Type and Interval	Sample Submitted for Laboratory Analysis	Percent Recovery (%)	OMV Reading (ppm)	Odors or Discoloration	Notes
0.0	0.0		<b>Clayey Gravel with Sand (GC) [Fill]</b> moist, brown, fine to coarse angular gravel, fine to coarse sand, some brick fragments			x	50			
2.5	2.5		<b>Lean Clay with Sand (CL)</b> moist, dark brown, fine sand, trace fine gravel			x	50			
5.0	5.0		Bottom of Boring at 5.0 feet.							



# CORNERSTONE EARTH GROUP

## BORING NUMBER SS-7

PAGE 1 OF 1

**PROJECT NAME** East Palo Alto Library Phase 2  
**PROJECT NUMBER** 118-128-3  
**PROJECT LOCATION** East Palo Alto, CA  
**DATE STARTED** 6/28/22      **DATE COMPLETED** 6/28/22  
**GROUND ELEVATION** \_\_\_\_\_      **BORING DEPTH** 5 ft.  
**DRILLING CONTRACTOR** Penecore  
**LATITUDE** \_\_\_\_\_      **LONGITUDE** \_\_\_\_\_  
**DRILLING METHOD** Geoprobe 7822DT  
**GROUND WATER LEVELS:**  
 **AT TIME OF DRILLING** Not Encountered  
 **AT END OF DRILLING** Not Encountered  
**LOGGED BY** KLH  
**NOTES** \_\_\_\_\_

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sample Type and Interval	Sample Submitted for Laboratory Analysis	Percent Recovery (%)	OMV Reading (ppm)	Odors or Discoloration	Notes
0.0	0.0		6 inches asphalt concrete							
			Lean Clay with Sand (CL) [Fill] moist, dark brown, fine to coarse sand, some fine gravel			x	60		Some chip seal observed, some green staining	
	2.5		Lean Clay with Sand (CL) moist, dark brown, fine sand			x	80			
	5.0		Bottom of Boring at 5.0 feet.							



PROJECT NAME East Palo Alto Library Phase 2

PROJECT NUMBER 118-128-3

PROJECT LOCATION East Palo Alto, CA

DATE STARTED 6/28/22 DATE COMPLETED 6/28/22

GROUND ELEVATION \_\_\_\_\_ BORING DEPTH 5 ft.

DRILLING CONTRACTOR Penecore

LATITUDE \_\_\_\_\_ LONGITUDE \_\_\_\_\_

DRILLING METHOD Geoprobe 7822DT

GROUND WATER LEVELS:

LOGGED BY KLH

AT TIME OF DRILLING Not Encountered

NOTES \_\_\_\_\_

AT END OF DRILLING Not Encountered

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sample Type and Interval	Sample Submitted for Laboratory Analysis	Percent Recovery (%)	OMV Reading (ppm)	Odors or Discoloration	Notes
0.0	0.0	[Solid Black]	6 inches asphalt concrete							
	0.0	[Cross-hatch]	Lean Clay with Sand (CL) [Fill] moist, dark brown, fine to coarse sand, some fine gravel			x	60		Some chip seal observed	
	2.5	[Diagonal Lines]	Lean Clay with Sand (CL) moist, dark brown, fine sand  color changes to brown			x	80			
	5.0		Bottom of Boring at 5.0 feet.			x				



# CORNERSTONE EARTH GROUP

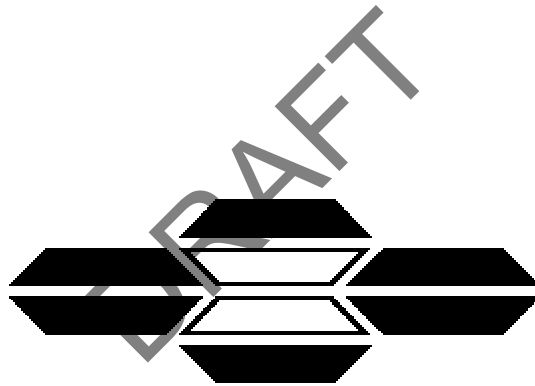
## BORING NUMBER SS-9

PAGE 1 OF 1

PROJECT NAME East Palo Alto Library Phase 2  
 PROJECT NUMBER 118-128-3  
 PROJECT LOCATION East Palo Alto, CA  
 DATE STARTED 6/28/22 DATE COMPLETED 6/28/22  
 GROUND ELEVATION \_\_\_\_\_ BORING DEPTH 5 ft.  
 DRILLING CONTRACTOR Penecore LATITUDE \_\_\_\_\_ LONGITUDE \_\_\_\_\_  
 DRILLING METHOD Geoprobe 7822DT GROUND WATER LEVELS:  
 LOGGED BY KLH  AT TIME OF DRILLING Not Encountered  
 AT END OF DRILLING Not Encountered

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sample Type and Interval	Sample Submitted for Laboratory Analysis	Percent Recovery (%)	OMV Reading (ppm)	Odors or Discoloration	Notes
	0.0		7 inches asphalt concrete							
			Lean Clay with Sand (CL) [Fill] moist, dark brown, fine to coarse sand, some fine gravel, some glass fragmnets			x	60		Some chip seal observed	
	2.5		Lean Clay with Sand (CL) moist, dark brown, fine sand, trace coarse sand  color changes to brown			x	80			
	5.0		Bottom of Boring at 5.0 feet.			x				

CORNERSTONE GE LOG DEC192007 - CORNERSTONE 0812.GDT - 7/25/22 11:54 - P:\DRAFTING\GINT FILES\118-128-3 EPA LIBRARY GE.GPJ



**ASBESTOS TEM LABORATORIES, INC.**

**CARB Method 435  
Polarized Light Microscopy  
Analytical Report**

**Laboratory Job # 1206-00872**

3431 Ettie St.  
Oakland, CA 94608  
(510) 704-8930  
FAX (510) 704-8429

---





ASBESTOS TEM LABORATORIES, INC

CA ELAP  
Lab No. 1866



NVLAP Lab Code: 101891-0  
Oakland, CA

Jul/13/2022

Michael Chang  
Cornerstone Earth Group, Inc.  
1259 Oakmead Parkway  
Sunnyvale, CA 94085

RE: LABORATORY JOB # 1206-00872  
Polarized light microscopy analytical results for 6 bulk sample(s).  
Job Site: 118-128-3  
Job No.: Pulgas Avenue, East Palo Alto

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microscope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting technique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager  
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

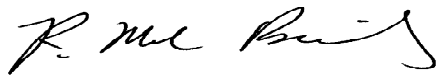
3431 Ettie St. • Oakland, CA 94608 • PH. (510) 704-8930 • FAX (510) 704-8429

With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

# POLARIZED LIGHT MICROSCOPY CARB 435 ANALYTICAL REPORT

Contact: Michael Chang	Samples Submitted: 6	Report No. <b>379468</b>
Address: Cornerstone Earth Group, Inc. 1259 Oakmead Parkway Sunnyvale, CA 94085	Samples Analyzed: 6	Date Submitted: Jun-30-22
	Job Site / No. Pulgas Avenue, East Palo Alto 118-128-3	Date Reported: Jul-07-22

SAMPLE ID	ASBESTOS		LOCATION / DESCRIPTION
	POINTS COUNTED	% TYPE	
SG-4(0.5-1)	<b>&lt;0.25%</b>	<b>No Asbestos Detected</b>	Exception #1 - No asbestos in 10 FOV on 3 slides
Lab ID # 1206-00872-001	0 - Total Points		
SG-5(0.5-1)	<b>&lt;0.25%</b>	<b>No Asbestos Detected</b>	Exception #1 - No asbestos in 10 FOV on 3 slides
Lab ID # 1206-00872-002	0 - Total Points		
SG-6(0.5-1)	<b>&lt;0.25%</b>	<b>No Asbestos Detected</b>	Exception #1 - No asbestos in 10 FOV on 3 slides
Lab ID # 1206-00872-003	0 - Total Points		
SG-3(0.5-1)	<b>&lt;0.25%</b>	<b>No Asbestos Detected</b>	Exception #1 - No asbestos in 10 FOV on 3 slides
Lab ID # 1206-00872-004	0 - Total Points		
SG-2(0.5-1)	<b>&lt;0.25%</b>	<b>No Asbestos Detected</b>	Exception #1 - No asbestos in 10 FOV on 3 slides
Lab ID # 1206-00872-005	0 - Total Points		
SG-1(0.5-1)	<b>&lt;0.25%</b>	<b>No Asbestos Detected</b>	HOLD Exception #1 - No asbestos in 10 FOV on 3 slides
Lab ID # 1206-00872-006	0 - Total Points		
Lab ID #	- Total Points		
Lab ID #	- Total Points		
Lab ID #	- Total Points		
Lab ID #	- Total Points		

QC Reviewer   
Asbestos TEM Laboratories, Inc.

Analyst   
3431 Ettie St., Oakland, CA 94608 PH. (510) 704-8930



# ASBESTOS TEM LABORATORIES CHAIN OF CUSTODY

CALIFORNIA: 3431 Ette St. Oakland, CA 94608 Phone (510) 704-8930 Fax (510) 704-8429  
 NEVADA: 1350 Freeport Blvd. #104, Sparks, NV 89431 Phone (775) 359-3377 Fax (775) 359-2798 You  
 may also email this chain of custody to [co2@asbestoslabs.com](mailto:co2@asbestoslabs.com) \* denotes required field

319468

Company: Cornerstone Earth Group  
 Address: \* 1259 Oakmead Parkway  
 City: \* Sunnyside  
 Job #: 118-128-3  
 PO #:  
 State: \* CA Zip: 94589  
 Email: \* [mchang@cornerstoneearth.com](mailto:mchang@cornerstoneearth.com)  
 Email: [khilton@cornerstoneearth.com](mailto:khilton@cornerstoneearth.com)

Contract: \* [mchang@cornerstoneearth.com](mailto:mchang@cornerstoneearth.com)  
 Phone: \* (408) 609-1753  
 Fax: (408) 609-1753

Reporting \*  
 Email  
 Phone  
 Fax  
 Mail  
 RTP  
 Pickup  
 Billing  
 Fax  
 Email  
 Mail  
 Pre-Paid  
 On Receipt  
 3<sup>rd</sup> Party

Results Due: \*  
 2 HR  
 4 HR  
 6 HR  
 8 HR  
 24 HR  
 48 HR  
 3 DAY  
 5 DAY  
 10 DAY  
 Hold Samples  
 After Hours: \*\*  
 ISO 10312  
 ISO 13794  
*see below*

Asbestos Air  
 PCM (NIOSH 7400A)  
 TEM AHERA  
 TEM CARB Mod. AHERA  
 TEM EPA Yamate Level II  
 TEM NIOSH 7402  
 ISO 10312  
 TEM EPA Quantitative

Asbestos Bulk  
 PLM Standard (EPA 500/R-93-1)  
 TEM Charific (Semi-Quant)  
 PREP ONLY  
 Custom Analysis: \*\*

Asbestos Soils  
 CARB 435 Prep Only  
 CARB 435 PLM 400 PC  
 CARB 435 PLM 1000 PC  
 EPA Soil Screening Qualitative  
 TEM EPA/CARB Quantitative

Asbestos Dust  
 ASTM D-5755 Fiber Count  
 ASTM D-5756 Wt. %  
 ASTM D-5756 Mass  
 ASTM D-6480-99 Dust Wrpe  
 Total Particulates (Grav.)

Asbestos Water  
 100.2 Potable Drinking Water  
 100.1 Non Potable Water  
 REPORT TO STATE: EDT # \_\_\_\_\_  
 Lead Paint  
 Lead Dust  
 Lead Air  
 Lead Soil  
 Silica Dust Airborne by NIOSH 7500  
 Crystalline Silica (Single Species)  
 Slice Dust Bulk by NIOSH 7500  
 Crystalline Silica in Bulk (Single Species)

Lead/Silica  
 Wipe  
 Silica Dust Airborne by NIOSH 7500

Sample Storage  
 No Test Hold Until: \_\_\_\_\_  
 Test AND Hold Until: \_\_\_\_\_  
 All samples will be held for 3 months from the date of receipt at ATEM. Additional sample storage time may be obtained through ATEM Customer Service.

Custom Order  
 Sensitivity: \_\_\_\_\_  
 Composite  
 8 Hour TWA  
 Special Instructions: \_\_\_\_\_

REANALYSIS  
 Original Underline # \_\_\_\_\_  
 New Analysis Type: \_\_\_\_\_  
 TAT: \_\_\_\_\_  
 Special Instructions: \_\_\_\_\_

Sample # *	Sample Type	Date Collected	Time On	Time Off	Total Time (min)	Flow Rate (lpm)			Volume or Area Sampled	Hold Sample	Description *
						On	Off	Average			
SG-4(0.5-1)	Baggie	6/28/12									
SG-5(0.5-1)											
SG-6(0.5-1)											
SG-3(0.5-1)											
SG-2(0.5-1)											
SG-1(0.5-1)											Hold

Submitted By \* *Mchang*  
 Date/Time Submitted \* *6/28/12 1439*  
 Received By *MB*  
 Date/Time Received *JUN 28 22 18:38 PM*

Date/Time Submitted \_\_\_\_\_  
 Received By \_\_\_\_\_  
 Date/Time Received \_\_\_\_\_

\*\* Any special instructions, RUSH results or Custom Analysis, you must clarify these specifications AND, of more importance, contact us here at ATEM ahead of time to manage scheduling to meet your requests. Drop off and processing of samples after hours cannot be accommodated without proper notification from you, and confirmation by ATEM staff.



Cornerstone Earth Group  
1259 Oakmead Parkway  
Sunnyvale, California 94035  
Tel: (408) 245-4600  
Fax: (408) 245-4620  
RE: East Palo Alto Library

DRAFT

Work Order No.: 2206250

Dear Michael Chang:

Torrent Laboratory, Inc. received 24 sample(s) on June 28, 2022 for the analyses presented in the following Report.

Six samples are on hold.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink that reads "Kathie Evans". The signature is written in a cursive style and is positioned above a horizontal line.

Kathie Evans  
Project Manager

July 06, 2022

Date

**Date:** 7/6/2022

---

**Client:** Cornerstone Earth Group

**Project:** East Palo Alto Library

**Work Order:** 2206250

**CASE NARRATIVE**

---

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.

Data is reported on a dry weight basis.

Analytical Comments for method 8081B, 2206250-023A MS/MSD, QC Preparation Batch ID 1142765, Note: The % recoveries for Dieldrin and Endrin are outside of laboratory control limits but % RPD is within limits. The associated LCS/LCSD is within both % Recovery and RPD limits. No corrective action required.



## Sample Result Summary

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date Received:** 06/28/22

**Date Reported:** 07/06/22

**SG-1 (0.5-1)**

2206250-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	4.46	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.04	%
Arsenic	SW6010B	1	0.15	1.4	5.56	mg/Kg
alpha-BHC	SW8081B	10	1.3	21	1.76	ug/Kg
gamma-BHC (Lindane)	SW8081B	10	1.7	21	3.03	ug/Kg
beta-BHC	SW8081B	10	3.3	21	5.45	ug/Kg
delta-BHC	SW8081B	10	1.6	21	2.26	ug/Kg
Heptachlor Epoxide	SW8081B	10	0.81	21	2.26	ug/Kg
gamma-Chlordane	SW8081B	10	1.7	21	28.1	ug/Kg
alpha-Chlordane	SW8081B	10	1.8	21	20.7	ug/Kg
4,4'-DDE	SW8081B	10	2.0	21	94.8	ug/Kg
Dieldrin	SW8081B	10	1.5	21	14.8	ug/Kg
4,4'-DDD	SW8081B	10	5.9	21	9.94	ug/Kg
4,4'-DDT	SW8081B	10	1.3	21	92.9	ug/Kg
Chlordane, Technical	SW8081B	10	22	210	199	ug/Kg

**SG-1 (2-2.5)**

2206250-002

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	10.3	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.10	%
Arsenic	SW6010B	1	0.16	1.4	7.15	mg/Kg
gamma-Chlordane	SW8081B	10	1.8	22	5.50	ug/Kg
alpha-Chlordane	SW8081B	10	1.9	22	3.20	ug/Kg
4,4'-DDE	SW8081B	10	2.1	22	10.1	ug/Kg
Dieldrin	SW8081B	10	1.6	22	9.60	ug/Kg
4,4'-DDT	SW8081B	10	1.4	22	16.8	ug/Kg
Endrin Aldehyde	SW8081B	10	1.7	22	1.88	ug/Kg
Chlordane, Technical	SW8081B	10	23	220	29.0	ug/Kg

**SS-7 (2-2.5)**

2206250-004

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	9.12	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.09	%
Arsenic	SW6010B	1	0.16	1.4	13.8	mg/Kg

**SS-7 (3-3.5)**

2206250-005

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	17.2	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.17	%
Arsenic	SW6010B	1	0.17	1.5	7.25	mg/Kg



## Sample Result Summary

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date Received:** 06/28/22

**Date Reported:** 07/06/22

**SS-8 (0.5-1)** 2206250-007

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	6.68	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.07	%
Arsenic	SW6010B	1	0.16	1.4	14.9	mg/Kg

**SS-8 (3-3.5)** 2206250-008

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	18.7	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.19	%
Arsenic	SW6010B	1	0.17	1.5	6.07	mg/Kg

**SS-9 (0.5-1)** 2206250-010

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	5.18	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.05	%
Arsenic	SW6010B	1	0.15	1.4	9.08	mg/Kg

**SS-9 (3.5-4)** 2206250-011

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	18.3	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.18	%
Arsenic	SW6010B	1	0.17	1.5	5.39	mg/Kg

**SG-4 (0.5-1)** 2206250-013

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	5.48	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.05	%
Arsenic	SW6010B	1	0.15	1.4	4.47	mg/Kg
gamma-Chlordane	SW8081B	20	3.4	42	10.6	ug/Kg
alpha-Chlordane	SW8081B	20	3.6	42	9.03	ug/Kg
4,4'-DDE	SW8081B	20	4.1	42	81.9	ug/Kg
Dieldrin	SW8081B	20	3.1	42	23.3	ug/Kg
4,4'-DDT	SW8081B	20	2.7	42	30.4	ug/Kg
Chlordane, Technical	SW8081B	20	44	420	66.9	ug/Kg

**SG-4 (3-3.5)** 2206250-014

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	18.3	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.18	%
Arsenic	SW6010B	1	0.17	1.5	5.60	mg/Kg
gamma-Chlordane	SW8081B	10	1.9	24	2.51	ug/Kg
4,4'-DDE	SW8081B	10	2.3	24	15.0	ug/Kg
4,4'-DDT	SW8081B	10	1.5	24	16.9	ug/Kg



## Sample Result Summary

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date Received:** 06/28/22

**Date Reported:** 07/06/22

**SG-5 (0.5-1)**

2206250-015

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	6.82	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.07	%
Arsenic	SW6010B	1	0.16	1.4	5.67	mg/Kg
Heptachlor Epoxide	SW8081B	20	1.7	43	2.61	ug/Kg
gamma-Chlordane	SW8081B	20	3.5	43	31.2	ug/Kg
alpha-Chlordane	SW8081B	20	3.7	43	28.3	ug/Kg
4,4'-DDE	SW8081B	20	4.2	43	102	ug/Kg
Dieldrin	SW8081B	20	3.2	43	36.7	ug/Kg
4,4'-DDD	SW8081B	20	12	43	14.9	ug/Kg
4,4'-DDT	SW8081B	20	2.8	43	96.8	ug/Kg
Chlordane, Technical	SW8081B	20	45	430	246	ug/Kg

**SG-5 (2-2.5)**

2206250-016

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	14.4	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.14	%
Arsenic	SW6010B	1	0.17	1.5	6.10	mg/Kg
gamma-Chlordane	SW8081B	10	1.9	23	5.89	ug/Kg
alpha-Chlordane	SW8081B	10	2.0	23	11.6	ug/Kg
4,4'-DDE	SW8081B	10	2.2	23	19.6	ug/Kg
Dieldrin	SW8081B	10	1.7	23	2.60	ug/Kg
4,4'-DDT	SW8081B	10	1.5	23	32.0	ug/Kg
Chlordane, Technical	SW8081B	10	24	230	51.0	ug/Kg

**SG-6 (0.5-1)**

2206250-018

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	4.76	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.05	%
Arsenic	SW6010B	1	0.15	1.4	4.69	mg/Kg
gamma-BHC (Lindane)	SW8081B	10	1.7	21	3.19	ug/Kg
beta-BHC	SW8081B	10	3.3	21	6.74	ug/Kg
Heptachlor Epoxide	SW8081B	10	0.82	21	3.66	ug/Kg
gamma-Chlordane	SW8081B	10	1.7	21	42.5	ug/Kg
alpha-Chlordane	SW8081B	10	1.8	21	29.9	ug/Kg
4,4'-DDE	SW8081B	10	2.0	21	144	ug/Kg
Dieldrin	SW8081B	10	1.6	21	15.4	ug/Kg
4,4'-DDD	SW8081B	10	5.9	21	12.9	ug/Kg
4,4'-DDT	SW8081B	10	1.4	21	136	ug/Kg
Chlordane, Technical	SW8081B	10	22	210	267	ug/Kg





### Sample Result Summary

Report prepared for: Michael Chang  
Cornerstone Earth Group

Date Received: 06/28/22

Date Reported: 07/06/22

**SG-6 (3.5-4)**

2206250-019

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	12.1	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.12	%
Arsenic	SW6010B	1	0.16	1.5	5.99	mg/Kg
gamma-Chlordane	SW8081B	10	1.8	22	4.40	ug/Kg
alpha-Chlordane	SW8081B	10	1.9	22	2.56	ug/Kg
4,4'-DDE	SW8081B	10	2.2	22	16.7	ug/Kg
Dieldrin	SW8081B	10	1.7	22	4.23	ug/Kg
4,4'-DDT	SW8081B	10	1.4	22	17.1	ug/Kg

**SG-3 (0.5-1)**

2206250-020

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	3.59	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.04	%
Arsenic	SW6010B	1	0.15	1.4	4.48	mg/Kg
delta-BHC	SW8081B	20	3.2	42	4.93	ug/Kg
gamma-Chlordane	SW8081B	20	3.4	42	19.8	ug/Kg
alpha-Chlordane	SW8081B	20	3.6	42	15.2	ug/Kg
4,4'-DDE	SW8081B	20	4.0	42	90.5	ug/Kg
Dieldrin	SW8081B	20	3.1	42	12.8	ug/Kg
4,4'-DDT	SW8081B	20	2.7	42	71.9	ug/Kg
Chlordane, Technical	SW8081B	20	44	420	128	ug/Kg

**SG-3 (2.5-3)**

2206250-021

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	12.4	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.12	%
Arsenic	SW6010B	1	0.16	1.5	26.6	mg/Kg
gamma-Chlordane	SW8081B	10	1.8	22	3.45	ug/Kg
alpha-Chlordane	SW8081B	10	1.9	22	2.82	ug/Kg
4,4'-DDE	SW8081B	10	2.2	22	27.7	ug/Kg
Dieldrin	SW8081B	10	1.7	22	49.7	ug/Kg
4,4'-DDT	SW8081B	10	1.4	22	36.2	ug/Kg
Chlordane, Technical	SW8081B	10	24	220	24.1	ug/Kg



### Sample Result Summary

Report prepared for: Michael Chang  
Cornerstone Earth Group

Date Received: 06/28/22

Date Reported: 07/06/22

2206250-022

SG-2 (0.5-1)

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	3.47	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.03	%
Arsenic	SW6010B	1	0.15	1.3	5.87	mg/Kg
Heptachlor Epoxide	SW8081B	10	0.80	21	1.25	ug/Kg
gamma-Chlordane	SW8081B	10	1.7	21	14.2	ug/Kg
alpha-Chlordane	SW8081B	10	1.8	21	11.5	ug/Kg
4,4'-DDE	SW8081B	10	2.0	21	45.4	ug/Kg
Dieldrin	SW8081B	10	1.5	21	11.4	ug/Kg
4,4'-DDD	SW8081B	10	5.8	21	8.15	ug/Kg
4,4'-DDT	SW8081B	10	1.3	21	45.2	ug/Kg
Endrin Aldehyde	SW8081B	10	1.6	21	1.97	ug/Kg
Chlordane, Technical	SW8081B	10	22	210	101	ug/Kg

SG-2 (1.5-2)

2206250-023

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	12.4	%
Dry Weight Factor	ASTM D2216-90	1	1	1	1.12	%
Arsenic	SW6010B	1	0.16	1.5	8.18	mg/Kg
alpha-BHC	SW8081B	10	1.4	22	2.98	ug/Kg
beta-BHC	SW8081B	10	3.5	22	27.3	ug/Kg
Dieldrin	SW8081B	10	1.7	22	10.2	ug/Kg



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-1 (0.5-1)	<b>Lab Sample ID:</b>	2206250-001A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:29		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22 8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.15	1.4	5.56		mg/Kg	06/30/22	17:03	AT	467279



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-1 (0.5-1)	<b>Lab Sample ID:</b>	2206250-001A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:29		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22	1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	36.4	104	ND		ug/Kg	06/30/22	19:08	MK	467158
Aroclor1221	SW8082A	1	5.20	104	ND		ug/Kg	06/30/22	19:08	MK	467158
Aroclor1232	SW8082A	1	17.7	104	ND		ug/Kg	06/30/22	19:08	MK	467158
Aroclor1242	SW8082A	1	3.12	104	ND		ug/Kg	06/30/22	19:08	MK	467158
Aroclor1248	SW8082A	1	2.08	104	ND		ug/Kg	06/30/22	19:08	MK	467158
Aroclor1254	SW8082A	1	14.6	104	ND		ug/Kg	06/30/22	19:08	MK	467158
Aroclor1260	SW8082A	1	25.0	104	ND		ug/Kg	06/30/22	19:08	MK	467158
Acceptance Limits											
TCMX (S)	SW8082A		48 - 125		<b>79.0</b>		%	06/30/22	19:08	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>72.0</b>		%	06/30/22	19:08	MK	467158



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-1 (0.5-1)	<b>Lab Sample ID:</b>	2206250-001A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:29		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/30/22	1:52:00PM
<b>Prep Batch ID:</b> 1142808	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	10	1.3	21	1.76	J	ug/Kg	07/01/22	17:34	LA	467243
gamma-BHC (Lindane)	SW8081B	10	1.7	21	3.03	J	ug/Kg	07/01/22	17:34	LA	467243
beta-BHC	SW8081B	10	3.3	21	5.45	J	ug/Kg	07/01/22	17:34	LA	467243
delta-BHC	SW8081B	10	1.6	21	2.26	J	ug/Kg	07/01/22	17:34	LA	467243
Heptachlor	SW8081B	10	1.1	21	ND		ug/Kg	07/01/22	17:34	LA	467243
Aldrin	SW8081B	10	2.0	21	ND		ug/Kg	07/01/22	17:34	LA	467243
Heptachlor Epoxide	SW8081B	10	0.81	21	2.26	J	ug/Kg	07/01/22	17:34	LA	467243
gamma-Chlordane	SW8081B	10	1.7	21	28.1		ug/Kg	07/01/22	17:34	LA	467243
alpha-Chlordane	SW8081B	10	1.8	21	20.7	J	ug/Kg	07/01/22	17:34	LA	467243
4,4'-DDE	SW8081B	10	2.0	21	94.8		ug/Kg	07/01/22	17:34	LA	467243
Endosulfan I	SW8081B	10	1.9	21	ND		ug/Kg	07/01/22	17:34	LA	467243
Dieldrin	SW8081B	10	1.5	21	14.8	J	ug/Kg	07/01/22	17:34	LA	467243
Endrin	SW8081B	10	2.0	21	ND		ug/Kg	07/01/22	17:34	LA	467243
4,4'-DDD	SW8081B	10	5.9	21	9.94	J	ug/Kg	07/01/22	17:34	LA	467243
Endosulfan II	SW8081B	10	6.0	21	ND		ug/Kg	07/01/22	17:34	LA	467243
4,4'-DDT	SW8081B	10	1.3	21	92.9		ug/Kg	07/01/22	17:34	LA	467243
Endrin Aldehyde	SW8081B	10	1.6	21	ND		ug/Kg	07/01/22	17:34	LA	467243
Methoxychlor	SW8081B	10	2.1	21	ND		ug/Kg	07/01/22	17:34	LA	467243
Endosulfan Sulfate	SW8081B	10	1.2	21	ND		ug/Kg	07/01/22	17:34	LA	467243
Endrin Ketone	SW8081B	10	0.98	21	ND		ug/Kg	07/01/22	17:34	LA	467243
Chlordane, Technical	SW8081B	10	22	210	199	J	ug/Kg	07/01/22	17:34	LA	467243
Toxaphene	SW8081B	10	89	520	ND		ug/Kg	07/01/22	17:34	LA	467243
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		80.7		%	07/01/22	17:34	LA	467243
Decachlorobiphenyl (S)	SW8081B		38 - 135		82.1		%	07/01/22	17:34	LA	467243

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-1 (0.5-1)	<b>Lab Sample ID:</b>	2206250-001A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:29		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22 6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b> KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	<b>4.46</b>		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	<b>1.04</b>		-	07/04/22	11:30	NK	467240



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-1 (2-2.5)	<b>Lab Sample ID:</b>	2206250-002A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:30		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.16	1.4	7.15		mg/Kg	06/30/22	17:08	AT	467279



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-1 (2-2.5)	<b>Lab Sample ID:</b>	2206250-002A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:30		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22	1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	38.5	110	ND		ug/Kg	06/30/22	19:25	MK	467158
Aroclor1221	SW8082A	1	5.50	110	ND		ug/Kg	06/30/22	19:25	MK	467158
Aroclor1232	SW8082A	1	18.7	110	ND		ug/Kg	06/30/22	19:25	MK	467158
Aroclor1242	SW8082A	1	3.30	110	ND		ug/Kg	06/30/22	19:25	MK	467158
Aroclor1248	SW8082A	1	2.20	110	ND		ug/Kg	06/30/22	19:25	MK	467158
Aroclor1254	SW8082A	1	15.4	110	ND		ug/Kg	06/30/22	19:25	MK	467158
Aroclor1260	SW8082A	1	26.4	110	ND		ug/Kg	06/30/22	19:25	MK	467158
Acceptance Limits											
TCMX (S)	SW8082A		48 - 125		<b>98.0</b>		%	06/30/22	19:25	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>96.0</b>		%	06/30/22	19:25	MK	467158





## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-1 (2-2.5)	<b>Lab Sample ID:</b>	2206250-002A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:30		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/30/22	1:52:00PM
<b>Prep Batch ID:</b> 1142808	<b>Prep Analyst:</b>	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	10	1.4	22	ND		ug/Kg	07/01/22	17:45	LA	467243
gamma-BHC (Lindane)	SW8081B	10	1.7	22	ND		ug/Kg	07/01/22	17:45	LA	467243
beta-BHC	SW8081B	10	3.5	22	ND		ug/Kg	07/01/22	17:45	LA	467243
delta-BHC	SW8081B	10	1.7	22	ND		ug/Kg	07/01/22	17:45	LA	467243
Heptachlor	SW8081B	10	1.2	22	ND		ug/Kg	07/01/22	17:45	LA	467243
Aldrin	SW8081B	10	2.1	22	ND		ug/Kg	07/01/22	17:45	LA	467243
Heptachlor Epoxide	SW8081B	10	0.86	22	ND		ug/Kg	07/01/22	17:45	LA	467243
gamma-Chlordane	SW8081B	10	1.8	22	<b>5.50</b>	J	ug/Kg	07/01/22	17:45	LA	467243
alpha-Chlordane	SW8081B	10	1.9	22	<b>3.20</b>	J	ug/Kg	07/01/22	17:45	LA	467243
4,4'-DDE	SW8081B	10	2.1	22	<b>10.1</b>	J	ug/Kg	07/01/22	17:45	LA	467243
Endosulfan I	SW8081B	10	2.0	22	ND		ug/Kg	07/01/22	17:45	LA	467243
Dieldrin	SW8081B	10	1.6	22	<b>9.60</b>	J	ug/Kg	07/01/22	17:45	LA	467243
Endrin	SW8081B	10	2.1	22	ND		ug/Kg	07/01/22	17:45	LA	467243
4,4'-DDD	SW8081B	10	6.2	22	ND		ug/Kg	07/01/22	17:45	LA	467243
Endosulfan II	SW8081B	10	6.3	22	ND		ug/Kg	07/01/22	17:45	LA	467243
4,4'-DDT	SW8081B	10	1.4	22	<b>16.8</b>	J	ug/Kg	07/01/22	17:45	LA	467243
Endrin Aldehyde	SW8081B	10	1.7	22	<b>1.88</b>	J	ug/Kg	07/01/22	17:45	LA	467243
Methoxychlor	SW8081B	10	2.2	22	ND		ug/Kg	07/01/22	17:45	LA	467243
Endosulfan Sulfate	SW8081B	10	1.3	22	ND		ug/Kg	07/01/22	17:45	LA	467243
Endrin Ketone	SW8081B	10	1.0	22	ND		ug/Kg	07/01/22	17:45	LA	467243
Chlordane, Technical	SW8081B	10	23	220	<b>29.0</b>	J	ug/Kg	07/01/22	17:45	LA	467243
Toxaphene	SW8081B	10	94	550	ND		ug/Kg	07/01/22	17:45	LA	467243
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		<b>101</b>		%	07/01/22	17:45	LA	467243
Decachlorobiphenyl (S)	SW8081B		38 - 135		<b>95.6</b>		%	07/01/22	17:45	LA	467243

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-1 (2-2.5)	<b>Lab Sample ID:</b>	2206250-002A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:30		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	<b>10.3</b>		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	<b>1.10</b>		-	07/04/22	11:30	NK	467240



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-7 (2-2.5)	<b>Lab Sample ID:</b>	2206250-004A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:53		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.16	1.4	13.8		mg/Kg	06/30/22	17:09	AT	467279



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-7 (2-2.5)	<b>Lab Sample ID:</b>	2206250-004A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:53		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	<b>9.12</b>		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	<b>1.09</b>		-	07/04/22	11:30	NK	467240



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-7 (3-3.5)	<b>Lab Sample ID:</b>	2206250-005A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:54		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.17	1.5	7.25		mg/Kg	06/30/22	17:11	AT	467279



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-7 (3-3.5)	<b>Lab Sample ID:</b>	2206250-005A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:54		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	17.2		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.17		-	07/04/22	11:30	NK	467240



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-8 (0.5-1)	<b>Lab Sample ID:</b>	2206250-007A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 11:15		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.16	1.4	14.9		mg/Kg	06/30/22	17:12	AT	467279



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-8 (0.5-1)	<b>Lab Sample ID:</b>	2206250-007A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 11:15		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	<b>6.68</b>		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	<b>1.07</b>		-	07/04/22	11:30	NK	467240





### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-8 (3-3.5)	<b>Lab Sample ID:</b>	2206250-008A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 11:16		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.17	1.5	<b>6.07</b>		mg/Kg	06/30/22	17:14	AT	467279



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-8 (3-3.5)	<b>Lab Sample ID:</b>	2206250-008A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 11:16		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22 6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b> KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	18.7		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.19		-	07/04/22	11:30	NK	467240



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-9 (0.5-1)	<b>Lab Sample ID:</b>	2206250-010A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 11:36		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.15	1.4	9.08		mg/Kg	06/30/22	17:16	AT	467279



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-9 (0.5-1)	<b>Lab Sample ID:</b>	2206250-010A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 11:36		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	5.18		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.05		-	07/04/22	11:30	NK	467240



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-9 (3.5-4)	<b>Lab Sample ID:</b>	2206250-011A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 11:37		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22 8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.17	1.5	5.39		mg/Kg	06/30/22	17:17	AT	467279



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SS-9 (3.5-4)	<b>Lab Sample ID:</b>	2206250-011A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 11:37		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	18.3		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.18		-	07/04/22	11:30	NK	467240



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-4 (0.5-1)	<b>Lab Sample ID:</b>	2206250-013A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:00		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.15	1.4	4.47		mg/Kg	06/30/22	17:22	AT	467279



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-4 (0.5-1)	<b>Lab Sample ID:</b>	2206250-013A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:00		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22	1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b>	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	36.8	105	ND		ug/Kg	06/30/22	19:41	MK	467158
Aroclor1221	SW8082A	1	5.25	105	ND		ug/Kg	06/30/22	19:41	MK	467158
Aroclor1232	SW8082A	1	17.9	105	ND		ug/Kg	06/30/22	19:41	MK	467158
Aroclor1242	SW8082A	1	3.15	105	ND		ug/Kg	06/30/22	19:41	MK	467158
Aroclor1248	SW8082A	1	2.10	105	ND		ug/Kg	06/30/22	19:41	MK	467158
Aroclor1254	SW8082A	1	14.7	105	ND		ug/Kg	06/30/22	19:41	MK	467158
Aroclor1260	SW8082A	1	25.2	105	ND		ug/Kg	06/30/22	19:41	MK	467158
Acceptance Limits											
TCMX (S)	SW8082A		48 - 125		<b>95.0</b>		%	06/30/22	19:41	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>83.0</b>		%	06/30/22	19:41	MK	467158





## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-4 (0.5-1)	<b>Lab Sample ID:</b>	2206250-013A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:00		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/30/22	1:52:00PM
<b>Prep Batch ID:</b> 1142808	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	20	2.7	42	ND		ug/Kg	07/01/22	23:53	LA	467243
gamma-BHC (Lindane)	SW8081B	20	3.3	42	ND		ug/Kg	07/01/22	23:53	LA	467243
beta-BHC	SW8081B	20	6.6	42	ND		ug/Kg	07/01/22	23:53	LA	467243
delta-BHC	SW8081B	20	3.3	42	ND		ug/Kg	07/01/22	23:53	LA	467243
Heptachlor	SW8081B	20	2.2	42	ND		ug/Kg	07/01/22	23:53	LA	467243
Aldrin	SW8081B	20	4.1	42	ND		ug/Kg	07/01/22	23:53	LA	467243
Heptachlor Epoxide	SW8081B	20	1.6	42	ND		ug/Kg	07/01/22	23:53	LA	467243
gamma-Chlordane	SW8081B	20	3.4	42	<b>10.6</b>	J	ug/Kg	07/01/22	23:53	LA	467243
alpha-Chlordane	SW8081B	20	3.6	42	<b>9.03</b>	J	ug/Kg	07/01/22	23:53	LA	467243
4,4'-DDE	SW8081B	20	4.1	42	<b>81.9</b>		ug/Kg	07/01/22	23:53	LA	467243
Endosulfan I	SW8081B	20	3.8	42	ND		ug/Kg	07/01/22	23:53	LA	467243
Dieldrin	SW8081B	20	3.1	42	<b>23.3</b>	J	ug/Kg	07/01/22	23:53	LA	467243
Endrin	SW8081B	20	3.9	42	ND		ug/Kg	07/01/22	23:53	LA	467243
4,4'-DDD	SW8081B	20	12	42	ND		ug/Kg	07/01/22	23:53	LA	467243
Endosulfan II	SW8081B	20	12	42	ND		ug/Kg	07/01/22	23:53	LA	467243
4,4'-DDT	SW8081B	20	2.7	42	<b>30.4</b>	J	ug/Kg	07/01/22	23:53	LA	467243
Endrin Aldehyde	SW8081B	20	3.2	42	ND		ug/Kg	07/01/22	23:53	LA	467243
Methoxychlor	SW8081B	20	4.2	42	ND		ug/Kg	07/01/22	23:53	LA	467243
Endosulfan Sulfate	SW8081B	20	2.5	42	ND		ug/Kg	07/01/22	23:53	LA	467243
Endrin Ketone	SW8081B	20	2.0	42	ND		ug/Kg	07/01/22	23:53	LA	467243
Chlordane, Technical	SW8081B	20	44	420	<b>66.9</b>	J	ug/Kg	07/01/22	23:53	LA	467243
Toxaphene	SW8081B	20	180	1100	ND		ug/Kg	07/01/22	23:53	LA	467243
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		<b>0.000</b>	D	%	07/01/22	23:53	LA	467243
Decachlorobiphenyl (S)	SW8081B		38 - 135		<b>0.000</b>	D	%	07/01/22	23:53	LA	467243

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-4 (0.5-1)	<b>Lab Sample ID:</b>	2206250-013A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:00		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	<b>5.48</b>		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	<b>1.05</b>		-	07/04/22	11:30	NK	467240



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-4 (3-3.5)	<b>Lab Sample ID:</b>	2206250-014A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:01		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.17	1.5	<b>5.60</b>		mg/Kg	06/30/22	17:24	AT	467279



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-4 (3-3.5)	<b>Lab Sample ID:</b>	2206250-014A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:01		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22 1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b> AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	41.3	118	ND		ug/Kg	06/30/22	19:58	MK	467158
Aroclor1221	SW8082A	1	5.90	118	ND		ug/Kg	06/30/22	19:58	MK	467158
Aroclor1232	SW8082A	1	20.1	118	ND		ug/Kg	06/30/22	19:58	MK	467158
Aroclor1242	SW8082A	1	3.54	118	ND		ug/Kg	06/30/22	19:58	MK	467158
Aroclor1248	SW8082A	1	2.36	118	ND		ug/Kg	06/30/22	19:58	MK	467158
Aroclor1254	SW8082A	1	16.5	118	ND		ug/Kg	06/30/22	19:58	MK	467158
Aroclor1260	SW8082A	1	28.3	118	ND		ug/Kg	06/30/22	19:58	MK	467158
			Acceptance Limits								
TCMX (S)	SW8082A		48 - 125		<b>100</b>		%	06/30/22	19:58	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>86.0</b>		%	06/30/22	19:58	MK	467158



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-4 (3-3.5)	<b>Lab Sample ID:</b>	2206250-014A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:01		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/30/22 1:52:00PM
<b>Prep Batch ID:</b> 1142808	<b>Prep Analyst:</b> AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	10	1.5	24	ND		ug/Kg	07/01/22	18:00	LA	467243
gamma-BHC (Lindane)	SW8081B	10	1.9	24	ND		ug/Kg	07/01/22	18:00	LA	467243
beta-BHC	SW8081B	10	3.7	24	ND		ug/Kg	07/01/22	18:00	LA	467243
delta-BHC	SW8081B	10	1.8	24	ND		ug/Kg	07/01/22	18:00	LA	467243
Heptachlor	SW8081B	10	1.2	24	ND		ug/Kg	07/01/22	18:00	LA	467243
Aldrin	SW8081B	10	2.3	24	ND		ug/Kg	07/01/22	18:00	LA	467243
Heptachlor Epoxide	SW8081B	10	0.92	24	ND		ug/Kg	07/01/22	18:00	LA	467243
gamma-Chlordane	SW8081B	10	1.9	24	2.51	J	ug/Kg	07/01/22	18:00	LA	467243
alpha-Chlordane	SW8081B	10	2.0	24	ND		ug/Kg	07/01/22	18:00	LA	467243
4,4'-DDE	SW8081B	10	2.3	24	15.0	J	ug/Kg	07/01/22	18:00	LA	467243
Endosulfan I	SW8081B	10	2.2	24	ND		ug/Kg	07/01/22	18:00	LA	467243
Dieldrin	SW8081B	10	1.7	24	ND		ug/Kg	07/01/22	18:00	LA	467243
Endrin	SW8081B	10	2.2	24	ND		ug/Kg	07/01/22	18:00	LA	467243
4,4'-DDD	SW8081B	10	6.7	24	ND		ug/Kg	07/01/22	18:00	LA	467243
Endosulfan II	SW8081B	10	6.8	24	ND		ug/Kg	07/01/22	18:00	LA	467243
4,4'-DDT	SW8081B	10	1.5	24	16.9	J	ug/Kg	07/01/22	18:00	LA	467243
Endrin Aldehyde	SW8081B	10	1.8	24	ND		ug/Kg	07/01/22	18:00	LA	467243
Methoxychlor	SW8081B	10	2.4	24	ND		ug/Kg	07/01/22	18:00	LA	467243
Endosulfan Sulfate	SW8081B	10	1.4	24	ND		ug/Kg	07/01/22	18:00	LA	467243
Endrin Ketone	SW8081B	10	1.1	24	ND		ug/Kg	07/01/22	18:00	LA	467243
Chlordane, Technical	SW8081B	10	25	240	ND		ug/Kg	07/01/22	18:00	LA	467243
Toxaphene	SW8081B	10	100	590	ND		ug/Kg	07/01/22	18:00	LA	467243
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		98.2		%	07/01/22	18:00	LA	467243
Decachlorobiphenyl (S)	SW8081B		38 - 135		110		%	07/01/22	18:00	LA	467243

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-4 (3-3.5)	<b>Lab Sample ID:</b>	2206250-014A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:01		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	18.3		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.18		-	07/04/22	11:30	NK	467240



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-5 (0.5-1)	<b>Lab Sample ID:</b>	2206250-015A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:07		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22 8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.16	1.4	5.67		mg/Kg	06/30/22	17:26	AT	467279



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-5 (0.5-1)	<b>Lab Sample ID:</b>	2206250-015A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:07		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22	1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b>	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	37.5	107	ND		ug/Kg	06/30/22	20:14	MK	467158
Aroclor1221	SW8082A	1	5.35	107	ND		ug/Kg	06/30/22	20:14	MK	467158
Aroclor1232	SW8082A	1	18.2	107	ND		ug/Kg	06/30/22	20:14	MK	467158
Aroclor1242	SW8082A	1	3.21	107	ND		ug/Kg	06/30/22	20:14	MK	467158
Aroclor1248	SW8082A	1	2.14	107	ND		ug/Kg	06/30/22	20:14	MK	467158
Aroclor1254	SW8082A	1	15.0	107	ND		ug/Kg	06/30/22	20:14	MK	467158
Aroclor1260	SW8082A	1	25.7	107	ND		ug/Kg	06/30/22	20:14	MK	467158
Acceptance Limits											
TCMX (S)	SW8082A		48 - 125		<b>92.0</b>		%	06/30/22	20:14	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>82.0</b>		%	06/30/22	20:14	MK	467158





## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-5 (0.5-1)	<b>Lab Sample ID:</b>	2206250-015A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:07		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/30/22	1:52:00PM
<b>Prep Batch ID:</b> 1142808	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	20	2.7	43	ND		ug/Kg	07/02/22	0:07	LA	467243
gamma-BHC (Lindane)	SW8081B	20	3.4	43	ND		ug/Kg	07/02/22	0:07	LA	467243
beta-BHC	SW8081B	20	6.8	43	ND		ug/Kg	07/02/22	0:07	LA	467243
delta-BHC	SW8081B	20	3.3	43	ND		ug/Kg	07/02/22	0:07	LA	467243
Heptachlor	SW8081B	20	2.2	43	ND		ug/Kg	07/02/22	0:07	LA	467243
Aldrin	SW8081B	20	4.2	43	ND		ug/Kg	07/02/22	0:07	LA	467243
Heptachlor Epoxide	SW8081B	20	1.7	43	<b>2.61</b>	J	ug/Kg	07/02/22	0:07	LA	467243
gamma-Chlordane	SW8081B	20	3.5	43	<b>31.2</b>	J	ug/Kg	07/02/22	0:07	LA	467243
alpha-Chlordane	SW8081B	20	3.7	43	<b>28.3</b>	J	ug/Kg	07/02/22	0:07	LA	467243
4,4'-DDE	SW8081B	20	4.2	43	<b>102</b>		ug/Kg	07/02/22	0:07	LA	467243
Endosulfan I	SW8081B	20	3.9	43	ND		ug/Kg	07/02/22	0:07	LA	467243
Dieldrin	SW8081B	20	3.2	43	<b>36.7</b>	J	ug/Kg	07/02/22	0:07	LA	467243
Endrin	SW8081B	20	4.0	43	ND		ug/Kg	07/02/22	0:07	LA	467243
4,4'-DDD	SW8081B	20	12	43	<b>14.9</b>	J	ug/Kg	07/02/22	0:07	LA	467243
Endosulfan II	SW8081B	20	12	43	ND		ug/Kg	07/02/22	0:07	LA	467243
4,4'-DDT	SW8081B	20	2.8	43	<b>96.8</b>		ug/Kg	07/02/22	0:07	LA	467243
Endrin Aldehyde	SW8081B	20	3.2	43	ND		ug/Kg	07/02/22	0:07	LA	467243
Methoxychlor	SW8081B	20	4.3	43	ND		ug/Kg	07/02/22	0:07	LA	467243
Endosulfan Sulfate	SW8081B	20	2.5	43	ND		ug/Kg	07/02/22	0:07	LA	467243
Endrin Ketone	SW8081B	20	2.0	43	ND		ug/Kg	07/02/22	0:07	LA	467243
Chlordane, Technical	SW8081B	20	45	430	<b>246</b>	J	ug/Kg	07/02/22	0:07	LA	467243
Toxaphene	SW8081B	20	180	1100	ND		ug/Kg	07/02/22	0:07	LA	467243
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		<b>0.000</b>	D	%	07/02/22	0:07	LA	467243
Decachlorobiphenyl (S)	SW8081B		38 - 135		<b>0.000</b>	D	%	07/02/22	0:07	LA	467243

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-5 (0.5-1)	<b>Lab Sample ID:</b>	2206250-015A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:07		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22 6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b> KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	<b>6.82</b>		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	<b>1.07</b>		-	07/04/22	11:30	NK	467240



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-5 (2-2.5)	<b>Lab Sample ID:</b>	2206250-016A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:08		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22 8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.17	1.5	6.10		mg/Kg	06/30/22	17:27	AT	467279



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-5 (2-2.5)	<b>Lab Sample ID:</b>	2206250-016A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:08		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22	1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	39.9	114	ND		ug/Kg	06/30/22	20:30	MK	467158
Aroclor1221	SW8082A	1	5.70	114	ND		ug/Kg	06/30/22	20:30	MK	467158
Aroclor1232	SW8082A	1	19.4	114	ND		ug/Kg	06/30/22	20:30	MK	467158
Aroclor1242	SW8082A	1	3.42	114	ND		ug/Kg	06/30/22	20:30	MK	467158
Aroclor1248	SW8082A	1	2.28	114	ND		ug/Kg	06/30/22	20:30	MK	467158
Aroclor1254	SW8082A	1	16.0	114	ND		ug/Kg	06/30/22	20:30	MK	467158
Aroclor1260	SW8082A	1	27.4	114	ND		ug/Kg	06/30/22	20:30	MK	467158
Acceptance Limits											
TCMX (S)	SW8082A		48 - 125		<b>97.0</b>		%	06/30/22	20:30	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>90.0</b>		%	06/30/22	20:30	MK	467158



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-5 (2-2.5)	<b>Lab Sample ID:</b>	2206250-016A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:08		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/30/22	1:52:00PM
<b>Prep Batch ID:</b> 1142808	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	10	1.4	23	ND		ug/Kg	07/01/22	18:14	LA	467243
gamma-BHC (Lindane)	SW8081B	10	1.8	23	ND		ug/Kg	07/01/22	18:14	LA	467243
beta-BHC	SW8081B	10	3.6	23	ND		ug/Kg	07/01/22	18:14	LA	467243
delta-BHC	SW8081B	10	1.8	23	ND		ug/Kg	07/01/22	18:14	LA	467243
Heptachlor	SW8081B	10	1.2	23	ND		ug/Kg	07/01/22	18:14	LA	467243
Aldrin	SW8081B	10	2.2	23	ND		ug/Kg	07/01/22	18:14	LA	467243
Heptachlor Epoxide	SW8081B	10	0.89	23	ND		ug/Kg	07/01/22	18:14	LA	467243
gamma-Chlordane	SW8081B	10	1.9	23	<b>5.89</b>	J	ug/Kg	07/01/22	18:14	LA	467243
alpha-Chlordane	SW8081B	10	2.0	23	<b>11.6</b>	J	ug/Kg	07/01/22	18:14	LA	467243
4,4'-DDE	SW8081B	10	2.2	23	<b>19.6</b>	J	ug/Kg	07/01/22	18:14	LA	467243
Endosulfan I	SW8081B	10	2.1	23	ND		ug/Kg	07/01/22	18:14	LA	467243
Dieldrin	SW8081B	10	1.7	23	<b>2.60</b>	J	ug/Kg	07/01/22	18:14	LA	467243
Endrin	SW8081B	10	2.1	23	ND		ug/Kg	07/01/22	18:14	LA	467243
4,4'-DDD	SW8081B	10	6.4	23	ND		ug/Kg	07/01/22	18:14	LA	467243
Endosulfan II	SW8081B	10	6.6	23	ND		ug/Kg	07/01/22	18:14	LA	467243
4,4'-DDT	SW8081B	10	1.5	23	<b>32.0</b>		ug/Kg	07/01/22	18:14	LA	467243
Endrin Aldehyde	SW8081B	10	1.7	23	ND		ug/Kg	07/01/22	18:14	LA	467243
Methoxychlor	SW8081B	10	2.3	23	ND		ug/Kg	07/01/22	18:14	LA	467243
Endosulfan Sulfate	SW8081B	10	1.3	23	ND		ug/Kg	07/01/22	18:14	LA	467243
Endrin Ketone	SW8081B	10	1.1	23	ND		ug/Kg	07/01/22	18:14	LA	467243
Chlordane, Technical	SW8081B	10	24	230	<b>51.0</b>	J	ug/Kg	07/01/22	18:14	LA	467243
Toxaphene	SW8081B	10	97	570	ND		ug/Kg	07/01/22	18:14	LA	467243
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		<b>99.2</b>		%	07/01/22	18:14	LA	467243
Decachlorobiphenyl (S)	SW8081B		38 - 135		<b>92.0</b>		%	07/01/22	18:14	LA	467243

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-5 (2-2.5)	<b>Lab Sample ID:</b>	2206250-016A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:08		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22 6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b> KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	14.4		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.14		-	07/04/22	11:30	NK	467240



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-6 (0.5-1)	<b>Lab Sample ID:</b>	2206250-018A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:36		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22 8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.15	1.4	4.69		mg/Kg	07/06/22	17:02	AT	467279



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-6 (0.5-1)	<b>Lab Sample ID:</b>	2206250-018A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:36		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22 1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b> AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	36.8	105	ND		ug/Kg	06/30/22	21:52	MK	467158
Aroclor1221	SW8082A	1	5.25	105	ND		ug/Kg	06/30/22	21:52	MK	467158
Aroclor1232	SW8082A	1	17.9	105	ND		ug/Kg	06/30/22	21:52	MK	467158
Aroclor1242	SW8082A	1	3.15	105	ND		ug/Kg	06/30/22	21:52	MK	467158
Aroclor1248	SW8082A	1	2.10	105	ND		ug/Kg	06/30/22	21:52	MK	467158
Aroclor1254	SW8082A	1	14.7	105	ND		ug/Kg	06/30/22	21:52	MK	467158
Aroclor1260	SW8082A	1	25.2	105	ND		ug/Kg	06/30/22	21:52	MK	467158
			Acceptance Limits								
TCMX (S)	SW8082A		48 - 125		<b>83.0</b>		%	06/30/22	21:52	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>76.0</b>		%	06/30/22	21:52	MK	467158





## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-6 (0.5-1)	<b>Lab Sample ID:</b>	2206250-018A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:36		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/29/22	12:09:00PM
<b>Prep Batch ID:</b> 1142765	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	10	1.3	21	ND		ug/Kg	07/01/22	18:26	LA	467288
gamma-BHC (Lindane)	SW8081B	10	1.7	21	<b>3.19</b>	J	ug/Kg	07/01/22	18:26	LA	467288
beta-BHC	SW8081B	10	3.3	21	<b>6.74</b>	J	ug/Kg	07/01/22	18:26	LA	467288
delta-BHC	SW8081B	10	1.6	21	ND		ug/Kg	07/01/22	18:26	LA	467288
Heptachlor	SW8081B	10	1.1	21	ND		ug/Kg	07/01/22	18:26	LA	467288
Aldrin	SW8081B	10	2.0	21	ND		ug/Kg	07/01/22	18:26	LA	467288
Heptachlor Epoxide	SW8081B	10	0.82	21	<b>3.66</b>	J	ug/Kg	07/01/22	18:26	LA	467288
gamma-Chlordane	SW8081B	10	1.7	21	<b>42.5</b>		ug/Kg	07/01/22	18:26	LA	467288
alpha-Chlordane	SW8081B	10	1.8	21	<b>29.9</b>		ug/Kg	07/01/22	18:26	LA	467288
4,4'-DDE	SW8081B	10	2.0	21	<b>144</b>		ug/Kg	07/01/22	18:26	LA	467288
Endosulfan I	SW8081B	10	1.9	21	ND		ug/Kg	07/01/22	18:26	LA	467288
Dieldrin	SW8081B	10	1.6	21	<b>15.4</b>	J	ug/Kg	07/01/22	18:26	LA	467288
Endrin	SW8081B	10	2.0	21	ND		ug/Kg	07/01/22	18:26	LA	467288
4,4'-DDD	SW8081B	10	5.9	21	<b>12.9</b>	J	ug/Kg	07/01/22	18:26	LA	467288
Endosulfan II	SW8081B	10	6.0	21	ND		ug/Kg	07/01/22	18:26	LA	467288
4,4'-DDT	SW8081B	10	1.4	21	<b>136</b>		ug/Kg	07/01/22	18:26	LA	467288
Endrin Aldehyde	SW8081B	10	1.6	21	ND		ug/Kg	07/01/22	18:26	LA	467288
Methoxychlor	SW8081B	10	2.1	21	ND		ug/Kg	07/01/22	18:26	LA	467288
Endosulfan Sulfate	SW8081B	10	1.2	21	ND		ug/Kg	07/01/22	18:26	LA	467288
Endrin Ketone	SW8081B	10	0.99	21	ND		ug/Kg	07/01/22	18:26	LA	467288
Chlordane, Technical	SW8081B	10	22	210	<b>267</b>		ug/Kg	07/01/22	18:26	LA	467288
Toxaphene	SW8081B	10	89	530	ND		ug/Kg	07/01/22	18:26	LA	467288
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		<b>96.4</b>		%	07/01/22	18:26	LA	467288
Decachlorobiphenyl (S)	SW8081B		38 - 135		<b>95.1</b>		%	07/01/22	18:26	LA	467288

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-6 (0.5-1)	<b>Lab Sample ID:</b>	2206250-018A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:36		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22 6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b> KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	4.76		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.05		-	07/04/22	11:30	NK	467240



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-6 (3.5-4)	<b>Lab Sample ID:</b>	2206250-019A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:37		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.16	1.5	5.99		mg/Kg	06/30/22	17:31	AT	467279



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-6 (3.5-4)	<b>Lab Sample ID:</b>	2206250-019A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:37		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22	1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b>	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	39.2	112	ND		ug/Kg	06/30/22	22:09	MK	467158
Aroclor1221	SW8082A	1	5.60	112	ND		ug/Kg	06/30/22	22:09	MK	467158
Aroclor1232	SW8082A	1	19.0	112	ND		ug/Kg	06/30/22	22:09	MK	467158
Aroclor1242	SW8082A	1	3.36	112	ND		ug/Kg	06/30/22	22:09	MK	467158
Aroclor1248	SW8082A	1	2.24	112	ND		ug/Kg	06/30/22	22:09	MK	467158
Aroclor1254	SW8082A	1	15.7	112	ND		ug/Kg	06/30/22	22:09	MK	467158
Aroclor1260	SW8082A	1	26.9	112	ND		ug/Kg	06/30/22	22:09	MK	467158
Acceptance Limits											
TCMX (S)	SW8082A		48 - 125		<b>91.0</b>		%	06/30/22	22:09	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>92.0</b>		%	06/30/22	22:09	MK	467158



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-6 (3.5-4)	<b>Lab Sample ID:</b>	2206250-019A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:37		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/29/22	12:09:00PM
<b>Prep Batch ID:</b> 1142765	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	10	1.4	22	ND		ug/Kg	07/01/22	18:39	LA	467288
gamma-BHC (Lindane)	SW8081B	10	1.8	22	ND		ug/Kg	07/01/22	18:39	LA	467288
beta-BHC	SW8081B	10	3.5	22	ND		ug/Kg	07/01/22	18:39	LA	467288
delta-BHC	SW8081B	10	1.7	22	ND		ug/Kg	07/01/22	18:39	LA	467288
Heptachlor	SW8081B	10	1.2	22	ND		ug/Kg	07/01/22	18:39	LA	467288
Aldrin	SW8081B	10	2.2	22	ND		ug/Kg	07/01/22	18:39	LA	467288
Heptachlor Epoxide	SW8081B	10	0.87	22	ND		ug/Kg	07/01/22	18:39	LA	467288
gamma-Chlordane	SW8081B	10	1.8	22	<b>4.40</b>	J	ug/Kg	07/01/22	18:39	LA	467288
alpha-Chlordane	SW8081B	10	1.9	22	<b>2.56</b>	J	ug/Kg	07/01/22	18:39	LA	467288
4,4'-DDE	SW8081B	10	2.2	22	<b>16.7</b>	J	ug/Kg	07/01/22	18:39	LA	467288
Endosulfan I	SW8081B	10	2.1	22	ND		ug/Kg	07/01/22	18:39	LA	467288
Dieldrin	SW8081B	10	1.7	22	<b>4.23</b>	J	ug/Kg	07/01/22	18:39	LA	467288
Endrin	SW8081B	10	2.1	22	ND		ug/Kg	07/01/22	18:39	LA	467288
4,4'-DDD	SW8081B	10	6.3	22	ND		ug/Kg	07/01/22	18:39	LA	467288
Endosulfan II	SW8081B	10	6.5	22	ND		ug/Kg	07/01/22	18:39	LA	467288
4,4'-DDT	SW8081B	10	1.4	22	<b>17.1</b>	J	ug/Kg	07/01/22	18:39	LA	467288
Endrin Aldehyde	SW8081B	10	1.7	22	ND		ug/Kg	07/01/22	18:39	LA	467288
Methoxychlor	SW8081B	10	2.2	22	ND		ug/Kg	07/01/22	18:39	LA	467288
Endosulfan Sulfate	SW8081B	10	1.3	22	ND		ug/Kg	07/01/22	18:39	LA	467288
Endrin Ketone	SW8081B	10	1.1	22	ND		ug/Kg	07/01/22	18:39	LA	467288
Chlordane, Technical	SW8081B	10	24	220	ND		ug/Kg	07/01/22	18:39	LA	467288
Toxaphene	SW8081B	10	95	560	ND		ug/Kg	07/01/22	18:39	LA	467288
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		<b>101</b>		%	07/01/22	18:39	LA	467288
Decachlorobiphenyl (S)	SW8081B		38 - 135		<b>97.4</b>		%	07/01/22	18:39	LA	467288

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-6 (3.5-4)	<b>Lab Sample ID:</b>	2206250-019A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:37		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	12.1		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.12		-	07/04/22	11:30	NK	467240



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-3 (0.5-1)	<b>Lab Sample ID:</b>	2206250-020A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:52		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22 8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.15	1.4	4.48		mg/Kg	06/30/22	17:32	AT	467279



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-3 (0.5-1)	<b>Lab Sample ID:</b>	2206250-020A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:52		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22	1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b>	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	36.4	104	ND		ug/Kg	06/30/22	22:25	MK	467158
Aroclor1221	SW8082A	1	5.20	104	ND		ug/Kg	06/30/22	22:25	MK	467158
Aroclor1232	SW8082A	1	17.7	104	ND		ug/Kg	06/30/22	22:25	MK	467158
Aroclor1242	SW8082A	1	3.12	104	ND		ug/Kg	06/30/22	22:25	MK	467158
Aroclor1248	SW8082A	1	2.08	104	ND		ug/Kg	06/30/22	22:25	MK	467158
Aroclor1254	SW8082A	1	14.6	104	ND		ug/Kg	06/30/22	22:25	MK	467158
Aroclor1260	SW8082A	1	25.0	104	ND		ug/Kg	06/30/22	22:25	MK	467158
Acceptance Limits											
TCMX (S)	SW8082A		48 - 125		<b>82.0</b>		%	06/30/22	22:25	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>88.0</b>		%	06/30/22	22:25	MK	467158





## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-3 (0.5-1)	<b>Lab Sample ID:</b>	2206250-020A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:52		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/29/22	12:09:00PM
<b>Prep Batch ID:</b> 1142765	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	20	2.6	42	ND		ug/Kg	07/02/22	0:19	LA	467288
gamma-BHC (Lindane)	SW8081B	20	3.3	42	ND		ug/Kg	07/02/22	0:19	LA	467288
beta-BHC	SW8081B	20	6.6	42	ND		ug/Kg	07/02/22	0:19	LA	467288
delta-BHC	SW8081B	20	3.2	42	<b>4.93</b>	J	ug/Kg	07/02/22	0:19	LA	467288
Heptachlor	SW8081B	20	2.2	42	ND		ug/Kg	07/02/22	0:19	LA	467288
Aldrin	SW8081B	20	4.1	42	ND		ug/Kg	07/02/22	0:19	LA	467288
Heptachlor Epoxide	SW8081B	20	1.6	42	ND		ug/Kg	07/02/22	0:19	LA	467288
gamma-Chlordane	SW8081B	20	3.4	42	<b>19.8</b>	J	ug/Kg	07/02/22	0:19	LA	467288
alpha-Chlordane	SW8081B	20	3.6	42	<b>15.2</b>	J	ug/Kg	07/02/22	0:19	LA	467288
4,4'-DDE	SW8081B	20	4.0	42	<b>90.5</b>		ug/Kg	07/02/22	0:19	LA	467288
Endosulfan I	SW8081B	20	3.8	42	ND		ug/Kg	07/02/22	0:19	LA	467288
Dieldrin	SW8081B	20	3.1	42	<b>12.8</b>	J	ug/Kg	07/02/22	0:19	LA	467288
Endrin	SW8081B	20	3.9	42	ND		ug/Kg	07/02/22	0:19	LA	467288
4,4'-DDD	SW8081B	20	12	42	ND		ug/Kg	07/02/22	0:19	LA	467288
Endosulfan II	SW8081B	20	12	42	ND		ug/Kg	07/02/22	0:19	LA	467288
4,4'-DDT	SW8081B	20	2.7	42	<b>71.9</b>		ug/Kg	07/02/22	0:19	LA	467288
Endrin Aldehyde	SW8081B	20	3.1	42	ND		ug/Kg	07/02/22	0:19	LA	467288
Methoxychlor	SW8081B	20	4.2	42	ND		ug/Kg	07/02/22	0:19	LA	467288
Endosulfan Sulfate	SW8081B	20	2.4	42	ND		ug/Kg	07/02/22	0:19	LA	467288
Endrin Ketone	SW8081B	20	2.0	42	ND		ug/Kg	07/02/22	0:19	LA	467288
Chlordane, Technical	SW8081B	20	44	420	<b>128</b>	J	ug/Kg	07/02/22	0:19	LA	467288
Toxaphene	SW8081B	20	180	1000	ND		ug/Kg	07/02/22	0:19	LA	467288
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		<b>0.000</b>	D	%	07/02/22	0:19	LA	467288
Decachlorobiphenyl (S)	SW8081B		38 - 135		<b>0.000</b>	D	%	07/02/22	0:19	LA	467288

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-3 (0.5-1)	<b>Lab Sample ID:</b>	2206250-020A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:52		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	<b>3.59</b>		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	<b>1.04</b>		-	07/04/22	11:30	NK	467240



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-3 (2.5-3)	<b>Lab Sample ID:</b>	2206250-021A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:53		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.16	1.5	26.6		mg/Kg	06/30/22	17:34	AT	467279



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-3 (2.5-3)	<b>Lab Sample ID:</b>	2206250-021A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:53		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22	1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b>	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	39.2	112	ND		ug/Kg	06/30/22	22:41	MK	467158
Aroclor1221	SW8082A	1	5.60	112	ND		ug/Kg	06/30/22	22:41	MK	467158
Aroclor1232	SW8082A	1	19.0	112	ND		ug/Kg	06/30/22	22:41	MK	467158
Aroclor1242	SW8082A	1	3.36	112	ND		ug/Kg	06/30/22	22:41	MK	467158
Aroclor1248	SW8082A	1	2.24	112	ND		ug/Kg	06/30/22	22:41	MK	467158
Aroclor1254	SW8082A	1	15.7	112	ND		ug/Kg	06/30/22	22:41	MK	467158
Aroclor1260	SW8082A	1	26.9	112	ND		ug/Kg	06/30/22	22:41	MK	467158
Acceptance Limits											
TCMX (S)	SW8082A		48 - 125		<b>92.0</b>		%	06/30/22	22:41	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>94.0</b>		%	06/30/22	22:41	MK	467158



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-3 (2.5-3)	<b>Lab Sample ID:</b>	2206250-021A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:53		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/29/22	12:09:00PM
<b>Prep Batch ID:</b> 1142765	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	10	1.4	22	ND		ug/Kg	07/01/22	18:53	LA	467288
gamma-BHC (Lindane)	SW8081B	10	1.8	22	ND		ug/Kg	07/01/22	18:53	LA	467288
beta-BHC	SW8081B	10	3.5	22	ND		ug/Kg	07/01/22	18:53	LA	467288
delta-BHC	SW8081B	10	1.7	22	ND		ug/Kg	07/01/22	18:53	LA	467288
Heptachlor	SW8081B	10	1.2	22	ND		ug/Kg	07/01/22	18:53	LA	467288
Aldrin	SW8081B	10	2.2	22	ND		ug/Kg	07/01/22	18:53	LA	467288
Heptachlor Epoxide	SW8081B	10	0.87	22	ND		ug/Kg	07/01/22	18:53	LA	467288
gamma-Chlordane	SW8081B	10	1.8	22	<b>3.45</b>	J	ug/Kg	07/01/22	18:53	LA	467288
alpha-Chlordane	SW8081B	10	1.9	22	<b>2.82</b>	J	ug/Kg	07/01/22	18:53	LA	467288
4,4'-DDE	SW8081B	10	2.2	22	<b>27.7</b>		ug/Kg	07/01/22	18:53	LA	467288
Endosulfan I	SW8081B	10	2.1	22	ND		ug/Kg	07/01/22	18:53	LA	467288
Dieldrin	SW8081B	10	1.7	22	<b>49.7</b>		ug/Kg	07/01/22	18:53	LA	467288
Endrin	SW8081B	10	2.1	22	ND		ug/Kg	07/01/22	18:53	LA	467288
4,4'-DDD	SW8081B	10	6.3	22	ND		ug/Kg	07/01/22	18:53	LA	467288
Endosulfan II	SW8081B	10	6.5	22	ND		ug/Kg	07/01/22	18:53	LA	467288
4,4'-DDT	SW8081B	10	1.4	22	<b>36.2</b>		ug/Kg	07/01/22	18:53	LA	467288
Endrin Aldehyde	SW8081B	10	1.7	22	ND		ug/Kg	07/01/22	18:53	LA	467288
Methoxychlor	SW8081B	10	2.2	22	ND		ug/Kg	07/01/22	18:53	LA	467288
Endosulfan Sulfate	SW8081B	10	1.3	22	ND		ug/Kg	07/01/22	18:53	LA	467288
Endrin Ketone	SW8081B	10	1.1	22	ND		ug/Kg	07/01/22	18:53	LA	467288
Chlordane, Technical	SW8081B	10	24	220	<b>24.1</b>	J	ug/Kg	07/01/22	18:53	LA	467288
Toxaphene	SW8081B	10	95	560	ND		ug/Kg	07/01/22	18:53	LA	467288
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		<b>101</b>		%	07/01/22	18:53	LA	467288
Decachlorobiphenyl (S)	SW8081B		38 - 135		<b>98.4</b>		%	07/01/22	18:53	LA	467288

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-3 (2.5-3)	<b>Lab Sample ID:</b>	2206250-021A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 9:53		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	12.4		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.12		-	07/04/22	11:30	NK	467240



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-2 (0.5-1)	<b>Lab Sample ID:</b>	2206250-022A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:11		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22	8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.15	1.3	5.87		mg/Kg	06/30/22	17:36	AT	467279



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-2 (0.5-1)	<b>Lab Sample ID:</b>	2206250-022A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:11		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22	1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b>	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	36.1	103	ND		ug/Kg	06/30/22	22:58	MK	467158
Aroclor1221	SW8082A	1	5.15	103	ND		ug/Kg	06/30/22	22:58	MK	467158
Aroclor1232	SW8082A	1	17.5	103	ND		ug/Kg	06/30/22	22:58	MK	467158
Aroclor1242	SW8082A	1	3.09	103	ND		ug/Kg	06/30/22	22:58	MK	467158
Aroclor1248	SW8082A	1	2.06	103	ND		ug/Kg	06/30/22	22:58	MK	467158
Aroclor1254	SW8082A	1	14.4	103	ND		ug/Kg	06/30/22	22:58	MK	467158
Aroclor1260	SW8082A	1	24.7	103	ND		ug/Kg	06/30/22	22:58	MK	467158
Acceptance Limits											
TCMX (S)	SW8082A		48 - 125		<b>75.0</b>		%	06/30/22	22:58	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>80.0</b>		%	06/30/22	22:58	MK	467158





## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-2 (0.5-1)	<b>Lab Sample ID:</b>	2206250-022A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:11		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/29/22	12:09:00PM
<b>Prep Batch ID:</b> 1142765	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	10	1.3	21	ND		ug/Kg	07/01/22	19:06	LA	467288
gamma-BHC (Lindane)	SW8081B	10	1.6	21	ND		ug/Kg	07/01/22	19:06	LA	467288
beta-BHC	SW8081B	10	3.3	21	ND		ug/Kg	07/01/22	19:06	LA	467288
delta-BHC	SW8081B	10	1.6	21	ND		ug/Kg	07/01/22	19:06	LA	467288
Heptachlor	SW8081B	10	1.1	21	ND		ug/Kg	07/01/22	19:06	LA	467288
Aldrin	SW8081B	10	2.0	21	ND		ug/Kg	07/01/22	19:06	LA	467288
Heptachlor Epoxide	SW8081B	10	0.80	21	1.25	J	ug/Kg	07/01/22	19:06	LA	467288
gamma-Chlordane	SW8081B	10	1.7	21	14.2	J	ug/Kg	07/01/22	19:06	LA	467288
alpha-Chlordane	SW8081B	10	1.8	21	11.5	J	ug/Kg	07/01/22	19:06	LA	467288
4,4'-DDE	SW8081B	10	2.0	21	45.4		ug/Kg	07/01/22	19:06	LA	467288
Endosulfan I	SW8081B	10	1.9	21	ND		ug/Kg	07/01/22	19:06	LA	467288
Dieldrin	SW8081B	10	1.5	21	11.4	J	ug/Kg	07/01/22	19:06	LA	467288
Endrin	SW8081B	10	1.9	21	ND		ug/Kg	07/01/22	19:06	LA	467288
4,4'-DDD	SW8081B	10	5.8	21	8.15	J	ug/Kg	07/01/22	19:06	LA	467288
Endosulfan II	SW8081B	10	5.9	21	ND		ug/Kg	07/01/22	19:06	LA	467288
4,4'-DDT	SW8081B	10	1.3	21	45.2		ug/Kg	07/01/22	19:06	LA	467288
Endrin Aldehyde	SW8081B	10	1.6	21	1.97	J	ug/Kg	07/01/22	19:06	LA	467288
Methoxychlor	SW8081B	10	2.1	21	ND		ug/Kg	07/01/22	19:06	LA	467288
Endosulfan Sulfate	SW8081B	10	1.2	21	ND		ug/Kg	07/01/22	19:06	LA	467288
Endrin Ketone	SW8081B	10	0.97	21	ND		ug/Kg	07/01/22	19:06	LA	467288
Chlordane, Technical	SW8081B	10	22	210	101	J	ug/Kg	07/01/22	19:06	LA	467288
Toxaphene	SW8081B	10	88	520	ND		ug/Kg	07/01/22	19:06	LA	467288
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		82.1		%	07/01/22	19:06	LA	467288
Decachlorobiphenyl (S)	SW8081B		38 - 135		81.4		%	07/01/22	19:06	LA	467288

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-2 (0.5-1)	<b>Lab Sample ID:</b>	2206250-022A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:11		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	3.47		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.03		-	07/04/22	11:30	NK	467240



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-2 (1.5-2)	<b>Lab Sample ID:</b>	2206250-023A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:12		
<b>SDG:</b>			

<b>Prep Method:</b> 3050B	<b>Prep Batch Date/Time:</b> 6/29/22 8:45:00PM
<b>Prep Batch ID:</b> 1142797	<b>Prep Analyst:</b> CTHACH

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Arsenic	SW6010B	1	0.16	1.5	8.18		mg/Kg	06/30/22	17:37	AT	467279



## SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-2 (1.5-2)	<b>Lab Sample ID:</b>	2206250-023A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:12		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_PCB	<b>Prep Batch Date/Time:</b> 6/30/22	1:58:00PM
<b>Prep Batch ID:</b> 1142811	<b>Prep Analyst:</b> AKIZ	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aroclor1016	SW8082A	1	39.2	112	ND		ug/Kg	06/30/22	23:14	MK	467158
Aroclor1221	SW8082A	1	5.60	112	ND		ug/Kg	06/30/22	23:14	MK	467158
Aroclor1232	SW8082A	1	19.0	112	ND		ug/Kg	06/30/22	23:14	MK	467158
Aroclor1242	SW8082A	1	3.36	112	ND		ug/Kg	06/30/22	23:14	MK	467158
Aroclor1248	SW8082A	1	2.24	112	ND		ug/Kg	06/30/22	23:14	MK	467158
Aroclor1254	SW8082A	1	15.7	112	ND		ug/Kg	06/30/22	23:14	MK	467158
Aroclor1260	SW8082A	1	26.9	112	ND		ug/Kg	06/30/22	23:14	MK	467158
Acceptance Limits											
TCMX (S)	SW8082A		48 - 125		<b>68.0</b>		%	06/30/22	23:14	MK	467158
DCBP (S)	SW8082A		48 - 135		<b>70.0</b>		%	06/30/22	23:14	MK	467158



**SAMPLE RESULTS**

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-2 (1.5-2)	<b>Lab Sample ID:</b>	2206250-023A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:12		
<b>SDG:</b>			

<b>Prep Method:</b> 3546_OCP	<b>Prep Batch Date/Time:</b> 6/29/22 12:09:00PM
<b>Prep Batch ID:</b> 1142765	<b>Prep Analyst:</b> AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081B	10	1.4	22	<b>2.98</b>	J	ug/Kg	07/01/22	20:10	LA	467288
gamma-BHC (Lindane)	SW8081B	10	1.8	22	ND		ug/Kg	07/01/22	20:10	LA	467288
beta-BHC	SW8081B	10	3.5	22	<b>27.3</b>		ug/Kg	07/01/22	20:10	LA	467288
delta-BHC	SW8081B	10	1.7	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Heptachlor	SW8081B	10	1.2	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Aldrin	SW8081B	10	2.2	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Heptachlor Epoxide	SW8081B	10	0.87	22	ND		ug/Kg	07/01/22	20:10	LA	467288
gamma-Chlordane	SW8081B	10	1.8	22	ND		ug/Kg	07/01/22	20:10	LA	467288
alpha-Chlordane	SW8081B	10	1.9	22	ND		ug/Kg	07/01/22	20:10	LA	467288
4,4'-DDE	SW8081B	10	2.2	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Endosulfan I	SW8081B	10	2.1	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Dieldrin	SW8081B	10	1.7	22	<b>10.2</b>	J	ug/Kg	07/01/22	20:10	LA	467288
Endrin	SW8081B	10	2.1	22	ND		ug/Kg	07/01/22	20:10	LA	467288
4,4'-DDD	SW8081B	10	6.3	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Endosulfan II	SW8081B	10	6.5	22	ND		ug/Kg	07/01/22	20:10	LA	467288
4,4'-DDT	SW8081B	10	1.4	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Endrin Aldehyde	SW8081B	10	1.7	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Methoxychlor	SW8081B	10	2.2	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Endosulfan Sulfate	SW8081B	10	1.3	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Endrin Ketone	SW8081B	10	1.1	22	ND		ug/Kg	07/01/22	20:10	LA	467288
Chlordane, Technical	SW8081B	10	24	220	ND		ug/Kg	07/01/22	20:10	LA	467288
Toxaphene	SW8081B	10	95	560	ND		ug/Kg	07/01/22	20:10	LA	467288
Acceptance Limits											
Tetrachloro-M-Xylene (S)	SW8081B		48 - 125		<b>71.3</b>		%	07/01/22	20:10	LA	467288
Decachlorobiphenyl (S)	SW8081B		38 - 135		<b>84.0</b>		%	07/01/22	20:10	LA	467288

**NOTE:** Sample diluted due to the nature of the sample matrix (dark colored extract)



### SAMPLE RESULTS

**Report prepared for:** Michael Chang  
Cornerstone Earth Group

**Date/Time Received:** 06/28/22, 1:35 pm  
**Date Reported:** 07/06/22

<b>Client Sample ID:</b>	SG-2 (1.5-2)	<b>Lab Sample ID:</b>	2206250-023A
<b>Project Name/Location:</b>	East Palo Alto Library	<b>Sample Matrix:</b>	Soil
<b>Project Number:</b>	118-128-3		
<b>Date/Time Sampled:</b>	06/28/22 / 10:12		
<b>SDG:</b>			

<b>Prep Method:</b> % Water-P	<b>Prep Batch Date/Time:</b> 7/4/22	6:15:00PM
<b>Prep Batch ID:</b> 1142916	<b>Prep Analyst:</b>	KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Moisture, Percent	ASTM D2216-90	1	0.050	0.050	12.4		%	07/04/22	11:30	NK	467240
Dry Weight Factor	ASTM D2216-90	1	1	1	1.12		-	07/04/22	11:30	NK	467240



## MB Summary Report

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3546_OCP	<b>Prep Date:</b>	06/29/22	<b>Prep Batch:</b>	1142765
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW8081B	<b>Analyzed Date:</b>	6/29/2022	<b>Analytical Batch:</b>	467153
<b>Units:</b>	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
alpha-BHC	0.25	2.0	ND	
gamma-BHC (Lindane)	0.71	2.0	ND	
beta-BHC	0.44	2.0	ND	
delta-BHC	0.65	2.0	ND	
Heptachlor	0.27	2.0	ND	
Aldrin	0.29	2.0	ND	
Heptachlor Epoxide	0.31	2.0	ND	
gamma-Chlordane	1.5	3.0	ND	
alpha-Chlordane	0.36	2.0	ND	
4,4'-DDE	0.61	2.0	ND	
Endosulfan I	0.29	2.0	ND	
Dieldrin	0.25	2.0	ND	
Endrin	0.79	2.0	ND	
4,4'-DDD	0.64	2.0	ND	
Endosulfan II	0.34	2.0	ND	
4,4'-DDT	0.74	2.0	ND	
Endrin Aldehyde	0.51	2.0	ND	
Methoxychlor	2.6	6.0	ND	
Endosulfan Sulfate	0.51	2.0	ND	
Endrin Ketone	0.43	2.0	ND	
Chlordane, Technical	13	20	ND	
Toxaphene	22	50	ND	
Tetrachloro-M-Xylene (S)			83.8	
Decachlorobiphenyl (S)			92.3	

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3050B	<b>Prep Date:</b>	06/29/22	<b>Prep Batch:</b>	1142797
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW6010B	<b>Analyzed Date:</b>	6/30/2022	<b>Analytical Batch:</b>	467279
<b>Units:</b>	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Arsenic	0.15	1.30	ND	



## MB Summary Report

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3546_OCP	<b>Prep Date:</b>	06/30/22	<b>Prep Batch:</b>	1142808
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW8081B	<b>Analyzed Date:</b>	6/30/2022	<b>Analytical Batch:</b>	467198
<b>Units:</b>	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
alpha-BHC	0.25	2.0	ND	
gamma-BHC (Lindane)	0.71	2.0	ND	
beta-BHC	0.44	2.0	ND	
delta-BHC	0.65	2.0	ND	
Heptachlor	0.27	2.0	ND	
Aldrin	0.29	2.0	ND	
Heptachlor Epoxide	0.31	2.0	ND	
gamma-Chlordane	1.5	3.0	ND	
alpha-Chlordane	0.36	2.0	ND	
4,4'-DDE	0.61	2.0	ND	
Endosulfan I	0.29	2.0	ND	
Dieldrin	0.25	2.0	ND	
Endrin	0.79	2.0	ND	
4,4'-DDD	0.64	2.0	ND	
Endosulfan II	0.34	2.0	ND	
4,4'-DDT	0.74	2.0	ND	
Endrin Aldehyde	0.51	2.0	ND	
Methoxychlor	2.6	6.0	ND	
Endosulfan Sulfate	0.51	2.0	ND	
Endrin Ketone	0.43	2.0	ND	
Chlordane, Technical	13	20	ND	
Toxaphene	22	50	ND	
Tetrachloro-M-Xylene (S)			90.4	
Decachlorobiphenyl (S)			102	

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3546_PCB	<b>Prep Date:</b>	06/30/22	<b>Prep Batch:</b>	1142811
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW8082A	<b>Analyzed Date:</b>	6/30/2022	<b>Analytical Batch:</b>	467158
<b>Units:</b>	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Aroclor1016	35.0	100	ND	
Aroclor1221	5.00	100	ND	
Aroclor1232	17.0	100	ND	
Aroclor1242	3.00	100	ND	
Aroclor1248	2.00	100	ND	
Aroclor1254	14.0	100	ND	
Aroclor1260	24.0	100	ND	
TCMX (S)			101	
DCBP (S)			90.0	





### MB Summary Report

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	% Water-P	<b>Prep Date:</b>	07/04/22	<b>Prep Batch:</b>	1142916
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	ASTM D2216-90	<b>Analyzed Date:</b>	7/4/2022	<b>Analytical Batch:</b>	467240
<b>Units:</b>	%						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Moisture, Percent	0.050	0.050	ND	



## LCS/LCSD Summary Report

*Raw values are used in quality control assessment.*

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3546_OCP	<b>Prep Date:</b>	06/29/22	<b>Prep Batch:</b>	1142765
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW8081B	<b>Analyzed Date:</b>	6/29/2022	<b>Analytical Batch:</b>	467153
<b>Units:</b>	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
gamma-BHC (Lindane)	0.16	2.0	ND	40	95.4	92.0	3.47	25 - 135	30	
Heptachlor	0.11	2.0	ND	40	98.0	93.2	4.97	40 - 130	30	
Aldrin	0.20	2.0	ND	40	95.9	91.8	4.27	25 - 140	30	
Dieldrin	0.15	2.0	ND	40	97.2	93.2	4.20	60 - 130	30	
Endrin	0.19	2.0	ND	40	97.6	92.6	5.26	55 - 135	30	
4,4'-DDT	0.13	2.0	ND	40	97.4	94.4	3.13	45 - 140	30	
Tetrachloro-M-Xylene (S)				100	87.7	84.8		48 - 125		
Decachlorobiphenyl (S)				100	100	96.5		38 - 135		

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3050B	<b>Prep Date:</b>	06/29/22	<b>Prep Batch:</b>	1142797
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW6010B	<b>Analyzed Date:</b>	6/30/2022	<b>Analytical Batch:</b>	467279
<b>Units:</b>	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Arsenic	0.15	1.30	ND	50	101	101	0.000	80 - 120	30	

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3546_OCP	<b>Prep Date:</b>	06/30/22	<b>Prep Batch:</b>	1142808
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW8081B	<b>Analyzed Date:</b>	7/1/2022	<b>Analytical Batch:</b>	467198
<b>Units:</b>	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
gamma-BHC (Lindane)	0.16	2.0	ND	40	91.5	92.5	1.09	25 - 135	30	
Heptachlor	0.11	2.0	ND	40	90.7	94.7	4.31	40 - 130	30	
Aldrin	0.20	2.0	ND	40	90.3	92.1	1.92	25 - 140	30	
Dieldrin	0.15	2.0	ND	40	95.7	97.7	2.07	60 - 130	30	
Endrin	0.19	2.0	ND	40	93.5	97.2	3.93	55 - 135	30	
4,4'-DDT	0.13	2.0	ND	40	89.4	91.8	2.48	45 - 140	30	
Tetrachloro-M-Xylene (S)				100	85.5	89.9		48 - 125		
Decachlorobiphenyl (S)				100	98.9	103		38 - 135		

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3546_PCB	<b>Prep Date:</b>	06/30/22	<b>Prep Batch:</b>	1142811
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW8082A	<b>Analyzed Date:</b>	6/30/2022	<b>Analytical Batch:</b>	467158
<b>Units:</b>	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aroclor1016	53	100	ND	600	101	102	1.15	25 - 145	30	
Aroclor1260	36	100	ND	600	89.2	91.8	2.95	30 - 145	30	
TCMX (S)				0.10	105	106		48 - 125		
DCBP (S)				0.10	94.0	94.0		48 - 135		



## MS/MSD Summary Report

*Raw values are used in quality control assessment.*

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3546_OCP	<b>Prep Date:</b>	06/29/22	<b>Prep Batch:</b>	1142765
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW8081B	<b>Analyzed Date:</b>	7/1/2022	<b>Analytical Batch:</b>	467288
<b>Spiked Sample:</b>	2206250-023A						
<b>Units:</b>	ug/Kg						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
gamma-BHC (Lindane)	1.59	20.0	ND	40	67.7	51.8	26.8	25 - 135	30	
Heptachlor	1.05	20.0	ND	40	69.7	56.8	20.6	40 - 130	30	
Aldrin	1.95	20.0	ND	40	66.8	52.1	24.8	25 - 140	30	
Dieldrin	1.48	20.0	ND	40	40.9	32.8	13.2	60 - 130	30	S
Endrin	1.88	20.0	ND	40	58.6	52.0	11.8	55 - 135	30	S
4,4'-DDT	1.29	20.0	ND	40	72.9	59.6	20.4	45 - 140	30	
Tetrachloro-M-Xylene (S)				100	70.4	57.5		48 - 125		
Decachlorobiphenyl (S)				100	78.5	66.7		38 - 135		

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3050B	<b>Prep Date:</b>	06/29/22	<b>Prep Batch:</b>	1142797
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW6010B	<b>Analyzed Date:</b>	6/30/2022	<b>Analytical Batch:</b>	467279
<b>Spiked Sample:</b>	2206250-001A						
<b>Units:</b>	mg/Kg						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Arsenic	0.15	5.00	ND	50	106	107	0.939	71.0 - 121	30	

<b>Work Order:</b>	2206250	<b>Prep Method:</b>	3546_PCB	<b>Prep Date:</b>	06/30/22	<b>Prep Batch:</b>	1142811
<b>Matrix:</b>	Soil	<b>Analytical Method:</b>	SW8082A	<b>Analyzed Date:</b>	6/30/2022	<b>Analytical Batch:</b>	467158
<b>Spiked Sample:</b>	2206250-002A						
<b>Units:</b>	ug/Kg						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aroclor1016	53.0	100	ND	600	97.0	87.2	10.7	25 - 145	30	
Aroclor1260	36.0	100	ND	600	92.7	85.5	8.04	30 - 145	30	
TCMX (S)				0.10	93.0	84.0		48 - 125		
DCBP (S)				0.10	83.0	74.0		48 - 135		



### Duplicate QC Summary Report

DRAFT

<b>Work Order:</b> 2206250	<b>Prep Method:</b> % Water-P	<b>Prep Date:</b> 7/4/2022	<b>Prep Batch:</b> 1142916
<b>Matrix:</b>	<b>Analytical Method:</b> ASTM D2216-90	<b>Analyzed Date:</b> 07/04/22	<b>Analytical Batch:</b> 467240
<b>Units:</b>	<b>Lab Sample ID:</b> 2206250-005A-DUP-1142916		

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>
Moisture, Percent	0.050	0.0500	17.2	17.3	0.58

<b>Work Order:</b> 2206250	<b>Prep Method:</b> % Water-P	<b>Prep Date:</b> 7/4/2022	<b>Prep Batch:</b> 1142916
<b>Matrix:</b>	<b>Analytical Method:</b> ASTM D2216-90	<b>Analyzed Date:</b> 07/04/22	<b>Analytical Batch:</b> 467240
<b>Units:</b>	<b>Lab Sample ID:</b> 2206250-011A-DUP-1142916		

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>
Moisture, Percent	0.050	0.0500	18.3	18.6	1.63



## Laboratory Qualifiers and Definitions

### DEFINITIONS:

<b>Accuracy/Bias (% Recovery)</b> - The closeness of agreement between an observed value and an accepted reference value.
<b>Blank (Method/Preparation Blank)</b> -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
<b>Duplicate</b> - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
<b>Laboratory Control Sample (LCS ad LCSD)</b> - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
<b>Matrix</b> - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
<b>Matrix Spike (MS/MSD)</b> - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
<b>Method Detection Limit (MDL)</b> - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
<b>Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ)</b> - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
<b>Precision (%RPD)</b> - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
<b>Surrogate (S) or (Surr)</b> - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
<b>Tentatively Identified Compound (TIC)</b> - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
<b>Units:</b> the unit of measure used to express the reported result - <b>mg/L</b> and <b>mg/Kg</b> (equivalent to PPM - parts per million in <b>liquid</b> and <b>solid</b> ), <b>ug/L</b> and <b>ug/Kg</b> (equivalent to PPB - parts per billion in <b>liquid</b> and <b>solid</b> ), <b>ug/m<sup>3</sup></b> , <b>mg/m<sup>3</sup></b> , <b>ppbv</b> and <b>ppmv</b> (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), <b>ug/Wipe</b> (concentration found on the surface of a single Wipe usually taken over a 100cm <sup>2</sup> surface)

### LABORATORY QUALIFIERS

<b>B</b> - Indicates when the analyte is found in the associated method or preparation blank
<b>D</b> - Surrogate is not recoverable due to the necessary dilution of the sample
<b>E</b> - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
<b>H</b> - Indicates that the recommended holding time for the analyte or compound has been exceeded
<b>J</b> - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
<b>NA</b> - Not Analyzed
<b>N/A</b> - Not Applicable
<b>ND</b> - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
<b>NR</b> - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
<b>R</b> - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
<b>S</b> - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
<b>X</b> -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



## Sample Receipt Checklist

Client Name: Cornerstone Earth Group

Date and Time Received: 6/28/2022 1:35:00PM

Project Name: East Palo Alto Library

Received By: NK

Work Order No.: 2206250

Physically Logged By: Katherene Evans

Checklist Completed By: Katherene Evans

Carrier Name: Client Drop Off

### Chain of Custody (COC) Information

Chain of custody present? Yes

Chain of custody signed when relinquished and received? Yes

Chain of custody agrees with sample labels? Yes

Custody seals intact on sample bottles? Not Present

### Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present

Shipping Container/Cooler In Good Condition? Yes

Samples in proper container/bottle? Yes

Samples containers intact? Yes

Sufficient sample volume for indicated test? Yes

### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes

Container/Temp Blank temperature in compliance? No Temperature: 15.0 °C

Water-VOA vials have zero headspace? No VOA vials submitted

Water-pH acceptable upon receipt? N/A

pH Checked by: na pH Adjusted by: n

### Comments:

Sample id discrepancy for SG-6 (3.5-4) (2206250-019A). The id on the sleeve is SG-6 (3-3.5) but the id on the COC is SG-6 (3.5-4) logged as per COC.



## Login Summary Report

DRAFT

**Client ID:** TL5119 Cornerstone Earth Group

**QC Level:** II

**Project Name:** East Palo Alto Library

**TAT Requested:** 5+ day:5

**Project # :** 118-128-3

**Date Received:** 6/28/2022

**Report Due Date:** 7/6/2022

**Time Received:** 1:35 pm

**Comments:**

**Work Order # :** 2206250

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2206250-001A	SG-1 (0.5-1)	06/28/22 10:29	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST Pest_S_8081 DryWt PCBs_S_8082A_Dry Wt	
<b>Sample Note:</b>	6010 for As							
2206250-002A	SG-1 (2-2.5)	06/28/22 10:30	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST Pest_S_8081 DryWt PCBs_S_8082A_Dry Wt	
2206250-003A	SG-1 (3.5-4)	06/28/22 10:31	Soil	12/25/22			Hold Samples	
2206250-004A	SS-7 (2-2.5)	06/28/22 10:53	Soil	12/25/22			PMOIST Met_S_AsPb Dry Wt	
2206250-005A	SS-7 (3-3.5)	06/28/22 10:54	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST	
2206250-006A	SS-7 (4.5-5)	06/28/22 10:55	Soil	12/25/22			Hold Samples	
2206250-007A	SS-8 (0.5-1)	06/28/22 11:15	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST	
2206250-008A	SS-8 (3-3.5)	06/28/22 11:16	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST	
2206250-009A	SS-8 (4.5-5)	06/28/22 11:17	Soil	12/25/22			Hold Samples	
2206250-010A	SS-9 (0.5-1)	06/28/22 11:36	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST	
2206250-011A	SS-9 (3.5-4)	06/28/22 11:37	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST	
2206250-012A	SS-9 (4.5-5)	06/28/22 11:38	Soil	12/25/22			Hold Samples	
2206250-013A	SG-4 (0.5-1)	06/28/22 9:00	Soil	12/25/22			Met_S_AsPb Dry Wt	



## Login Summary Report

DRAFT

**Client ID:** TL5119 Cornerstone Earth Group  
**Project Name:** East Palo Alto Library  
**Project # :** 118-128-3  
**Report Due Date:** 7/6/2022  
**Comments:**  
**Work Order # :** 2206250

**QC Level:** II  
**TAT Requested:** 5+ day:5  
**Date Received:** 6/28/2022  
**Time Received:** 1:35 pm

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2206250-014A	SG-4 (3-3.5)	06/28/22 9:01	Soil	12/25/22			PMOIST Pest_S_8081 DryWt PCBs_S_8082A_Dry Wt	
2206250-015A	SG-5 (0.5-1)	06/28/22 9:07	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST Pest_S_8081 DryWt PCBs_S_8082A_Dry Wt	
2206250-016A	SG-5 (2-2.5)	06/28/22 9:08	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST Pest_S_8081 DryWt PCBs_S_8082A_Dry Wt	
2206250-017A	SG-5 (3.5-4)	06/28/22 9:09	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST Pest_S_8081 DryWt PCBs_S_8082A_Dry Wt	
2206250-018A	SG-6 (0.5-1)	06/28/22 9:36	Soil	12/25/22			Hold Samples	
2206250-019A	SG-6 (3.5-4)	06/28/22 9:37	Soil	12/25/22			PCBs_S_8082A_Dry Wt PMOIST Met_S_AsPb Dry Wt Pest_S_8081 DryWt	
2206250-020A	SG-3 (0.5-1)	06/28/22 9:52	Soil	12/25/22			Met_S_AsPb Dry Wt PMOIST Pest_S_8081 DryWt PCBs_S_8082A_Dry Wt	
2206250-021A	SG-3 (2.5-3)	06/28/22 9:53	Soil	12/25/22			PCBs_S_8082A_Dry Wt PMOIST Met_S_AsPb Dry Wt Pest_S_8081 DryWt	





## Login Summary Report

DRAFT

**Client ID:** TL5119 Cornerstone Earth Group

**QC Level:** II

**Project Name:** East Palo Alto Library

**TAT Requested:** 5+ day:5

**Project # :** 118-128-3

**Date Received:** 6/28/2022

**Report Due Date:** 7/6/2022

**Time Received:** 1:35 pm

**Comments:**

**Work Order # :** 2206250

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2206250-022A	SG-2 (0.5-1)	06/28/22 10:11	Soil	12/25/22			PCBs_S_8082A_Dry Wt PMOIST Met_S_AsPb Dry Wt Pest_S_8081 DryWt	
2206250-023A	SG-2 (1.5-2)	06/28/22 10:12	Soil	12/25/22			PCBs_S_8082A_Dry Wt PMOIST Met_S_AsPb Dry Wt Pest_S_8081 DryWt	
2206250-024A	SG-2 (3-3.5)	06/28/22 10:13	Soil	12/25/22			PCBs_S_8082A_Dry Wt PMOIST Met_S_AsPb Dry Wt Pest_S_8081 DryWt	
							Hold Samples	



Chain of Custody Record

Project Manager: Michael Chang		Site Sampler: KLH		Date: 6/28/22		COC No: 1				
Cornerstone Earth Group, Inc.		Tel/Fax: (408) 609-1753		Lab Contact: Kathie Evans		Lab: Torrent				
1259 Oakmead Pkwy		Sunnyvale, California 94085		Analysis Turnaround Time		Laboratory's Job No.				
(408) 245-4600 Phone		TAT if different from Below		Arsenic (EPA 6010B)		2206250				
(408) 245-4620 FAX		<input checked="" type="checkbox"/> 1 week		OCPS (EPA 8081)						
Project Name: East Palo Alto Library		<input type="checkbox"/> 3 days		PCBs (EPA 8082)						
Site: Pulgas Avenue, East Palo Alto		<input type="checkbox"/> 2 days		Hold						
Project Number: 118-128-3		<input type="checkbox"/> 1 day								
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Arsenic (EPA 6010B)	OCPS (EPA 8081)	PCBs (EPA 8082)	Hold	Laboratory's Sample Specific Notes:
001 SG-1 (0.5-1)	6/28/2022	10:29	Liner	Soil	1	X	X	X		
002 SG-1 (2-2.5)		10:30				X	X	X		
003 SG-1 (3.5-4)		10:31							X	
004 SS-7 (2-2.9)		10:53				X				
005 SS-7 (3-3.9)		10:54				X				
006 SS-7 (4.5-5)		10:55							X	
007 SS-8 (0.5-1)		11:15				X				
008 SS-8 (3-3.9)		11:16				X				
009 SS-8 (4.5-5)		11:17							X	
010 SS-9 (0.5-1)		11:36				X				
011 SS-9 (3.5-4)		11:37				X				
012 SS-9 (4.5-5)		11:38							X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other										
Possible Hazard Identification					Sample Disposal					
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements & Comments: <b><i>If additional sample is needed, please use the liner. Please email results to mchang@cornerstoneearth.com and khilton@cornerstoneearth.com. Run on a dry weight basis.</i></b>										
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:					
<i>Kathie Evans</i>	Cornerstone Earth Group	6/28/22 1:35	<i>[Signature]</i>		6/28/22 1:35pm					
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:					
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:					

Temp - (11:8) #2

7/14/2022

Mr. Mike Chang  
Cornerstone Earth Group  
1259 Oakmead Parkway

Sunnyvale CA 94085

Project Name: 2474 Pulgas Ave, East Palo Alto

Project #: 118-128-3

Workorder #: 2207001AR1

DRAFT

Dear Mr. Mike Chang

The following report includes the data for the above referenced project for sample(s) received on 7/1/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Nazanin Khorrami at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Nazanin Khorrami

Project Manager

**WORK ORDER #: 2207001AR1**

Work Order Summary

**CLIENT:** Mr. Mike Chang  
 Cornerstone Earth Group  
 1259 Oakmead Parkway  
 Sunnyvale, CA 94085

**BILL TO:** Accounts Payable  
 Cornerstone Earth Group  
 1259 Oakmead Parkway  
 Sunnyvale, CA 94085

**PHONE:** 408-245-4600

**P.O. #**

**FAX:** 408-245-4620

**PROJECT #** 118-128-3 2474 Pulgas Ave, East Palo

**DATE RECEIVED:** 07/01/2022

**CONTACT:** <sup>Alto</sup>  
 Nazanin Khorrami

**DATE COMPLETED:** 07/11/2022

**DATE REISSUED:** 07/14/2022

DRAFT

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SG-6	TO-15	6.1 "Hg	10 psi
02A	SG-5	TO-15	5.7 "Hg	9.8 psi
03A	SG-4	TO-15	6.1 "Hg	9.9 psi
04A	SG-3	TO-15	4.7 "Hg	9.7 psi
05A	SG-2	TO-15	5.7 "Hg	9.9 psi
06A	SG-1	TO-15	4.7 "Hg	10.2 psi
07A	Lab Blank	TO-15	NA	NA
08A	CCV	TO-15	NA	NA
09A	LCS	TO-15	NA	NA
09AA	LCSD	TO-15	NA	NA

CERTIFIED BY:   
 Technical Director

DATE: 07/14/22

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)  
 Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

*This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.*

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630  
 (916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

**LABORATORY NARRATIVE**  
**EPA Method TO-15**  
**Cornerstone Earth Group**  
**Workorder# 2207001AR1**

Six 1 Liter Summa Canister samples were received on July 01, 2022. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

**Receiving Notes**

There were no receiving discrepancies.

The work order was reissued on 7/14/22 to change identification of samples to SG-6, SG-5, SG-4, SG-3, SG-2, and SG-1 per emailed client request received on 7/13/22.

**Analytical Notes**

Dilution was performed on sample SG-1 due to the presence of high level target species.

**Definition of Data Qualifying Flags**

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS FULL SCAN**

**Client Sample ID: SG-6**

**Lab ID#: 2207001AR1-01A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 11	1.0	1.4	5.9	7.6
Ethanol	10	19	20	37
Acetone	10	15	25	36
2-Propanol	4.2	11	10	28
Benzene	1.0	4.4	3.4	14
Trichloroethene	1.0	2.0	5.7	10

**Client Sample ID: SG-5**

**Lab ID#: 2207001AR1-02A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 11	1.0	4.7	5.8	26
Ethanol	10	20	19	38
Acetone	10	16	24	38
2-Propanol	4.1	11	10	27

**Client Sample ID: SG-4**

**Lab ID#: 2207001AR1-03A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 11	1.0	8.0	5.9	45
Ethanol	10	22	20	41
Acetone	10	14	25	34
2-Propanol	4.2	17	10	43

**Client Sample ID: SG-3**

**Lab ID#: 2207001AR1-04A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 11	0.98	2.2	5.5	12
Ethanol	9.8	18	18	34
Acetone	9.8	22	23	53

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS FULL SCAN**

**Client Sample ID: SG-3**

**Lab ID#: 2207001AR1-04A**

2-Propanol	3.9	11	9.7	28
Trichloroethene	0.98	7.1	5.3	38
Tetrachloroethene	0.98	29	6.7	200
Chlorobenzene	0.98	2.3	4.5	10

**Client Sample ID: SG-2**

**Lab ID#: 2207001AR1-05A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	1.0	1.1	5.1	5.4
Ethanol	10	20	20	37
Acetone	10	19	24	46
2-Propanol	4.1	19	10	47
Benzene	1.0	1.3	3.3	4.2
Trichloroethene	1.0	3.0	5.6	16
Tetrachloroethene	1.0	46	7.0	310

**Client Sample ID: SG-1**

**Lab ID#: 2207001AR1-06A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Trichloroethene	5.0	14	27	75
Tetrachloroethene	5.0	1200	34	8200

Client Sample ID: SG-6

Lab ID#: 2207001AR1-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070822	Date of Collection:	6/30/22 10:25:00 AM
Dil. Factor:	2.11	Date of Analysis:	7/8/22 11:05 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.2	Not Detected
Freon 114	1.0	Not Detected	7.4	Not Detected
Chloromethane	10	Not Detected	22	Not Detected
Vinyl Chloride	1.0	Not Detected	2.7	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	10	Not Detected	41	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Freon 11	1.0	1.4	5.9	7.6
Ethanol	10	19	20	37
Freon 113	1.0	Not Detected	8.1	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Acetone	10	15	25	36
2-Propanol	4.2	11	10	28
Carbon Disulfide	4.2	Not Detected	13	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	37	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Hexane	1.0	Not Detected	3.7	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.1	Not Detected
Chloroform	1.0	Not Detected	5.2	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.8	Not Detected
Cyclohexane	1.0	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.6	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.9	Not Detected
Benzene	1.0	4.4	3.4	14
1,2-Dichloroethane	1.0	Not Detected	4.3	Not Detected
Heptane	1.0	Not Detected	4.3	Not Detected
Trichloroethene	1.0	2.0	5.7	10
1,2-Dichloropropane	1.0	Not Detected	4.9	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	7.1	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.8	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.3	Not Detected
Toluene	1.0	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.8	Not Detected
Tetrachloroethene	1.0	Not Detected	7.2	Not Detected
2-Hexanone	4.2	Not Detected	17	Not Detected



Client Sample ID: SG-6

Lab ID#: 2207001AR1-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070822	Date of Collection:	6/30/22 10:25:00 AM
Dil. Factor:	2.11	Date of Analysis:	7/8/22 11:05 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	9.0	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	8.1	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Ethyl Benzene	1.0	Not Detected	4.6	Not Detected
m,p-Xylene	1.0	Not Detected	4.6	Not Detected
o-Xylene	1.0	Not Detected	4.6	Not Detected
Styrene	1.0	Not Detected	4.5	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Cumene	1.0	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.2	Not Detected
Propylbenzene	1.0	Not Detected	5.2	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.2	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.2	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.5	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	111	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	96	70-130

Client Sample ID: SG-5

Lab ID#: 2207001AR1-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070823	Date of Collection:	6/30/22 10:59:00 AM
Dil. Factor:	2.06	Date of Analysis:	7/8/22 11:31 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.1	Not Detected
Freon 114	1.0	Not Detected	7.2	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Freon 11	1.0	4.7	5.8	26
Ethanol	10	20	19	38
Freon 113	1.0	Not Detected	7.9	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Acetone	10	16	24	38
2-Propanol	4.1	11	10	27
Carbon Disulfide	4.1	Not Detected	13	Not Detected
3-Chloropropene	4.1	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Methyl tert-butyl ether	4.1	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.1	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Chloroform	1.0	Not Detected	5.0	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Cyclohexane	1.0	Not Detected	3.5	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.5	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.8	Not Detected
Benzene	1.0	Not Detected	3.3	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
Heptane	1.0	Not Detected	4.2	Not Detected
Trichloroethene	1.0	Not Detected	5.5	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	6.9	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Toluene	1.0	Not Detected	3.9	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Tetrachloroethene	1.0	Not Detected	7.0	Not Detected
2-Hexanone	4.1	Not Detected	17	Not Detected

Client Sample ID: SG-5

Lab ID#: 2207001AR1-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070823	Date of Collection:	6/30/22 10:59:00 AM
Dil. Factor:	2.06	Date of Analysis:	7/8/22 11:31 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.8	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.9	Not Detected
Chlorobenzene	1.0	Not Detected	4.7	Not Detected
Ethyl Benzene	1.0	Not Detected	4.5	Not Detected
m,p-Xylene	1.0	Not Detected	4.5	Not Detected
o-Xylene	1.0	Not Detected	4.5	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Cumene	1.0	Not Detected	5.1	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.1	Not Detected
Propylbenzene	1.0	Not Detected	5.1	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.1	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.3	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	30	Not Detected
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	97	70-130

Client Sample ID: SG-4

Lab ID#: 2207001AR1-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070824	Date of Collection:	6/30/22 11:28:00 AM
Dil. Factor:	2.10	Date of Analysis:	7/8/22 11:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.2	Not Detected
Freon 114	1.0	Not Detected	7.3	Not Detected
Chloromethane	10	Not Detected	22	Not Detected
Vinyl Chloride	1.0	Not Detected	2.7	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	10	Not Detected	41	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Freon 11	1.0	8.0	5.9	45
Ethanol	10	22	20	41
Freon 113	1.0	Not Detected	8.0	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Acetone	10	14	25	34
2-Propanol	4.2	17	10	43
Carbon Disulfide	4.2	Not Detected	13	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Hexane	1.0	Not Detected	3.7	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.1	Not Detected
Chloroform	1.0	Not Detected	5.1	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.7	Not Detected
Cyclohexane	1.0	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.6	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.9	Not Detected
Benzene	1.0	Not Detected	3.4	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
Heptane	1.0	Not Detected	4.3	Not Detected
Trichloroethene	1.0	Not Detected	5.6	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	7.0	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.8	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.3	Not Detected
Toluene	1.0	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.7	Not Detected
Tetrachloroethene	1.0	Not Detected	7.1	Not Detected
2-Hexanone	4.2	Not Detected	17	Not Detected

Client Sample ID: SG-4

Lab ID#: 2207001AR1-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070824	Date of Collection:	6/30/22 11:28:00 AM
Dil. Factor:	2.10	Date of Analysis:	7/8/22 11:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.9	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	8.1	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Ethyl Benzene	1.0	Not Detected	4.6	Not Detected
m,p-Xylene	1.0	Not Detected	4.6	Not Detected
o-Xylene	1.0	Not Detected	4.6	Not Detected
Styrene	1.0	Not Detected	4.5	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Cumene	1.0	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.2	Not Detected
Propylbenzene	1.0	Not Detected	5.2	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.2	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.2	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.4	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.3	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
Hexachlorobutadiene	4.2	Not Detected	45	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	112	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	96	70-130

Client Sample ID: SG-3

Lab ID#: 2207001AR1-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070825	Date of Collection:	6/30/22 12:19:00 PM
Dil. Factor:	1.97	Date of Analysis:	7/9/22 12:24 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.98	Not Detected	4.9	Not Detected
Freon 114	0.98	Not Detected	6.9	Not Detected
Chloromethane	9.8	Not Detected	20	Not Detected
Vinyl Chloride	0.98	Not Detected	2.5	Not Detected
1,3-Butadiene	0.98	Not Detected	2.2	Not Detected
Bromomethane	9.8	Not Detected	38	Not Detected
Chloroethane	3.9	Not Detected	10	Not Detected
Freon 11	0.98	2.2	5.5	12
Ethanol	9.8	18	18	34
Freon 113	0.98	Not Detected	7.5	Not Detected
1,1-Dichloroethene	0.98	Not Detected	3.9	Not Detected
Acetone	9.8	22	23	53
2-Propanol	3.9	11	9.7	28
Carbon Disulfide	3.9	Not Detected	12	Not Detected
3-Chloropropene	3.9	Not Detected	12	Not Detected
Methylene Chloride	9.8	Not Detected	34	Not Detected
Methyl tert-butyl ether	3.9	Not Detected	14	Not Detected
trans-1,2-Dichloroethene	0.98	Not Detected	3.9	Not Detected
Hexane	0.98	Not Detected	3.5	Not Detected
1,1-Dichloroethane	0.98	Not Detected	4.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	0.98	Not Detected	3.9	Not Detected
Tetrahydrofuran	0.98	Not Detected	2.9	Not Detected
Chloroform	0.98	Not Detected	4.8	Not Detected
1,1,1-Trichloroethane	0.98	Not Detected	5.4	Not Detected
Cyclohexane	0.98	Not Detected	3.4	Not Detected
Carbon Tetrachloride	0.98	Not Detected	6.2	Not Detected
2,2,4-Trimethylpentane	0.98	Not Detected	4.6	Not Detected
Benzene	0.98	Not Detected	3.1	Not Detected
1,2-Dichloroethane	0.98	Not Detected	4.0	Not Detected
Heptane	0.98	Not Detected	4.0	Not Detected
Trichloroethene	0.98	7.1	5.3	38
1,2-Dichloropropane	0.98	Not Detected	4.6	Not Detected
1,4-Dioxane	3.9	Not Detected	14	Not Detected
Bromodichloromethane	0.98	Not Detected	6.6	Not Detected
cis-1,3-Dichloropropene	0.98	Not Detected	4.5	Not Detected
4-Methyl-2-pentanone	0.98	Not Detected	4.0	Not Detected
Toluene	0.98	Not Detected	3.7	Not Detected
trans-1,3-Dichloropropene	0.98	Not Detected	4.5	Not Detected
1,1,2-Trichloroethane	0.98	Not Detected	5.4	Not Detected
Tetrachloroethene	0.98	29	6.7	200
2-Hexanone	3.9	Not Detected	16	Not Detected

Client Sample ID: SG-3

Lab ID#: 2207001AR1-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070825	Date of Collection:	6/30/22 12:19:00 PM
Dil. Factor:	1.97	Date of Analysis:	7/9/22 12:24 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.98	Not Detected	8.4	Not Detected
1,2-Dibromoethane (EDB)	0.98	Not Detected	7.6	Not Detected
Chlorobenzene	0.98	2.3	4.5	10
Ethyl Benzene	0.98	Not Detected	4.3	Not Detected
m,p-Xylene	0.98	Not Detected	4.3	Not Detected
o-Xylene	0.98	Not Detected	4.3	Not Detected
Styrene	0.98	Not Detected	4.2	Not Detected
Bromoform	0.98	Not Detected	10	Not Detected
Cumene	0.98	Not Detected	4.8	Not Detected
1,1,2,2-Tetrachloroethane	0.98	Not Detected	6.8	Not Detected
Propylbenzene	0.98	Not Detected	4.8	Not Detected
4-Ethyltoluene	0.98	Not Detected	4.8	Not Detected
1,3,5-Trimethylbenzene	0.98	Not Detected	4.8	Not Detected
1,2,4-Trimethylbenzene	0.98	Not Detected	4.8	Not Detected
1,3-Dichlorobenzene	0.98	Not Detected	5.9	Not Detected
1,4-Dichlorobenzene	0.98	Not Detected	5.9	Not Detected
alpha-Chlorotoluene	0.98	Not Detected	5.1	Not Detected
1,2-Dichlorobenzene	0.98	Not Detected	5.9	Not Detected
1,2,4-Trichlorobenzene	3.9	Not Detected	29	Not Detected
Hexachlorobutadiene	3.9	Not Detected	42	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	98	70-130

Client Sample ID: SG-2

Lab ID#: 2207001AR1-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070826	Date of Collection:	6/30/22 1:08:00 PM
Dil. Factor:	2.07	Date of Analysis:	7/9/22 12:50 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	1.1	5.1	5.4
Freon 114	1.0	Not Detected	7.2	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.8	Not Detected
Ethanol	10	20	20	37
Freon 113	1.0	Not Detected	7.9	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Acetone	10	19	24	46
2-Propanol	4.1	19	10	47
Carbon Disulfide	4.1	Not Detected	13	Not Detected
3-Chloropropene	4.1	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Methyl tert-butyl ether	4.1	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.1	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Chloroform	1.0	Not Detected	5.0	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Cyclohexane	1.0	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.5	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.8	Not Detected
Benzene	1.0	1.3	3.3	4.2
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
Heptane	1.0	Not Detected	4.2	Not Detected
Trichloroethene	1.0	3.0	5.6	16
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	6.9	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Toluene	1.0	Not Detected	3.9	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Tetrachloroethene	1.0	46	7.0	310
2-Hexanone	4.1	Not Detected	17	Not Detected



Client Sample ID: SG-2

Lab ID#: 2207001AR1-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070826	Date of Collection:	6/30/22 1:08:00 PM
Dil. Factor:	2.07	Date of Analysis:	7/9/22 12:50 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.8	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	8.0	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Ethyl Benzene	1.0	Not Detected	4.5	Not Detected
m,p-Xylene	1.0	Not Detected	4.5	Not Detected
o-Xylene	1.0	Not Detected	4.5	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Cumene	1.0	Not Detected	5.1	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.1	Not Detected
Propylbenzene	1.0	Not Detected	5.1	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.1	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.4	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	31	Not Detected
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	112	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: SG-1

Lab ID#: 2207001AR1-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070827	Date of Collection:	6/30/22 1:51:00 PM
Dil. Factor:	10.0	Date of Analysis:	7/9/22 01:14 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	5.0	Not Detected	25	Not Detected
Freon 114	5.0	Not Detected	35	Not Detected
Chloromethane	50	Not Detected	100	Not Detected
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,3-Butadiene	5.0	Not Detected	11	Not Detected
Bromomethane	50	Not Detected	190	Not Detected
Chloroethane	20	Not Detected	53	Not Detected
Freon 11	5.0	Not Detected	28	Not Detected
Ethanol	50	Not Detected	94	Not Detected
Freon 113	5.0	Not Detected	38	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
Acetone	50	Not Detected	120	Not Detected
2-Propanol	20	Not Detected	49	Not Detected
Carbon Disulfide	20	Not Detected	62	Not Detected
3-Chloropropene	20	Not Detected	63	Not Detected
Methylene Chloride	50	Not Detected	170	Not Detected
Methyl tert-butyl ether	20	Not Detected	72	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Hexane	5.0	Not Detected	18	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	20	Not Detected	59	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrahydrofuran	5.0	Not Detected	15	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Cyclohexane	5.0	Not Detected	17	Not Detected
Carbon Tetrachloride	5.0	Not Detected	31	Not Detected
2,2,4-Trimethylpentane	5.0	Not Detected	23	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Heptane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	14	27	75
1,2-Dichloropropane	5.0	Not Detected	23	Not Detected
1,4-Dioxane	20	Not Detected	72	Not Detected
Bromodichloromethane	5.0	Not Detected	34	Not Detected
cis-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
4-Methyl-2-pentanone	5.0	Not Detected	20	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
trans-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	1200	34	8200
2-Hexanone	20	Not Detected	82	Not Detected

Client Sample ID: SG-1

Lab ID#: 2207001AR1-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070827	Date of Collection:	6/30/22 1:51:00 PM
Dil. Factor:	10.0	Date of Analysis:	7/9/22 01:14 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	5.0	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Chlorobenzene	5.0	Not Detected	23	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Styrene	5.0	Not Detected	21	Not Detected
Bromoform	5.0	Not Detected	52	Not Detected
Cumene	5.0	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	5.0	Not Detected	34	Not Detected
Propylbenzene	5.0	Not Detected	24	Not Detected
4-Ethyltoluene	5.0	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,3-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,4-Dichlorobenzene	5.0	Not Detected	30	Not Detected
alpha-Chlorotoluene	5.0	Not Detected	26	Not Detected
1,2-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	20	Not Detected	150	Not Detected
Hexachlorobutadiene	20	Not Detected	210	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	109	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: Lab Blank

Lab ID#: 2207001AR1-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070805	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/8/22 11:35 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	5.0	Not Detected	9.4	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

Client Sample ID: Lab Blank

Lab ID#: 2207001AR1-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070805	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/8/22 11:35 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	98	70-130

Client Sample ID: CCV

Lab ID#: 2207001AR1-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/22 09:44 AM

Compound	%Recovery
Freon 12	99
Freon 114	95
Chloromethane	86
Vinyl Chloride	87
1,3-Butadiene	92
Bromomethane	86
Chloroethane	88
Freon 11	106
Ethanol	96
Freon 113	100
1,1-Dichloroethene	92
Acetone	84
2-Propanol	88
Carbon Disulfide	80
3-Chloropropene	76
Methylene Chloride	95
Methyl tert-butyl ether	93
trans-1,2-Dichloroethene	91
Hexane	92
1,1-Dichloroethane	98
2-Butanone (Methyl Ethyl Ketone)	83
cis-1,2-Dichloroethene	98
Tetrahydrofuran	97
Chloroform	98
1,1,1-Trichloroethane	106
Cyclohexane	87
Carbon Tetrachloride	109
2,2,4-Trimethylpentane	107
Benzene	91
1,2-Dichloroethane	104
Heptane	88
Trichloroethene	107
1,2-Dichloropropane	104
1,4-Dioxane	92
Bromodichloromethane	108
cis-1,3-Dichloropropene	108
4-Methyl-2-pentanone	120
Toluene	107
trans-1,3-Dichloropropene	88
1,1,2-Trichloroethane	87
Tetrachloroethene	89
2-Hexanone	87

Client Sample ID: CCV

Lab ID#: 2207001AR1-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/22 09:44 AM

Compound	%Recovery
Dibromochloromethane	95
1,2-Dibromoethane (EDB)	93
Chlorobenzene	94
Ethyl Benzene	93
m,p-Xylene	98
o-Xylene	97
Styrene	102
Bromoform	108
Cumene	104
1,1,2,2-Tetrachloroethane	90
Propylbenzene	103
4-Ethyltoluene	99
1,3,5-Trimethylbenzene	107
1,2,4-Trimethylbenzene	102
1,3-Dichlorobenzene	98
1,4-Dichlorobenzene	97
alpha-Chlorotoluene	100
1,2-Dichlorobenzene	102
1,2,4-Trichlorobenzene	88
Hexachlorobutadiene	107

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	109	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: LCS

Lab ID#: 2207001AR1-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070803	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/22 10:09 AM

Compound	%Recovery	Method Limits
Freon 12	98	70-130
Freon 114	94	70-130
Chloromethane	80	70-130
Vinyl Chloride	85	70-130
1,3-Butadiene	89	70-130
Bromomethane	83	70-130
Chloroethane	84	70-130
Freon 11	104	70-130
Ethanol	93	70-130
Freon 113	98	70-130
1,1-Dichloroethene	87	70-130
Acetone	80	70-130
2-Propanol	93	70-130
Carbon Disulfide	79	70-130
3-Chloropropene	78	70-130
Methylene Chloride	90	70-130
Methyl tert-butyl ether	92	70-130
trans-1,2-Dichloroethene	91	70-130
Hexane	89	70-130
1,1-Dichloroethane	96	70-130
2-Butanone (Methyl Ethyl Ketone)	84	70-130
cis-1,2-Dichloroethene	93	70-130
Tetrahydrofuran	97	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	104	70-130
Cyclohexane	88	70-130
Carbon Tetrachloride	104	70-130
2,2,4-Trimethylpentane	105	70-130
Benzene	94	70-130
1,2-Dichloroethane	108	70-130
Heptane	92	70-130
Trichloroethene	112	70-130
1,2-Dichloropropane	105	70-130
1,4-Dioxane	101	70-130
Bromodichloromethane	107	70-130
cis-1,3-Dichloropropene	111	70-130
4-Methyl-2-pentanone	120	70-130
Toluene	108	70-130
trans-1,3-Dichloropropene	94	70-130
1,1,2-Trichloroethane	92	70-130
Tetrachloroethene	92	70-130
2-Hexanone	92	70-130



Client Sample ID: LCS

Lab ID#: 2207001AR1-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070803	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/22 10:09 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	99	70-130
1,2-Dibromoethane (EDB)	96	70-130
Chlorobenzene	98	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	98	70-130
o-Xylene	99	70-130
Styrene	109	70-130
Bromoform	112	70-130
Cumene	105	70-130
1,1,2,2-Tetrachloroethane	92	70-130
Propylbenzene	106	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	109	70-130
1,2,4-Trimethylbenzene	105	70-130
1,3-Dichlorobenzene	105	70-130
1,4-Dichlorobenzene	105	70-130
alpha-Chlorotoluene	112	70-130
1,2-Dichlorobenzene	108	70-130
1,2,4-Trichlorobenzene	113	70-130
Hexachlorobutadiene	118	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	99	70-130

Client Sample ID: LCSD  
 Lab ID#: 2207001AR1-09AA  
 EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/22 10:33 AM

Compound	%Recovery	Method Limits
Freon 12	101	70-130
Freon 114	96	70-130
Chloromethane	84	70-130
Vinyl Chloride	88	70-130
1,3-Butadiene	90	70-130
Bromomethane	86	70-130
Chloroethane	85	70-130
Freon 11	105	70-130
Ethanol	90	70-130
Freon 113	99	70-130
1,1-Dichloroethene	91	70-130
Acetone	84	70-130
2-Propanol	97	70-130
Carbon Disulfide	80	70-130
3-Chloropropene	84	70-130
Methylene Chloride	93	70-130
Methyl tert-butyl ether	95	70-130
trans-1,2-Dichloroethene	91	70-130
Hexane	92	70-130
1,1-Dichloroethane	99	70-130
2-Butanone (Methyl Ethyl Ketone)	88	70-130
cis-1,2-Dichloroethene	94	70-130
Tetrahydrofuran	98	70-130
Chloroform	96	70-130
1,1,1-Trichloroethane	107	70-130
Cyclohexane	88	70-130
Carbon Tetrachloride	108	70-130
2,2,4-Trimethylpentane	106	70-130
Benzene	93	70-130
1,2-Dichloroethane	110	70-130
Heptane	92	70-130
Trichloroethene	112	70-130
1,2-Dichloropropane	107	70-130
1,4-Dioxane	97	70-130
Bromodichloromethane	109	70-130
cis-1,3-Dichloropropene	114	70-130
4-Methyl-2-pentanone	119	70-130
Toluene	109	70-130
trans-1,3-Dichloropropene	93	70-130
1,1,2-Trichloroethane	92	70-130
Tetrachloroethene	94	70-130
2-Hexanone	93	70-130

Client Sample ID: LCSD  
 Lab ID#: 2207001AR1-09AA  
 EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a070804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/22 10:33 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	99	70-130
1,2-Dibromoethane (EDB)	96	70-130
Chlorobenzene	96	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	100	70-130
o-Xylene	96	70-130
Styrene	107	70-130
Bromoform	112	70-130
Cumene	105	70-130
1,1,2,2-Tetrachloroethane	92	70-130
Propylbenzene	106	70-130
4-Ethyltoluene	106	70-130
1,3,5-Trimethylbenzene	106	70-130
1,2,4-Trimethylbenzene	105	70-130
1,3-Dichlorobenzene	103	70-130
1,4-Dichlorobenzene	106	70-130
alpha-Chlorotoluene	113	70-130
1,2-Dichlorobenzene	108	70-130
1,2,4-Trichlorobenzene	115	70-130
Hexachlorobutadiene	116	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	97	70-130

7/14/2022

Mr. Mike Chang  
Cornerstone Earth Group  
1259 Oakmead Parkway

Sunnyvale CA 94085

Project Name: 2474 Pulgas Ave, East Palo Alto

Project #: 118-128-3

Workorder #: 2207001BR1

DRAFT

Dear Mr. Mike Chang

The following report includes the data for the above referenced project for sample(s) received on 7/1/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-15 (5&20 ppbv) are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Nazanin Khorrami at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Nazanin Khorrami

Project Manager

**WORK ORDER #: 2207001BR1**

Work Order Summary

**CLIENT:** Mr. Mike Chang  
 Cornerstone Earth Group  
 1259 Oakmead Parkway  
 Sunnyvale, CA 94085

**BILL TO:** Accounts Payable  
 Cornerstone Earth Group  
 1259 Oakmead Parkway  
 Sunnyvale, CA 94085

**PHONE:** 408-245-4600

**FAX:** 408-245-4620

**DATE RECEIVED:** 07/01/2022

**DATE COMPLETED:** 07/09/2022

**DATE REISSUED:** 07/14/2022

**P.O. #**

**PROJECT #** 118-128-3 2474 Pulgas Ave, East Palo

**CONTACT:** Alto Nazanin Khorrami

DRAFT

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
07A	SG-2 (IPA)	Modified TO-15 (5&20 ppbv	Tedlar Bag	Tedlar Bag
08A	Lab Blank	Modified TO-15 (5&20 ppbv	NA	NA
09A	CCV	Modified TO-15 (5&20 ppbv	NA	NA
10A	LCS	Modified TO-15 (5&20 ppbv	NA	NA
10AA	LCSD	Modified TO-15 (5&20 ppbv	NA	NA

CERTIFIED BY:   
 Technical Director

DATE: 07/14/22

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)  
 Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

*This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.*

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630  
 (916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

**LABORATORY NARRATIVE**  
**EPA Method TO-15 Soil Gas**  
**Cornerstone Earth Group**  
**Workorder# 2207001BR1**

One 1 Liter Tedlar Bag sample was received on July 01, 2022. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 50 mLs of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

**Receiving Notes**

There were no receiving discrepancies.

The work order was reissued on 7/14/22 to change identification of sample to SG-2 (IPA) per emailed client request received on 7/13/22.

**Analytical Notes**

Method TO-15 is validated for samples collected in specially treated canisters. As such, the use of Tedlar bags for sample collection is outside the scope of the method and not recommended for ambient or indoor air samples. It is the responsibility of the data user to determine the usability of TO-15 results generated from Tedlar bags.

Dilution was performed on sample SG-2 (IPA) due to the presence of high level target species.

**Definition of Data Qualifying Flags**

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

Client Sample ID: SG-2 (IPA)

Lab ID#: 2207001BR1-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	310	39000	770	96000

Client Sample ID: SG-2 (IPA)

Lab ID#: 2207001BR1-07A

EPA METHOD TO-15 GC/MS

File Name:	14070128	Date of Collection:	6/30/22 1:08:00 PM
Dil. Factor:	12.5	Date of Analysis:	7/1/22 06:16 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	310	39000	770	96000

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: Lab Blank

Lab ID#: 2207001BR1-08A

EPA METHOD TO-15 GC/MS

File Name:	14070105e	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/1/22 09:14 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	25	Not Detected	61	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: CCV  
 Lab ID#: 2207001BR1-09A  
 EPA METHOD TO-15 GC/MS

File Name:	14070102	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/1/22 07:59 AM

Compound	%Recovery
2-Propanol	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: LCS  
 Lab ID#: 2207001BR1-10A  
 EPA METHOD TO-15 GC/MS

File Name:	14070103	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/1/22 08:27 AM

Compound	%Recovery	Method Limits
2-Propanol	109	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130

Client Sample ID: LCSD  
 Lab ID#: 2207001BR1-10AA  
 EPA METHOD TO-15 GC/MS

File Name:	14070104	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/1/22 08:50 AM

Compound	%Recovery	Method Limits
2-Propanol	110	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130



### Chain of Custody Record

Project Manager: Michael Chang		Site Sampler: KLH		Date: 6/28/22		COC No: 1	
Cornerstone Earth Group, Inc.		Tel/Fax: (408) 609-1753		Lab Contact: Kathie Evans		Lab: Torrent	
1259 Oakmead Pkwy		Sunnyvale, California 94085		Analysis Turnaround Time		Laboratory's Job No. <b>2206250</b>	
(408) 245-4600 Phone		TAT if different from Below		Arsenic (EPA 6010B)		OCPIs (EPA 8081)	
(408) 245-4620 FAX		<input type="checkbox"/> 1 week		PCBs (EPA 8082)		Hold	
Project Name: East Palo Alto Library		<input type="checkbox"/> 3 days					
Site: Pulgas Avenue, East Palo Alto		<input type="checkbox"/> 2 days					
Project Number: 118-128-3		<input type="checkbox"/> 1 day					
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Laboratory's Sample Specific Notes:
013 SG-4 (0.5-1)	6/28/2022	0900	Liner	Soil	1	X X X	
014 SG-4 (3-3.5)		0901				X X X	
015 SG-5 (0.5-1)		0907				X X X	
016 SG-5 (2-2.5)		0908				X X X	
017 SG-5 (3.5-4)		0909					X
018 SG-6 (0.5-1)		0936				X X X	
019 SG-6 (3.5-4)		0937				X X X	
020 SG-3 (0.5-1)		0952				X X X	
021 SG-3 (2.5-3)		0953				X X X	
022 SG-2 (0.5-1)		10:11				X X X	
023 SG-2 (1.5-2)		10:12				X X X	
024 SG-2 (3-3.5)		10:13					X
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							
Possible Hazard Identification				Sample Disposal			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Special Instructions/QC Requirements & Comments: <b>If additional sample is needed, please use the liner. Please email results to mchang@cornerstoneearth.com and khilton@cornerstoneearth.com. Run on a dry weight basis.</b>							
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:		
<i>Michael Chang</i>	Cornerstone Earth Group	6/28/22 3:35	<i>N. S. ...</i>		6/28/22 1:35 pm		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:		

Temp - 14-8°C #3

7/14/2022

Mr. Mike Chang  
Cornerstone Earth Group  
1259 Oakmead Parkway

Sunnyvale CA 94085

Project Name: 2474 Pulgas Ave, East Palo Alto

Project #: 118-128-3

Workorder #: 2207001BR1

DRAFT

Dear Mr. Mike Chang

The following report includes the data for the above referenced project for sample(s) received on 7/1/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-15 (5&20 ppbv) are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Nazanin Khorrami at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Nazanin Khorrami

Project Manager

**WORK ORDER #: 2207001BR1**

Work Order Summary

**CLIENT:** Mr. Mike Chang  
 Cornerstone Earth Group  
 1259 Oakmead Parkway  
 Sunnyvale, CA 94085

**BILL TO:** Accounts Payable  
 Cornerstone Earth Group  
 1259 Oakmead Parkway  
 Sunnyvale, CA 94085

**PHONE:** 408-245-4600

**FAX:** 408-245-4620

**DATE RECEIVED:** 07/01/2022

**DATE COMPLETED:** 07/09/2022

**DATE REISSUED:** 07/14/2022

**P.O. #**

**PROJECT #** 118-128-3 2474 Pulgas Ave, East Palo

**CONTACT:** Alto Nazanin Khorrami

DRAFT

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
07A	SG-2 (IPA)	Modified TO-15 (5&20 ppbv	Tedlar Bag	Tedlar Bag
08A	Lab Blank	Modified TO-15 (5&20 ppbv	NA	NA
09A	CCV	Modified TO-15 (5&20 ppbv	NA	NA
10A	LCS	Modified TO-15 (5&20 ppbv	NA	NA
10AA	LCSD	Modified TO-15 (5&20 ppbv	NA	NA

CERTIFIED BY:   
 Technical Director

DATE: 07/14/22

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630  
 (916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

**LABORATORY NARRATIVE**  
**EPA Method TO-15 Soil Gas**  
**Cornerstone Earth Group**  
**Workorder# 2207001BR1**

One 1 Liter Tedlar Bag sample was received on July 01, 2022. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 50 mLs of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

**Receiving Notes**

There were no receiving discrepancies.

The work order was reissued on 7/14/22 to change identification of sample to SG-2 (IPA) per emailed client request received on 7/13/22.

**Analytical Notes**

Method TO-15 is validated for samples collected in specially treated canisters. As such, the use of Tedlar bags for sample collection is outside the scope of the method and not recommended for ambient or indoor air samples. It is the responsibility of the data user to determine the usability of TO-15 results generated from Tedlar bags.

Dilution was performed on sample SG-2 (IPA) due to the presence of high level target species.

**Definition of Data Qualifying Flags**

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

Client Sample ID: SG-2 (IPA)

Lab ID#: 2207001BR1-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	310	39000	770	96000

Client Sample ID: SG-2 (IPA)

Lab ID#: 2207001BR1-07A

EPA METHOD TO-15 GC/MS

File Name:	14070128	Date of Collection:	6/30/22 1:08:00 PM
Dil. Factor:	12.5	Date of Analysis:	7/1/22 06:16 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	310	39000	770	96000

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: Lab Blank

Lab ID#: 2207001BR1-08A

EPA METHOD TO-15 GC/MS

File Name:	14070105e	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/1/22 09:14 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	25	Not Detected	61	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: CCV  
 Lab ID#: 2207001BR1-09A  
 EPA METHOD TO-15 GC/MS

File Name:	14070102	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/1/22 07:59 AM

Compound	%Recovery
2-Propanol	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: LCS  
 Lab ID#: 2207001BR1-10A  
 EPA METHOD TO-15 GC/MS

File Name:	14070103	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/1/22 08:27 AM

Compound	%Recovery	Method Limits
2-Propanol	109	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130

Client Sample ID: LCSD  
 Lab ID#: 2207001BR1-10AA  
 EPA METHOD TO-15 GC/MS

File Name:	14070104	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/1/22 08:50 AM

Compound	%Recovery	Method Limits
2-Propanol	110	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

7/14/2022

Mr. Mike Chang  
Cornerstone Earth Group  
1259 Oakmead Parkway

Sunnyvale CA 94085

Project Name: 2474 Pulgas Ave, East Palo Alto

Project #: 118-128-3

Workorder #: 2207001CR1

DRAFT

Dear Mr. Mike Chang

The following report includes the data for the above referenced project for sample(s) received on 7/1/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Nazanin Khorrami at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Nazanin Khorrami

Project Manager

**WORK ORDER #: 2207001CR1**

Work Order Summary

**CLIENT:** Mr. Mike Chang  
 Cornerstone Earth Group  
 1259 Oakmead Parkway  
 Sunnyvale, CA 94085

**BILL TO:** Accounts Payable  
 Cornerstone Earth Group  
 1259 Oakmead Parkway  
 Sunnyvale, CA 94085

**PHONE:** 408-245-4600

**P.O. #**

**FAX:** 408-245-4620

**PROJECT #** 118-128-3 2474 Pulgas Ave, East Palo

**DATE RECEIVED:** 07/01/2022

**CONTACT:** Alto Nazanin Khorrami

**DATE COMPLETED:** 07/11/2022

**DATE REISSUED:** 07/14/2022

DRAFT

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SG-6	Modified ASTM D-1946	6.1 "Hg	10 psi
02A	SG-5	Modified ASTM D-1946	5.7 "Hg	9.8 psi
03A	SG-4	Modified ASTM D-1946	6.1 "Hg	9.9 psi
04A	SG-3	Modified ASTM D-1946	4.7 "Hg	9.7 psi
05A	SG-2	Modified ASTM D-1946	5.7 "Hg	9.9 psi
06A	SG-1	Modified ASTM D-1946	4.7 "Hg	10.2 psi
07A	Lab Blank	Modified ASTM D-1946	NA	NA
08A	CCV	Modified ASTM D-1946	NA	NA
09A	LCS	Modified ASTM D-1946	NA	NA
09AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: 

DATE: 07/14/22

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279



**LABORATORY NARRATIVE**  
**Modified ASTM D-1946**  
**Cornerstone Earth Group**  
**Workorder# 2207001CR1**

Six 1 Liter Summa Canister samples were received on July 01, 2022. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

<i>Requirement</i>	<i>ASTM D-1946</i>	<i>ATL Modifications</i>
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a $\geq 95\%$ accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

**Receiving Notes**

There were no receiving discrepancies.

---

The work order was reissued on 7/14/22 to change identification of samples to SG-6, SG-5, SG-4, SG-3, SG-2, and SG-1 per emailed client request received on 7/13/22.

**Analytical Notes**

There were no analytical discrepancies.

**Definition of Data Qualifying Flags**

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the detection limit.

M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds**  
**MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946**

DRAFT

**Client Sample ID: SG-6**

**Lab ID#: 2207001CR1-01A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.21	18
Carbon Dioxide	0.021	4.2

**Client Sample ID: SG-5**

**Lab ID#: 2207001CR1-02A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.21	7.6
Carbon Dioxide	0.021	11

**Client Sample ID: SG-4**

**Lab ID#: 2207001CR1-03A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.21	2.9
Carbon Dioxide	0.021	12

**Client Sample ID: SG-3**

**Lab ID#: 2207001CR1-04A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.20	16
Carbon Dioxide	0.020	5.7

**Client Sample ID: SG-2**

**Lab ID#: 2207001CR1-05A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.21	19
Carbon Dioxide	0.021	3.0

**Summary of Detected Compounds**  
**MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946**

Client Sample ID: SG-1

Lab ID#: 2207001CR1-06A

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.20	16
Carbon Dioxide	0.020	5.1

Client Sample ID: SG-6

Lab ID#: 2207001CR1-01A

## MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	10070805	Date of Collection:	6/30/22 10:25:00 AM
Dil. Factor:	2.11	Date of Analysis:	7/8/22 10:31 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	18
Methane	0.00021	Not Detected
Carbon Dioxide	0.021	4.2

Container Type: 1 Liter Summa Canister

Client Sample ID: SG-5

Lab ID#: 2207001CR1-02A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	10070806	Date of Collection:	6/30/22 10:59:00 AM
Dil. Factor:	2.06	Date of Analysis:	7/8/22 10:58 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	7.6
Methane	0.00021	Not Detected
Carbon Dioxide	0.021	11

Container Type: 1 Liter Summa Canister

Client Sample ID: SG-4

Lab ID#: 2207001CR1-03A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	10070807	Date of Collection:	6/30/22 11:28:00 AM
Dil. Factor:	2.10	Date of Analysis:	7/8/22 11:32 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	2.9
Methane	0.00021	Not Detected
Carbon Dioxide	0.021	12

Container Type: 1 Liter Summa Canister

Client Sample ID: SG-3

Lab ID#: 2207001CR1-04A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	10070808	Date of Collection:	6/30/22 12:19:00 PM
Dil. Factor:	1.97	Date of Analysis:	7/8/22 12:30 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.20	16
Methane	0.00020	Not Detected
Carbon Dioxide	0.020	5.7

Container Type: 1 Liter Summa Canister



Client Sample ID: SG-2

Lab ID#: 2207001CR1-05A

## MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	10070809	Date of Collection:	6/30/22 1:08:00 PM
Dil. Factor:	2.07	Date of Analysis:	7/8/22 01:00 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	19
Methane	0.00021	Not Detected
Carbon Dioxide	0.021	3.0

Container Type: 1 Liter Summa Canister

Client Sample ID: SG-1

Lab ID#: 2207001CR1-06A

## MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	10070810	Date of Collection:	6/30/22 1:51:00 PM
Dil. Factor:	2.01	Date of Analysis:	7/8/22 01:22 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.20	16
Methane	0.00020	Not Detected
Carbon Dioxide	0.020	5.1

Container Type: 1 Liter Summa Canister

Client Sample ID: Lab Blank

Lab ID#: 2207001CR1-07A

## MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	10070804	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/8/22 10:04 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

Client Sample ID: CCV

Lab ID#: 2207001CR1-08A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	10070801	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/22 08:43 AM

Compound	%Recovery
Oxygen	98
Methane	102
Carbon Dioxide	100

Container Type: NA - Not Applicable

Client Sample ID: LCS

Lab ID#: 2207001CR1-09A

## MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	10070802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/22 09:12 AM

Compound	%Recovery	Method Limits
Oxygen	98	85-115
Methane	103	85-115
Carbon Dioxide	101	85-115

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 2207001CR1-09AA

## MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	10070827	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/22 09:50 PM

Compound	%Recovery	Method Limits
Oxygen	98	85-115
Methane	100	85-115
Carbon Dioxide	101	85-115

Container Type: NA - Not Applicable