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July 20, 2017

Ms. Karel Detterman
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

I, Sandra Barrios, hereby authorize ERAS Environmental, Inc. to submit the Limited Phase II Subsurface Investigation for 0 29th Avenue in Oakland, California, dated July 20, 2017 to the Alameda County Health Care Services Agency.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Signature: _____

Printed Name: Sandra Barrios

Ms. Sandra Barrios
Education for Change
510.904.6368
sbarrios@efcps.net

ERAS Environmental, Inc.

1533 B Street
Hayward, CA 94541

Phone (510) 247-9885 Facsimile: (510) 886-5399 info@eras.biz

LIMITED PHASE II SUBSURFACE INVESTIGATION

AT

0 29th AVENUE
OAKLAND, CALIFORNIA

ERAS PROJECT NUMBER: 16-004-002
GLOBAL ID: T10000001070
LOC Case Number: RO0002960

Prepared for

Education for Change
303 Hegenberger Road, Suite 301
Oakland, CA 94621

July 20, 2017

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CERTIFICATION

This **Limited Phase II Subsurface Investigation** at 0 29th Avenue in Oakland, California, has been prepared by ERAS Environmental, Inc. (ERAS) under the professional supervision of the Registered Professional Geologist whose signature appears hereon.

This report was prepared in general accordance with the accepted standard of practice that exists in Northern California at the time the investigation was performed. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies.

Our firm has prepared this report for the Client's exclusive use for this particular project and in accordance with generally accepted professional practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended.

This report may be used only by the client and only for the purposes stated within a reasonable time from its issuance. Land use, site conditions (both on-site and off-site) or other factors may change over time, and additional work may be required with the passage of time. Any party other than the client who wishes to use this report shall notify ERAS of such intended use. Based on the intended use of report, ERAS may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release ERAS from any liability resulting from the use of this report by any unauthorized party.

Sincerely,
ERAS Environmental, Inc.

Andrew Savage
Project Geologist

Curtis Payton
California Registered Professional Geologist 5608

July 20, 2017

1.0 INTRODUCTION

The following is a report summarizing the results of the collection and analysis of soil samples and soil gas samples at a site located at 0 29th Avenue in Oakland, California (the "Property"). The Property is listed with the Alameda County Health Care Services Agency (ACHCSA) as Open Site Assessment under the name Pacific Thomas Corp.

The ACHCSA requested this report in a letter approving the scope of work dated April 14, 2017. The scope of work was presented in a work plan prepared by ERAS dated October 19, 2016.

The purpose of the work conducted was to evaluate environmental conditions at the Property for potential redevelopment for commercial uses.

1.1 BACKGROUND

The location of the Property is shown on **Figure 1**. The Property extends from 29th Avenue on the northwest to Derby Avenue on the southeast. The northwestern portion of the Property is a vacant undeveloped lot and the southeastern portion is mostly paved and used as a parking lot for the adjacent Epic Charter School at 1045 Derby Avenue and 1112 29th Avenue. The layout of the Property is shown on **Figure 2**. A review of a 1950 Sanborn Fire Insurance Map indicates that the Property previously contained two sets of railroad lines.

Subsurface Investigation

Phase 2 subsurface investigations were performed for the adjacent site at 3001-3015 East 12th Street by Tec Accutite (TEC) in 2007. The investigations also included investigation on the Property which appear to have been owned by the same party at that time. The results of the subsurface investigation were summarized in a "Workplan for Site Characterization, 3001-3015 East 12th Street, Oakland California" dated June 23, 2008. Note that reports available regarding these investigations include documents entitled "3001-3007 East 12th Street.

A total of five borings were drilled during the investigations, B-1 and B-2 at 3001-3005 East 12th Street and B-3, B-4 and B-5 on the Property. Soil samples were collected from these borings from depths between 8 and 14 feet below the ground surface (bgs). Groundwater was collected only from B-1 and B-2 and was encountered at depths of approximately 24 feet bgs in B-1 and 28 feet bgs in B-2. No groundwater samples were collected from the borings on the Property.

The locations of the borings are shown on Figure 2 from the 2008 TEC workplan that is attached to this report in **Appendix A**. The attachment also includes tables of analytical data for soil and groundwater and boring logs for the deeper borings that encountered groundwater. The analytical results are included on **Table 1** of this report.

Laboratory Results

Soil and groundwater samples were submitted for laboratory analysis for total petroleum hydrocarbons quantified as gasoline range organics (TPH-gro[1]), diesel range organics (TPH-dro),

[1] TPH-gro, TPH-dro, and TPH-oro are methods that compare analytical results to standards for gasoline, diesel and motor oil, respectively. Therefore, analytical results are estimates of quantities based on what would be expected for the range of hydrocarbon results for the standard. Gasoline range organics (gro) are those hydrocarbon compounds that are in the range of C6 to C10, diesel range organics (dro) are those hydrocarbon compounds that are in the range of C10 to C23, and oil range organics (oro) are those hydrocarbon compounds that are in the range of C18 to

and oil range organics (TPH-oro), volatile organic compounds (VOCs), semi volatile compounds (PNAs and PAHs), polychlorinated biphenyls (PCBs) and a variety of metals.

No concentrations of fuel hydrocarbons or VOCs were detected in the soil samples.

Nickel was reported at concentrations above the Tier 1 environmental screening limit (ESL). Nickel was detected in the soil sample from B-4 at a concentration of 180 mg/Kg. The concentration of nickel detected above the Tier 1 ESL (180 mg/Kg) is within the upper quartile of the range of background concentrations (Kearney, 1996) detected and within 2 standard deviations of the mean. Based on this concentration being in the background range and the other concentrations detected also being in the upper quartile of the range of background concentrations for California, it can reasonably be concluded that the nickel concentrations detected are not anthropogenic.

The remaining concentrations of metal in soil were below the February 2016 Regional Water Quality Control Board Tier 1 ESLs and appeared to be within the typical range of background soil concentrations.

Only one (non-metal) contaminant in soil was detected at a concentration above the Tier 1 ESLs. The soil sample from boring B-4, collected at a depth of 14 feet below the ground surface, was reported to contain 0.272 mg/Kg of PCB (Aroclor 1016), slightly above the ESL for residential land use of 0.22 mg/Kg but below the ESL of 0.74 mg/Kg for commercial/industrial use.

Groundwater from Boring B-1 contained a concentration of nickel at 11 micrograms per liter (µg/L) above the Aquatic Habitat ESL of 8.2 µg/L. Groundwater from Borings B-1 and B-2 contained silver at concentrations of 3 and 2 µg/L, above the ESL of 0.19 µg/L.

Summary

The Property is a former rail line that appears to have been later used as a storage yard by Caltrans. Five borings were drilled in 2007 on the Property and adjacent site at 3001-3005 East 12th Street. According to TEC Boring B-1 was in the vicinity of a former parking garage and B-2 in the area of a former hay and fuel yard. Borings B-3 and B-5 on the Property appear to be located on one of the former rail lines and Boring B-4 was located near the second rail line (TEC, December 2007).

Soil samples were collected for laboratory analysis from depths of 8-14 feet. It was not specified why these depths for sampling were selected.

The only contaminant found at concentrations above the commercial/industrial ESLs was silver that was found in groundwater from the adjacent site at 3001-3005 East 12th Street. PCBs were detected in a sample from one boring on the Property (B-4) below the commercial/industrial ESL. In general, the ESLs derived for California are based on models that include some very conservative assumptions, including:

1. the concentrations detected in soil are in contact with groundwater

2. the concentrations detected are ubiquitous and of the same magnitude across the site being

C36. There can be overlap in reporting methods as well as identification of compounds that fall within the standard that may not necessarily be derived from gasoline, diesel, or oil.

modeled

3. the concentrations in groundwater radiate infinitely in all directions until they come into contact with a surface body of water at which point an aquatic receptor pathway becomes complete.

Since the concentrations of PCBs in the other two soil samples (B-3 & B-5) were below the ESL or not detected above the reporting limit, the first assumption is not valid. Since the soil sample from B-4 was collected approximately 14 feet below ground surface (10 feet above the nearest reported groundwater elevation), the second assumption is not valid. Since the nearest surface body of water is the tidal channel of the Oakland Harbor approximately ½ mile from the Property, the third assumption is also very likely to be invalid based on attenuation of contaminants in the groundwater table which is very typical of transport mechanisms in the groundwater table.

The previous subsurface investigations at the Property indicated that no detectable contaminants above the commercial/industrial ESLs are present. No petroleum hydrocarbons or volatile organic compounds were detected. It appears that contamination of the Property is unlikely to have a complete exposure pathway for human or ecological receptors.

However, the sampling was limited to only few potential contaminants and former rail lines are considered to be potential sources of contamination. Boring logs for B-1 and B-2 indicated the Property may contain up to 20 feet of fill which is from an unknown source.

2.0 REGIONAL GEOLOGY/HYDROLOGY

The Property is in the southern part of the City of Oakland in the San Francisco Bay area. The San Francisco Bay area occupies a broad alluvial valley that slopes gently northward toward Oakland Bay and is flanked by alluvial fans deposited at the foot of the Diablo Range to the east and the Santa Cruz Mountains to the west. Surface topography in the immediate vicinity of the Property is gently sloping down to the south west towards tidally influenced Brooklyn Basin Tidal Canal.

The Property is at an elevation of approximately 40 feet above Mean Sea Level according to the United States Geological Survey (USGS) Oakland East Quadrangle California 7.5 Minute Series topographic map.

Materials underlying the site are unconsolidated deposits of near shore and beach sediments, deposited in Oakland Bay at higher sea level stands. At shallow depths beneath these sediments are chert, greywacke, serpentine and shale bedrock that are a part of the Cretaceous to Jurassic-aged Franciscan Formation. Bedrock is exposed to the west and north on the upland surfaces.

The subject site is located on the San Francisco Bay Plain in the northernmost part of the Santa Clara Valley Groundwater Basin, (DWR, 1967), the surface of which slopes gently down toward the north.

The regional groundwater flow follows the topography, moving from areas of higher elevation to areas of lower elevation. The regional groundwater flow direction in the area of the Property is estimated to be toward the southwest toward the Brooklyn Basin Tidal Canal. Groundwater monitoring at an adjacent leak site (1112 29th Avenue), indicated that the flow direction has been determined to be to the southwest.

Based on borings drilled on the adjacent site, the subsurface sediments consist of clayey sand to depths of 18-20 feet underlain by clay to the total depths explored. The sandy clay contained sand, silt and clay and 15% of medium gravel, according to TEC. This material does not appear to be native material and may be artificial fill brought in for the former rail line.

3.0 WORK PERFORMED

3.1 SCOPE OF INVESTIGATION

Scope of work conducted by ERAS for this investigation was as follows.

- Obtained a permit for drilling from the Alameda County Public Works Department (ACPWD).
- Cleared the boring location for the presence of utilities by notifying Underground Service Alert and contracting a private underground locating/clearance service.
- Advanced seven borings (SV-1 through SV-7) using a direct push sample rig to depths of approximately 5.5 feet and installed temporary soil gas sampling points in each.
- Advanced seven borings (SB-1 through SB-7) using a direct push sample rig to a depth of approximately 10 feet directly adjacent to borings SV-1 through SV-7 for the collection of soil samples.
- Collected soil samples from the borings for laboratory analysis. Samples were collected from depth ranges of 0-5 feet and 5-10 feet bgs unless signs of contamination are observed.
- The soil vapor samples were analyzed for volatile organic compounds (VOC) by EPA Method TO-15 and for methane, carbon dioxide and oxygen. Samples were also collected for analysis for naphthalene by EPA Method TO-17. The results of the analyses were compared to the February 2016 Regional Water Quality Control Board Environmental Screening Levels for soil gas sampling.
- The soil samples were analyzed for poly aromatic hydrocarbons (PAHs) and poly nuclear aromatic hydrocarbons (PNAs) by EPA Method 8270C with the Selected Ion Mode (SIM), polychlorinated biphenyls by EPA Method 8082B and for LUFT 5 metals (cadmium, chromium, lead, nickel and zinc).

3.2 BORING LOCATIONS AND SAMPLING

A drilling permit was obtained from the ACPWD. A copy of the permit is included in **Appendix B**. The locations of the borings are shown on **Figure 2**. The Standard Operating Procedures for direct-push sampling and soil gas sampling is included in **Appendix C**.

Seven boring locations were spaced on an approximate 100-foot grid across the Property to confirm and further characterize contaminants previously detected on the Property as well as determine if contaminants not previously investigated were present.

In each location, a 5.5-foot-deep boring (SV-1 through SV-7) was advanced to install a temporary soil gas vapor point. In each location, a boring was also advanced to 10 feet (SB-1 through SB-7) for the collection of soil samples from a depth of 0-5 feet and 5-10 bgs.

The borings were advanced using a direct push sample rig by Environmental Control Associates (ECA), of Aptos, California, on June 14, 2017. The borings were continuously logged for lithology

and copies of the lithologic logs are included in **Appendix D**. The subsurface vadose zone lithology encountered consisted of gravel or a sand/gravel/organic fill from the surface to a max of 2 feet bgs. From beneath the fill to the base of the boring silty clay and clayey silt was observed. No evidence of contamination including odor or elevated photoionization (PID) readings were observed. No evidence of groundwater was encountered.

Note the current subsurface exploration indicates the upper portion of the Property is only filled to a depth of approximately 2 feet and refutes the idea that the top 10 feet may be fill material based on the previous investigation.

Soil samples for laboratory analysis were collected from borings SB-1 through SB-7 at the depths of 3.5-4 feet bgs and 9.5-10 feet bgs. The soil gas samples (SV-1 through SV-7) were collected from a depth of 5.0-5.5 feet bgs. The soil gas field forms are included in **Appendix E**.

The soil samples were kept refrigerated pending transport under chain-of-custody procedures to a California certified environmental analytical laboratory.

The soil samples were analyzed for PAHs by EPA Method 8270C with the Selected Ion Mode, PCBs by EPA Method 8082B and for LUFT 5 metals (cadmium, chromium, lead, nickel and zinc).

The soil gas samples were transported under chain of custody procedure to a California certified environmental analytical laboratory and analyzed for volatile organic compounds (VOC) by EPA Method TO-15 and for methane, carbon dioxide and oxygen. Samples were also analyzed for naphthalene by EPA Method TO-17.

An insufficient amount of soil gas flow was available from borings SV-2, SV-3, SV-6 and SV-7 due to tight clay conditions for the analysis for naphthalene by EPA Method TO-17. Naphthalene was however analyzed for by EPA Method TO-15 as part of the VOC suite.

3.3 ANALYTICAL RESULTS

3.3.1 Results in Soil

The laboratory report and chain of custody form are included as **Appendix G**. The results of the analyses are included on **Table 1**.

Only a sample collected from SB-7 contained concentrations of PCBs above the method detection limit (MDL). The sample collected from 9.5-10 feet bgs from SB-7 contained a concentration of 0.040 mg/Kg which is below the ESL for direct exposure on a commercial site and below the ESL for the potential leaching to groundwater.

Concentrations of naphthalene were detected in the samples collected from borings SB-2, SB-3, SB-4, and SB-5 at concentrations ranging from 0.0016 to 0.0021 mg/Kg. None of the concentrations exceeded the ESL for direct exposure on a commercial site and were below the ESL for the potential leaching to groundwater.

No concentrations of PAHs or PNAs were detected above the ESL for direct exposure on a commercial site or the ESL for the potential leaching to groundwater. Only boring SB-5 and SB-7 were found to contain concentrations of other PAHs or PNAs above their respective MDLs. PAHs and

PNAs detected included benzo (a) anthracene, benzo (b) pyrene, benzo (b) fluoranthene, benzo (g,h,i) perylene, benzo (k) fluoranthene, chrysene, fluoranthene, phenanthene, and pyrene.

All concentrations of LUFT 5 metals were below the commercial direct exposure ESL and were within the range of background concentrations (Kearney, 1996) and/or within 2 standard deviations of the mean. Based on this it is concluded that the detected concentrations are not anthropogenic.

3.3.2 Results in Soil Gas

The laboratory report and chain of custody form are included as **Appendix H**. Select results of the analyses are included on **Tables 2**.

Oxygen was detected in the samples collected from borings SV-1 through SV-7 at 5.6% to 18%. Methane was detected from below the MDL up to 0.0052%. Carbon dioxide was detected from below the MDL up to 5.0%.

Numerous VOCs on the TO-15 list were detected however no concentrations were found to exceed the ESLs for vapor intrusion and health risk on a commercial Property. Naphthalene on the TO-15 list was found to be below the MDL in all borings. Of the VOCs detected only chloroform was detected, above the Tier 1 ESLs but below the ESL for vapor intrusion and health risk on a commercial Property, in the samples collected from borings SV-2, SV-3, SV-5, and SV-6 at concentrations up to 100 micro grams per cubic meter ($\mu g/m^3$).

Naphthalene was analyzed for by TO-17 from borings SV-1, SV-4, and SV-5 and no concentrations above the MDL were detected. An insufficient amount of soil gas flow due to tight clay conditions was available from borings SV-2, SV-3, SV-6 and SV-7 for the analysis for naphthalene by EPA Method TO-17.

4.0 UPDATED SITE CONCEPTUAL MODEL

An updated Site Conceptual Model Table and Data Gap Summary are included as **Appendix F**.

4.1 HYDROGEOLOGIC SETTING

Shallow groundwater is at roughly 24 to 28 feet bgs. No groundwater monitoring has been conducted on the Property but based on nearby leak cases with active groundwater monitoring the groundwater has been determined to flow toward the southwest at a gradient of about 0.01 foot/foot.

The shallow water-bearing zone at the Property is found in the clayey sand (containing sand, silt, clay and gravel). Groundwater is generally under water-table conditions, but may be locally confined by the clay underlying the fill.

4.2 EXTENT OF CONTAMINATION

4.2.1 Results in Soil

No concentrations of fuel hydrocarbons or VOCs were detected in the soil samples collected on the Property.

Only a sample collected from SB-7 contained concentrations of PCBs above the method detection limit (MDL). The sample collected from 9.5-10 feet bgs from SB-7 contained a concentration of 0.040 mg/Kg which is below the ESL for direct exposure on a commercial site and below the ESL for the potential leaching to groundwater.

Concentrations of naphthalene were detected in the samples collected from borings SB-2, SB-3, SB-4, and SB-5 at concentrations ranging from below the MDL to 0.0021 mg/Kg. None of the concentrations exceeded the ESL for direct exposure on a commercial site and were below the ESL for the potential leaching to groundwater.

No concentrations of PAHs or PNAs were detected above the ESL for direct exposure on a commercial site or the ESL for the potential leaching to groundwater. Only borings SB-5 and SB-7 were found to contain concentrations of other PAHs or PNAs above their respective MDLs. PAHs and PNAs detected included benzo (a) anthracene, benzo (b) pyrene, benzo (b) fluoranthene, benzo (g,h,i) perylene, benzo (k) fluoranthene, chrysene, fluoranthene, phenanthene, and pyrene.

With the exception of nickel, concentrations of metals in soil were below the Tier 1 ESLs. All metals appeared to be within the typical range of background soil concentrations.

4.2.2 Results in Groundwater

No groundwater samples have been collected from the Property.

4.2.2 Results in Soil Gas

Oxygen was detected in the samples collected from borings SV-1 through SV-7 at 5.6% to 18%. Methane was detected from below the MDL up to 0.0052%. Carbon dioxide was detected from below the MDL up to 5.0%.

Numerous VOCs on the TO-15 list were detected however no concentrations were found to exceed the ESLs for vapor intrusion and health risk on a commercial Property. Naphthalene on the TO-15

list was found to be below the MDL in all borings. Of the VOCs detected only chloroform was detected, above the Tier 1 ESLs but below the ESL for vapor intrusion and health risk on a commercial Property, in the samples collected from borings SV-2, SV-3, SV-5, and SV-6 at concentrations up to 100 micro grams per cubic meter (µg/m^3).

Naphthalene was analyzed for by TO-17 from borings SV-1, SV-4, and SV-5 and no concentrations above the MDL were detected. An insufficient amount of soil gas flow due to tight clay conditions was available from borings SV-2, SV-3, SV-6 and SV-7 for the analysis for naphthalene by EPA Method TO-17.

5.0 LOW THREAT CASE CLOSURE EVALUATION

The following criteria should be met for a site to qualify for closure per RWQCB's *Interim Guidance on Required Cleanup at Low-Risk Sites*.

- The leak has been stopped and ongoing sources including free product, have been removed or remediated;
- The site has been adequately characterized;
- The dissolved plume is not migrating;
- No groundwater impact currently exists, no contaminants are found at levels above the established MCLs or other water quality objectives;
- No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted; and
- The site presents no significant risk to human health or the environment.

Leak Has Been Stopped and Ongoing Sources Have Been Removed
The investigations have not identified a specific source of contamination.

Site is Adequately Characterized
The site has been adequately characterized. The Property is zoned commercial and no concentrations of the contaminants of concern (COCs) have been found to exceed the commercial ESLs. With the exception of nickel in the soil samples collected and chloroform in the soil gas samples collected all other COCs are also below the Tier 1 ESLs. The nickel concentrations are within background ranges and are considered not anthropogenic. No known source of the soil vapor concentrations of chloroform have been identified.

Dissolved Plume is Not Migrating
No dissolved plume has been identified.

No Water Wells or Other Sensitive Receptors Are Threatened
None of the COCs identified were present at concentrations capable of threatening water wells or other sensitive receptors.

Site Presents No Significant Risk
The analytical data for soil and soil gas have not identified any risk to human health safety and the environment for a commercial site.

6.0 CONCLUSIONS AND RECOMMENDATIONS

ERAS concludes that the site has been adequately characterized. The Property is zoned commercial and no concentrations of the contaminants of concern (COCs) have been found to exceed the commercial ESLs.

The investigations conducted on the Property have not identified a specific release or a source of contamination and the analytical data for soil and soil gas have not identified any risk to human health safety and the environment for a commercial site.

Based on the results of this investigation, the fact that the property is zoned commercial, and the lack of any detected COCs exceeding the commercial site ESLs ERAS recommends that this site be considered for case closure.

7.0 REFERENCES

Alameda County Department of Environmental Health, Remedial Action Completion Certificate, Fuel Leak Case, RO0000397 and Geotracker Global ID T0600101631, Caltrans South Oakland, Maintenance Station, 1102 29th Avenue, CA 94601, July 25, 2011.

Alameda County Department of Environmental Health, Voluntary Remedial Action Program (VRAP) Case No. RO0003204 and Geotracker ID T10000006491, Pacific Thomas Corporation, 0 29th Avenue, Oakland, CA 94621, April 14, 2017.

California Department of Water Resources, Evaluation of Ground Water Resources South Bay, Appendix A: Geology, Bulletin 118-1, August 1967.

California Regional Water Quality Control Board, Water Quality Control Plan, San Francisco Bay Basin Region (2), December 1986.

ERAS Environmental Inc., Work Plan for Limited Phase II Subsurface Investigation, 0 29th Avenue, Oakland, California, October 19, 2016.

Goldman, Harold B., Geology of San Francisco Bay prepared for San Francisco Bay Conservation and Development Commission, February 1967.

Helley, E.J., La Joie, K.R., Spangle, W.E., and Blair, M.L., Flatland Deposits of the San Francisco Bay Region, California - their geology and engineering properties and their importance to comprehensive planning, U.S. Geological Survey Professional Paper 943, 1974.

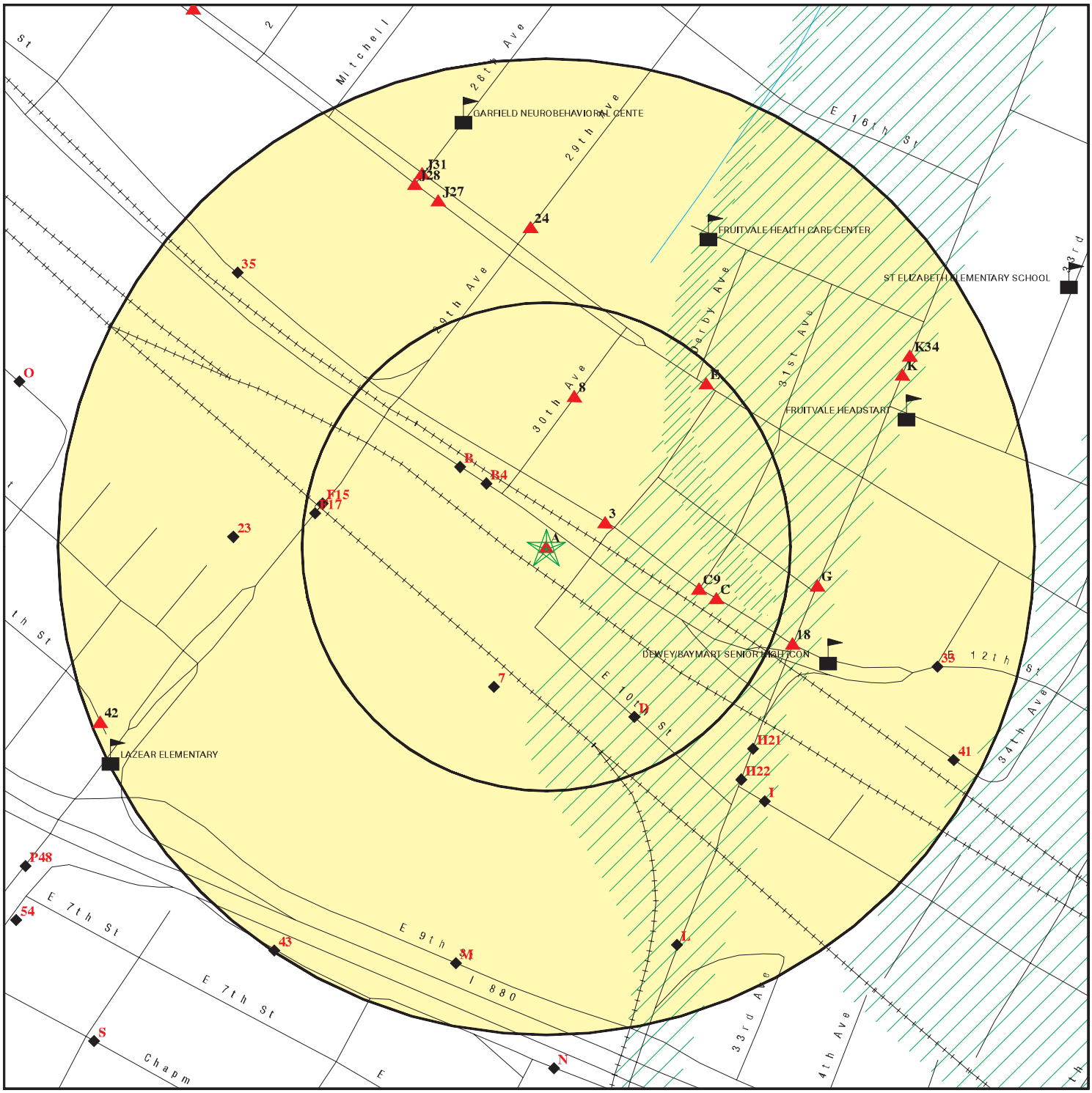
Kearney Foundation. (1996). Background Concentrations of Trace and Major Elements in California Soils, Kearney Foundation Special Report. Kearney Foundation of Soil Science, Division of Agricultural and Natural Resources, University of California at Riverside. March.

Tec Accutite (TEC), Workplan for Site Characterization, 3001-3015 East 12th Street, Oakland, California, 94601, June 23, 2008.

Tec Accutite (TEC), Limited Subsurface Investigation Report, 3001-3015 East 12th Street, Oakland, California, 94601, June 22, 2007.

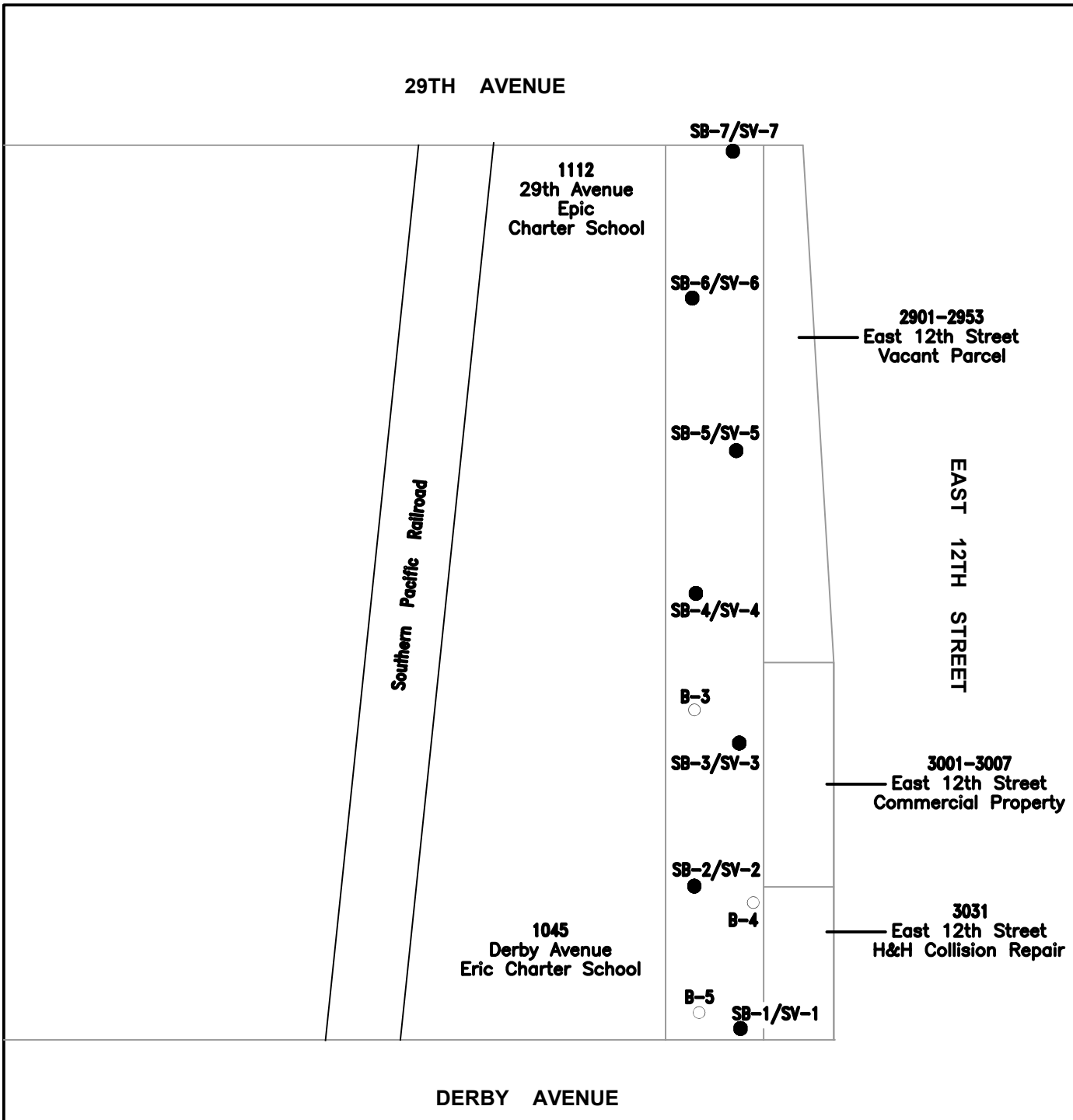
Tec Accutite (TEC), Addendum to Limited Subsurface Investigation Report, 3001-3015 East 12th Street, Oakland, California, 94601, December 3, 2007.

FIGURES



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

FIGURE 1
PROPERTY LOCATION MAP
0 29th AVENUE, OAKLAND



EXPLANATION

● Boring location, EARS 2017

○ Boring location, TEC 2007

BORING LOCATION MAP **FIGURE 2**

Project No. 16-004-02
0 29th Avenue
Oakland, California July, 2017

EARS Environmental

0 100

Scale in Feet

TABLES

TABLE 1. ANALYTICAL RESULTS - SOIL
0 29th Avenue, Oakland, CA

Sample ID	Date	Depth	PCBs	Naphthalene	Other PAHs/PNAs	Nickel	Other LUFT 5
		ft-bgs	mg/Kg				
TEC, 2007							
B-3	6-Jun-07	12	ND	<0.33	ND	81	BESL
B-4	6-Jun-07	14	0.272	<0.33	ND	180	BESL
B-5	6-Jun-07	8	ND	<0.33	ND	92	BESL
ERAS, 2017							
SB-1	14-Jun-17	3.5-4	<0.050	<0.010	ND	72	BESL
SB-1	14-Jun-17	9.5-10	<0.050	<0.010	ND	83	BESL
SB-2	14-Jun-17	3.5-4	<0.050	<0.010	ND	72	BESL
SB-2	14-Jun-17	9.5-10	<0.050	0.0016 J	ND	90	BESL
SB-3	14-Jun-17	3.5-4	<0.050	0.0021 J	ND	110	BESL
SB-3	14-Jun-17	9.5-10	<0.050	<0.020	ND	81	BESL
SB-4	14-Jun-17	3.5-4	<0.050	<0.010	ND	72	BESL
SB-4	14-Jun-17	9.5-10	<0.050	0.0017 J	ND	130	BESL
SB-5	14-Jun-17	3.5-4	<0.050	<0.010	ND	74	BESL
SB-5	14-Jun-17	9.5-10	<0.050	0.0020 J	BESL	75	BESL
SB-6	14-Jun-17	3.5-4	<0.050	<0.010	ND	120	BESL
SB-6	14-Jun-17	9.5-10	<0.050	<0.010	ND	94	BESL
SB-7	14-Jun-17	3.5-4	<0.050	<0.010	ND	120	BESL
SB-7	14-Jun-17	9.5-10	0.040 J	<0.010	BESL	100	BESL
ESL - Com			1.0	14	-	11,000	-
ESL - GW			6.30	0.033	-	-	-

NOTES

ESL - Com = Environmental Screening Level (potential drinking water,SFRWQCB, February 2016 Revision 3), Commercial/Industrial Shallow Soil Direct Exposure

ESL - GW = Environmental Screening Level (potential drinking water,SFRWQCB, February 2016 Revision 3), Leaching to Groundwater

BESL = all detected concentrations of LUFT 5 metals other than nickel were below the ESL set forth by the RWQCB as of February, 2016 (commercial/industrial and leaching to groundwater).

Reported concentrations above the ESLs are in bold type

J = Result is less that the reporting limit but greater than the method detection limit. The reported

ft-bgs = feet below ground surface

mg/kg = milligrams per kilogram

ND = concentration below method detection limit

PCBs = polychlorinated biphenyls

PAHs/PNAs = polynuclear aromatic hydrocarbons

LUFT 5 = cadmium, chromium, lead, nickel, and zinc

TABLE 2. ANALYTICAL RESULTS - SOIL GAS
0 29th Avenue, Oakland CA

Sample ID	Date	Depth	Oxygen	Methane	Carbon Dioxide	Benzene	Toluene	Ethylbenzene	Xylenes	Choloform	Naphthalene	2-Propanol	Other TO-15	Naph TO-17
		ft-bgs	Percentage (%)			µg/m³								
SV-1	15-Jun-17	5-5.5	5.6	<0.00024	1.9	5.4	8.2	12	52	13	<13	<12	BESL	<5.0
SV-2	15-Jun-17	5-5.5	17	0.0040	<0.096	<15	29	<21	111	100	<51	<48	BESL	Insuficient
SV-3	15-Jun-17	5-5.5	18	<0.00080	1.6	<13	24	<17	32	73	<42	<39	BESL	Insuficient
SV-4	15-Jun-17	5-5.5	16	<0.00026	4.9	11	19	15	103	28	<13	<12	BESL	<5.0
SV-5	15-Jun-17	5-5.5	18	<0.00025	2.7	23	55	<11	56	85	<26	<25	BESL	<5.0
SV-6	15-Jun-17	5-5.5	13	<0.00028	5.0	18	27	6.8	27.4	64	<15	<14	BESL	Insuficient
SV-7	15-Jun-17	5-5.5	15	0.0052	3.3	31	35	<13	23	42	<32	<30	BESL	Insuficient
ESL - Com			-	-	-	420	1,300,000	4,900	440,000	530	360	-	-	360

NOTES

ESL - Com = Environmental Screening Level (potential drinking water,SFRWQCB, February 2016 Revision 3), Commercial/Industrial, Vapor Intrusion, Health Risk

µg/m³ = micro grams per cubic meter

ft-bgs = feet below ground surface

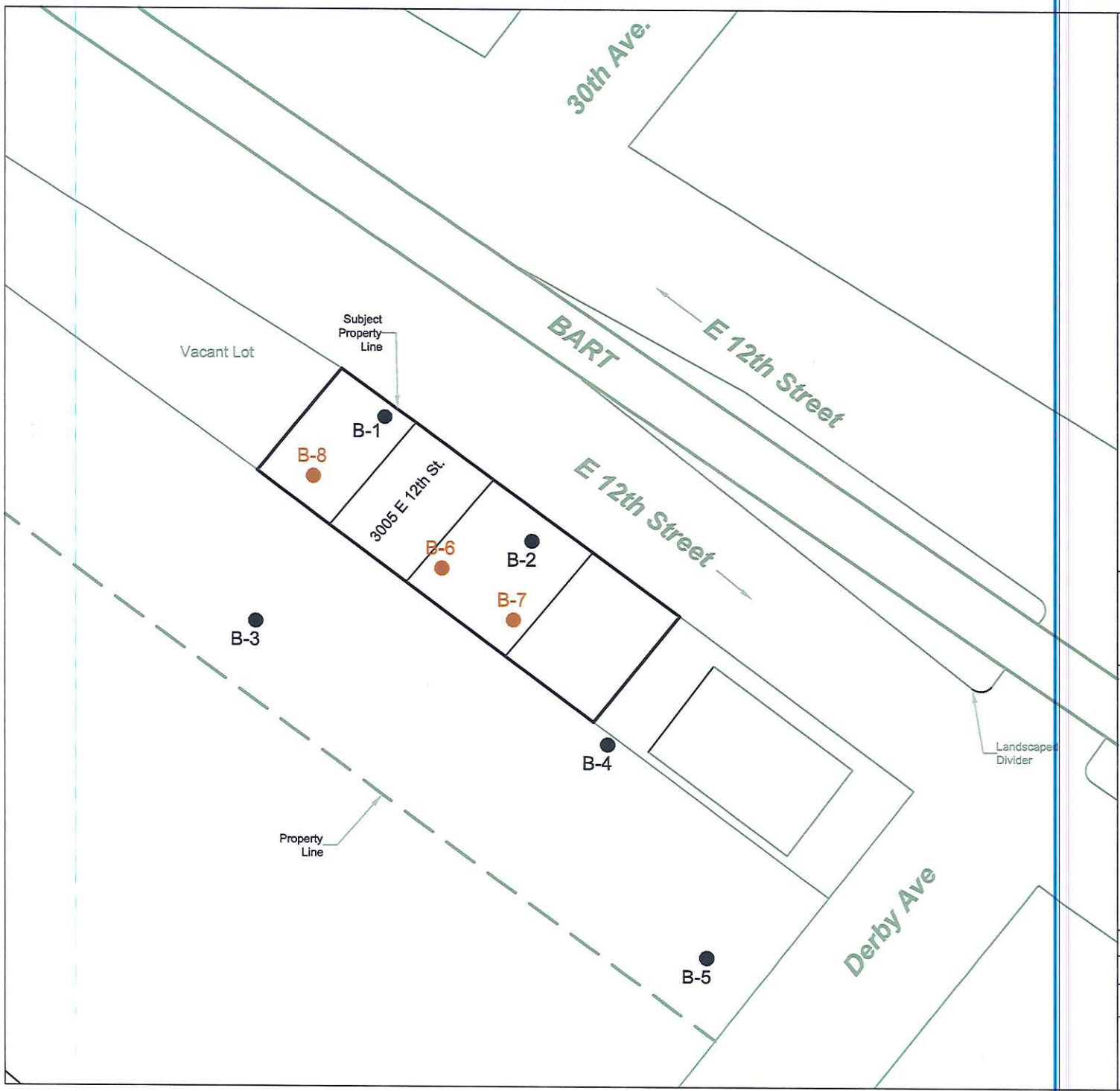
Insuficient = Insuficient flow for analysis

BESL = All remaining VOCs concentrations detected were below the ESL (Commercial/Industrial, Vapor Intrusion, Health Risk) set forth by the RWQCB as of February, 2016

Bold = Above the ESL

APPENDIX A

Previous Investigation Maps and Tables



N

0 25 50

SCALE (ft)

LEGEND

B-2 Former Boring Locations (June 2007)

B-8 Proposed Boring Locations

SITE

3001 - 3015 E 12th Street
Oakland, California

FIGURE

2

Site Map and Proposed Boring Locations

Revision:	
Date:	06/13/2008
Drafted By:	LC

TEC ACCUTITE
262 Michelle Court
So. San Francisco, CA 94080
Main: (650) 616-1200
Fax: (650) 616-1244

Table 1
Summary of Historical Soil Analytical Data
3001 - 3015 East 12th Street
Oakland, California

Sample ID	Depth (feet)	Date	TPHg	TPHd	TPHmo	BTEX	VOC's	PCP & PAH's	PCB's	Metals						
										Cd	Cr	Cu	Pb	Ni	Ag	Zn
			Concentrations in mg/Kg													
ESL			*83*	*83*	*370*	*var*	*var*	*var*	*0.22*	*1.7*	*---*	*230*	*200*	*150*	*20*	*600*
B-1 @ 8fbg	8	6/6/2007	<0.1	<2.0	<4.0	ND	ND	ND	ND	<1.0	65	28	12	110	<1.0	64
B-2 @14fbg	14	6/6/2007	<0.1	<2.0	<4.0	ND	ND	ND	ND	<1.0	80	32	8.3	110	<1.0	51
B-3 @12fbg	12	6/6/2007	<0.1	<2.0	10.7	ND	ND	ND	ND	**2.7**	62	73	45	81	<1.0	140
B-4 @14fbg	14	6/6/2007	<0.1	<2.0	<4.0	ND	ND	ND	**0.272***	<1.0	95	33	6.9	**180**	<1.0	52
B-5 @ 8fbg	8	6/6/2007	<0.1	<2.0	<4.0	ND	ND	ND	ND	<1.0	41	28	12	92	<1.0	55

Notes:
BOLD = Concentration exceeds ESL
(fbg) = feet below surface grade
TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8015.
TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015.
TPHmo = Total petroleum hydrocarbons as motor oil by EPA Method 8015.
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes by EPA Method 8260B.
VOC's = volatile organic compounds including 1,2-Dibromoethane, 1,2-Dichloroethane, Ethyl tert Butyl Ether, Isopropyl ether, Methyl tert-butyl ether, t-Butyl alcohol, tert-amyl methyl ether by EPA Method 8260B.
PCPs & PAH's = semi-volatile compounds by EPA Method 8270C.
PCB's = semi-volatile compounds by EPA Method 8082.
Metals: Cd = Cadmium, Cr = Chromium, Cu = Copper, PB = Lead, Ni = Nickel, Ag = Silver, and Zn = Zinc by EPA Method 6010B.
ND = all individual analytes not detected at or above laboratory detection limits for this method
* = Aroclor 1016 (PCB) detected by EPA Method 8082; all other analytes ND for this method.
ESL = Environmental Screening Level for subsurface soil (< 3M BGS), Table A-1, groundwater IS a current or potential drinking water resource, residential land use (CRWQCB Interim Final – November 2007 (revised May 2008)).

Table 2
Summary of Historical Grab Groundwater Analytical Data
3001 - 3007 E 12th Street
Oakland, California

Sample ID	Date	TPHg	TPHd	TPHmo	BTEX	VOC's	PCP & PAH's	PCB's	Metals						
									Cd	Cr	Cu	Pb	Ni	Ag	Zn
		Concentrations in µg/L													
ESL		***100***	***100***	***100***	***var***	***var***	***var***	***0.014***	***0.25***	***50***	***3.1***	***2.5***	***8.2***	***0.19***	***81***
B-1	6/6/2007	<58	<77	<14	ND	ND	ND	<1.0	<0.2	<2.0	<3.0	<2.0	**11**	**3****	8.6
B-2	6/6/2007	<57	<42.4	<21.2	ND	ND	ND	<1.0	<0.2	2**	<3.0	<2.0	7**	**2****	20

Notes:
BOLD = Concentration exceeds ESL
TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8015.
TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015.
TPHmo = Total petroleum hydrocarbons as motor oil by EPA Method 8015.
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes by EPA Method 8260B.
VOC's = volatile organic compounds including 1,2-Dibromoethane, 1,2-Dichloroethane, Ethyl tert Butyl Ether, Isopropyl ether, Methyl tert-butyl ether, t-Butyl alcohol, tert-amyl methyl ether by EPA Method 8260B.
PCPs & PAH's = semi-volatile compounds pentachlorophenol and polycyclic aromatic hydrocarbon by EPA Method 8270C.
PCB's = semi-volatile compound polychlorinated biphenyls by EPA Method 8082.
Metals: Cd = Cadmium, Cr = Chromium, Cu = Copper, BP = Lead, Ni = Nickel, Ag = Silver, and Zn = Zinc by EPA Method 6010B.
ND = all individual analytes not detected at or above laboratory detection limits for this method
** = considered an estimated value (reported between Maximum Detection Limit and Reporting Limit)
var = variable ESL's, unique for each constituent.
ESL = Environmental Screening Level for Groundwater, groundwater IS a current or potential drinking water resource, Table F-1a (CRWQCB Interim Final – November 2007 (revised May 2008)).

APPENDIX B

Permit

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 06/05/2017 By jamesy

Permit Numbers: W2017-0473
Permits Valid from 06/14/2017 to 06/15/2017

Application Id:	1495749378195	**City of Project Site:**	Oakland
Site Location:	0 29th Avenue, Oakland APN 693-25-8 Drill 7 locations (2 borings in each location) One to 5 feet for soil gas and one to 10 feet for soil sampling		
Project Start Date:	06/14/2017	**Completion Date:**	06/15/2017
Assigned Inspector:	Contact Marcelino Vialpando at (510) 670-5760 or Marcelino@acpwa.org		
Applicant:	ERAS Environmental, Inc, - Andrew Savage 1533 B Street, Hayward, CA 94541	**Phone:**	510-247-9885 x302
Property Owner:	Education for Change 303 Hegenberger Road, Suite 301, Oakland, CA 94621	**Phone:**	--
Client:	Education for Change 303 Hegenberger Road, Suite 301, Oakland, CA 94621	**Phone:**	--
Contact:	Andrew Savage	**Phone:** **Cell:**	510-247-9885 x302 925-330-8926

	Total Due:	$265.00
Receipt Number: WR2017-0259	**Total Amount Paid:**	$265.00
Payer Name : Andrew Savage	Paid By: MC	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Vapor Sampling 24 to 48 hours only - 14 Boreholes
Driller: Environmental Control Associates - Lic #: 695970 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2017-0473	06/05/2017	09/12/2017	14	2.75 in.	10.00 ft

Specific Work Permit Conditions

1. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

2. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

4. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend

and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.

5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

7. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

8. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

9. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

10. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Temp Vapor wells shall not be converted to monitoring Vapor wells, without a seperate permit application process.

11. Vapor monitoring wells constructed with tubing shall be decomissioned by complete removal of tubing, grout seal, and fill material of sand or bentonite. Fill material may be removed by hand auger if material can be removed completely.

Vapor monitoring wells constructed with pvc pipe less than 2" shall be overdrilled to total depth.

Vapor monitoring wells constructed with 2" pvc pipe or larger may be grouted by tremie pipe (any depth) or pressure grouted (less than 30', 25 psi for 5 min).

APPENDIX C

Standard Operating Procedure

STANDARD OPERATING PROCEDURE – DIRECT PUSH BORINGS

SOIL CORING AND SAMPLING PROCEDURES

Prior to drilling, all boreholes will be hand dug to a depth of 4-5 feet below ground surface (bgs) to check for underground utilities.

Soil and groundwater samples are collected for lithologic and chemical analyses using a direct driven soil coring system. A hydraulic hammer drives sampling rods into the ground to collect continuous soil cores. As the rods are advanced, soil is driven into an approximately 2.5-inch-diamter sample barrel that is attached to the end of the rods. Soil samples are collected in sleeves inside the sample barrel as the rods are advanced. After being driven 4 to 5 feet into the ground, the rods are removed from the borehole. The sleeve containing the soil core is removed from the sample barrel, and can then be preserved for chemical analyses, or used for lithologic description. This process is repeated until the desired depth or instrument refusal is reached.

If the soil sample is to be analyzed for volatile organic compounds (VOC's) and En Core® sampler will be utilized. If the sample is not being analyzed for VOC's a soil core interval selected for analyses is cut from the sleeve using a pre-cleaned hacksaw. The ends of the tube are covered with aluminum foil or Teflon liner and sealed with plastic caps. The soil-filled liner is labeled with the bore number, sample depth, site location, date, and time. The samples are placed in bags and stored in a cooler containing ice. Soil from the core adjacent to the interval selected for analyses is placed in a plastic zip-top bag. The soil is allowed to volatilize for a period of time, depending on the ambient temperature. The soil is scanned with a flame-ionization detector (FID) or photo-ionization detector (PID).

All sample barrels, rods, and tools (e.g. hacksaw) are cleaned with Alconox or equivalent detergent and de-ionized water. All rinsate from the cleaning is contained in 55-gallon drums at the project site.

GROUNDWATER SAMPLING FROM DIRECT PUSH BORINGS

After the targeted water-bearing zone has been penetrated, the soil-sample barrel is removed from the borehole. Small-diameter well casing with 0.010-inch slotted well screen may be installed in the borehole to facilitate the collection of groundwater samples. Threaded sections of PVC are lowered into the borehole. Groundwater samples may then be collected with a bailer, peristaltic pump, submersible or other appropriate pump until adequate sample volume is obtained. Perstaltic pumps are not used in applications requiring a lift of greater than 1 feet of net head.

Groundwater samples are preserved, stored in an ice-filled cooler, and are delivered, under chain-of-custody, to a laboratory certified by the California Department of Health Services (DHS) for hazardous materials analysis.

BOREHOLE GROUTING FOR DIRECT PUSH BORINGS

Upon completion of soil and water sampling, boreholes will be abandoned with neat cement grout to the surface. If the borehole was advanced into groundwater, the grout is pumped through a grouting tube positioned at the bottom of the borehole.

STANDARD OPERATING PROCEDURE
–SOIL GAS SAMPLING

The collection of soil gas samples will not be conducted in the event of precipitation or heavy irrigation. 5-days of dry weather and the lack or heavy irrigation is required prior to the collection of the vapor samples.

The installation of the sample probes and the sampling procedures follows the Department of Toxic Substances Control, California Environmental Protection Agency, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air Vapor Intrusion Guidance document dated October 2011. The procedures for leak testing and purge volume testing follow the California Environmental Protection Agency, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, San Francisco Regional Water Quality Control Board, Advisory for Active Soil Gas Investigations dated July 2015.

Sample rods with an expendable soil-gas sampling point are driven to the desired depth. The rods are retracted and clean sand is placed in the boring to approximately 6-inches above the sample point. 6-inches of granulated bentonite is then placed in the boring topped with bentonite slurry to the surface. The bentonite will be allowed to hydrate and expand for at least 2 hours prior to purging the sample line.

The soil gas sample is collected into a Summa canister. A summa canister is a stainless steel vessel which has had the internal surfaces specially passivated using a “Summa” process. The Summa canister arrives pre-cleaned from the laboratory and with an internal vacuum between 25” Hg and 30” Hg. Prior to use, the pressure in the summa canister is checked by the sampler with a pressure gauge to ensure a vacuum of at least 25” Hg for quality control purposes.

A sampling manifold is connected to the sample tubing which originated from the target depth for the sample collection. The sample manifold is connected to a purge Summa canister and a sample Summa canister. The sample manifold contains a gauge to display the vacuum remaining in the canister, valves to isolate the sample train, a particulate filter, and a flow controller to maintain a low purge rate.

A leak test is performed on the sampling manifold prior to sample collection. A vacuum is applied and required to stabilize and remain at the same pressure for a time period of 30 minutes. Once the leak test has been performed a vacuum is applied to the tubing to purge at least three volumes of air from the sample tubing at a purge rate from 100 to 200 ml/min.

The valve on the summa canister is opened, and the soil-gas sample is drawn into the canister. The sample tubing will be checked for water. If observed, the sample will be discarded. The sample collection will be stopped with about 5-inches Hg remaining in the Summa canister. The soil-gas samples will be transferred under chain-of-custody procedures to a state certified laboratory for analyses.

As a leak detector isopropyl alcohol (2-propanol) will be used in a shroud during sample collection. Analysis of the sample for isopropyl alcohol (2-propanol) will indicate if ambient air entered the sample. A sample of the shroud will also be collected and analyzed for isopropyl alcohol (2-propanol).

APPENDIX D

Lithologic Logs

ERAS Environmental	Log of Boring SB-1
PROJECT: *16-004-02*	ADDRESS: *0 29th Avenue, Oakland, CA*
JOB NUMBER: *16-004-02*	LOCATION: *near Derby Street*
DATE STARTED: *06-14-17*	First Water (ft. bgs.): *NA* DATE: ---
DATE FINISHED: *06-14-17*	TOTAL DEPTH: *10 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ECA*	Reviewed By: ---

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION
							1/4 to 1/2 inch gravel to dust + fill
	4' 0						Silty Clay (CL), dark brown (10YR-3/3), damp, medium stiff, medium plasticity, no contaminant odor
5							at 5.5 feet, color change to dark greenish gray (Gley1-4/1), no contaminant odor
	7' 0						at 7.5 feet, 10-15% fine to course well graded sand, no contaminant odor
10	10' 0.5						Bottom of boring 10 feet bgs 06-14-17
15							
20							

ERAS Environmental	Log of Boring SB-2
PROJECT: *16-004-02*	ADDRESS: *0 29th Avenue, Oakland, CA*
JOB NUMBER: *16-004-02*	LOCATION: *half way back in parking area*
DATE STARTED: *06-14-17*	First Water (ft. bgs.): *NA* DATE: ---
DATE FINISHED: *06-14-17*	TOTAL DEPTH: *10 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ECA*	Reviewed By: ---

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION
							1/4 to 1/2 inch gravel to dust + fill
	4' 0						Silty Clay (CL), dark brown (10YR-3/3), damp, medium stiff, medium plasticity, no contaminant odor
5	7' 0						at 5 feet, color change to dark yellowish brown (10YR-4/6)
10	10' 0.5						Bottom of boring 10 feet bgs 06-14-17
15							
20							

ERAS Environmental	Log of Boring SB-3
PROJECT: *16-004-02*	ADDRESS: *0 29th Avenue, Oakland, CA*
JOB NUMBER: *16-004-02*	LOCATION: *back of parking area*
DATE STARTED: *06-14-17*	First Water (ft. bgs.): *NA* DATE: ---
DATE FINISHED: *06-14-17*	TOTAL DEPTH: *10 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ECA*	Reviewed By: ---

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION
							1/4 to 1/2 inch gravel to dust + fill
	4' 0.1						Silty Clay (CL), dark brown (10YR-3/3), damp, medium stiff, medium plasticity, no contaminant odor
5							at 5 feet, color change to dark yellowish brown (10YR-4/6)
	7' 0						
10	10' 0						Bottom of boring 10 feet bgs 06-14-17
15							
20							

ERAS Environmental	Log of Boring SB-4
PROJECT: *16-004-02*	ADDRESS: *0 29th Avenue, Oakland, CA*
JOB NUMBER: *16-004-02*	LOCATION: *dirt nearest parking lot*
DATE STARTED: *06-14-17*	First Water (ft. bgs.): *NA* DATE: ---
DATE FINISHED: *06-14-17*	TOTAL DEPTH: *10 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ECA*	Reviewed By: ---

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION
							Sand/Gravel/Organics (Fill)
	4' 0						Silty Clay (CL), dark brown (10YR-3/3), stiff, medium plasticity, no contaminant odor
5							at 5.5 feet, color change to dark yellowish brown (10YR-4/6)
	7' 0						at 7 feet
							Clayey Silt (ML), dark yellowish brown (10YR-4/6), damp, stiff, low plasticity, 70% fines, 20% fine to course well graded sand, 10% 1/8 to 1/2 inch gravel, no contaminant odor
10	10' 0.1						Bottom of boring 10 feet bgs 06-14-17
15							
20							

ERAS Environmental	Log of Boring SB-5
PROJECT: *16-004-02*	ADDRESS: *0 29th Avenue, Oakland, CA*
JOB NUMBER: *16-004-02*	LOCATION: *dirt area, middle, nearest E 12th*
DATE STARTED: *06-14-17*	First Water (ft. bgs.): *NA* DATE: ---
DATE FINISHED: *06-14-17*	TOTAL DEPTH: *10 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ECA*	Reviewed By: ---

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION
							Sand/Gravel/Organics (Fill)
							Silty Clay (CL), dark brown (10YR-3/3), damp, stiff, medium plasticity, no contaminant odor
	4' 0.1						
5							at 4.5 feet, color change to dark yellowish brown (10YR-4/6)
	7' 0						
							at 9 feet
10	10' 0						Clayey Silt (ML), dark yellowish brown (10YR-4/6), damp, stiff, low plasticity, 70% fines, 20% fine to course well graded sand, 10% 1/8 to 1/2 inch gravel, no contaminant odor
							Bottom of boring 10 feet bgs 06-14-17
15							
20							

ERAS Environmental	Log of Boring SB-6
PROJECT: *16-004-02*	ADDRESS: *0 29th Avenue, Oakland, CA*
JOB NUMBER: *16-004-02*	LOCATION: *dirt area*
DATE STARTED: *06-14-17*	First Water (ft. bgs.): *NA* DATE: ---
DATE FINISHED: *06-14-17*	TOTAL DEPTH: *10 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ECA*	Reviewed By: ---

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION
							Sand/Gravel/Organics (Fill)
	4' 0						Silty Clay (CL), dark brown (10YR-3/3), damp, medium stiff, medium plasticity, no contaminant odor
5							
	7' 0						at 7 feet, dark yellowish brown (10YR-3/4)
10	10' 0						Bottom of boring 10 feet bgs 06-14-17
15							
20							

ERAS Environmental	Log of Boring SB-7
PROJECT: *16-004-02*	ADDRESS: *0 29th Avenue, Oakland, CA*
JOB NUMBER: *16-004-02*	LOCATION: *by 2nd Avenue*
DATE STARTED: *06-14-17*	First Water (ft. bgs.): *NA* DATE: ---
DATE FINISHED: *06-14-17*	TOTAL DEPTH: *10 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ECA*	Reviewed By: ---

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION
							Sand/Gravel/Organics (Fill)
							Silty Clay (CL), dark brown (10YR-3/3), damp, medium stiff, medium plasticity, no contaminant odor
	4' 0						
5							
	7' 0						
							at 8 feet, dark yellowish brown (10YR-3/4)
10	10' 0.1						Bottom of boring 10 feet bgs 06-14-17
15							
20							

APPENDIX E

Field Forms – Soil Gas

Soil Vapor/Sub-Slab Sampling Data Sheet

Project Number: ERAS-04
Client: _____
Date: 6-15-17
Facility: _____
Sampler: Ross Tinline
Address: 0 29th Avenue
Weather: Sunny Warm

Location: SV-1 Pore volume calc. 1 ring = 308.8mL Note: All vacuum (Vac) readings in "Hg

Purge Calculation & Target Volume: Sand = 2 rings x 308.8mL x 37% porosity = 228.5 ∴ 1 pore volume = 430.9mL
Dry, bentonite = 1 ring x 308.8mL x 50% porosity = 154.4 3 pore volumes = 1292.7mL
8 1/4" tubing = 6mL/ft = 48 mL

	Start Time	Initial Vac	End Time	Final Vac	Back Vac	Notes (Passed / completed / purge volume removed)
Vac Test	08:50	23.01	9:01	22.94		Held sufficiently tight. P△ due to T°△
Purge	9:03	—	9:23	—	1	
Sampling	9:28	29.71	9:36	4.85	See below	

Measurements during sampling - Drops IPA in Shroud = 19

Time	929	930	931	932	933	934	935	936	END
Vac	27 24.8	23 21	19.1 17.3	15.7 14.0	12.2 10.7	9.5 8.7	7.6 6.6	5.8 4.85	—
PID ppmv	0.3 2.8	4.2 5.1	6.2 6.1	5.1 5.1	4.7 6.8	7.0 6.0	5.5 4.6	6.0 5.6	—
Back Vac	3.5	3.5	3.5	3.4	3.2	2.2	1.8	1	

At SV-1 Purge Test Performed on only probe to host odor duplex installation 1,2,3,4,5 Pore volumes

Notes: or additional measurements
1 pore volume = 6.2 ppm 4 = 2.6 ppmV 1 pore volume was measurement
2 pore volume = 2.4 ppmV 5 = 3.0 ppmV PID measurement
3 pore volumes = 4.7
Setup TO-17 tube at QC fitting at end of manifold. 945-948AM removed 200mL utilizing syringe.

Location: SV-2

Purge Calculation & Target Volume: Purge 1 volume of pore space or ~430.9mL prior to sampling.

	Start Time	Initial Vac	End Time	Final Vac	Back Vac	Notes (Passed / completed / purge volume removed)
Vac Test	10:13	19.93	10:23	20.01		Held tight & increased vac due to T°△
Purge	10:23	—	10:28	—	12.8"	Purged with Syringe
Sampling	10:31	29.49	10:43	23.84	See below	

Measurements during sampling - Drops IPA in Shroud = 16

Time	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043
Vac	28	26.8	26	25.48	25.05	24.74	24.46	24.28	24.13	24.00	23.91	23.84
PID ppmv	1.4	2.4	1.7	1.5	1.8	3.0	5.0	2.2	3.1	3.7	5.7	8.2
Back Vac	16					21.5	21.7		23	23.3		23.8

END due to low flow.

Notes: or additional measurements
1046 = 23.01 "Hg } Flow insufficient to draw TO17 tube for
1047 = 22.98 "Hg } naphthalene analysis (valve open to manifold only).

Location: SV-3

Purge Calculation & Target Volume: Purge 1 volume as above.

	Start Time	Initial Vac	End Time	Final Vac	Back Vac	Notes (Passed / completed / purge volume removed)
Vac Test	11:08	20.84	11:18	20.85		Held tight.
Purge	11:19		11:27		10	utilized syringe to purge 430mL.
Sampling	11:29	29.74	11:42	22.48	See below	

Measurements during sampling - Drops IPA in Shroud = 18

Time	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142
Vac	27.8	26.4	25.3	24.5	24	23.5	23.3	23.05	22.80	22.74	22.62	22.53	22.48
PID ppmv	3.1	4.2	6.2	5.2	6.3	5.5	6.4	6.9	7.7	11.8	8.6	8.1	8.5
Back Vac		16.8			20		21.5		22		22.3		22.5

END due to low flow.

Notes: or additional measurements
1148 = 22.04 "Hg } Very low to no flow; tight clay; no TO-17 tube possible.
1149 = 22.04 "Hg }

Soil Vapor/Sub-Slab Sampling Data Sheet

Project Number: ERAS-04
Client:
Facility:
Address: "0" 29th Ave Oakland
Date: 6-15-17
Sampler: Ross Tinline
Weather: Sunny Hot.

Location: SV-4

Note: All vacuum (Vac) readings in "Hg

Purge Calculation & Target Volume: Purged 1 pore volume as previously calculated.

	Start Time	Initial Vac	End Time	Final Vac	Back Vac	Notes: (Passed / completed / purge volume removed)
Vac Test	12:40	20.30	12:50	20.31	—	Held tight.
Purge	12:52	—	12:01	—	Max 9	Purged 430mL with syringe.
Sampling	1:04	29.71	1:27	5.05	See below	

Measurements during sampling - Drops IPA in Shroud = 16

Time	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122
Vac	27.7	26.4	24.3	22.5	21	19.8	18.6	17.4	16.3	15.3	14.3	13.4	12.4	11.6	10.7	9.9	9.2	8.5	7.8
PID ppmv	2.4	6.3	11	16	13.1	12.5	13.6	9.6	11.6	5.1	4.1	5.5	23	9.7	9.3	12	9.5	7	11.4
Back Vac		11		14		14		13.3		11.5		10.7		9.4		8		7	

Notes: or additional measurements

Time	123	124	125	126	127	
Vac	7.1	6.5	6.0	5.5	5.05	END
PID ppmv	14	9.8	6.6	7.1	7.0	
Back Vac	5.9		4.9		4.2	

Location: SV-5

Set up sorbent tube & pulled 200mL 1:32-1:37 @ <5"Hg back vac

Purge Calculation & Target Volume: Purge as previous of 1 pore vol utilizing syringe.

	Start Time	Initial Vac	End Time	Final Vac	Back Vac	Notes: (Passed / completed / purge volume removed)
Vac Test	2:03	19.84	2:13	19.85		Held tight
Purge	2:14	—	2:19	—	< 3	Completed 430mL with syringe.
Sampling	2:21	29.60	2:33	4.65	See below	

Measurements during sampling - Drops IPA in Shroud = 12

Time	222	223	224	225	226	227	228	229	230	231	232	233
Vac	27.3	25.8	24.3	22.4	21.5	19.8	18.7	17.5	15.1	13.2	11.1	9.3	7.8	6.5	5.4	4.65
PID ppmv	4.9	5.4	7.1	7.8	8.0	8.2	7.7	8.0	6.4	6.6	6.8	7.8	7.1	8.3	8.1	7.4
Back Vac			5.5		6.0		6.0		5.0		3.6		2.6			1.5

END

Notes: or additional measurements

Set up TO-17 tube pulled 200mL thru tube; 2:37-~~2:41~~1:36

Location: SV-6

Purge Calculation & Target Volume: Purge as previous.

	Start Time	Initial Vac	End Time	Final Vac	Back Vac	Notes. (Passed / completed / purge volume removed)
Vac Test	2:55	20.05	3:05	20.10		Held tight & increased due to T°Δ.
Purge	3:05	—	3:13	—	10	Purged 430mL w syringe
Sampling	3:15	29.47	4:28	7.50	See below	

Measurements during sampling - Drops IPA in Shroud = 17

Time	316	317	318	319	320	321	322	323	324	325	327	328	329	330
Vac	27.6	26.2	25.5	25.2	24.7	24.3	23.7	23.1	22.6	22.1	21.7	21.3	20.5	20.2	19.93	19.4
PID ppmv	4.1	6.1	8.6	8.2	7.9	8.3	9.0	8.6	8.9	9.5	9.8	11.0	9.3	12.1	14.1	12.7
Back Vac		16.5		17.5		18.5		19.5		18.3				19		

Notes: or additional measurements

Shroud sample end

Time	331	332	333	334	335	336
Vac	19.33	19.03	18.74	18.45	18.18	17.9
PID	8.6	10.0	11.7	9.3	17.4	13.0
Back Vac	18.5		18		17.9	

next page

Soil Vapor/Sub-Slab Sampling Data Sheet

Project Number: ERAS-04
Client:
Facility:
Address: 0 29th Ave, Oakland
Date: 6/15/17
Sampler: Ross Tinline
Weather: Sunny Warm

Location: SV-6 continued from previous page. Note: All vacuum (Vac) readings in "Hg

Purge Calculation & Target Volume:

	Start Time	Initial Vac	End Time	Final Vac	Back Vac	Notes. (Passed / completed / purge volume removed)
Vac Test	:		:			
Purge	:		:			
Sampling	:		:		See below	

Measurements during sampling - Drops IPA in Shroud =

Time	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354
Vac	17.6	17.36	17.09	16.83	16.56	16.3	16.05	15.8	15.55	15.3	15.05	14.8	14.6	14.4	14.1	13.9	13.7	13.46
PID ppmv	8.7	6.5	6.1	5.3	3.6	7.2	3.0	4.4	3.0	3.1	1.9	1.8	2.6	2.1	1.7	1.2	1.5	1.5
Back Vac	17.3		16.9		16.5			16		15.5		15.		14.5		14.1		13.8

Notes: or additional measurements

	355	356	357	358	359	400	401	402	403	404	405	406	407	408
Vac	13.23	13.0	12.81	12.62	12.41	12.2	12	11.81	11.61	11.42	11.23	11.04	10.86	10.66
PID	1.0	1.5	3.8	6.2	3.3	5.5	4.1	8.4	4.5	6.8	6.0	6.7	4.4	6.9
Back Vac	13.5		13.1		12.8		12.5		12		12			11

@ added 5 drops IPA

Location: SV-6(cnt) continued.

Purge Calculation & Target Volume:

	Start Time	Initial Vac	End Time	Final Vac	Back Vac	Notes: (Passed / completed / purge volume removed)
Vac Test	:		:			
Purge	:		:			
Sampling	:		:		See below	

Measurements during sampling - Drops IPA in Shroud =

Time	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427
Vac	10.47	10.29	10.12	9.94	9.78	9.61	9.44	9.28	9.11	8.95	8.79	8.64	8.48	8.32	8.18	8.03	7.88	7.74	7.60
PID ppmv	8.2	3.8	7.1	6.3	5.7	5.4	7.0	6.3	5.1	4.6	4.7	3.6	3.1	2.8	2.2	2.1	2.0	1.8	1.2
Back Vac		10.7			10.2			9.7			9.2			8.8			8.3		

Notes: or additional measurements

End @ 4:28 @ 7.50 "Hg 1.4 ppmv 7 "Hg back vac
Too much back vacuum to pull TO-17 vs. manifold - by TO15.

Location: SV-7

Purge Calculation & Target Volume: Purged on previous.

	Start Time	Initial Vac	End Time	Final Vac	Back Vac	Notes: (Passed / completed / purge volume removed)
Vac Test	4:45	19.91	4:55	19.96	—	Tight; increased Vac due to T°C
Purge	4:55	—	5:01	~	9	430 mL purged to syringe
Sampling	5:13	28.75	:		See below	

Measurements during sampling - Drops IPA in Shroud = 17

Time	5:14	515	516	517	518	519	520	521	522	523	524	525	526
Vac	26.5	24.9	23.7	22.8	22.2	21.7	21.3	21.05	20.85	20.69	20.58	20.48	20.42
PID ppmv	6.5	5.7	6.2	8.5	5.9	7.1	6.0	5.4	5.9	7.0	6.3	6.0	5.8
Back Vac		15.5		17.9		19.2		20		20.2			20.5

END due to Low Flow.

Notes: or additional measurements

5:27 = 19.96 "Hg Not sufficient flow - valve to probe open to manifold
5:28 = 19.94 "Hg. No TO17 tube feasible.

APPENDIX F

Site Conceptual Model and Data Gap Summary

Site Conceptual Model

CSM Element	CSM Sub-Element	Description	Data Gap Item #	Resolution
Geology and Hydrogeology	Regional	The Property is in the southern part of the City of Oakland in the San Francisco Bay area. The San Francisco Bay area occupies a broad alluvial valley that slopes gently northward toward Oakland Bay and is flanked by alluvial fans deposited at the foot of the Diablo Range to the east and the Santa Cruz Mountains to the west. Surface topography in the immediate vicinity of the Property is gently sloping down to the south west towards tidally influenced Brooklyn Basin Tidal Canal. The Property is at an elevation of approximately 40 feet above Mean Sea Level according to the United States Geological Survey (USGS) Oakland East Quadrangle California 7.5 Minute Series topographic map. Materials underlying the Property are unconsolidated deposits of near shore and beach sediments, deposited in Oakland Bay at higher sea level stands. At shallow depths beneath these sediments are chert, greywacke, serpentine and shale bedrock that are a part of the Cretaceous to Jurassic-aged Franciscan Formation. Bedrock is exposed to the west and north on the upland surfaces. Based on borings drilled on the adjacent site, the subsurface sediments consist of clayey sand to depths of 18-20 feet underlain by clay. The subject Property is located on the San Francisco Bay Plain in the northernmost part of the Santa Clara Valley Groundwater Basin, (DWR, 1967), the surface of which slopes gently down toward the north. The regional groundwater flow follows the topography, moving from areas of higher elevation to areas of lower elevation. The regional groundwater flow direction in the area of the Property is estimated to be toward the southwest toward the Brooklyn Basin Tidal Canal. Groundwater monitoring at an adjacent leak site (1112 29th Avenue), indicated that the flow direction has been determined to be to the southwest.	None	NA

Site Conceptual Model (Continued)

CSM Element	CSM Sub-Element	Description	Data Gap Item #	Resolution
Geology and Hydrogeology	Site	Shallow groundwater is at roughly 24 to 28 feet bgs. No groundwater monitoring has been conducted on the Property but based on nearby leak cases with active groundwater monitoring the groundwater has been determined to flow toward the southwest at a gradient of about 0.01 foot/foot. The shallow water-bearing zone at the Property is found in the clayey sand (containing sand, silt, clay and gravel). Groundwater is generally under water-table conditions, but may be locally confined by the clay underlying the fill. The base of the shallow water bearing zone has not been determined.	1. There are no monitoring wells on Property to establish Property specific groundwater depth, flow direction, and gradient.	N/A
Surface Water Bodies		The closest surface water body is Sausal Creek, which is approximately 850 feet northeast of the Property.		N/A
Nearby Wells		A well survey has not been conducted for the Property		N/A
Release Source and Volume		The release source and volume are unknown. It is suspected that the fill imported to level the Property may have been impacted prior to placement on the Property. The fill which is present on the Property is from an unknown source. A review of a 1950 Sanborn Fire Insurance Map indicates that the Property contained two sets of railroad lines. Phase 2 subsurface investigations were performed for the adjacent site at 3001-3015 East 12th Street by Tec Accutite (TEC) in 2007. A total of five borings were drilled during the investigations, B-1 and B-2 at 3001-3005 East 12th Street and B-3, B-4 and B-5 on the Property. Soil samples were collected from these borings from depths between 8 and 14 feet below the ground surface (bgs). Groundwater was collected only from B-1 and B-2 and was encountered at depths of approximately 24 feet in B-1 and 28 feet in B-2 below ground surface (bgs). No groundwater samples were collected on the Property. An additional limited phase II subsurface investigation was conducted by ERAS in June of 2017. Soil samples were collected from depth ranges of 0-5 feet bgs and 5-10 feet bgs along with soil gas samples from seven boring locations spaced throughout the Property. No additional evidence of a release was identified on the Property.	2. The source of the contaminants of concern (TPH, VOCs, PCBs, PNAs, PAHs, SVOCs, and metal) are unknown.	N/A

Site Conceptual Model (Continued)

CSM Element	CSM Sub-Element	Description	Data Gap Item #	Resolution
LNAPL		There are currently no groundwater monitoring wells located on the Property. There is no evidence that LNAPL would be present on the Property.		
Source Removal Activities		No source area has been identified for removal. With the exception of nickel in the soil samples collected and chloroform in the soil gas samples collected all other contaminants of concern (COCs) are below the Tier 1 ESLs. The nickel concentrations are within background ranges and are considered not anthropogenic. No known source of the soil vapor concentrations of chloroform have been identified and the detected concentrations were below the commercial ESL. The Property is zoned commercial.	2. The source of the contaminants of concern (TPH, VOCs, PCBs, PNAs, PAHs, SVOCs, and metal) are unknown.	
Contaminants of Concern		Based on the historical investigations and communications with the Alameda County Health Care Services Agency the contaminants of concern have been determined to include the following: TPH, VOCs, PCBs, PNAs, PAHs, SVOCs, and metal.	2. The source of the contaminants of concern (TPH, VOCs, PCBs, PNAs, PAHs, SVOCs, and metal) are unknown.	
Contaminants of Concern in Soil		No concentrations of fuel hydrocarbons or VOCs were detected in the soil samples collected on the Property. No concentrations of PCBs with the exception of a sample collected from B-4 and SB-7 contained concentrations of PCBs above the MDL. The sample from B-4 collected from 14 feet bgs contained a concentration of 0.272 mg/Kg of PCB (Aloclor 1016). The sample collected from 9.5-10 feet bgs from SB-7 contained a concentration of 0.040 mg/Kg of PCB (Aloclor 1254) which is above the Tier 1 ESL but below the ESL for direct exposure on a commercial site and below the ESL for the potential leaching to groundwater. The Property is zoned commercial. Naphthalene was detected at concentrations ranging from below the MDL to 0.0021 mg/Kg. The concentrations of naphthalene were detected in the samples collected from borings SB-2, SB-3, SB-4, and SB-5. None of the concentrations detected exceeded the ESL for direct exposure on a commercial site and were below the ESL for the potential leaching to groundwater.	2. The source of the contaminants of concern (TPH, VOCs, PCBs, PNAs, PAHs, SVOCs, and metal) are unknown.	

Site Conceptual Model (Continued)

CSM Element	CSM Sub-Element	Description	Data Gap Item #	Resolution
		No concentrations of PAHs or PNAs were detected above the ESL for direct exposure on a commercial site or the ESL for the potential leaching to groundwater. Only boring SB-5 and SB-7 were found to contain concentrations of PAHs or PNAs other than naphthalene (previously discussed) above their respective MDLs. PAHs and PNAs detected included benzo (a) anthracene, benzo (b) pyrene, benzo (b) fluoranthene, benzo (g,h,i) perylene, benzo (k) fluoranthene, chrysene, fluoranthene, phenanthene, and pyrene. With the exception of nickel, concentrations of metals in soil were below the Tier 1 ESLs. All metals appeared to be within the typical range of background soil concentrations. .		
Contaminants of Concern in Groundwater		No groundwater samples have been collected from the Property.		
Contaminants of Concern in Soil Gas		Oxygen was detected in the samples collected from borings SV-1 through SV-7 at 5.6% to 18%. Methane was detected from below the MDL up to 0.0052%. Carbon dioxide was detected from below the MDL up to 5.0%. Numerous VOCs on the TO-15 list were detected however no concentrations were found to exceed the ESLs for vapor intrusion and health risk on a commercial Property. Naphthalene on the TO-15 list was found to be below the MDL in all borings. Of the VOCs detected only chloroform was detected above the Tier 1 ESLs in the samples collected from borings SV-2, SV-3, SV-5, and SV-6 at concentrations up to 100 µg/m³. Naphthalene was analyzed for by TO-17 from borings SV-1, SV-4, and SV-5. No concentrations above the MDL were detected. An insufficient amount of soil gas flow was available from borings SV-2, SV-3, SV-6 and SV-7 due to tight clay conditions for the analysis for naphthalene by EPA Method TO-17.	2. The source of the contaminants of concern (TPH, VOCs, PCBs, PNAs, PAHs, SVOCs, and metal) are unknown.	
Risk Evaluation		The Property is zoned for commercial land use. The Property has been adequately characterized. No concentrations	2. The source of the contaminants of concern (TPH,	.

Site Conceptual Model (Continued)

CSM Element	CSM Sub-Element	Description	Data Gap Item #	Resolution
		of the COCs have been found to exceed the commercial ESLs in soil or soil gas. With the exception of nickel in the soil samples collected and chloroform in the soil gas samples collected all other COCs are also below the Tier 1 ESLs as well. The nickel concentrations are within background ranges and are considered not anthropogenic. No known source of the soil vapor concentrations of chloroform have been identified.	VOCs, PCBs, PNAs, PAHs, SVOCs, and metal) are unknown.	

Data Gaps Summary and Proposed Investigation

Item	Data Gap Item #	Proposed Investigation	Rationale	Analyses
1	There are no monitoring wells on Property to establish site specific groundwater depth, flow direction, and gradient.	None at this time	The local groundwater depth, flow direction, and gradient are well known based on nearby leak sites	N/A
2	2. The source of the contaminants of concern (TPH, VOCs, PCBs, PNAs, PAHs, SVOCs, and metal) are unknown.	None at this time	The Property is zoned for commercial land use. The Property has been adequately characterized. No concentrations of the COCs have been found to exceed the commercial ESLs in soil or soil gas. With the exception of nickel in the soil samples collected and chloroform in the soil gas samples collected all other COCs are also below the Tier 1 ESLs as well. The nickel concentrations are within background ranges and are considered not anthropogenic. No known source of the soil vapor concentrations of chloroform have been identified.	N/A

APPENDIX G

Analytical Results – Soil

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1706802

Report Created for: ERAS Environmental, Inc.

1533 B Street
Hayward, CA 94541

Project Contact: Andrew Savage
Project P.O.:
Project Name: 16-004-025

Project Received: 06/15/2017

Analytical Report reviewed & approved for release on 06/22/2017 by:

Angela Rydelius,
Laboratory Manager

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
CA ELAP 1644 ♦ NELAP 4033ORELAP

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: ERAS Environmental, Inc.
Project: 16-004-025
WorkOrder: 1706802

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: ERAS Environmental, Inc.
Project: 16-004-025
WorkOrder: 1706802

Analytical Qualifiers

J	Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
a3	Sample diluted due to high organic content.
h4	Sulfuric acid permanganate (EPA 3665) cleanup

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8082
Project:	16-004-025	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1,3.5-4	1706802-001A	Soil	06/14/2017 08:32	GC23	140541

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/20/2017 11:33
Aroclor1221	ND	0.033	0.050	1	06/20/2017 11:33
Aroclor1232	ND	0.0032	0.050	1	06/20/2017 11:33
Aroclor1242	ND	0.0035	0.050	1	06/20/2017 11:33
Aroclor1248	ND	0.0036	0.050	1	06/20/2017 11:33
Aroclor1254	ND	0.0022	0.050	1	06/20/2017 11:33
Aroclor1260	ND	0.0085	0.050	1	06/20/2017 11:33
PCBs, total	ND	0.0040	0.050	1	06/20/2017 11:33

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	112	70-130	06/20/2017 11:33

Analyst(s): LT

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1,9.5-10	1706802-002A	Soil	06/14/2017 08:39	GC23	140541

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/20/2017 05:05
Aroclor1221	ND	0.033	0.050	1	06/20/2017 05:05
Aroclor1232	ND	0.0032	0.050	1	06/20/2017 05:05
Aroclor1242	ND	0.0035	0.050	1	06/20/2017 05:05
Aroclor1248	ND	0.0036	0.050	1	06/20/2017 05:05
Aroclor1254	ND	0.0022	0.050	1	06/20/2017 05:05
Aroclor1260	ND	0.0085	0.050	1	06/20/2017 05:05
PCBs, total	ND	0.0040	0.050	1	06/20/2017 05:05

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	99	70-130	06/20/2017 05:05

Analyst(s): SS

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8082
Project:	16-004-025	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2,3.4-4	1706802-003A	Soil	06/14/2017 09:07	GC23	140541

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/20/2017 05:18
Aroclor1221	ND	0.033	0.050	1	06/20/2017 05:18
Aroclor1232	ND	0.0032	0.050	1	06/20/2017 05:18
Aroclor1242	ND	0.0035	0.050	1	06/20/2017 05:18
Aroclor1248	ND	0.0036	0.050	1	06/20/2017 05:18
Aroclor1254	ND	0.0022	0.050	1	06/20/2017 05:18
Aroclor1260	ND	0.0085	0.050	1	06/20/2017 05:18
PCBs, total	ND	0.0040	0.050	1	06/20/2017 05:18

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	108	70-130	06/20/2017 05:18

Analyst(s): SS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2,9.5-10	1706802-004A	Soil	06/14/2017 09:14	GC23	140541

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/21/2017 14:51
Aroclor1221	ND	0.033	0.050	1	06/21/2017 14:51
Aroclor1232	ND	0.0032	0.050	1	06/21/2017 14:51
Aroclor1242	ND	0.0035	0.050	1	06/21/2017 14:51
Aroclor1248	ND	0.0036	0.050	1	06/21/2017 14:51
Aroclor1254	ND	0.0022	0.050	1	06/21/2017 14:51
Aroclor1260	ND	0.0085	0.050	1	06/21/2017 14:51
PCBs, total	ND	0.0040	0.050	1	06/21/2017 14:51

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	101	70-130	06/21/2017 14:51

Analyst(s): SS Analytical Comments: h4

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8082
Project:	16-004-025	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3,3.4-4	1706802-005A	Soil	06/14/2017 09:38	GC23	140609

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/20/2017 12:13
Aroclor1221	ND	0.033	0.050	1	06/20/2017 12:13
Aroclor1232	ND	0.0032	0.050	1	06/20/2017 12:13
Aroclor1242	ND	0.0035	0.050	1	06/20/2017 12:13
Aroclor1248	ND	0.0036	0.050	1	06/20/2017 12:13
Aroclor1254	ND	0.0022	0.050	1	06/20/2017 12:13
Aroclor1260	ND	0.0085	0.050	1	06/20/2017 12:13
PCBs, total	ND	0.0040	0.050	1	06/20/2017 12:13

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	110	70-130	06/20/2017 12:13

Analyst(s): LT

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3,9.5-10	1706802-006A	Soil	06/14/2017 09:46	GC23	140609

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/21/2017 15:05
Aroclor1221	ND	0.033	0.050	1	06/21/2017 15:05
Aroclor1232	ND	0.0032	0.050	1	06/21/2017 15:05
Aroclor1242	ND	0.0035	0.050	1	06/21/2017 15:05
Aroclor1248	ND	0.0036	0.050	1	06/21/2017 15:05
Aroclor1254	ND	0.0022	0.050	1	06/21/2017 15:05
Aroclor1260	ND	0.0085	0.050	1	06/21/2017 15:05
PCBs, total	ND	0.0040	0.050	1	06/21/2017 15:05

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	94	70-130	06/21/2017 15:05

Analyst(s): SS Analytical Comments: h4

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8082
Project:	16-004-025	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4,3.4-4	1706802-007A	Soil	06/14/2017 10:26	GC23	140609

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/22/2017 16:38
Aroclor1221	ND	0.033	0.050	1	06/22/2017 16:38
Aroclor1232	ND	0.0032	0.050	1	06/22/2017 16:38
Aroclor1242	ND	0.0035	0.050	1	06/22/2017 16:38
Aroclor1248	ND	0.0036	0.050	1	06/22/2017 16:38
Aroclor1254	ND	0.0022	0.050	1	06/22/2017 16:38
Aroclor1260	ND	0.0085	0.050	1	06/22/2017 16:38
PCBs, total	ND	0.0040	0.050	1	06/22/2017 16:38

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	113	70-130	06/22/2017 16:38

Analyst(s): LT

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4,9.5-10	1706802-008A	Soil	06/14/2017 10:34	GC23	140609

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/20/2017 05:45
Aroclor1221	ND	0.033	0.050	1	06/20/2017 05:45
Aroclor1232	ND	0.0032	0.050	1	06/20/2017 05:45
Aroclor1242	ND	0.0035	0.050	1	06/20/2017 05:45
Aroclor1248	ND	0.0036	0.050	1	06/20/2017 05:45
Aroclor1254	ND	0.0022	0.050	1	06/20/2017 05:45
Aroclor1260	ND	0.0085	0.050	1	06/20/2017 05:45
PCBs, total	ND	0.0040	0.050	1	06/20/2017 05:45

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	110	70-130	06/20/2017 05:45

Analyst(s): SS

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8082
Project:	16-004-025	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5,3.4-4	1706802-009A	Soil	06/14/2017 11:01	GC23	140609

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/20/2017 05:59
Aroclor1221	ND	0.033	0.050	1	06/20/2017 05:59
Aroclor1232	ND	0.0032	0.050	1	06/20/2017 05:59
Aroclor1242	ND	0.0035	0.050	1	06/20/2017 05:59
Aroclor1248	ND	0.0036	0.050	1	06/20/2017 05:59
Aroclor1254	ND	0.0022	0.050	1	06/20/2017 05:59
Aroclor1260	ND	0.0085	0.050	1	06/20/2017 05:59
PCBs, total	ND	0.0040	0.050	1	06/20/2017 05:59

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	103	70-130	06/20/2017 05:59

Analyst(s): SS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5,9.5-10	1706802-010A	Soil	06/14/2017 11:08	GC23	140609

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/21/2017 15:18
Aroclor1221	ND	0.033	0.050	1	06/21/2017 15:18
Aroclor1232	ND	0.0032	0.050	1	06/21/2017 15:18
Aroclor1242	ND	0.0035	0.050	1	06/21/2017 15:18
Aroclor1248	ND	0.0036	0.050	1	06/21/2017 15:18
Aroclor1254	ND	0.0022	0.050	1	06/21/2017 15:18
Aroclor1260	ND	0.0085	0.050	1	06/21/2017 15:18
PCBs, total	ND	0.0040	0.050	1	06/21/2017 15:18

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	85	70-130	06/21/2017 15:18

Analyst(s): SS Analytical Comments: h4

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8082
Project:	16-004-025	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-6,3.4-4	1706802-011A	Soil	06/14/2017 11:34	GC23	140609

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/20/2017 06:12
Aroclor1221	ND	0.033	0.050	1	06/20/2017 06:12
Aroclor1232	ND	0.0032	0.050	1	06/20/2017 06:12
Aroclor1242	ND	0.0035	0.050	1	06/20/2017 06:12
Aroclor1248	ND	0.0036	0.050	1	06/20/2017 06:12
Aroclor1254	ND	0.0022	0.050	1	06/20/2017 06:12
Aroclor1260	ND	0.0085	0.050	1	06/20/2017 06:12
PCBs, total	ND	0.0040	0.050	1	06/20/2017 06:12

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	107	70-130	06/20/2017 06:12

Analyst(s): SS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-6,9.5-10	1706802-012A	Soil	06/14/2017 11:42	GC23	140609

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/20/2017 06:25
Aroclor1221	ND	0.033	0.050	1	06/20/2017 06:25
Aroclor1232	ND	0.0032	0.050	1	06/20/2017 06:25
Aroclor1242	ND	0.0035	0.050	1	06/20/2017 06:25
Aroclor1248	ND	0.0036	0.050	1	06/20/2017 06:25
Aroclor1254	ND	0.0022	0.050	1	06/20/2017 06:25
Aroclor1260	ND	0.0085	0.050	1	06/20/2017 06:25
PCBs, total	ND	0.0040	0.050	1	06/20/2017 06:25

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	99	70-130	06/20/2017 06:25

Analyst(s): SS

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8082
Project:	16-004-025	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-7,3.5-4	1706802-013A	Soil	06/14/2017 12:14	GC23	140609

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	06/20/2017 06:39
Aroclor1221	ND	0.033	0.050	1	06/20/2017 06:39
Aroclor1232	ND	0.0032	0.050	1	06/20/2017 06:39
Aroclor1242	ND	0.0035	0.050	1	06/20/2017 06:39
Aroclor1248	ND	0.0036	0.050	1	06/20/2017 06:39
Aroclor1254	ND	0.0022	0.050	1	06/20/2017 06:39
Aroclor1260	ND	0.0085	0.050	1	06/20/2017 06:39
PCBs, total	ND	0.0040	0.050	1	06/20/2017 06:39

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	100	70-130	06/20/2017 06:39

Analyst(s): SS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-7,9.5-10	1706802-014A	Soil	06/14/2017 12:22	GC23	140609

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aroclor1016	ND		0.0051	0.050	1	06/21/2017 15:31
Aroclor1221	ND		0.033	0.050	1	06/21/2017 15:31
Aroclor1232	ND		0.0032	0.050	1	06/21/2017 15:31
Aroclor1242	ND		0.0035	0.050	1	06/21/2017 15:31
Aroclor1248	ND		0.0036	0.050	1	06/21/2017 15:31
Aroclor1254	**0.040**	J	0.0022	0.050	1	06/21/2017 15:31
Aroclor1260	ND		0.0085	0.050	1	06/21/2017 15:31
PCBs, total	**0.040**	J	0.0040	0.050	1	06/21/2017 15:31

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	89	70-130	06/21/2017 15:31

Analyst(s): SS Analytical Comments: h4

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"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1,3.5-4	1706802-001A	Soil	06/14/2017 08:32	GC35	140618

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.0026	0.010	1	06/20/2017 23:38
Acenaphthylene	ND	0.0034	0.010	1	06/20/2017 23:38
Anthracene	ND	0.0029	0.010	1	06/20/2017 23:38
Benzo (a) anthracene	ND	0.0017	0.010	1	06/20/2017 23:38
Benzo (a) pyrene	ND	0.0027	0.010	1	06/20/2017 23:38
Benzo (b) fluoranthene	ND	0.0015	0.010	1	06/20/2017 23:38
Benzo (g,h,i) perylene	ND	0.0033	0.010	1	06/20/2017 23:38
Benzo (k) fluoranthene	ND	0.0016	0.010	1	06/20/2017 23:38
Chrysene	ND	0.0024	0.010	1	06/20/2017 23:38
Dibenzo (a,h) anthracene	ND	0.0050	0.010	1	06/20/2017 23:38
Fluoranthene	ND	0.0040	0.010	1	06/20/2017 23:38
Fluorene	ND	0.0060	0.010	1	06/20/2017 23:38
Indeno (1,2,3-cd) pyrene	ND	0.0049	0.010	1	06/20/2017 23:38
1-Methylnaphthalene	ND	0.0029	0.010	1	06/20/2017 23:38
2-Methylnaphthalene	ND	0.0020	0.010	1	06/20/2017 23:38
Naphthalene	ND	0.0016	0.010	1	06/20/2017 23:38
Phenanthrene	ND	0.0035	0.010	1	06/20/2017 23:38
Pyrene	ND	0.0045	0.010	1	06/20/2017 23:38

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	104	30-130	06/20/2017 23:38
2-Fluorobiphenyl	108	30-130	06/20/2017 23:38

Analyst(s): REB

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McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1,9.5-10	1706802-002A	Soil	06/14/2017 08:39	GC35	140618

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.0026	0.010	1	06/21/2017 00:04
Acenaphthylene	ND	0.0034	0.010	1	06/21/2017 00:04
Anthracene	ND	0.0029	0.010	1	06/21/2017 00:04
Benzo (a) anthracene	ND	0.0017	0.010	1	06/21/2017 00:04
Benzo (a) pyrene	ND	0.0027	0.010	1	06/21/2017 00:04
Benzo (b) fluoranthene	ND	0.0015	0.010	1	06/21/2017 00:04
Benzo (g,h,i) perylene	ND	0.0033	0.010	1	06/21/2017 00:04
Benzo (k) fluoranthene	ND	0.0016	0.010	1	06/21/2017 00:04
Chrysene	ND	0.0024	0.010	1	06/21/2017 00:04
Dibenzo (a,h) anthracene	ND	0.0050	0.010	1	06/21/2017 00:04
Fluoranthene	ND	0.0040	0.010	1	06/21/2017 00:04
Fluorene	ND	0.0060	0.010	1	06/21/2017 00:04
Indeno (1,2,3-cd) pyrene	ND	0.0049	0.010	1	06/21/2017 00:04
1-Methylnaphthalene	ND	0.0029	0.010	1	06/21/2017 00:04
2-Methylnaphthalene	ND	0.0020	0.010	1	06/21/2017 00:04
Naphthalene	ND	0.0016	0.010	1	06/21/2017 00:04
Phenanthrene	ND	0.0035	0.010	1	06/21/2017 00:04
Pyrene	ND	0.0045	0.010	1	06/21/2017 00:04

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	104	30-130	06/21/2017 00:04
2-Fluorobiphenyl	107	30-130	06/21/2017 00:04

Analyst(s): REB

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2,3.4-4	1706802-003A	Soil	06/14/2017 09:07	GC35	140618

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.0026	0.010	1	06/21/2017 00:29
Acenaphthylene	ND	0.0034	0.010	1	06/21/2017 00:29
Anthracene	ND	0.0029	0.010	1	06/21/2017 00:29
Benzo (a) anthracene	ND	0.0017	0.010	1	06/21/2017 00:29
Benzo (a) pyrene	ND	0.0027	0.010	1	06/21/2017 00:29
Benzo (b) fluoranthene	ND	0.0015	0.010	1	06/21/2017 00:29
Benzo (g,h,i) perylene	ND	0.0033	0.010	1	06/21/2017 00:29
Benzo (k) fluoranthene	ND	0.0016	0.010	1	06/21/2017 00:29
Chrysene	ND	0.0024	0.010	1	06/21/2017 00:29
Dibenzo (a,h) anthracene	ND	0.0050	0.010	1	06/21/2017 00:29
Fluoranthene	ND	0.0040	0.010	1	06/21/2017 00:29
Fluorene	ND	0.0060	0.010	1	06/21/2017 00:29
Indeno (1,2,3-cd) pyrene	ND	0.0049	0.010	1	06/21/2017 00:29
1-Methylnaphthalene	ND	0.0029	0.010	1	06/21/2017 00:29
2-Methylnaphthalene	ND	0.0020	0.010	1	06/21/2017 00:29
Naphthalene	ND	0.0016	0.010	1	06/21/2017 00:29
Phenanthrene	ND	0.0035	0.010	1	06/21/2017 00:29
Pyrene	ND	0.0045	0.010	1	06/21/2017 00:29

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	104	30-130	06/21/2017 00:29
2-Fluorobiphenyl	106	30-130	06/21/2017 00:29

Analyst(s): REB

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2,9.5-10	**1706802-004A**	**Soil**	**06/14/2017 09:14**	**GC35**	**140618**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.0026	0.010	1	06/21/2017 00:54
Acenaphthylene	ND		0.0034	0.010	1	06/21/2017 00:54
Anthracene	ND		0.0029	0.010	1	06/21/2017 00:54
Benzo (a) anthracene	ND		0.0017	0.010	1	06/21/2017 00:54
Benzo (a) pyrene	ND		0.0027	0.010	1	06/21/2017 00:54
Benzo (b) fluoranthene	ND		0.0015	0.010	1	06/21/2017 00:54
Benzo (g,h,i) perylene	ND		0.0033	0.010	1	06/21/2017 00:54
Benzo (k) fluoranthene	ND		0.0016	0.010	1	06/21/2017 00:54
Chrysene	ND		0.0024	0.010	1	06/21/2017 00:54
Dibenzo (a,h) anthracene	ND		0.0050	0.010	1	06/21/2017 00:54
Fluoranthene	ND		0.0040	0.010	1	06/21/2017 00:54
Fluorene	ND		0.0060	0.010	1	06/21/2017 00:54
Indeno (1,2,3-cd) pyrene	ND		0.0049	0.010	1	06/21/2017 00:54
1-Methylnaphthalene	ND		0.0029	0.010	1	06/21/2017 00:54
2-Methylnaphthalene	ND		0.0020	0.010	1	06/21/2017 00:54
Naphthalene	**0.0016**	J	0.0016	0.010	1	06/21/2017 00:54
Phenanthrene	ND		0.0035	0.010	1	06/21/2017 00:54
Pyrene	ND		0.0045	0.010	1	06/21/2017 00:54

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	104	30-130	06/21/2017 00:54
2-Fluorobiphenyl	104	30-130	06/21/2017 00:54

Analyst(s): REB

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3,3.4-4	**1706802-005A**	**Soil**	**06/14/2017 09:38**	**GC35**	**140618**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.0026	0.010	1	06/21/2017 01:19
Acenaphthylene	ND		0.0034	0.010	1	06/21/2017 01:19
Anthracene	ND		0.0029	0.010	1	06/21/2017 01:19
Benzo (a) anthracene	ND		0.0017	0.010	1	06/21/2017 01:19
Benzo (a) pyrene	ND		0.0027	0.010	1	06/21/2017 01:19
Benzo (b) fluoranthene	ND		0.0015	0.010	1	06/21/2017 01:19
Benzo (g,h,i) perylene	ND		0.0033	0.010	1	06/21/2017 01:19
Benzo (k) fluoranthene	ND		0.0016	0.010	1	06/21/2017 01:19
Chrysene	ND		0.0024	0.010	1	06/21/2017 01:19
Dibenzo (a,h) anthracene	ND		0.0050	0.010	1	06/21/2017 01:19
Fluoranthene	ND		0.0040	0.010	1	06/21/2017 01:19
Fluorene	ND		0.0060	0.010	1	06/21/2017 01:19
Indeno (1,2,3-cd) pyrene	ND		0.0049	0.010	1	06/21/2017 01:19
1-Methylnaphthalene	ND		0.0029	0.010	1	06/21/2017 01:19
2-Methylnaphthalene	ND		0.0020	0.010	1	06/21/2017 01:19
Naphthalene	**0.0021**	J	0.0016	0.010	1	06/21/2017 01:19
Phenanthrene	ND		0.0035	0.010	1	06/21/2017 01:19
Pyrene	ND		0.0045	0.010	1	06/21/2017 01:19

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	99	30-130	06/21/2017 01:19
2-Fluorobiphenyl	99	30-130	06/21/2017 01:19

Analyst(s): REB

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3,9.5-10	1706802-006A	Soil	06/14/2017 09:46	GC35	140618

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.0052	0.020	2	06/21/2017 01:44
Acenaphthylene	ND	0.0068	0.020	2	06/21/2017 01:44
Anthracene	ND	0.0058	0.020	2	06/21/2017 01:44
Benzo (a) anthracene	ND	0.0034	0.020	2	06/21/2017 01:44
Benzo (a) pyrene	ND	0.0054	0.020	2	06/21/2017 01:44
Benzo (b) fluoranthene	ND	0.0030	0.020	2	06/21/2017 01:44
Benzo (g,h,i) perylene	ND	0.0066	0.020	2	06/21/2017 01:44
Benzo (k) fluoranthene	ND	0.0032	0.020	2	06/21/2017 01:44
Chrysene	ND	0.0048	0.020	2	06/21/2017 01:44
Dibenzo (a,h) anthracene	ND	0.010	0.020	2	06/21/2017 01:44
Fluoranthene	ND	0.0080	0.020	2	06/21/2017 01:44
Fluorene	ND	0.012	0.020	2	06/21/2017 01:44
Indeno (1,2,3-cd) pyrene	ND	0.0098	0.020	2	06/21/2017 01:44
1-Methylnaphthalene	ND	0.0058	0.020	2	06/21/2017 01:44
2-Methylnaphthalene	ND	0.0040	0.020	2	06/21/2017 01:44
Naphthalene	ND	0.0032	0.020	2	06/21/2017 01:44
Phenanthrene	ND	0.0070	0.020	2	06/21/2017 01:44
Pyrene	ND	0.0090	0.020	2	06/21/2017 01:44

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	90	30-130	06/21/2017 01:44
2-Fluorobiphenyl	90	30-130	06/21/2017 01:44

Analyst(s): REB Analytical Comments: a3

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4,3.4-4	1706802-007A	Soil	06/14/2017 10:26	GC35	140618

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.0026	0.010	1	06/21/2017 02:09
Acenaphthylene	ND	0.0034	0.010	1	06/21/2017 02:09
Anthracene	ND	0.0029	0.010	1	06/21/2017 02:09
Benzo (a) anthracene	ND	0.0017	0.010	1	06/21/2017 02:09
Benzo (a) pyrene	ND	0.0027	0.010	1	06/21/2017 02:09
Benzo (b) fluoranthene	ND	0.0015	0.010	1	06/21/2017 02:09
Benzo (g,h,i) perylene	ND	0.0033	0.010	1	06/21/2017 02:09
Benzo (k) fluoranthene	ND	0.0016	0.010	1	06/21/2017 02:09
Chrysene	ND	0.0024	0.010	1	06/21/2017 02:09
Dibenzo (a,h) anthracene	ND	0.0050	0.010	1	06/21/2017 02:09
Fluoranthene	ND	0.0040	0.010	1	06/21/2017 02:09
Fluorene	ND	0.0060	0.010	1	06/21/2017 02:09
Indeno (1,2,3-cd) pyrene	ND	0.0049	0.010	1	06/21/2017 02:09
1-Methylnaphthalene	ND	0.0029	0.010	1	06/21/2017 02:09
2-Methylnaphthalene	ND	0.0020	0.010	1	06/21/2017 02:09
Naphthalene	ND	0.0016	0.010	1	06/21/2017 02:09
Phenanthrene	ND	0.0035	0.010	1	06/21/2017 02:09
Pyrene	ND	0.0045	0.010	1	06/21/2017 02:09

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	100	30-130	06/21/2017 02:09
2-Fluorobiphenyl	102	30-130	06/21/2017 02:09

Analyst(s): REB

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4,9.5-10	**1706802-008A**	**Soil**	**06/14/2017 10:34**	**GC35**	**140618**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.0026	0.010	1	06/21/2017 02:34
Acenaphthylene	ND		0.0034	0.010	1	06/21/2017 02:34
Anthracene	ND		0.0029	0.010	1	06/21/2017 02:34
Benzo (a) anthracene	ND		0.0017	0.010	1	06/21/2017 02:34
Benzo (a) pyrene	ND		0.0027	0.010	1	06/21/2017 02:34
Benzo (b) fluoranthene	ND		0.0015	0.010	1	06/21/2017 02:34
Benzo (g,h,i) perylene	ND		0.0033	0.010	1	06/21/2017 02:34
Benzo (k) fluoranthene	ND		0.0016	0.010	1	06/21/2017 02:34
Chrysene	ND		0.0024	0.010	1	06/21/2017 02:34
Dibenzo (a,h) anthracene	ND		0.0050	0.010	1	06/21/2017 02:34
Fluoranthene	ND		0.0040	0.010	1	06/21/2017 02:34
Fluorene	ND		0.0060	0.010	1	06/21/2017 02:34
Indeno (1,2,3-cd) pyrene	ND		0.0049	0.010	1	06/21/2017 02:34
1-Methylnaphthalene	ND		0.0029	0.010	1	06/21/2017 02:34
2-Methylnaphthalene	ND		0.0020	0.010	1	06/21/2017 02:34
Naphthalene	**0.0017**	J	0.0016	0.010	1	06/21/2017 02:34
Phenanthrene	ND		0.0035	0.010	1	06/21/2017 02:34
Pyrene	ND		0.0045	0.010	1	06/21/2017 02:34

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	101	30-130	06/21/2017 02:34
2-Fluorobiphenyl	103	30-130	06/21/2017 02:34

Analyst(s): REB

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5,3.4-4	1706802-009A	Soil	06/14/2017 11:01	GC35	140618

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.0026	0.010	1	06/21/2017 02:59
Acenaphthylene	ND	0.0034	0.010	1	06/21/2017 02:59
Anthracene	ND	0.0029	0.010	1	06/21/2017 02:59
Benzo (a) anthracene	ND	0.0017	0.010	1	06/21/2017 02:59
Benzo (a) pyrene	ND	0.0027	0.010	1	06/21/2017 02:59
Benzo (b) fluoranthene	ND	0.0015	0.010	1	06/21/2017 02:59
Benzo (g,h,i) perylene	ND	0.0033	0.010	1	06/21/2017 02:59
Benzo (k) fluoranthene	ND	0.0016	0.010	1	06/21/2017 02:59
Chrysene	ND	0.0024	0.010	1	06/21/2017 02:59
Dibenzo (a,h) anthracene	ND	0.0050	0.010	1	06/21/2017 02:59
Fluoranthene	ND	0.0040	0.010	1	06/21/2017 02:59
Fluorene	ND	0.0060	0.010	1	06/21/2017 02:59
Indeno (1,2,3-cd) pyrene	ND	0.0049	0.010	1	06/21/2017 02:59
1-Methylnaphthalene	ND	0.0029	0.010	1	06/21/2017 02:59
2-Methylnaphthalene	ND	0.0020	0.010	1	06/21/2017 02:59
Naphthalene	ND	0.0016	0.010	1	06/21/2017 02:59
Phenanthrene	ND	0.0035	0.010	1	06/21/2017 02:59
Pyrene	ND	0.0045	0.010	1	06/21/2017 02:59

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	99	30-130	06/21/2017 02:59
2-Fluorobiphenyl	103	30-130	06/21/2017 02:59

Analyst(s): REB

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5,9.5-10	1706802-010A	Soil	06/14/2017 11:08	GC35	140618

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.0026	0.010	1	06/21/2017 03:25
Acenaphthylene	ND		0.0034	0.010	1	06/21/2017 03:25
Anthracene	ND		0.0029	0.010	1	06/21/2017 03:25
Benzo (a) anthracene	**0.0080**	J	0.0017	0.010	1	06/21/2017 03:25
Benzo (a) pyrene	ND		0.0027	0.010	1	06/21/2017 03:25
Benzo (b) fluoranthene	**0.0036**	J	0.0015	0.010	1	06/21/2017 03:25
Benzo (g,h,i) perylene	**0.0045**	J	0.0033	0.010	1	06/21/2017 03:25
Benzo (k) fluoranthene	**0.0023**	J	0.0016	0.010	1	06/21/2017 03:25
Chrysene	**0.0026**	J	0.0024	0.010	1	06/21/2017 03:25
Dibenzo (a,h) anthracene	ND		0.0050	0.010	1	06/21/2017 03:25
Fluoranthene	**0.0048**	J	0.0040	0.010	1	06/21/2017 03:25
Fluorene	ND		0.0060	0.010	1	06/21/2017 03:25
Indeno (1,2,3-cd) pyrene	ND		0.0049	0.010	1	06/21/2017 03:25
1-Methylnaphthalene	ND		0.0029	0.010	1	06/21/2017 03:25
2-Methylnaphthalene	ND		0.0020	0.010	1	06/21/2017 03:25
Naphthalene	**0.0020**	J	0.0016	0.010	1	06/21/2017 03:25
Phenanthrene	**0.0042**	J	0.0035	0.010	1	06/21/2017 03:25
Pyrene	**0.0059**	J	0.0045	0.010	1	06/21/2017 03:25

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	99	30-130	06/21/2017 03:25
2-Fluorobiphenyl	101	30-130	06/21/2017 03:25

Analyst(s): REB

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-6,3.4-4	1706802-011A	Soil	06/14/2017 11:34	GC35	140618

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.0026	0.010	1	06/21/2017 03:49
Acenaphthylene	ND	0.0034	0.010	1	06/21/2017 03:49
Anthracene	ND	0.0029	0.010	1	06/21/2017 03:49
Benzo (a) anthracene	ND	0.0017	0.010	1	06/21/2017 03:49
Benzo (a) pyrene	ND	0.0027	0.010	1	06/21/2017 03:49
Benzo (b) fluoranthene	ND	0.0015	0.010	1	06/21/2017 03:49
Benzo (g,h,i) perylene	ND	0.0033	0.010	1	06/21/2017 03:49
Benzo (k) fluoranthene	ND	0.0016	0.010	1	06/21/2017 03:49
Chrysene	ND	0.0024	0.010	1	06/21/2017 03:49
Dibenzo (a,h) anthracene	ND	0.0050	0.010	1	06/21/2017 03:49
Fluoranthene	ND	0.0040	0.010	1	06/21/2017 03:49
Fluorene	ND	0.0060	0.010	1	06/21/2017 03:49
Indeno (1,2,3-cd) pyrene	ND	0.0049	0.010	1	06/21/2017 03:49
1-Methylnaphthalene	ND	0.0029	0.010	1	06/21/2017 03:49
2-Methylnaphthalene	ND	0.0020	0.010	1	06/21/2017 03:49
Naphthalene	ND	0.0016	0.010	1	06/21/2017 03:49
Phenanthrene	ND	0.0035	0.010	1	06/21/2017 03:49
Pyrene	ND	0.0045	0.010	1	06/21/2017 03:49

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	100	30-130	06/21/2017 03:49
2-Fluorobiphenyl	104	30-130	06/21/2017 03:49

Analyst(s): REB

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-6,9.5-10	**1706802-012A**	**Soil**	**06/14/2017 11:42**	**GC35**	**140618**

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.0026	0.010	1	06/21/2017 04:14
Acenaphthylene	ND	0.0034	0.010	1	06/21/2017 04:14
Anthracene	ND	0.0029	0.010	1	06/21/2017 04:14
Benzo (a) anthracene	ND	0.0017	0.010	1	06/21/2017 04:14
Benzo (a) pyrene	ND	0.0027	0.010	1	06/21/2017 04:14
Benzo (b) fluoranthene	ND	0.0015	0.010	1	06/21/2017 04:14
Benzo (g,h,i) perylene	ND	0.0033	0.010	1	06/21/2017 04:14
Benzo (k) fluoranthene	ND	0.0016	0.010	1	06/21/2017 04:14
Chrysene	ND	0.0024	0.010	1	06/21/2017 04:14
Dibenzo (a,h) anthracene	ND	0.0050	0.010	1	06/21/2017 04:14
Fluoranthene	ND	0.0040	0.010	1	06/21/2017 04:14
Fluorene	ND	0.0060	0.010	1	06/21/2017 04:14
Indeno (1,2,3-cd) pyrene	ND	0.0049	0.010	1	06/21/2017 04:14
1-Methylnaphthalene	ND	0.0029	0.010	1	06/21/2017 04:14
2-Methylnaphthalene	ND	0.0020	0.010	1	06/21/2017 04:14
Naphthalene	ND	0.0016	0.010	1	06/21/2017 04:14
Phenanthrene	ND	0.0035	0.010	1	06/21/2017 04:14
Pyrene	ND	0.0045	0.010	1	06/21/2017 04:14

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	100	30-130	06/21/2017 04:14
2-Fluorobiphenyl	104	30-130	06/21/2017 04:14

Analyst(s): REB

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NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-7,3.5-4	1706802-013A	Soil	06/14/2017 12:14	GC35	140618

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.0026	0.010	1	06/21/2017 04:39
Acenaphthylene	ND	0.0034	0.010	1	06/21/2017 04:39
Anthracene	ND	0.0029	0.010	1	06/21/2017 04:39
Benzo (a) anthracene	ND	0.0017	0.010	1	06/21/2017 04:39
Benzo (a) pyrene	ND	0.0027	0.010	1	06/21/2017 04:39
Benzo (b) fluoranthene	ND	0.0015	0.010	1	06/21/2017 04:39
Benzo (g,h,i) perylene	ND	0.0033	0.010	1	06/21/2017 04:39
Benzo (k) fluoranthene	ND	0.0016	0.010	1	06/21/2017 04:39
Chrysene	ND	0.0024	0.010	1	06/21/2017 04:39
Dibenzo (a,h) anthracene	ND	0.0050	0.010	1	06/21/2017 04:39
Fluoranthene	ND	0.0040	0.010	1	06/21/2017 04:39
Fluorene	ND	0.0060	0.010	1	06/21/2017 04:39
Indeno (1,2,3-cd) pyrene	ND	0.0049	0.010	1	06/21/2017 04:39
1-Methylnaphthalene	ND	0.0029	0.010	1	06/21/2017 04:39
2-Methylnaphthalene	ND	0.0020	0.010	1	06/21/2017 04:39
Naphthalene	ND	0.0016	0.010	1	06/21/2017 04:39
Phenanthrene	ND	0.0035	0.010	1	06/21/2017 04:39
Pyrene	ND	0.0045	0.010	1	06/21/2017 04:39

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	97	30-130	06/21/2017 04:39
2-Fluorobiphenyl	100	30-130	06/21/2017 04:39

Analyst(s): REB

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Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3550B
Date Prepared:	6/16/17	**Analytical Method:**	SW8270C-SIM
Project:	16-004-025	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-7,9.5-10	**1706802-014A**	**Soil**	**06/14/2017 12:22**	**GC35**	**140618**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.0026	0.010	1	06/21/2017 17:12
Acenaphthylene	ND		0.0034	0.010	1	06/21/2017 17:12
Anthracene	ND		0.0029	0.010	1	06/21/2017 17:12
Benzo (a) anthracene	ND		0.0017	0.010	1	06/21/2017 17:12
Benzo (a) pyrene	**0.0053**	J	0.0027	0.010	1	06/21/2017 17:12
Benzo (b) fluoranthene	ND		0.0015	0.010	1	06/21/2017 17:12
Benzo (g,h,i) perylene	**0.012**		0.0033	0.010	1	06/21/2017 17:12
Benzo (k) fluoranthene	ND		0.0016	0.010	1	06/21/2017 17:12
Chrysene	**0.0026**	J	0.0024	0.010	1	06/21/2017 17:12
Dibenzo (a,h) anthracene	ND		0.0050	0.010	1	06/21/2017 17:12
Fluoranthene	ND		0.0040	0.010	1	06/21/2017 17:12
Fluorene	ND		0.0060	0.010	1	06/21/2017 17:12
Indeno (1,2,3-cd) pyrene	ND		0.0049	0.010	1	06/21/2017 17:12
1-Methylnaphthalene	ND		0.0029	0.010	1	06/21/2017 17:12
2-Methylnaphthalene	ND		0.0020	0.010	1	06/21/2017 17:12
Naphthalene	ND		0.0016	0.010	1	06/21/2017 17:12
Phenanthrene	ND		0.0035	0.010	1	06/21/2017 17:12
Pyrene	ND		0.0045	0.010	1	06/21/2017 17:12

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	98	30-130	06/21/2017 17:12
2-Fluorobiphenyl	97	30-130	06/21/2017 17:12

Analyst(s): REB

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"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3050B
Date Prepared:	6/16/17	**Analytical Method:**	SW6020
Project:	16-004-025	**Unit:**	mg/Kg

LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1,3.5-4	1706802-001A	Soil	06/14/2017 08:32	ICP-MS3	140589

Analytes	Result	MDL	RL	DF	Date Analyzed
Cadmium	ND	0.058	0.25	1	06/20/2017 02:30
Chromium	**79**	0.092	0.50	1	06/20/2017 02:30
Lead	**8.3**	0.094	0.50	1	06/20/2017 02:30
Nickel	**72**	0.072	0.50	1	06/20/2017 02:30
Zinc	**47**	1.4	5.0	1	06/20/2017 02:30

Surrogates	REC (%)	Limits	
Terbium	105	70-130	06/20/2017 02:30

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1,9.5-10	1706802-002A	Soil	06/14/2017 08:39	ICP-MS3	140589

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.11**	J	0.058	0.25	1	06/20/2017 02:36
Chromium	**71**		0.092	0.50	1	06/20/2017 02:36
Lead	**7.9**		0.094	0.50	1	06/20/2017 02:36
Nickel	**83**		0.072	0.50	1	06/20/2017 02:36
Zinc	**56**		1.4	5.0	1	06/20/2017 02:36

Surrogates	REC (%)	Limits	
Terbium	104	70-130	06/20/2017 02:36

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2,3.4-4	1706802-003A	Soil	06/14/2017 09:07	ICP-MS3	140589

Analytes	Result	MDL	RL	DF	Date Analyzed
Cadmium	ND	0.058	0.25	1	06/20/2017 03:00
Chromium	**70**	0.092	0.50	1	06/20/2017 03:00
Lead	**7.6**	0.094	0.50	1	06/20/2017 03:00
Nickel	**72**	0.072	0.50	1	06/20/2017 03:00
Zinc	**43**	1.4	5.0	1	06/20/2017 03:00

Surrogates	REC (%)	Limits	
Terbium	101	70-130	06/20/2017 03:00

Analyst(s): DB

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"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3050B
Date Prepared:	6/16/17	**Analytical Method:**	SW6020
Project:	16-004-025	**Unit:**	mg/Kg

LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2,9.5-10	1706802-004A	Soil	06/14/2017 09:14	ICP-MS3	140589

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.13**	J	0.058	0.25	1	06/20/2017 03:07
Chromium	**50**		0.092	0.50	1	06/20/2017 03:07
Lead	**6.4**		0.094	0.50	1	06/20/2017 03:07
Nickel	**90**		0.072	0.50	1	06/20/2017 03:07
Zinc	**46**		1.4	5.0	1	06/20/2017 03:07

Surrogates	REC (%)	Limits	
Terbium	103	70-130	06/20/2017 03:07

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3,3.4-4	1706802-005A	Soil	06/14/2017 09:38	ICP-MS3	140589

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.098**	J	0.058	0.25	1	06/20/2017 03:13
Chromium	**52**		0.092	0.50	1	06/20/2017 03:13
Lead	**6.9**		0.094	0.50	1	06/20/2017 03:13
Nickel	**110**		0.072	0.50	1	06/20/2017 03:13
Zinc	**49**		1.4	5.0	1	06/20/2017 03:13

Surrogates	REC (%)	Limits	
Terbium	101	70-130	06/20/2017 03:13

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3,9.5-10	1706802-006A	Soil	06/14/2017 09:46	ICP-MS3	140589

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.12**	J	0.058	0.25	1	06/20/2017 03:19
Chromium	**54**		0.092	0.50	1	06/20/2017 03:19
Lead	**7.1**		0.094	0.50	1	06/20/2017 03:19
Nickel	**81**		0.072	0.50	1	06/20/2017 03:19
Zinc	**49**		1.4	5.0	1	06/20/2017 03:19

Surrogates	REC (%)	Limits	
Terbium	102	70-130	06/20/2017 03:19

Analyst(s): DB

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"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3050B
Date Prepared:	6/16/17	**Analytical Method:**	SW6020
Project:	16-004-025	**Unit:**	mg/Kg

LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4,3.4-4	**1706802-007A**	**Soil**	**06/14/2017 10:26**	**ICP-MS3**	**140589**

Analytes	Result	MDL	RL	DF	Date Analyzed
Cadmium	ND	0.058	0.25	1	06/20/2017 03:25
Chromium	**59**	0.092	0.50	1	06/20/2017 03:25
Lead	**6.6**	0.094	0.50	1	06/20/2017 03:25
Nickel	**72**	0.072	0.50	1	06/20/2017 03:25
Zinc	**41**	1.4	5.0	1	06/20/2017 03:25

Surrogates	REC (%)	Limits	
Terbium	100	70-130	06/20/2017 03:25

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4,9.5-10	**1706802-008A**	**Soil**	**06/14/2017 10:34**	**ICP-MS3**	**140589**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.14**	J	0.058	0.25	1	06/20/2017 03:31
Chromium	**110**		0.092	0.50	1	06/20/2017 03:31
Lead	**7.7**		0.094	0.50	1	06/20/2017 03:31
Nickel	**130**		0.072	0.50	1	06/20/2017 03:31
Zinc	**52**		1.4	5.0	1	06/20/2017 03:31

Surrogates	REC (%)	Limits	
Terbium	104	70-130	06/20/2017 03:31

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5,3.4-4	**1706802-009A**	**Soil**	**06/14/2017 11:01**	**ICP-MS3**	**140589**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.092**	J	0.058	0.25	1	06/20/2017 03:37
Chromium	**63**		0.092	0.50	1	06/20/2017 03:37
Lead	**7.6**		0.094	0.50	1	06/20/2017 03:37
Nickel	**74**		0.072	0.50	1	06/20/2017 03:37
Zinc	**48**		1.4	5.0	1	06/20/2017 03:37

Surrogates	REC (%)	Limits	
Terbium	100	70-130	06/20/2017 03:37

Analyst(s): DB

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3050B
Date Prepared:	6/16/17	**Analytical Method:**	SW6020
Project:	16-004-025	**Unit:**	mg/Kg

LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5,9.5-10	1706802-010A	Soil	06/14/2017 11:08	ICP-MS3	140589

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.13**	J	0.058	0.25	1	06/20/2017 03:43
Chromium	**60**		0.092	0.50	1	06/20/2017 03:43
Lead	**21**		0.094	0.50	1	06/20/2017 03:43
Nickel	**75**		0.072	0.50	1	06/20/2017 03:43
Zinc	**55**		1.4	5.0	1	06/20/2017 03:43

Surrogates	REC (%)	Limits	
Terbium	103	70-130	06/20/2017 03:43

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-6,3.4-4	1706802-011A	Soil	06/14/2017 11:34	ICP-MS3	140589

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.096**	J	0.058	0.25	1	06/20/2017 03:50
Chromium	**70**		0.092	0.50	1	06/20/2017 03:50
Lead	**8.5**		0.094	0.50	1	06/20/2017 03:50
Nickel	**120**		0.072	0.50	1	06/20/2017 03:50
Zinc	**51**		1.4	5.0	1	06/20/2017 03:50

Surrogates	REC (%)	Limits	
Terbium	101	70-130	06/20/2017 03:50

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-6,9.5-10	1706802-012A	Soil	06/14/2017 11:42	ICP-MS3	140589

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.13**	J	0.058	0.25	1	06/20/2017 03:56
Chromium	**75**		0.092	0.50	1	06/20/2017 03:56
Lead	**14**		0.094	0.50	1	06/20/2017 03:56
Nickel	**94**		0.072	0.50	1	06/20/2017 03:56
Zinc	**66**		1.4	5.0	1	06/20/2017 03:56

Surrogates	REC (%)	Limits	
Terbium	102	70-130	06/20/2017 03:56

Analyst(s): DB

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"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Received:	6/15/17 19:00	**Extraction Method:**	SW3050B
Date Prepared:	6/16/17	**Analytical Method:**	SW6020
Project:	16-004-025	**Unit:**	mg/Kg

LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-7,3.5-4	**1706802-013A**	**Soil**	**06/14/2017 12:14**	**ICP-MS3**	**140589**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.12**	J	0.058	0.25	1	06/20/2017 04:20
Chromium	**70**		0.092	0.50	1	06/20/2017 04:20
Lead	**9.3**		0.094	0.50	1	06/20/2017 04:20
Nickel	**120**		0.072	0.50	1	06/20/2017 04:20
Zinc	**62**		1.4	5.0	1	06/20/2017 04:20

Surrogates	REC (%)	Limits	
Terbium	100	70-130	06/20/2017 04:20

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-7,9.5-10	**1706802-014A**	**Soil**	**06/14/2017 12:22**	**ICP-MS3**	**140589**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Cadmium	**0.20**	J	0.058	0.25	1	06/20/2017 04:26
Chromium	**71**		0.092	0.50	1	06/20/2017 04:26
Lead	**27**		0.094	0.50	1	06/20/2017 04:26
Nickel	**100**		0.072	0.50	1	06/20/2017 04:26
Zinc	**120**		1.4	5.0	1	06/20/2017 04:26

Surrogates	REC (%)	Limits	
Terbium	100	70-130	06/20/2017 04:26

Analyst(s): DB

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Prepared:	6/15/17 - 6/16/17	**BatchID:**	140541
Date Analyzed:	6/16/17 - 6/20/17	**Extraction Method:**	SW3550B
Instrument:	GC23	**Analytical Method:**	SW8082
Matrix:	Soil	**Unit:**	mg/kg
Project:	16-004-025	**Sample ID:**	MB/LCS-140541 1706802-001AMS/MSD

QC Summary Report for SW8082

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aroclor1016	ND	0.137	0.0051	0.050	0.15	-	92	70-130
Aroclor1221	ND	-	0.033	0.050	-	-	-	-
Aroclor1232	ND	-	0.0032	0.050	-	-	-	-
Aroclor1242	ND	-	0.0035	0.050	-	-	-	-
Aroclor1248	ND	-	0.0036	0.050	-	-	-	-
Aroclor1254	ND	-	0.0022	0.050	-	-	-	-
Aroclor1260	ND	0.182	0.0085	0.050	0.15	-	122	70-130
PCBs, total	ND	-	0.0040	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.052	0.0562			0.050	104	112	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aroclor1016	0.137	0.130	0.15	ND	91	86	70-130	5.77	20
Aroclor1260	0.156	0.158	0.15	ND	104	106	70-130	1.34	20
Surrogate Recovery									
Decachlorobiphenyl	0.0567	0.0562	0.050		113	112	70-130	0.777	20

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NELAP 4033ORELAP

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Prepared:	6/16/17	**BatchID:**	140609
Date Analyzed:	6/21/17	**Extraction Method:**	SW3550B
Instrument:	GC23	**Analytical Method:**	SW8082
Matrix:	Soil	**Unit:**	mg/kg
Project:	16-004-025	**Sample ID:**	MB/LCS-140609 1706802-005AMS/MSD

QC Summary Report for SW8082

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aroclor1016	ND	0.131	0.0051	0.050	0.15	-	87	70-130
Aroclor1221	ND	-	0.033	0.050	-	-	-	-
Aroclor1232	ND	-	0.0032	0.050	-	-	-	-
Aroclor1242	ND	-	0.0035	0.050	-	-	-	-
Aroclor1248	ND	-	0.0036	0.050	-	-	-	-
Aroclor1254	ND	-	0.0022	0.050	-	-	-	-
Aroclor1260	ND	0.174	0.0085	0.050	0.15	-	116	70-130
PCBs, total	ND	-	0.0040	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.05586	0.0529			0.050	112	106	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aroclor1016	0.130	0.129	0.15	ND	87	86	70-130	1.42	20
Aroclor1260	0.153	0.151	0.15	ND	102	101	70-130	1.13	20
Surrogate Recovery									
Decachlorobiphenyl	0.0501	0.0524	0.050		100	105	70-130	4.50	20

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Quality Control Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Prepared:	6/16/17	**BatchID:**	140618
Date Analyzed:	6/19/17 - 6/20/17	**Extraction Method:**	SW3550B
Instrument:	GC35	**Analytical Method:**	SW8270C-SIM
Matrix:	Soil	**Unit:**	mg/kg
Project:	16-004-025	**Sample ID:**	MB/LCS-140618 1706333-035AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.0026	0.010	-	-	-	-
Acenaphthylene	ND	-	0.0034	0.010	-	-	-	-
Anthracene	ND	-	0.0029	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.0017	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.193	0.0027	0.010	0.20	-	97	23-129
Benzo (b) fluoranthene	ND	-	0.0015	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.0033	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.0016	0.010	-	-	-	-
Chrysene	ND	0.176	0.0024	0.010	0.20	-	88	38-104
Dibenzo (a,h) anthracene	ND	-	0.0050	0.010	-	-	-	-
Fluoranthene	ND	-	0.0040	0.010	-	-	-	-
Fluorene	ND	-	0.0060	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.0049	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.200	0.0029	0.010	0.20	-	100	59-106
2-Methylnaphthalene	ND	0.193	0.0020	0.010	0.20	-	97	54-108
Naphthalene	ND	-	0.0016	0.010	-	-	-	-
Phenanthrene	ND	0.162	0.0035	0.010	0.20	-	81	48-107
Pyrene	ND	0.188	0.0045	0.010	0.20	-	94	40-104
Surrogate Recovery								
1-Fluoronaphthalene	0.34	0.402			0.50	68	80	63-123
2-Fluorobiphenyl	0.3352	0.393			0.50	67	79	55-127

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	0.244	0.206	0.20	ND	122	103	9-156	17.1	30
Chrysene	0.241	0.253	0.20	ND	120,F1	127,F1	33-115	5.08	30
1-Methylnaphthalene	0.271	0.283	0.20	ND	135	142	13-167	4.46	30
2-Methylnaphthalene	0.262	0.269	0.20	ND	131	135	25-152	2.63	30
Phenanthrene	0.235	0.251	0.20	ND	118	125	30-138	6.40	30
Pyrene	0.248	0.261	0.20	ND	124	130,F1	29-125	5.15	30
Surrogate Recovery									
1-Fluoronaphthalene	0.374	0.407	0.50		75	81	56-153	8.49	30
2-Fluorobiphenyl	0.378	0.390	0.50		76	78	50-150	3.18	30

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Quality Control Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1706802
Date Prepared:	6/16/17	**BatchID:**	140589
Date Analyzed:	6/19/17	**Extraction Method:**	SW3050B
Instrument:	ICP-MS2	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	16-004-025	**Sample ID:**	MB/LCS-140589 1706813-001AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Cadmium	ND	50.2	0.058	0.25	50	-	100	75-125
Chromium	ND	51.4	0.092	0.50	50	-	103	75-125
Lead	ND	51.7	0.094	0.50	50	-	103	75-125
Nickel	ND	51.1	0.072	0.50	50	-	102	75-125
Zinc	ND	506	1.4	5.0	500	-	101	75-125
Surrogate Recovery								
Terbium	500.2	511			500	100	102	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Cadmium	53.4	52.6	50	ND	107	105	75-125	1.47	20
Chromium	93.8	91.5	50	37.67	112	108	75-125	2.47	20
Lead	58.3	56.1	50	3.719	109	105	75-125	3.83	20
Nickel	97.0	93.5	50	42.77	108	101	75-125	3.69	20
Zinc	572	564	500	46.16	105	103	75-125	1.57	20
Surrogate Recovery									
Terbium	535	538	500		107	108	70-130	0.690	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Cadmium	ND<1.2	ND	-	-
Chromium	40.5	37.67	7.51	20
Lead	3.94	3.719	5.94	-
Nickel	44.1	42.77	3.11	20
Zinc	47.4	46.16	2.69	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1706802 **ClientCode: ERAS**

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Report to:
Andrew Savage
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541
(510) 247-9885 FAX: (510) 886-5399

Email: info@eras.biz; andrew@eras.biz
cc/3rd Party:
PO:
ProjectNo: 16-004-025

Bill to:
Kasey Cordoza
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541

Requested TAT: 5 days;

Date Received: **06/15/2017**
Date Logged: **06/16/2017**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1706802-001	SB-1,3.5-4	Soil	6/14/2017 08:32	☐	A	A	A	A								
1706802-002	SB-1,9.5-10	Soil	6/14/2017 08:39	☐	A	A	A									
1706802-003	SB-2,3.4-4	Soil	6/14/2017 09:07	☐	A	A	A									
1706802-004	SB-2,9.5-10	Soil	6/14/2017 09:14	☐	A	A	A									
1706802-005	SB-3,3.4-4	Soil	6/14/2017 09:38	☐	A	A	A									
1706802-006	SB-3,9.5-10	Soil	6/14/2017 09:46	☐	A	A	A									
1706802-007	SB-4,3.4-4	Soil	6/14/2017 10:26	☐	A	A	A									
1706802-008	SB-4,9.5-10	Soil	6/14/2017 10:34	☐	A	A	A									
1706802-009	SB-5,3.4-4	Soil	6/14/2017 11:01	☐	A	A	A									
1706802-010	SB-5,9.5-10	Soil	6/14/2017 11:08	☐	A	A	A									
1706802-011	SB-6,3.4-4	Soil	6/14/2017 11:34	☐	A	A	A									
1706802-012	SB-6,9.5-10	Soil	6/14/2017 11:42	☐	A	A	A									
1706802-013	SB-7,3.5-4	Soil	6/14/2017 12:14	☐	A	A	A									
1706802-014	SB-7,9.5-10	Soil	6/14/2017 12:22	☐	A	A	A									

Test Legend:

1	8082_PCB_S	2	8270_PNA_S	3	LUFTMS_6020_TTLC_S	4	PREDF REPORT
5		6		7		8	
9		10		11		12	

Prepared by: Jena Alfaro

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC. **Project:** 16-004-025 **Work Order:** 1706802
Client Contact: Andrew Savage **QC Level:** LEVEL 2
Contact's Email: info@eras.biz; andrew@eras.biz **Comments:** **Date Logged:** 6/16/2017

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☑ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706802-001A	SB-1,3.5-4	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 8:32	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-002A	SB-1,9.5-10	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 8:39	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-003A	SB-2,3.5-4	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 9:07	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-004A	SB-2,9.5-10	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 9:14	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-005A	SB-3,3.5-4	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 9:38	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-006A	SB-3,9.5-10	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 9:46	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC. **Project:** 16-004-025 **Work Order:** 1706802
Client Contact: Andrew Savage **QC Level:** LEVEL 2
Contact's Email: info@eras.biz; andrew@eras.biz **Comments:** **Date Logged:** 6/16/2017

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☑ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706802-006A	SB-3,9.5-10	Soil	SW8270C (PAHs/PNAs)	1	Acetate Liner	☐	6/14/2017 9:46	5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-007A	SB-4,3.5-4	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 10:26	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-008A	SB-4,9.5-10	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 10:34	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-009A	SB-5,3.5-4	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 11:01	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-010A	SB-5,9.5-10	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 11:08	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-011A	SB-6,3.5-4	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 11:34	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC. **Project:** 16-004-025 **Work Order:** 1706802
Client Contact: Andrew Savage **QC Level:** LEVEL 2
Contact's Email: info@eras.biz; andrew@eras.biz **Comments:** **Date Logged:** 6/16/2017

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☑ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706802-011A	SB-6,3.5-4	Soil	SW8082 (PCBs Only)	1	Acetate Liner	☐	6/14/2017 11:34	5 days		☐	
1706802-012A	SB-6,9.5-10	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 11:42	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-013A	SB-7,3.5-4	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 12:14	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1706802-014A	SB-7,9.5-10	Soil	SW6020 (LUFT)	1	Acetate Liner	☐	6/14/2017 12:22	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1706802

CHAIN OF CUSTODY FORM

Turnaround Time:	Rush	24Hr	48 Hr	72 Hr	5 Day
					X

Geotracker: X EDF Excel Write On (DW

McCampbell Analytical, Inc
1534 Willow Pass Rd.
Pittsburg, CA 94565
877.252.9262
925.252.9269 - fax

Report To: ERAS **Bill To:** ERAS
Company: ERAS Environmental, Inc.

Email: info@eras.biz
Telephone: 510-247-9885 **Fax:** 510-886-5399
Project # 16-004-025
Project location 0 29th Ave, Oakland
Sampler: Andrew

Sample ID	Location/Field Point Name	Sampling Date	Sampling Time	# of Containers	Container Type	Matrix: Soil	Matrix: Water	Matrix: Waste	Preservative: HCL	Preservative: H2SO4	Preservative: HNO3	Preservative: ICE	Preservative: None	PAHs by Select Ion Monitorng (SIM)	PCB by EPA 8082	LUFT 5 Metals	Other	Comments
SB-1, 3.5-4	SB-1	6/14/2017	8:32	1	Tube	X						X		X	X	X		
SB-1, 9.5-10	SB-1	6/14/2017	8:39	1	Tube	X						X		X	X	X		
SB-2, 3.4-4	SB-2	6/14/2017	9:07	1	Tube	X						X		X	X	X		
SB-2, 9.5-10	SB-2	6/14/2017	9:14	1	Tube	X						X		X	X	X		
SB-3, 3.4-4	SB-3	6/14/2017	9:38	1	Tube	X						X		X	X	X		
SB-3, 9.5-10	SB-3	6/14/2017	9:46	1	Tube	X						X		X	X	X		
SB-4, 3.4-4	SB-4	6/14/2017	10:26	1	Tube	X						X		X	X	X		
SB-4, 9.5-10	SB-4	6/14/2017	10:34	1	Tube	X						X		X	X	X		
SB-5, 3.4-4	SB-5	6/14/2017	11:01	1	Tube	X						X		X	X	X		
SB-5, 9.5-10	SB-5	6/14/2017	11:08	1	Tube	X						X		X	X	X		
SB-6, 3.4-4	SB-6	6/14/2017	11:34	1	Tube	X						X		X	X	X		
SB-6, 9.5-10	SB-6	6/14/2017	11:42	1	Tube	X						X		X	X	X		
SB-7, 3.5-4	SB-7	6/14/2017	12:14	1	Tube	X						X		X	X	X		
SB-7, 9.5-10	SB-7	6/14/2017	12:22	1	Tube	X						X		X	X	X		

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:
Relinquished by:	6-15-17	940	Recieved by:
Relinquished by:	6/15/17	1900	Recieved by:
Relinquished by:	Date:	Time:	Recieved by:

ICE/t° Condition	3.0° wet
Head space absent	
Dechlorinated in lab	
Appropriate containers	
Preserved in Lab	
Preservation	VOA's O&G Metals Other pH<2

Comments: Please PDF
PLEASE PROVIDE J-FLAGS
T10000010328

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Sample Receipt Checklist

Client Name: **ERAS Environmental, Inc.**
Project Name: **16-004-025**

WorkOrder №: **1706802** Matrix: Soil
Carrier: Benjamin Yslas (MAI Courier)

Date and Time Received **6/15/2017 19:00**
Date Logged: **6/16/2017**
Received by: Jena Alfaro
Logged by: Jena Alfaro

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	NA ☐
Sample/Temp Blank temperature	Temp: 3.6°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	
	(Ice Type: WET ICE)		

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

Comments:

APPENDIX H

Analytical Results – Soil Gas

eurofins | Air Toxics

6/20/2017
Mr. Ross Tinline
SVC Environmental, Inc.
11 Kenton Ave

San Carlos CA 94070

Project Name: 29th Ave, Oakland
Project #: ERAS-04
Workorder #: 1706343

Dear Mr. Ross Tinline

The following report includes the data for the above referenced project for sample(s) received on 6/17/2017 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-17 VI 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 Inc. 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: Rachel Selenis at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Rachel Selenis

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1706343

Work Order Summary

CLIENT:	Mr. Ross Tinline SVC Environmental, Inc. 11 Kenton Ave San Carlos, CA 94070	**BILL TO:**	Mr. Ross Tinline SVC Environmental, Inc. 11 Kenton Ave San Carlos, CA 94070
PHONE:	650-218-3766	**P.O. #**	
FAX:		**PROJECT #**	ERAS-04 29th Ave, Oakland
DATE RECEIVED:	06/17/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	06/20/2017		

FRACTION #	NAME	TEST
01A	SV-1	Modified TO-17 VI
02A	SV-4	Modified TO-17 VI
03A	SV-5	Modified TO-17 VI
04A	TB	Modified TO-17 VI
05A	Lab Blank	Modified TO-17 VI
06A	CCV	Modified TO-17 VI
07A	LCS	Modified TO-17 VI
07AA	LCSD	Modified TO-17 VI

CERTIFIED BY: Heidi Hayes DATE: 06/20/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
SVC Environmental, Inc.
Workorder# 1706343

Four TO-17 VI Tube samples were received on June 17, 2017. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 'VI' sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for compound separation and detection.

A modification that may be applied to EPA Method TO-17 at the client's discretion is the requirement to transport sorbent tubes at 4 deg C. Laboratory studies demonstrate a high level of stability for VOCs on the TO-17 'VI' tube at room temperature for periods of up to 14 days. Tubes can be shipped to and from the field site at ambient conditions as long as the 14-day sample hold time is upheld. Trip blanks and field surrogate spikes are used as additional control measures to monitor recovery and background contribution during tube transport.

Since the TO-17 VI application significantly extends the scope of target compounds addressed in EPA Method TO-15 and TO-17, the laboratory has implemented several method modifications outlined in the table below. Specific project requirements may over-ride the laboratory modifications.

Requirement	***TO-17***	***ATL Modifications***
Distributed Volume Pairs	Collection of distributed volume pairs required for monitoring ambient air to insure high quality.	If site is well-characterized or performance previously verified, single tube sampling may be appropriate. Distributed pairs may be impractical for soil gas collection due to configuration and volume constraints.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

A sampling volume of 0.2 L was used to convert ng to ug/m3 for the associated Lab Blank and sample TB.

Definition of Data Qualifying Flags

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

B - Compound present in blank (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

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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: SV-1

Lab ID#: 1706343-01A

No Detections Were Found.

Client Sample ID: SV-4

Lab ID#: 1706343-02A

No Detections Were Found.

Client Sample ID: SV-5

Lab ID#: 1706343-03A

No Detections Were Found.

Client Sample ID: TB

Lab ID#: 1706343-04A

No Detections Were Found.

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Client Sample ID: SV-1
Lab ID#: 1706343-01A
EPA METHOD TO-17

File Name:	**6061920**	**Date of Extraction: NA**	**Date of Collection: 6/15/17 9:48:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/19/17 10:12 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	66	50-150

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Client Sample ID: SV-4
Lab ID#: 1706343-02A
EPA METHOD TO-17

File Name:	**6061921**	**Date of Extraction: NA**	**Date of Collection: 6/15/17 1:37:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/19/17 10:53 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	85	50-150

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Client Sample ID: SV-5
Lab ID#: 1706343-03A
EPA METHOD TO-17

File Name:	**6061922**	**Date of Extraction: NA**	**Date of Collection: 6/15/17 2:41:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/19/17 11:33 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	98	50-150

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Client Sample ID: TB
Lab ID#: 1706343-04A
EPA METHOD TO-17

File Name:	**6061919**	**Date of Extraction: NA**	**Date of Collection: 6/15/17**
Dil. Factor:	**1.00**		**Date of Analysis: 6/19/17 09:32 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	93	50-150

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Client Sample ID: Lab Blank

Lab ID#: 1706343-05A

EPA METHOD TO-17

File Name:	**6061906**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/19/17 11:21 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected

Air Sample Volume(L): 0.200

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	119	50-150

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Client Sample ID: CCV
Lab ID#: 1706343-06A
EPA METHOD TO-17

File Name:	**6061902**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/19/17 08:39 AM**

Compound	%Recovery
Naphthalene	104

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	117	50-150

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Client Sample ID: LCS
Lab ID#: 1706343-07A
EPA METHOD TO-17

File Name:	**6061903**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/19/17 09:19 AM**

Compound	%Recovery	Method Limits
Naphthalene	110	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	107	50-150

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Client Sample ID: LCSD
Lab ID#: 1706343-07AA
EPA METHOD TO-17

File Name:	**6061904**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/19/17 10:00 AM**

Compound	%Recovery	Method Limits
Naphthalene	111	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	107	50-150

TO-17 SAMPLE COLLECTION

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CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Eurofins assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630
(916) 985-1000 FAX (916) 985-1020

Project Manager: Ross Tinline / Andrew Savage - ERAS
Collected by: (Print and Sign) Ross Tinline
Company: SVC Environmental Inc Email: ross t@svcenv.com
Address: 11 Kenton Ave City: San Carlos State: CA Zip: 94070
Phone: 650 218 3766 Fax:

Project Info:
P.O. #:
Project #: ERAS-04
Project Name: 0 29th Ave, Oakland

Turn Around Time: ☒ Normal ☐ Rush (specify)

Reporting Units: ☐ ppmv ☐ ppbv ☒ µg/m3 ☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Engraved or Stamped Tube #	Date of Collection (mm/dd/yy)	Start Time (hr:min)	Date of Retrieval (mm/dd/yy)	End Time (hr:min)	Pre-Test Flow Rate	Post-Test Flow Rate	Volume	Indoor Air	Outdoor Air	Soil Vapor	Other ( )
01A	SV-1	G01500038	6/15/17	9:45	6-15-17	9:48:15	—	—	200mL	☐	☐	☒	☐
02A	SV-4	G01525B7	6/15/17	1:32	6-15-17	1:37	—	—	200mL	☐	☐	☒	☐
03A	SV-5	G01522B1	6/15/17	2:37	6-15-17	2:41:30	—	—	200mL	☐	☐	☒	☐
04A	TB	G01552?4	6/15/17	—	6-15-17	—	—	—	0	☐	☐	☐	☒
										☐	☐	☐	☐
										☐	☐	☐	☐
										☐	☐	☐	☐
										☐	☐	☐	☐
										☐	☐	☐	☐
										☐	☐	☐	☐
										☐	☐	☐	☐

Relinquished by: (signature) Date/Time 3 6/16/17
Received by: (signature) Date/Time 3 FedEx 6/16/17
Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time 6/17/17 Andrea Anguiano EAR 0938
Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time

Notes:
EDF Required
T10000006491
Analyze for naphthalene only - TO-17.

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex		5.2°C	Good	Yes No (None)	1706343

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6/30/2017
Mr. Ross Tinline
SVC Environmental, Inc.
11 Kenton Ave

San Carlos CA 94070

Project Name: "O" 29th Ave, Oakland
Project #: ERAS-04
Workorder #: 1706371A

Dear Mr. Ross Tinline

The following report includes the data for the above referenced project for sample(s) received on 6/19/2017 at Air Toxics Ltd.

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 Inc. 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: Rachel Selenis at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1706371A

Work Order Summary

CLIENT:	Mr. Ross Tinline SVC Environmental, Inc. 11 Kenton Ave San Carlos, CA 94070	**BILL TO:**	Mr. Ross Tinline SVC Environmental, Inc. 11 Kenton Ave San Carlos, CA 94070
PHONE:	650-218-3766	**P.O. #**	
FAX:		**PROJECT #**	ERAS-04 "O" 29th Ave, Oakland
DATE RECEIVED:	06/19/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	06/30/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SV-1	TO-15	4.7 "Hg	15.2 psi
02A	SV-2	TO-15	23.7 "Hg	15.2 psi
03A	SV-3	TO-15	22.4 "Hg	15.1 psi
04A	SV-4	TO-15	6.5 "Hg	14.8 psi
05A	SV-5	TO-15	5.9 "Hg	15.1 psi
06A	SV-6	TO-15	8.2 "Hg	15.4 psi
07A	SV-7	TO-15	20.2 "Hg	14.8 psi
08A	Lab Blank	TO-15	NA	NA
09A	CCV	TO-15	NA	NA
10A	LCS	TO-15	NA	NA
10AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/30/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
EPA Method TO-15
SVC Environmental, Inc.
Workorder# 1706371A

Seven 1 Liter Summa Canister samples were received on June 19, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

Samples SV-2, SV-3 and SV-7 were received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

Dilution was performed on sample SV-5 due to matrix interference.

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

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

Client Sample ID: SV-1

Lab ID#: 1706371A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	1.2	2.2	2.7	4.8
Acetone	12	20	29	48
Carbon Disulfide	4.8	12	15	37
Hexane	1.2	2.0	4.2	7.0
Chloroform	1.2	2.6	5.9	13
Cyclohexane	1.2	2.1	4.1	7.2
Benzene	1.2	1.7	3.8	5.4
Toluene	1.2	2.2	4.5	8.2
Ethyl Benzene	1.2	2.7	5.2	12
m,p-Xylene	1.2	9.0	5.2	39
o-Xylene	1.2	3.1	5.2	13
1,3,5-Trimethylbenzene	1.2	1.2	5.9	6.0

Client Sample ID: SV-2

Lab ID#: 1706371A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	4.8	4.8	11	11
Carbon Disulfide	19	47	60	140
Hexane	4.8	6.8	17	24
Chloroform	4.8	21	24	100
Toluene	4.8	7.8	18	29
m,p-Xylene	4.8	19	21	82
o-Xylene	4.8	6.7	21	29

Client Sample ID: SV-3

Lab ID#: 1706371A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Carbon Disulfide	16	140	50	440
Hexane	4.0	4.9	14	17
Chloroform	4.0	15	20	73
Cyclohexane	4.0	8.3	14	29

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

Client Sample ID: SV-3

Lab ID#: 1706371A-03A

Toluene	4.0	6.4	15	24
m,p-Xylene	4.0	7.3	17	32

Client Sample ID: SV-4

Lab ID#: 1706371A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	1.3	2.0	2.8	4.5
Freon 11	1.3	29	7.2	160
Acetone	13	33	30	78
Carbon Disulfide	5.1	50	16	160
Hexane	1.3	6.0	4.5	21
Chloroform	1.3	5.8	6.2	28
Cyclohexane	1.3	4.2	4.4	14
2,2,4-Trimethylpentane	1.3	7.6	6.0	35
Benzene	1.3	3.6	4.1	11
Heptane	1.3	48	5.2	200
Toluene	1.3	5.0	4.8	19
Ethyl Benzene	1.3	3.6	5.6	15
m,p-Xylene	1.3	16	5.6	67
o-Xylene	1.3	8.2	5.6	36

Client Sample ID: SV-5

Lab ID#: 1706371A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	2.5	4.6	14	26
Acetone	25	84	60	200
Carbon Disulfide	10	72	31	220
Hexane	2.5	3.7	8.9	13
Chloroform	2.5	17	12	85
Cyclohexane	2.5	2.9	8.7	10
2,2,4-Trimethylpentane	2.5	12	12	54
Benzene	2.5	7.2	8.1	23

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

Client Sample ID: SV-5

Lab ID#: 1706371A-05A

Heptane	2.5	92	10	380
Toluene	2.5	15	9.5	55
m,p-Xylene	2.5	9.6	11	42
o-Xylene	2.5	3.2	11	14

Client Sample ID: SV-6

Lab ID#: 1706371A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	1.4	1.5	3.1	3.4
Acetone	14	16	33	38
Carbon Disulfide	5.6	40	18	120
Hexane	1.4	5.0	5.0	18
Chloroform	1.4	13	6.9	64
Cyclohexane	1.4	2.1	4.8	7.2
2,2,4-Trimethylpentane	1.4	11	6.6	53
Benzene	1.4	5.6	4.5	18
Heptane	1.4	69	5.8	280
Toluene	1.4	7.2	5.3	27
Ethyl Benzene	1.4	1.6	6.1	6.8
m,p-Xylene	1.4	4.4	6.1	19
o-Xylene	1.4	1.9	6.1	8.4

Client Sample ID: SV-7

Lab ID#: 1706371A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	3.1	33	6.8	73
Carbon Disulfide	12	64	38	200
Hexane	3.1	33	11	120
Chloroform	3.1	8.7	15	42
Cyclohexane	3.1	51	10	180
2,2,4-Trimethylpentane	3.1	14	14	68
Benzene	3.1	9.8	9.8	31

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

Client Sample ID: SV-7

Lab ID#: 1706371A-07A

Heptane	3.1	94	12	380
Toluene	3.1	9.3	12	35
m,p-Xylene	3.1	5.3	13	23

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Client Sample ID: SV-1

Lab ID#: 1706371A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062111**	**Date of Collection: 6/15/17 9:36:00 AM**	
Dil. Factor:	**2.41**	**Date of Analysis: 6/21/17 07:45 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	6.0	Not Detected
Freon 114	1.2	Not Detected	8.4	Not Detected
Chloromethane	12	Not Detected	25	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,3-Butadiene	1.2	2.2	2.7	4.8
Bromomethane	12	Not Detected	47	Not Detected
Chloroethane	4.8	Not Detected	13	Not Detected
Freon 11	1.2	Not Detected	6.8	Not Detected
Ethanol	4.8	Not Detected	9.1	Not Detected
Freon 113	1.2	Not Detected	9.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Acetone	12	20	29	48
2-Propanol	4.8	Not Detected	12	Not Detected
Carbon Disulfide	4.8	12	15	37
3-Chloropropene	4.8	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
Methyl tert-butyl ether	4.8	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Hexane	1.2	2.0	4.2	7.0
1,1-Dichloroethane	1.2	Not Detected	4.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.8	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.6	Not Detected
Chloroform	1.2	2.6	5.9	13
1,1,1-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Cyclohexane	1.2	2.1	4.1	7.2
Carbon Tetrachloride	1.2	Not Detected	7.6	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.6	Not Detected
Benzene	1.2	1.7	3.8	5.4
1,2-Dichloroethane	1.2	Not Detected	4.9	Not Detected
Heptane	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.6	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected
Bromodichloromethane	1.2	Not Detected	8.1	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.5	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.9	Not Detected
Toluene	1.2	2.2	4.5	8.2
trans-1,3-Dichloropropene	1.2	Not Detected	5.5	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
2-Hexanone	4.8	Not Detected	20	Not Detected

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Client Sample ID: SV-1

Lab ID#: 1706371A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062111**	**Date of Collection: 6/15/17 9:36:00 AM**	
Dil. Factor:	**2.41**	**Date of Analysis: 6/21/17 07:45 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.2	Not Detected	10	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.2	Not Detected
Chlorobenzene	1.2	Not Detected	5.5	Not Detected
Ethyl Benzene	1.2	2.7	5.2	12
m,p-Xylene	1.2	9.0	5.2	39
o-Xylene	1.2	3.1	5.2	13
Styrene	1.2	Not Detected	5.1	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Cumene	1.2	Not Detected	5.9	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.3	Not Detected
Propylbenzene	1.2	Not Detected	5.9	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.9	Not Detected
1,3,5-Trimethylbenzene	1.2	1.2	5.9	6.0
1,2,4-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.2	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
1,2,4-Trichlorobenzene	4.8	Not Detected	36	Not Detected
Hexachlorobutadiene	4.8	Not Detected	51	Not Detected
Naphthalene	2.4	Not Detected	13	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SV-2

Lab ID#: 1706371A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062112**	**Date of Collection:**	**6/15/17 10:43:00 AM**
Dil. Factor:	**9.68**	**Date of Analysis:**	**6/21/17 08:13 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	4.8	Not Detected	24	Not Detected
Freon 114	4.8	Not Detected	34	Not Detected
Chloromethane	48	Not Detected	100	Not Detected
Vinyl Chloride	4.8	Not Detected	12	Not Detected
1,3-Butadiene	4.8	4.8	11	11
Bromomethane	48	Not Detected	190	Not Detected
Chloroethane	19	Not Detected	51	Not Detected
Freon 11	4.8	Not Detected	27	Not Detected
Ethanol	19	Not Detected	36	Not Detected
Freon 113	4.8	Not Detected	37	Not Detected
1,1-Dichloroethene	4.8	Not Detected	19	Not Detected
Acetone	48	Not Detected	110	Not Detected
2-Propanol	19	Not Detected	48	Not Detected
Carbon Disulfide	19	47	60	140
3-Chloropropene	19	Not Detected	60	Not Detected
Methylene Chloride	48	Not Detected	170	Not Detected
Methyl tert-butyl ether	19	Not Detected	70	Not Detected
trans-1,2-Dichloroethene	4.8	Not Detected	19	Not Detected
Hexane	4.8	6.8	17	24
1,1-Dichloroethane	4.8	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	19	Not Detected	57	Not Detected
cis-1,2-Dichloroethene	4.8	Not Detected	19	Not Detected
Tetrahydrofuran	4.8	Not Detected	14	Not Detected
Chloroform	4.8	21	24	100
1,1,1-Trichloroethane	4.8	Not Detected	26	Not Detected
Cyclohexane	4.8	Not Detected	17	Not Detected
Carbon Tetrachloride	4.8	Not Detected	30	Not Detected
2,2,4-Trimethylpentane	4.8	Not Detected	23	Not Detected
Benzene	4.8	Not Detected	15	Not Detected
1,2-Dichloroethane	4.8	Not Detected	20	Not Detected
Heptane	4.8	Not Detected	20	Not Detected
Trichloroethene	4.8	Not Detected	26	Not Detected
1,2-Dichloropropane	4.8	Not Detected	22	Not Detected
1,4-Dioxane	19	Not Detected	70	Not Detected
Bromodichloromethane	4.8	Not Detected	32	Not Detected
cis-1,3-Dichloropropene	4.8	Not Detected	22	Not Detected
4-Methyl-2-pentanone	4.8	Not Detected	20	Not Detected
Toluene	4.8	7.8	18	29
trans-1,3-Dichloropropene	4.8	Not Detected	22	Not Detected
1,1,2-Trichloroethane	4.8	Not Detected	26	Not Detected
Tetrachloroethene	4.8	Not Detected	33	Not Detected
2-Hexanone	19	Not Detected	79	Not Detected

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Client Sample ID: SV-2

Lab ID#: 1706371A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062112**	**Date of Collection: 6/15/17 10:43:00 AM**	
Dil. Factor:	**9.68**	**Date of Analysis: 6/21/17 08:13 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	4.8	Not Detected	41	Not Detected
1,2-Dibromoethane (EDB)	4.8	Not Detected	37	Not Detected
Chlorobenzene	4.8	Not Detected	22	Not Detected
Ethyl Benzene	4.8	Not Detected	21	Not Detected
m,p-Xylene	4.8	19	21	82
o-Xylene	4.8	6.7	21	29
Styrene	4.8	Not Detected	21	Not Detected
Bromoform	4.8	Not Detected	50	Not Detected
Cumene	4.8	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	4.8	Not Detected	33	Not Detected
Propylbenzene	4.8	Not Detected	24	Not Detected
4-Ethyltoluene	4.8	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	4.8	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	4.8	Not Detected	24	Not Detected
1,3-Dichlorobenzene	4.8	Not Detected	29	Not Detected
1,4-Dichlorobenzene	4.8	Not Detected	29	Not Detected
alpha-Chlorotoluene	4.8	Not Detected	25	Not Detected
1,2-Dichlorobenzene	4.8	Not Detected	29	Not Detected
1,2,4-Trichlorobenzene	19	Not Detected	140	Not Detected
Hexachlorobutadiene	19	Not Detected	210	Not Detected
Naphthalene	9.7	Not Detected	51	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SV-3

Lab ID#: 1706371A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062113**	**Date of Collection:**	**6/15/17 11:42:00 AM**
Dil. Factor:	**8.00**	**Date of Analysis:**	**6/21/17 08:42 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	4.0	Not Detected	20	Not Detected
Freon 114	4.0	Not Detected	28	Not Detected
Chloromethane	40	Not Detected	83	Not Detected
Vinyl Chloride	4.0	Not Detected	10	Not Detected
1,3-Butadiene	4.0	Not Detected	8.8	Not Detected
Bromomethane	40	Not Detected	160	Not Detected
Chloroethane	16	Not Detected	42	Not Detected
Freon 11	4.0	Not Detected	22	Not Detected
Ethanol	16	Not Detected	30	Not Detected
Freon 113	4.0	Not Detected	31	Not Detected
1,1-Dichloroethene	4.0	Not Detected	16	Not Detected
Acetone	40	Not Detected	95	Not Detected
2-Propanol	16	Not Detected	39	Not Detected
Carbon Disulfide	16	140	50	440
3-Chloropropene	16	Not Detected	50	Not Detected
Methylene Chloride	40	Not Detected	140	Not Detected
Methyl tert-butyl ether	16	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	4.0	Not Detected	16	Not Detected
Hexane	4.0	4.9	14	17
1,1-Dichloroethane	4.0	Not Detected	16	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	Not Detected	47	Not Detected
cis-1,2-Dichloroethene	4.0	Not Detected	16	Not Detected
Tetrahydrofuran	4.0	Not Detected	12	Not Detected
Chloroform	4.0	15	20	73
1,1,1-Trichloroethane	4.0	Not Detected	22	Not Detected
Cyclohexane	4.0	8.3	14	29
Carbon Tetrachloride	4.0	Not Detected	25	Not Detected
2,2,4-Trimethylpentane	4.0	Not Detected	19	Not Detected
Benzene	4.0	Not Detected	13	Not Detected
1,2-Dichloroethane	4.0	Not Detected	16	Not Detected
Heptane	4.0	Not Detected	16	Not Detected
Trichloroethene	4.0	Not Detected	21	Not Detected
1,2-Dichloropropane	4.0	Not Detected	18	Not Detected
1,4-Dioxane	16	Not Detected	58	Not Detected
Bromodichloromethane	4.0	Not Detected	27	Not Detected
cis-1,3-Dichloropropene	4.0	Not Detected	18	Not Detected
4-Methyl-2-pentanone	4.0	Not Detected	16	Not Detected
Toluene	4.0	6.4	15	24
trans-1,3-Dichloropropene	4.0	Not Detected	18	Not Detected
1,1,2-Trichloroethane	4.0	Not Detected	22	Not Detected
Tetrachloroethene	4.0	Not Detected	27	Not Detected
2-Hexanone	16	Not Detected	66	Not Detected

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Client Sample ID: SV-3

Lab ID#: 1706371A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062113**	**Date of Collection:**	**6/15/17 11:42:00 AM**
Dil. Factor:	**8.00**	**Date of Analysis:**	**6/21/17 08:42 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	4.0	Not Detected	34	Not Detected
1,2-Dibromoethane (EDB)	4.0	Not Detected	31	Not Detected
Chlorobenzene	4.0	Not Detected	18	Not Detected
Ethyl Benzene	4.0	Not Detected	17	Not Detected
m,p-Xylene	4.0	7.3	17	32
o-Xylene	4.0	Not Detected	17	Not Detected
Styrene	4.0	Not Detected	17	Not Detected
Bromoform	4.0	Not Detected	41	Not Detected
Cumene	4.0	Not Detected	20	Not Detected
1,1,2,2-Tetrachloroethane	4.0	Not Detected	27	Not Detected
Propylbenzene	4.0	Not Detected	20	Not Detected
4-Ethyltoluene	4.0	Not Detected	20	Not Detected
1,3,5-Trimethylbenzene	4.0	Not Detected	20	Not Detected
1,2,4-Trimethylbenzene	4.0	Not Detected	20	Not Detected
1,3-Dichlorobenzene	4.0	Not Detected	24	Not Detected
1,4-Dichlorobenzene	4.0	Not Detected	24	Not Detected
alpha-Chlorotoluene	4.0	Not Detected	21	Not Detected
1,2-Dichlorobenzene	4.0	Not Detected	24	Not Detected
1,2,4-Trichlorobenzene	16	Not Detected	120	Not Detected
Hexachlorobutadiene	16	Not Detected	170	Not Detected
Naphthalene	8.0	Not Detected	42	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: SV-4

Lab ID#: 1706371A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062114**	**Date of Collection:**	**6/15/17 1:27:00 AM**
Dil. Factor:	**2.56**	**Date of Analysis:**	**6/21/17 09:10 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.3	Not Detected	6.3	Not Detected
Freon 114	1.3	Not Detected	8.9	Not Detected
Chloromethane	13	Not Detected	26	Not Detected
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,3-Butadiene	1.3	2.0	2.8	4.5
Bromomethane	13	Not Detected	50	Not Detected
Chloroethane	5.1	Not Detected	14	Not Detected
Freon 11	1.3	29	7.2	160
Ethanol	5.1	Not Detected	9.6	Not Detected
Freon 113	1.3	Not Detected	9.8	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Acetone	13	33	30	78
2-Propanol	5.1	Not Detected	12	Not Detected
Carbon Disulfide	5.1	50	16	160
3-Chloropropene	5.1	Not Detected	16	Not Detected
Methylene Chloride	13	Not Detected	44	Not Detected
Methyl tert-butyl ether	5.1	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Hexane	1.3	6.0	4.5	21
1,1-Dichloroethane	1.3	Not Detected	5.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.1	Not Detected	15	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Tetrahydrofuran	1.3	Not Detected	3.8	Not Detected
Chloroform	1.3	5.8	6.2	28
1,1,1-Trichloroethane	1.3	Not Detected	7.0	Not Detected
Cyclohexane	1.3	4.2	4.4	14
Carbon Tetrachloride	1.3	Not Detected	8.0	Not Detected
2,2,4-Trimethylpentane	1.3	7.6	6.0	35
Benzene	1.3	3.6	4.1	11
1,2-Dichloroethane	1.3	Not Detected	5.2	Not Detected
Heptane	1.3	48	5.2	200
Trichloroethene	1.3	Not Detected	6.9	Not Detected
1,2-Dichloropropane	1.3	Not Detected	5.9	Not Detected
1,4-Dioxane	5.1	Not Detected	18	Not Detected
Bromodichloromethane	1.3	Not Detected	8.6	Not Detected
cis-1,3-Dichloropropene	1.3	Not Detected	5.8	Not Detected
4-Methyl-2-pentanone	1.3	Not Detected	5.2	Not Detected
Toluene	1.3	5.0	4.8	19
trans-1,3-Dichloropropene	1.3	Not Detected	5.8	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.0	Not Detected
Tetrachloroethene	1.3	Not Detected	8.7	Not Detected
2-Hexanone	5.1	Not Detected	21	Not Detected

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Client Sample ID: SV-4

Lab ID#: 1706371A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062114**	**Date of Collection:**	**6/15/17 1:27:00 AM**
Dil. Factor:	**2.56**	**Date of Analysis:**	**6/21/17 09:10 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.3	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.3	Not Detected	9.8	Not Detected
Chlorobenzene	1.3	Not Detected	5.9	Not Detected
Ethyl Benzene	1.3	3.6	5.6	15
m,p-Xylene	1.3	16	5.6	67
o-Xylene	1.3	8.2	5.6	36
Styrene	1.3	Not Detected	5.4	Not Detected
Bromoform	1.3	Not Detected	13	Not Detected
Cumene	1.3	Not Detected	6.3	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	8.8	Not Detected
Propylbenzene	1.3	Not Detected	6.3	Not Detected
4-Ethyltoluene	1.3	Not Detected	6.3	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.3	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.3	Not Detected
1,3-Dichlorobenzene	1.3	Not Detected	7.7	Not Detected
1,4-Dichlorobenzene	1.3	Not Detected	7.7	Not Detected
alpha-Chlorotoluene	1.3	Not Detected	6.6	Not Detected
1,2-Dichlorobenzene	1.3	Not Detected	7.7	Not Detected
1,2,4-Trichlorobenzene	5.1	Not Detected	38	Not Detected
Hexachlorobutadiene	5.1	Not Detected	55	Not Detected
Naphthalene	2.6	Not Detected	13	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SV-5

Lab ID#: 1706371A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062115**	**Date of Collection:**	**6/15/17 2:33:00 AM**
Dil. Factor:	**5.05**	**Date of Analysis:**	**6/21/17 09:36 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	2.5	Not Detected	12	Not Detected
Freon 114	2.5	Not Detected	18	Not Detected
Chloromethane	25	Not Detected	52	Not Detected
Vinyl Chloride	2.5	Not Detected	6.4	Not Detected
1,3-Butadiene	2.5	Not Detected	5.6	Not Detected
Bromomethane	25	Not Detected	98	Not Detected
Chloroethane	10	Not Detected	27	Not Detected
Freon 11	2.5	4.6	14	26
Ethanol	10	Not Detected	19	Not Detected
Freon 113	2.5	Not Detected	19	Not Detected
1,1-Dichloroethene	2.5	Not Detected	10	Not Detected
Acetone	25	84	60	200
2-Propanol	10	Not Detected	25	Not Detected
Carbon Disulfide	10	72	31	220
3-Chloropropene	10	Not Detected	32	Not Detected
Methylene Chloride	25	Not Detected	88	Not Detected
Methyl tert-butyl ether	10	Not Detected	36	Not Detected
trans-1,2-Dichloroethene	2.5	Not Detected	10	Not Detected
Hexane	2.5	3.7	8.9	13
1,1-Dichloroethane	2.5	Not Detected	10	Not Detected
2-Butanone (Methyl Ethyl Ketone)	10	Not Detected	30	Not Detected
cis-1,2-Dichloroethene	2.5	Not Detected	10	Not Detected
Tetrahydrofuran	2.5	Not Detected	7.4	Not Detected
Chloroform	2.5	17	12	85
1,1,1-Trichloroethane	2.5	Not Detected	14	Not Detected
Cyclohexane	2.5	2.9	8.7	10
Carbon Tetrachloride	2.5	Not Detected	16	Not Detected
2,2,4-Trimethylpentane	2.5	12	12	54
Benzene	2.5	7.2	8.1	23
1,2-Dichloroethane	2.5	Not Detected	10	Not Detected
Heptane	2.5	92	10	380
Trichloroethene	2.5	Not Detected	14	Not Detected
1,2-Dichloropropane	2.5	Not Detected	12	Not Detected
1,4-Dioxane	10	Not Detected	36	Not Detected
Bromodichloromethane	2.5	Not Detected	17	Not Detected
cis-1,3-Dichloropropene	2.5	Not Detected	11	Not Detected
4-Methyl-2-pentanone	2.5	Not Detected	10	Not Detected
Toluene	2.5	15	9.5	55
trans-1,3-Dichloropropene	2.5	Not Detected	11	Not Detected
1,1,2-Trichloroethane	2.5	Not Detected	14	Not Detected
Tetrachloroethene	2.5	Not Detected	17	Not Detected
2-Hexanone	10	Not Detected	41	Not Detected

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Client Sample ID: SV-5

Lab ID#: 1706371A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062115**	**Date of Collection: 6/15/17 2:33:00 AM**	
Dil. Factor:	**5.05**	**Date of Analysis: 6/21/17 09:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	2.5	Not Detected	22	Not Detected
1,2-Dibromoethane (EDB)	2.5	Not Detected	19	Not Detected
Chlorobenzene	2.5	Not Detected	12	Not Detected
Ethyl Benzene	2.5	Not Detected	11	Not Detected
m,p-Xylene	2.5	9.6	11	42
o-Xylene	2.5	3.2	11	14
Styrene	2.5	Not Detected	11	Not Detected
Bromoform	2.5	Not Detected	26	Not Detected
Cumene	2.5	Not Detected	12	Not Detected
1,1,2,2-Tetrachloroethane	2.5	Not Detected	17	Not Detected
Propylbenzene	2.5	Not Detected	12	Not Detected
4-Ethyltoluene	2.5	Not Detected	12	Not Detected
1,3,5-Trimethylbenzene	2.5	Not Detected	12	Not Detected
1,2,4-Trimethylbenzene	2.5	Not Detected	12	Not Detected
1,3-Dichlorobenzene	2.5	Not Detected	15	Not Detected
1,4-Dichlorobenzene	2.5	Not Detected	15	Not Detected
alpha-Chlorotoluene	2.5	Not Detected	13	Not Detected
1,2-Dichlorobenzene	2.5	Not Detected	15	Not Detected
1,2,4-Trichlorobenzene	10	Not Detected	75	Not Detected
Hexachlorobutadiene	10	Not Detected	110	Not Detected
Naphthalene	5.0	Not Detected	26	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SV-6

Lab ID#: 1706371A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062116**	**Date of Collection:**	**6/15/17 4:28:00 AM**
Dil. Factor:	**2.82**	**Date of Analysis:**	**6/21/17 10:05 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.4	Not Detected	7.0	Not Detected
Freon 114	1.4	Not Detected	9.8	Not Detected
Chloromethane	14	Not Detected	29	Not Detected
Vinyl Chloride	1.4	Not Detected	3.6	Not Detected
1,3-Butadiene	1.4	1.5	3.1	3.4
Bromomethane	14	Not Detected	55	Not Detected
Chloroethane	5.6	Not Detected	15	Not Detected
Freon 11	1.4	Not Detected	7.9	Not Detected
Ethanol	5.6	Not Detected	11	Not Detected
Freon 113	1.4	Not Detected	11	Not Detected
1,1-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Acetone	14	16	33	38
2-Propanol	5.6	Not Detected	14	Not Detected
Carbon Disulfide	5.6	40	18	120
3-Chloropropene	5.6	Not Detected	18	Not Detected
Methylene Chloride	14	Not Detected	49	Not Detected
Methyl tert-butyl ether	5.6	Not Detected	20	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Hexane	1.4	5.0	5.0	18
1,1-Dichloroethane	1.4	Not Detected	5.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.6	Not Detected	17	Not Detected
cis-1,2-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Tetrahydrofuran	1.4	Not Detected	4.2	Not Detected
Chloroform	1.4	13	6.9	64
1,1,1-Trichloroethane	1.4	Not Detected	7.7	Not Detected
Cyclohexane	1.4	2.1	4.8	7.2
Carbon Tetrachloride	1.4	Not Detected	8.9	Not Detected
2,2,4-Trimethylpentane	1.4	11	6.6	53
Benzene	1.4	5.6	4.5	18
1,2-Dichloroethane	1.4	Not Detected	5.7	Not Detected
Heptane	1.4	69	5.8	280
Trichloroethene	1.4	Not Detected	7.6	Not Detected
1,2-Dichloropropane	1.4	Not Detected	6.5	Not Detected
1,4-Dioxane	5.6	Not Detected	20	Not Detected
Bromodichloromethane	1.4	Not Detected	9.4	Not Detected
cis-1,3-Dichloropropene	1.4	Not Detected	6.4	Not Detected
4-Methyl-2-pentanone	1.4	Not Detected	5.8	Not Detected
Toluene	1.4	7.2	5.3	27
trans-1,3-Dichloropropene	1.4	Not Detected	6.4	Not Detected
1,1,2-Trichloroethane	1.4	Not Detected	7.7	Not Detected
Tetrachloroethene	1.4	Not Detected	9.6	Not Detected
2-Hexanone	5.6	Not Detected	23	Not Detected

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Client Sample ID: SV-6

Lab ID#: 1706371A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062116**	**Date of Collection: 6/15/17 4:28:00 AM**	
Dil. Factor:	**2.82**	**Date of Analysis: 6/21/17 10:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.4	Not Detected	12	Not Detected
1,2-Dibromoethane (EDB)	1.4	Not Detected	11	Not Detected
Chlorobenzene	1.4	Not Detected	6.5	Not Detected
Ethyl Benzene	1.4	1.6	6.1	6.8
m,p-Xylene	1.4	4.4	6.1	19
o-Xylene	1.4	1.9	6.1	8.4
Styrene	1.4	Not Detected	6.0	Not Detected
Bromoform	1.4	Not Detected	14	Not Detected
Cumene	1.4	Not Detected	6.9	Not Detected
1,1,2,2-Tetrachloroethane	1.4	Not Detected	9.7	Not Detected
Propylbenzene	1.4	Not Detected	6.9	Not Detected
4-Ethyltoluene	1.4	Not Detected	6.9	Not Detected
1,3,5-Trimethylbenzene	1.4	Not Detected	6.9	Not Detected
1,2,4-Trimethylbenzene	1.4	Not Detected	6.9	Not Detected
1,3-Dichlorobenzene	1.4	Not Detected	8.5	Not Detected
1,4-Dichlorobenzene	1.4	Not Detected	8.5	Not Detected
alpha-Chlorotoluene	1.4	Not Detected	7.3	Not Detected
1,2-Dichlorobenzene	1.4	Not Detected	8.5	Not Detected
1,2,4-Trichlorobenzene	5.6	Not Detected	42	Not Detected
Hexachlorobutadiene	5.6	Not Detected	60	Not Detected
Naphthalene	2.8	Not Detected	15	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: SV-7

Lab ID#: 1706371A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062117**	**Date of Collection:**	**6/15/17 5:26:00 AM**
Dil. Factor:	**6.14**	**Date of Analysis:**	**6/21/17 10:33 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	3.1	Not Detected	15	Not Detected
Freon 114	3.1	Not Detected	21	Not Detected
Chloromethane	31	Not Detected	63	Not Detected
Vinyl Chloride	3.1	Not Detected	7.8	Not Detected
1,3-Butadiene	3.1	33	6.8	73
Bromomethane	31	Not Detected	120	Not Detected
Chloroethane	12	Not Detected	32	Not Detected
Freon 11	3.1	Not Detected	17	Not Detected
Ethanol	12	Not Detected	23	Not Detected
Freon 113	3.1	Not Detected	24	Not Detected
1,1-Dichloroethene	3.1	Not Detected	12	Not Detected
Acetone	31	Not Detected	73	Not Detected
2-Propanol	12	Not Detected	30	Not Detected
Carbon Disulfide	12	64	38	200
3-Chloropropene	12	Not Detected	38	Not Detected
Methylene Chloride	31	Not Detected	110	Not Detected
Methyl tert-butyl ether	12	Not Detected	44	Not Detected
trans-1,2-Dichloroethene	3.1	Not Detected	12	Not Detected
Hexane	3.1	33	11	120
1,1-Dichloroethane	3.1	Not Detected	12	Not Detected
2-Butanone (Methyl Ethyl Ketone)	12	Not Detected	36	Not Detected
cis-1,2-Dichloroethene	3.1	Not Detected	12	Not Detected
Tetrahydrofuran	3.1	Not Detected	9.0	Not Detected
Chloroform	3.1	8.7	15	42
1,1,1-Trichloroethane	3.1	Not Detected	17	Not Detected
Cyclohexane	3.1	51	10	180
Carbon Tetrachloride	3.1	Not Detected	19	Not Detected
2,2,4-Trimethylpentane	3.1	14	14	68
Benzene	3.1	9.8	9.8	31
1,2-Dichloroethane	3.1	Not Detected	12	Not Detected
Heptane	3.1	94	12	380
Trichloroethene	3.1	Not Detected	16	Not Detected
1,2-Dichloropropane	3.1	Not Detected	14	Not Detected
1,4-Dioxane	12	Not Detected	44	Not Detected
Bromodichloromethane	3.1	Not Detected	20	Not Detected
cis-1,3-Dichloropropene	3.1	Not Detected	14	Not Detected
4-Methyl-2-pentanone	3.1	Not Detected	12	Not Detected
Toluene	3.1	9.3	12	35
trans-1,3-Dichloropropene	3.1	Not Detected	14	Not Detected
1,1,2-Trichloroethane	3.1	Not Detected	17	Not Detected
Tetrachloroethene	3.1	Not Detected	21	Not Detected
2-Hexanone	12	Not Detected	50	Not Detected

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Client Sample ID: SV-7

Lab ID#: 1706371A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062117**	**Date of Collection: 6/15/17 5:26:00 AM**	
Dil. Factor:	**6.14**	**Date of Analysis: 6/21/17 10:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	3.1	Not Detected	26	Not Detected
1,2-Dibromoethane (EDB)	3.1	Not Detected	24	Not Detected
Chlorobenzene	3.1	Not Detected	14	Not Detected
Ethyl Benzene	3.1	Not Detected	13	Not Detected
m,p-Xylene	3.1	5.3	13	23
o-Xylene	3.1	Not Detected	13	Not Detected
Styrene	3.1	Not Detected	13	Not Detected
Bromoform	3.1	Not Detected	32	Not Detected
Cumene	3.1	Not Detected	15	Not Detected
1,1,2,2-Tetrachloroethane	3.1	Not Detected	21	Not Detected
Propylbenzene	3.1	Not Detected	15	Not Detected
4-Ethyltoluene	3.1	Not Detected	15	Not Detected
1,3,5-Trimethylbenzene	3.1	Not Detected	15	Not Detected
1,2,4-Trimethylbenzene	3.1	Not Detected	15	Not Detected
1,3-Dichlorobenzene	3.1	Not Detected	18	Not Detected
1,4-Dichlorobenzene	3.1	Not Detected	18	Not Detected
alpha-Chlorotoluene	3.1	Not Detected	16	Not Detected
1,2-Dichlorobenzene	3.1	Not Detected	18	Not Detected
1,2,4-Trichlorobenzene	12	Not Detected	91	Not Detected
Hexachlorobutadiene	12	Not Detected	130	Not Detected
Naphthalene	6.1	Not Detected	32	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706371A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062105**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 11:14 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	2.0	Not Detected	3.8	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

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Client Sample ID: Lab Blank

Lab ID#: 1706371A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062105**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 11:14 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
Naphthalene	1.0	Not Detected	5.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: CCV

Lab ID#: 1706371A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 09:27 AM**	

Compound	%Recovery
Freon 12	96
Freon 114	99
Chloromethane	99
Vinyl Chloride	95
1,3-Butadiene	89
Bromomethane	97
Chloroethane	96
Freon 11	95
Ethanol	88
Freon 113	98
1,1-Dichloroethene	94
Acetone	87
2-Propanol	89
Carbon Disulfide	94
3-Chloropropene	93
Methylene Chloride	88
Methyl tert-butyl ether	92
trans-1,2-Dichloroethene	92
Hexane	89
1,1-Dichloroethane	89
2-Butanone (Methyl Ethyl Ketone)	88
cis-1,2-Dichloroethene	91
Tetrahydrofuran	84
Chloroform	92
1,1,1-Trichloroethane	91
Cyclohexane	85
Carbon Tetrachloride	92
2,2,4-Trimethylpentane	87
Benzene	93
1,2-Dichloroethane	90
Heptane	90
Trichloroethene	95
1,2-Dichloropropane	90
1,4-Dioxane	96
Bromodichloromethane	96
cis-1,3-Dichloropropene	94
4-Methyl-2-pentanone	87
Toluene	94
trans-1,3-Dichloropropene	92
1,1,2-Trichloroethane	95
Tetrachloroethene	99
2-Hexanone	85

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Client Sample ID: CCV

Lab ID#: 1706371A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 09:27 AM**	

Compound	%Recovery
Dibromochloromethane	98
1,2-Dibromoethane (EDB)	96
Chlorobenzene	94
Ethyl Benzene	94
m,p-Xylene	94
o-Xylene	93
Styrene	91
Bromoform	101
Cumene	92
1,1,2,2-Tetrachloroethane	92
Propylbenzene	92
4-Ethyltoluene	93
1,3,5-Trimethylbenzene	92
1,2,4-Trimethylbenzene	93
1,3-Dichlorobenzene	95
1,4-Dichlorobenzene	95
alpha-Chlorotoluene	93
1,2-Dichlorobenzene	94
1,2,4-Trichlorobenzene	102
Hexachlorobutadiene	106
Naphthalene	90

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: LCS

Lab ID#: 1706371A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 09:53 AM**	

Compound	%Recovery	Method Limits
Freon 12	98	70-130
Freon 114	106	70-130
Chloromethane	99	70-130
Vinyl Chloride	102	70-130
1,3-Butadiene	91	70-130
Bromomethane	103	70-130
Chloroethane	105	70-130
Freon 11	101	70-130
Ethanol	80	70-130
Freon 113	102	70-130
1,1-Dichloroethene	98	70-130
Acetone	94	70-130
2-Propanol	92	70-130
Carbon Disulfide	102	70-130
3-Chloropropene	103	70-130
Methylene Chloride	92	70-130
Methyl tert-butyl ether	96	70-130
trans-1,2-Dichloroethene	107	70-130
Hexane	96	70-130
1,1-Dichloroethane	94	70-130
2-Butanone (Methyl Ethyl Ketone)	94	70-130
cis-1,2-Dichloroethene	87	70-130
Tetrahydrofuran	88	70-130
Chloroform	96	70-130
1,1,1-Trichloroethane	95	70-130
Cyclohexane	90	70-130
Carbon Tetrachloride	96	70-130
2,2,4-Trimethylpentane	91	70-130
Benzene	97	70-130
1,2-Dichloroethane	93	70-130
Heptane	95	70-130
Trichloroethene	100	70-130
1,2-Dichloropropane	94	70-130
1,4-Dioxane	96	70-130
Bromodichloromethane	100	70-130
cis-1,3-Dichloropropene	105	70-130
4-Methyl-2-pentanone	88	70-130
Toluene	98	70-130
trans-1,3-Dichloropropene	94	70-130
1,1,2-Trichloroethane	99	70-130
Tetrachloroethene	102	70-130
2-Hexanone	85	70-130

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Client Sample ID: LCS

Lab ID#: 1706371A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 09:53 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	102	70-130
1,2-Dibromoethane (EDB)	98	70-130
Chlorobenzene	97	70-130
Ethyl Benzene	96	70-130
m,p-Xylene	94	70-130
o-Xylene	94	70-130
Styrene	91	70-130
Bromoform	106	70-130
Cumene	93	70-130
1,1,2,2-Tetrachloroethane	93	70-130
Propylbenzene	94	70-130
4-Ethyltoluene	97	70-130
1,3,5-Trimethylbenzene	92	70-130
1,2,4-Trimethylbenzene	94	70-130
1,3-Dichlorobenzene	98	70-130
1,4-Dichlorobenzene	98	70-130
alpha-Chlorotoluene	95	70-130
1,2-Dichlorobenzene	97	70-130
1,2,4-Trichlorobenzene	105	70-130
Hexachlorobutadiene	110	70-130
Naphthalene	91	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: LCSD

Lab ID#: 1706371A-10AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 10:20 AM**	

Compound	%Recovery	Method Limits
Freon 12	98	70-130
Freon 114	105	70-130
Chloromethane	100	70-130
Vinyl Chloride	101	70-130
1,3-Butadiene	89	70-130
Bromomethane	104	70-130
Chloroethane	104	70-130
Freon 11	100	70-130
Ethanol	78	70-130
Freon 113	101	70-130
1,1-Dichloroethene	96	70-130
Acetone	92	70-130
2-Propanol	92	70-130
Carbon Disulfide	101	70-130
3-Chloropropene	103	70-130
Methylene Chloride	91	70-130
Methyl tert-butyl ether	94	70-130
trans-1,2-Dichloroethene	105	70-130
Hexane	94	70-130
1,1-Dichloroethane	93	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
cis-1,2-Dichloroethene	87	70-130
Tetrahydrofuran	88	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	95	70-130
Cyclohexane	90	70-130
Carbon Tetrachloride	95	70-130
2,2,4-Trimethylpentane	90	70-130
Benzene	98	70-130
1,2-Dichloroethane	94	70-130
Heptane	95	70-130
Trichloroethene	102	70-130
1,2-Dichloropropane	95	70-130
1,4-Dioxane	98	70-130
Bromodichloromethane	101	70-130
cis-1,3-Dichloropropene	103	70-130
4-Methyl-2-pentanone	89	70-130
Toluene	98	70-130
trans-1,3-Dichloropropene	96	70-130
1,1,2-Trichloroethane	100	70-130
Tetrachloroethene	103	70-130
2-Hexanone	86	70-130

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Client Sample ID: LCSD

Lab ID#: 1706371A-10AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17062104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 10:20 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	103	70-130
1,2-Dibromoethane (EDB)	99	70-130
Chlorobenzene	97	70-130
Ethyl Benzene	97	70-130
m,p-Xylene	95	70-130
o-Xylene	95	70-130
Styrene	91	70-130
Bromoform	108	70-130
Cumene	93	70-130
1,1,2,2-Tetrachloroethane	94	70-130
Propylbenzene	94	70-130
4-Ethyltoluene	98	70-130
1,3,5-Trimethylbenzene	94	70-130
1,2,4-Trimethylbenzene	96	70-130
1,3-Dichlorobenzene	99	70-130
1,4-Dichlorobenzene	100	70-130
alpha-Chlorotoluene	96	70-130
1,2-Dichlorobenzene	99	70-130
1,2,4-Trichlorobenzene	110	70-130
Hexachlorobutadiene	115	70-130
Naphthalene	95	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	105	70-130

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Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Ross Tinline / Andrew Savage-Eras
Collected by: (Print and Sign) [signature]
Company SVC Environmental Email rosst@svcenv.com
Address 11 Kenton Ave City San Carlos State CA Zip 94070
Phone 650 218 3766 Fax —

Project Info:
P.O. #
Project # ERAS-04
Project Name "O" 29th Ave, Oakland

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)	FC #
01A	SV-1	1L 2837	6/15/17	9:28–9:36	VOC's by TO15	29.71	4.85			452
02A	SV-2	1L 2819	6/15/17	1031–1043	including naphthalene	29.49	23.84			269
03A	SV-3	1L 2497	6/15/17	1129–1142	Oxygen, Methane,	29.74	22.48			750
04A	SV-4	1L 2339	6/15/17	104–1:27	CO_2 (report	29.71	5.05			284
05A	SV-5	8032	6/15/17	2:21–2:33	fixed gases in %)	29.60	4.65			426
06A	SV-6	8036	6/15/17	3:15–4:28	↓	29.47	7.50			809
07A	SV-7	1L 1508	6/15/17	5:13–5:26	↓	28.75	20.42			334
	SV-6 (IPA)	2825	6/15/17	317–319	2propanol only (TO15 5820)					
						-28	-5			40690

Relinquished by: (signature) Date/Time 315 [signature] 6/16/17
Received by: (signature) Date/Time 315 FedEx 6/16/17
Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time Alex Berg EAL 06/16/17 1250
Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time

Notes:
EDF Required
T0000006491

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	fed Ex		NA	Good	Yes No None	1706371

Form 1293 rev.11

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6/30/2017
Mr. Ross Tinline
SVC Environmental, Inc.
11 Kenton Ave

San Carlos CA 94070

Project Name: "O" 29th Ave, Oakland
Project #: ERAS-04
Workorder #: 1706371B

Dear Mr. Ross Tinline

The following report includes the data for the above referenced project for sample(s) received on 6/19/2017 at Air Toxics Ltd.

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 Inc. 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: Rachel Selenis at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1706371B

Work Order Summary

CLIENT:	Mr. Ross Tinline SVC Environmental, Inc. 11 Kenton Ave San Carlos, CA 94070	**BILL TO:**	Mr. Ross Tinline SVC Environmental, Inc. 11 Kenton Ave San Carlos, CA 94070
PHONE:	650-218-3766	**P.O. #**	
FAX:		**PROJECT #**	ERAS-04 "O" 29th Ave, Oakland
DATE RECEIVED:	06/19/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	06/30/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SV-1	Modified ASTM D-1946	4.7 "Hg	15.2 psi
02A	SV-2	Modified ASTM D-1946	23.7 "Hg	15.2 psi
03A	SV-3	Modified ASTM D-1946	22.4 "Hg	15.1 psi
04A	SV-4	Modified ASTM D-1946	6.5 "Hg	14.8 psi
05A	SV-5	Modified ASTM D-1946	5.9 "Hg	15.1 psi
06A	SV-6	Modified ASTM D-1946	8.2 "Hg	15.4 psi
07A	SV-7	Modified ASTM D-1946	20.2 "Hg	14.8 psi
08A	Lab Blank	Modified ASTM D-1946	NA	NA
09A	LCS	Modified ASTM D-1946	NA	NA
09AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/30/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified ASTM D-1946
SVC Environmental, Inc.
Workorder# 1706371B

Seven 1 Liter Summa Canister samples were received on June 19, 2017. 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 ATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
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 >/= 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

Samples SV-2, SV-3 and SV-7 were received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

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

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

Client Sample ID: SV-1

Lab ID#: 1706371B-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	5.6
Carbon Dioxide	0.024	1.9

Client Sample ID: SV-2

Lab ID#: 1706371B-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.96	17
Methane	0.00096	0.0040

Client Sample ID: SV-3

Lab ID#: 1706371B-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.80	18
Carbon Dioxide	0.080	1.6

Client Sample ID: SV-4

Lab ID#: 1706371B-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	16
Carbon Dioxide	0.026	4.9

Client Sample ID: SV-5

Lab ID#: 1706371B-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	18
Carbon Dioxide	0.025	2.7

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

Client Sample ID: SV-6

Lab ID#: 1706371B-06A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.28	13
Carbon Dioxide	0.028	5.0

Client Sample ID: SV-7

Lab ID#: 1706371B-07A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.61	15
Methane	0.00061	0.0052
Carbon Dioxide	0.061	3.3

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Client Sample ID: SV-1

Lab ID#: 1706371B-01A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10062117**	**Date of Collection: 6/15/17 9:36:00 AM**	
Dil. Factor:	**2.41**	**Date of Analysis: 6/21/17 02:22 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.24	5.6
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	1.9

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-2

Lab ID#: 1706371B-02A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10062118**	**Date of Collection: 6/15/17 10:43:00 AM**	
Dil. Factor:	**9.64**	**Date of Analysis: 6/21/17 02:48 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.96	17
Methane	0.00096	0.0040
Carbon Dioxide	0.096	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-3

Lab ID#: 1706371B-03A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10062119**	**Date of Collection:**	**6/15/17 11:42:00 AM**
Dil. Factor:	**8.05**	**Date of Analysis:**	**6/21/17 03:13 PM**

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.80	18
Methane	0.00080	Not Detected
Carbon Dioxide	0.080	1.6

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-4

Lab ID#: 1706371B-04A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10062120**	**Date of Collection: 6/15/17 1:27:00 AM**	
Dil. Factor:	**2.56**	**Date of Analysis: 6/21/17 04:06 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.26	16
Methane	0.00026	Not Detected
Carbon Dioxide	0.026	4.9

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-5

Lab ID#: 1706371B-05A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10062121**	**Date of Collection: 6/15/17 2:33:00 AM**	
Dil. Factor:	**2.52**	**Date of Analysis: 6/21/17 04:49 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.25	18
Methane	0.00025	Not Detected
Carbon Dioxide	0.025	2.7

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-6

Lab ID#: 1706371B-06A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10062122**	**Date of Collection: 6/15/17 4:28:00 AM**	
Dil. Factor:	**2.81**	**Date of Analysis: 6/21/17 05:13 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.28	13
Methane	0.00028	Not Detected
Carbon Dioxide	0.028	5.0

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-7

Lab ID#: 1706371B-07A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10062123**	**Date of Collection: 6/15/17 5:26:00 AM**	
Dil. Factor:	**6.14**	**Date of Analysis: 6/21/17 05:36 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.61	15
Methane	0.00061	0.0052
Carbon Dioxide	0.061	3.3

Container Type: 1 Liter Summa Canister

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Client Sample ID: Lab Blank

Lab ID#: 1706371B-08A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10062103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 08:31 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

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Client Sample ID: LCS

Lab ID#: 1706371B-09A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10062102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 07:50 AM**	

Compound	%Recovery	Method Limits
Oxygen	98	85-115
Methane	104	85-115
Carbon Dioxide	98	85-115

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 1706371B-09AA

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10062124**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 06:01 PM**	

Compound	%Recovery	Method Limits
Oxygen	98	85-115
Methane	100	85-115
Carbon Dioxide	99	85-115

Container Type: NA - Not Applicable

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specify

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Pressurized by:
Date:
Pressurization Gas: N_2 He

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03A	SV-3	1L 2497	6/15/17	1129–1142	Oxygen, Methane,	29.74	22.48			750
04A	SV-4	1L 2339	6/15/17	104–1:27	CO_2 (report	29.71	5.05			284
05A	SV-5	8032	6/15/17	2:21–2:33	fixed gases in %)	29.60	4.65			426
06A	SV-6	8036	6/15/17	3:15–4:28	↓	29.47	7.50			809
07A	SV-7	1L 1508	6/15/17	5:13–5:26	↓	28.75	20.42			334
	SV-6 (IPA)	2825	6/15/17	317–319	2propanol only (TO15 5820)					
						-28	-5			40690

Relinquished by: (signature) Date/Time 315 [signature] 6/16/17
Received by: (signature) Date/Time 315 FedEx 6/16/17
Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time Alex Berg EAL 06/16/17 1250
Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time

Notes:
EDF Required
T0000006491

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	fed Ex		NA	Good	Yes No None	1706371

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