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November 13, 2014

Mr. Mark Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6540

I, Reid Settlemier, hereby authorize ERAS Environmental, Inc. to submit the Workplan for Subsurface Investigation for 3037-3115 Adeline St., Oakland in Oakland, California, dated November 13, 2014 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: _____

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SUBSURFACE SOIL INVESTIGATION REPORT

FOR

**3037-3115 ADELIN STREET
OAKLAND, CALIFORNIA**

Prepared for

Mr. John Murray
John Murray Productions
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Oakland, CA 94608

And

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November 13, 2014

TABLE OF CONTENTS

TABLE OF CONTENTS	ii
CERTIFICATION.....	iii
1.0 INTRODUCTION	1
1.2 BACKGROUND.....	1
2.0 SITE CONCEPTUAL MODEL	3
2.1 REGIONAL GEOLOGIC/HYDROLOGIC SETTING.....	3
2.2 PREVIOUSLY KNOWN EXTENT OF CONTAMINATION	3
3.0 FIELD WORK PERFORMED.....	4
3.1 THE OBJECTIVES.....	4
3.2 FIELD WORK PERFORMED	4
3.3 ANALYTICAL RESULTS	5
4.0 CONCLUSIONS AND RECOMMENDATIONS.....	7

FIGURES

- 1 Site Location Map
- 2 Sample Location Map

APPENDICES

- A Historic Tables and Maps
- B Permit
- C Standard Operating Procedures
- D Lithologic Logs
- E Analytical Results - Soil

CERTIFICATION

This **Subsurface Soil Investigation Report** at 3037-3115 Adeline Street in Oakland, California, has been prepared by ERAS Environmental, Inc. (ERAS) under the professional supervision of the Registered 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



November 13, 2014

1.0 INTRODUCTION

The following presents the results of soil sampling at 3037-3115 Adeline Street in Oakland, California (the "Property"). This work was conducted in accordance to a work plan prepared by ERAS dated August 1, 2014 and an addendum to the work plan dated September 30, 2014. The scope of work was approved by Mr. Mark Detterman with the Alameda County Health Care Services Agency (ACHCSA) in a letter dated October 1, 2014.

1.2 BACKGROUND

Phase 1 and Phase 2 investigations have recently been performed on the Property.

Phase 1 Investigation

A Phase 1 Environmental Site Assessment (ESA) was conducted by Rincon Associates, Inc. (Rincon) and the results were presented in a report dated November 15, 2013. Rincon identified the following information for the Property.

- A bronze foundry operated at part of the Property (3037 and 3101 Adeline Street) from at least 1928 to 1963.
- Machine shops operated at 3101 and 3115 Adeline Street from at least 1951 until 1959.
- Six nearby historic auto stations were listed on the environmental database. Rincon indicated these sites were located hydrologically up-gradient and there is potential that contamination from these sites could have impacted groundwater beneath the subject property.

Rincon concluded foundry operations can involve the use of heavy metals including copper, lead, nickel and zinc. Machine shop operations can involve the use of cutting oil and degreasing solvents. Rincon indicated the former use of the Property represented a potential recognized environmental condition (REC) and recommended a subsurface investigation.

Soil and Groundwater Investigation

A Phase 2 soil and groundwater investigation was performed by Partner Engineering and Science, Inc. (Partner). A total of 5 soil borings were drilled on the Property in the general areas of the former foundry and machine shops. The locations of the borings are shown on the Boring Location Map in **Appendix A**.

Extent of Soil Contamination

Partner reported concentrations of total petroleum hydrocarbons as diesel range organics (TPH-

dro¹) and as oil range organics (TPH-oro) in Boring PES-B2 at 3 feet and 7 feet. Concentrations of TPH-dro and TPH-oro were 1,200 milligrams per kilogram (mg/Kg) and 950 mg/Kg at 3 feet and 1,600 and 860 mg/Kg at 7 feet. Concentrations of TPH-dro were above the California Regional Water Quality Control Board Environmental Screening Level (ESL) of 110 mg/Kg (Table A, RWQCB, December 2013). The sample from 3 feet also contained total petroleum hydrocarbons as gasoline (TPH-gro) at a concentration of 46 mg/Kg. Partner does not appear to have had the laboratory run silica gel cleanup on the samples prior to analysis to remove biogenic hydrocarbon interferences.

Naphthalene was detected at 5.3 mg/Kg in the sample from Boring PES-B2 at 3 feet. This concentration was above the ESL of 1.2 mg/Kg (Table A, RWQCB, December 2013). No other concentrations of TPH-dro, TPH-oro or naphthalene were detected in soil samples.

Lead and copper were detected in soil at 3 feet in borings PES-B1 and PESB-2 which appear to be above background concentrations. However the maximum concentration of copper of 1,200 mg/Kg is below the ESL of 5,000 mg/Kg (Table A, RWQCB, December 2013). The maximum concentration of lead of 140 mg/Kg is below the ESL of 320 mg/Kg (Table A, RWQCB, December 2013).

Extent of Groundwater Contamination

No concentrations of TPH-dro or TPH-oro were detected in groundwater samples from Borings PES-B1 and PES-B2. Volatile organic compounds (VOCs) were not detected in the groundwater sample collected from PES-B1. Naphthalene was not detected in the groundwater sample from PES-B2. No groundwater samples were collected from borings PES-B3, PES-B4, or PES-B5.

Results of the laboratory analyses are tabulated in the Tables 1 through 7 that are included in **Appendix A**.

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 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.

2.0 SITE CONCEPTUAL MODEL

2.1 REGIONAL GEOLOGIC/HYDROLOGIC SETTING

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 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 west towards Oakland Outer Harbor.

The Property is at an elevation of approximately 20 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 east-northeast 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 west.

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 west-southwest toward the Oakland Outer Harbor.

Based on the previous borings drilled on the Property, the subsurface sediments consist of mostly medium stiff to stiff clay to the depths explored of approximately 20 feet. Coarser sediments were observed in Boring PES-B1 at approximately 10-15 feet. Groundwater was reported in the borings at depths of approximately 17.5 to 19.5 feet.

2.2 PREVIOUSLY KNOWN EXTENT OF CONTAMINATION

2.2.1 Results in Soil

High concentrations of diesel range hydrocarbons were detected at 3 and 7 feet in Boring PES-B2 located near the southwest corner of the building. The lateral extent of contamination is defined on three sides of this boring although none of those borings were closer together than approximately 30 feet. The vertical extent of contamination had not been determined.

Naphthalene was detected at an elevated concentration at 3 feet but was not detected in the deeper sample at 7 feet.

2.2.2 Results in Groundwater

No contamination has been detected in groundwater samples collected from two of the borings (PES-B1 & PES-B2) drilled at the site.

3.0 FIELD WORK PERFORMED

3.1 THE OBJECTIVES

The main objective of this investigation was to define the vertical and lateral extent of the previously detected contaminants. (TPH-gro, TPH-dro, TPH-oro, copper, lead, and tin)

3.2 FIELD WORK PERFORMED

ERAS obtained a drilling permit from the Alameda County Department of Public Works (ACDPW). A copy of the permit is included in **Appendix B**.

Seven 2.5-inch diameter soil borings were drilled using a hydraulic push sampling rig by ECA of Aptos, California on October 21, 2014. The locations of the borings are shown on **Figure 2**.

Borings B-1, B-3, B-4, and B-7 were advanced to a depth of 12 feet bgs, borings B-2 and B-6 were advanced to 16 feet bgs, and boring B-8 was advanced to 4 feet bgs.

Soil samples were collected from the following depths from each boring:

- B-1 1.5-2 feet bgs, 3-3.5 feet bgs, and 9-9.5 feet bgs
- B-2 2-2.5 feet bgs, 3-3.5 feet bgs, 7.5-8 feet bgs, and 15.5-16 feet bgs
- B-3 2-2.5 feet bgs, 3-3.5 feet bgs, 7.5-8 feet bgs, and 11.5-12 feet bgs
- B-4 3-3.5 feet bgs, 7.5-8 feet bgs, and 9.5-10 feet bgs
- B-6 1.5-2 feet bgs, 2.5-3 feet bgs, 7.5-8 feet bgs, and 15.5-16 feet bgs
- B-7 2-2.5 feet bgs, 3-3.5 feet bgs, 7.5-8 feet bgs, and 11.5-12 feet bgs
- B-8 1.5-2 feet bgs

Soil was continuously cored for lithologic logging and monitored using an organic vapor meter (OVM) for indications of contamination. The soil cores were logged by ERAS geologist Andrew Savage. The Standard Operating Procedures for soil gas sampling are included in **Appendix C**.

The subsurface vadose zone lithology encountered consisted of sand and rock fill beneath the asphalt pavement to a depth of 1.5-2 feet bgs underlain by silty clay, silty sand, gravely sand, and sandy gravel. The bulk of the vadose zone consisted of a silty clay. Details of subsurface conditions are provided on the soil boring logs in **Appendix D**.

Hydrocarbon odor and elevated OVM readings were found to be present in Borings B-2, B-3, and B-6.

3.3 ANALYTICAL RESULTS

The soil samples collected from the zone of 1.5-2.5 feet bgs and 2.5-3.5 feet bgs were analyzed for TPH-gro by EPA Method SW8021B/8015B, TPH-dro and TPH-oro by EPA Method SW8015B, and copper, lead, and tin by EPA Method SW6020 with the exception of borings B-1, B-4, and B-7 where the 2.-3.5 foot sample was only analyzed for the three metals and not the hydrocarbons

The soil samples collected from depth greater than 3.5 feet bgs were analyzed for only the presence of the hydrocarbons.

The results of the soil sample analyses are presented in the table below. The analytical laboratory report is included in **Appendix E**.

Sample ID	Date	TPH-gro	TPH-dro	TPH-dro*	TPH-oro	TPH-oro*	Copper	Lead	Tin
		(mg/Kg)							
B-1, 1.5-2	21-Oct-14	<1	<1.0	NA	<5.0	NA	210	25	<5.0
B-1, 3-3.5	21-Oct-14	NA	NA	NA	NA	NA	22	6.7	<5.0
B-1, 9-9.5	21-Oct-14	<1	11	NA	100	NA	NA	NA	NA
B-1, 10.5-11	21-Oct-14	<1	<1.0	NA	<5.0	NA	NA	NA	NA
B-2, 2-2.5	21-Oct-14	540	17,000	20,000	8,700	11,000	1,200	650	78
B-2, 3-3.5	21-Oct-14	190	270	NA	<250	NA	24	7.8	<5
B-2, 7.5-8	21-Oct-14	200	2,700	NA	1,700	NA	NA	NA	NA
B-2, 15.5-16	21-Oct-14	4.1	49	NA	38	NA	NA	NA	NA
B-3, 2-2.5	21-Oct-14	<1	480	NA	430	NA	31	7.0	<5
B-3, 3-3.5	21-Oct-14	150	370	NA	<250	NA	22	8.8	<5
B-3, 7.5-8	21-Oct-14	<1	120	NA	100	NA	NA	NA	NA
B-3, 11.5-12	21-Oct-14	<1	<5.0	NA	<5.0	NA	NA	NA	NA
B-4, 3-3.5	21-Oct-14	NA	NA	NA	NA	NA	18	5.8	<5
B-4, 7.5-8	21-Oct-14	<1	<5.0	NA	<5.0	NA	NA	NA	NA
B-4, 9.5-10	21-Oct-14	<1	1.2	NA	<5.0	NA	NA	NA	NA
B-6, 1.5-2	21-Oct-14	55	1,400	NA	1,200	NA	380	120	20
B-6, 2.5-3	21-Oct-14	180	670	NA	280	NA	22	7.1	<5
B-6, 7.5-8	21-Oct-14	40	480	NA	280	NA	NA	NA	NA
B-6, 15.5-16	21-Oct-14	<1	<1.0	NA	<5.0	NA	NA	NA	NA
B-7, 2-2.5	21-Oct-14	<1	<1.0	NA	<5.0	NA	87	18	<5
B-7, 3-3.5	21-Oct-14	NA	NA	NA	NA	NA	18	7.1	<5
B-7, 7.5-8	21-Oct-14	<1	3.1	NA	14	NA	NA	NA	NA
B-7, 11.5-12	21-Oct-14	<1	<1.0	NA	<5.0	NA	NA	NA	NA
B-8, 1.5-2	21-Oct-14	NA	NA	NA	NA	NA	23	10	<5
ESL <3m		500	110	110	500	500	230	320	-
ESL >3m		770	110	110	1000	1000	5,000	320	-

Notes

NA = Not Analyzed (mg/Kg) = Milligrams per Kilogram

Bold Type Indicates Reported Value Above the ESL.

TPH-gro = Total petroleum hydrocarbons quantified as gasoline range organics

TPH-dro = Total petroleum hydrocarbons quantified as diesel range organics

TPH-oro = Total petroleum hydrocarbons quantified as oil range organics

TPH-dro* = Total petroleum hydrocarbons quantified as diesel range organics run without silica gel cleanup

TPH-oro* = Total petroleum hydrocarbons quantified as oil range organics run without silica gel cleanup

ESL <3m = environmental screening limits set forth by the RWQCQ for soil shallower than 3 meters on a commercial Property where groundwater is considered a potential source of drinking water

ESL >3m = environmental screening limits set forth by the RWQCQ for soil deeper than 3 meters on a commercial Property where groundwater is considered a potential source of drinking water

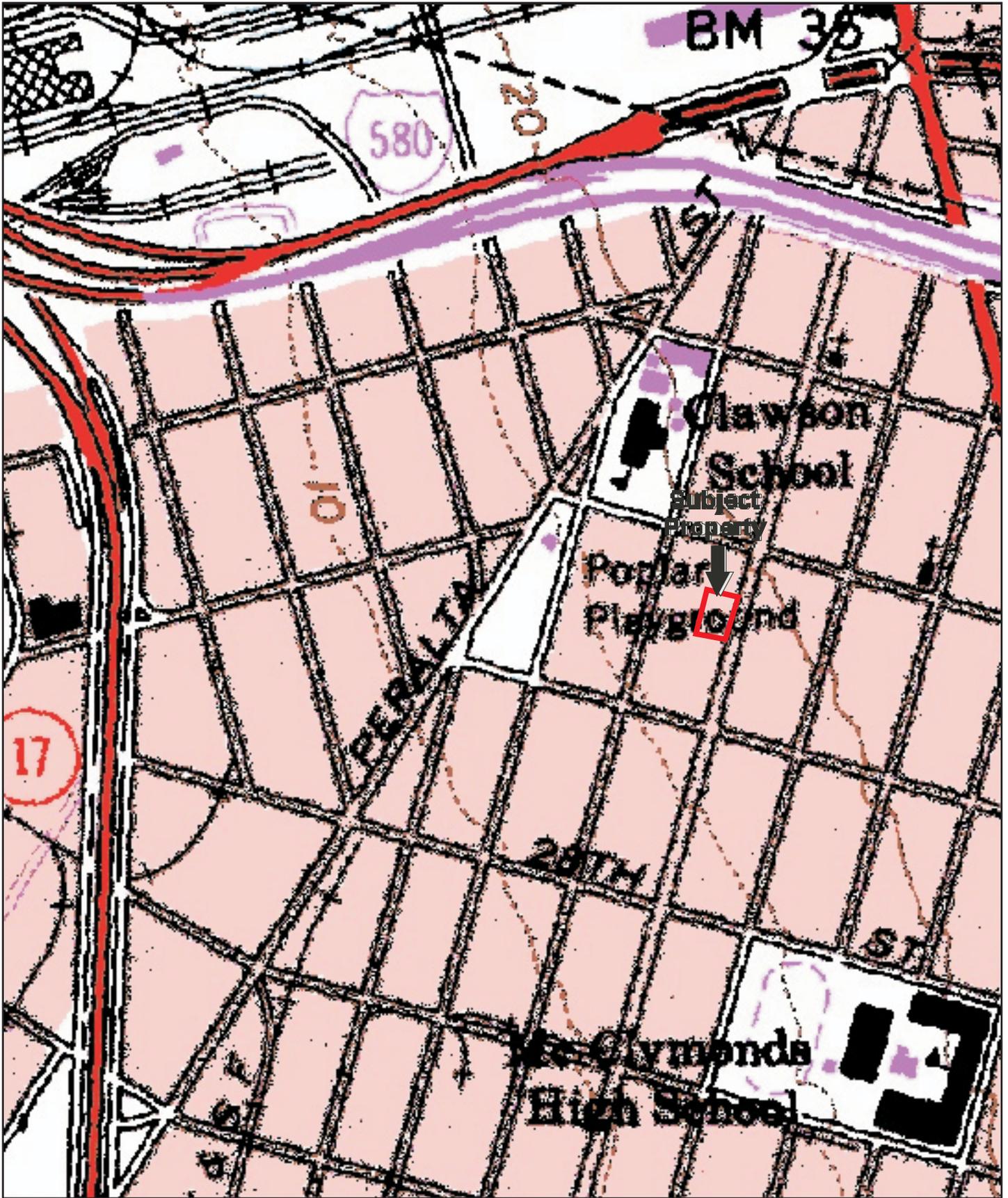
4.0 CONCLUSIONS AND RECOMMENDATIONS

The concentrations of the contaminants of concern above the ESL appear to be limited to the area of borings B-2, B-3, B-6, and PES-B2. Concentrations of contaminants above the ESL were detected to a depth of approximately 8 feet bgs. Samples collected at depths of 12 feet bgs did not contain concentrations above the ESLs. Based on the depth to water (17.5 to 19.5 feet bgs), the lack of groundwater contamination in the prior borings (PES-B1 & -B2), the attenuation of the degree of contamination in the soil samples with depth above 12 ft bgs, and the concentrations of deeper soil samples in comparison to the ESLs, contaminants detected in the soil column do not appear to pose a risk of contamination to groundwater beneath the Property.

ERAS recommends that elevated concentrations of contaminants be removed to a depth of up to 10 feet and that the soil be properly disposed. Following the completion of the soil excavation confirmation samples should be collected to determine what concentrations of the contaminants remain in the subsurface.

Any remaining contaminants will not include volatile constituents that would pose a risk to occupants. Since groundwater does not appear to be impacted there does not appear to be a risk to drinking water resources or aquatic receptors. After removal of contaminated shallow soil, the risk of direct contact will be significantly reduced and once the soil is excavated the bulk of the known contamination will have been removed. Based on the soil remediation, it is expected the Property could be considered for case closure.

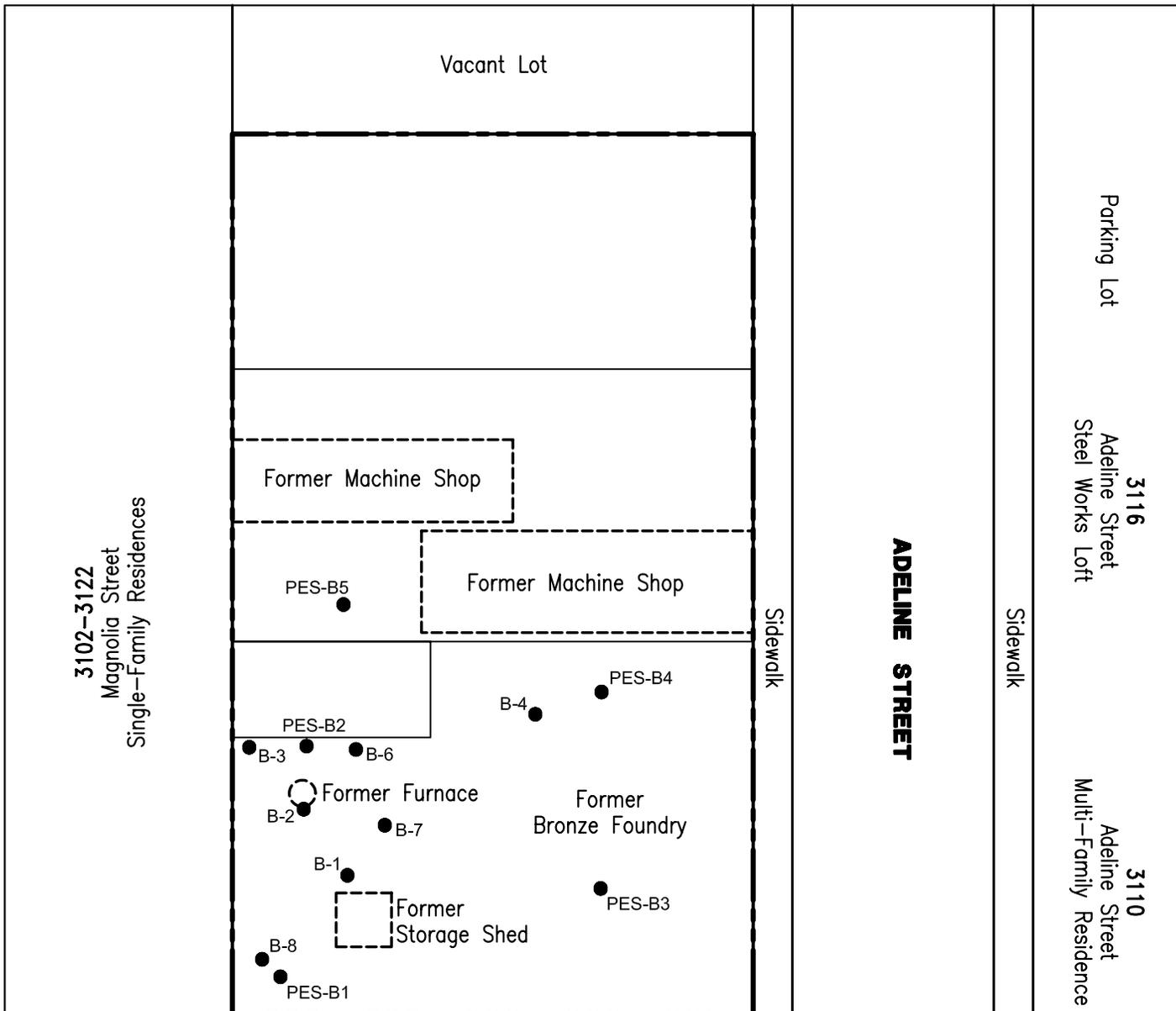
FIGURES



USGS Oakland West Quadrangle
Version: 1980

Site Vicinity Map

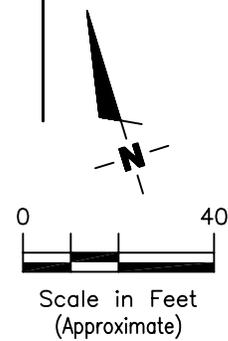
Figure	
1	
3037, 3101 & 3115 Adeline Street Oakland, California 94608	



3031
Adeline Street
Vacant Commercial Building

EXPLANATION

- PES- Previous boring location (Partner 2013)
- B- boring locations (ERAS 2014)



BORING LOCATION MAP

DATE
10/14

REVIEWED BY
AS

3037, 3101 & 3115 Adeline Street
Oakland, California

JOB NUMBER
14157B
FIGURE
2

ERAS Environmental Inc.

APPENDIX A

Historic Maps and Tables

Table 1: Summary of Investigation Scope

Borehole Identification	Location	Terminal Depth (feet bgs)	Matrix Sampled	Sampling Depths* (feet bgs)	Target Contaminants
PES-B1	Southwestern Portion of Parking Lot / Former Foundry	20**	Soil	<u>3</u> , 7, 13, 19	Metals
			Groundwater	17.5	TPH-cc, VOCs
PES-B2	Northern Portion of Parking Lot / Former Foundry	19**	Soil	<u>3</u> , 7 ^{1,2} , 12 ^{1,2} , 18 ^{1,2}	TPH-cc, VOCs, Metals
			Groundwater	18.8 ¹	TPH-cc, VOCs
PES-B3	Southern Portion of Parking Lot / Former Foundry	20**	Soil	<u>3</u> , 8, 13, 17	TPH-cc, VOCs, Metals
			Groundwater	18.4	NA
PES-B4	Northwestern Portion of Parking Lot / Former Foundry Machine Shop	20**	Soil	<u>3</u> , 7, <i>11</i> , 13	TPH-cc, VOCs, Metals
			Groundwater	19.5	NA
PES-B5	Southwestern Interior of Subject Property Warehouse/ Former Machine Shop	18.2***	Soil	<u>3</u> , 7, 11, 15	TPH-cc, VOCs, Metals

Notes:

*Depths in **bold** analyzed for carbon chain total petroleum hydrocarbons (TPH-cc) in accordance with Environmental Protection Agency (EPA) Method 8015M. Depths in *italics* analyzed for volatile organic compounds (VOCs) in accordance with EPA Method 8260B. Underlined depths analyzed for California Administrative Manual (CAM) 17 Metals in accordance with EPA Method 6010B/7471A. ¹Sample analyzed for total petroleum hydrocarbons - diesel-range organics/oil-range organics (TPH-DRO/ORO) in accordance with EPA Method 8015M, naphthalene in accordance with EPA Method 8260B. ²Sample analyzed for lead and copper in accordance with EPA Method 6010.

**Boring Terminated at the terminal depth after groundwater was encountered

***Refusal encountered at the terminal depth

bgs = below ground surface

NA = not analyzed

Table 2: Soil Sample TPH-cc Laboratory Results

EPA Method	TPH-cc via 8015M		
Units	(mg/kg)		
Sample Identification	TPH-g	TPH-d	TPH-o
PES-B2-3	46	<u>1200</u>	<i>950</i>
PES-B2-7	NA	<u>1600</u>	<i>860</i>
PES-B2-12	NA	< 10	< 10
PES-B2-18	NA	< 10	< 10
PES-B3-3	< 10	< 10	< 10
PES-B4-11	< 10	< 10	< 10
PES-B5-7	< 10	< 10	< 10
Residential ESLs	100	100	500
Industrial ESLs	420	500	2,500

Notes:

TPH-cc = carbon chain total petroleum hydrocarbons

EPA = Environmental Protection Agency

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

TPH-o = total petroleum hydrocarbons as oil

mg/kg = milligrams per kilogram

< = not detected above indicated laboratory Method Detection Limit (MDL)

ESLs = Environmental Screening Levels (EPA Region 9 - 2013)

Italicized values exceed residential ESLs

Underlined values exceed both residential and industrial ESLs

NA = not applicable

Table 3: Soil Sample VOCs Laboratory Results

EPA Method	VOCs via 8260B				
Units	(µg/kg)				
Sample Identification	n-Butylbenzene	sec-Butylbenzene	Napthalene	n-Propylbenzene	Other VOCs
PES-B2-3	19	5.4	<u>5300</u>	7.6	ND
PES-B2-7	NA	NA	ND	NA	NA
PES-B2-12	NA	NA	ND	NA	NA
PES-B2-18	NA	NA	ND	NA	NA
PES-B3-3	ND	ND	ND	ND	ND
PES-B4-11	ND	ND	ND	ND	ND
PES-B5-7	ND	ND	ND	ND	ND
Residential Soil ESL	540	540	1,700	540	--
Industrial Soil ESL	1,200	1,200	4,800	1,200	--

Notes:

VOCs = volatile organic compounds

EPA = Environmental Protection Agency

µg/kg = micrograms per kilogram

ND = not detected above laboratory Method Detection Limit (MDL)

ESLs = Environmental Screening Levels

NA = not applicable

Underlined values exceed both residential and industrial ESLs

Table 4: Soil Sample CAM 17 Metals Laboratory Results (mg/kg)

Element	PES-B1-3	PES-B2-3	PES-B2-7	PES-B2-12	PES-B2-18	PES-B3-3	PES-B4-3	PES-B5-3	Background Concentrations*	Residential ESL	Commercial/Industrial ESL
Antimony (Sb)	< 3.0	< 3.0	NA	NA	NA	< 3.0	< 3.0	< 3.0	0.21 - 0.99	20	40
Arsenic (As)	< 5.0	< 5.0	NA	NA	NA	< 5.0	< 5.0	< 5.0	11**	.39	40
Barium (Ba)	180	160	NA	NA	NA	160	68	170	299 - 719	750	1500
Beryllium (Be)	< 1.0	< 1.0	NA	NA	NA	< 1.0	< 1.0	< 1.0	0.76 - 1.8	4	8
Cadmium (Cd)	< 2.0	2.8	NA	NA	NA	< 2.0	< 2.0	< 2.0	0.05 - 0.67	12	12
Chromium (Cr)	20	20	NA	NA	NA	21	16	23	0 - 345	8	8
Cobalt (Co)	9.1	8.9	NA	NA	NA	7.7	7.5	9.0	5.7 - 24.1	.33	1.6
Copper (Cu)	160	1200	15	11	17	17	11	18	9.4 - 48	230	230
Lead (Pb)	43	140	< 3.0	8.3	< 3.0	< 3.0	< 3.0	44	10.1 - 37.7	80	320
Mercury (Hg)	< 0.10	< 0.10	NA	NA	NA	< 0.10	< 0.10	< 0.10	0.05 - 0.47	40	40
Molybdenum (Mo)	< 5.0	< 5.0	NA	NA	NA	< 5.0	< 5.0	< 5.0	0 - 2.8	150	150
Nickel (Ni)	24	26	NA	NA	NA	33	17	25	0 - 137	10	10
Selenium (Se)	< 5.0	< 5.0	NA	NA	NA	< 5.0	< 5.0	< 5.0	0 - 0.142	20	40
Silver (Ag)	< 2.0	< 2.0	NA	NA	NA	< 2.0	< 2.0	< 2.0	0 - 2.23	.78	10
Thallium (Tl)	< 2.0	< 2.0	NA	NA	NA	< 2.0	< 2.0	< 2.0	0.37 - 0.75	200	200
Vanadium (V)	28	30	NA	NA	NA	26	17	31	59 - 165	600	600
Zinc (Zn)	140	530	NA	NA	NA	25	14	29	117 - 181	6.7	10

Notes:

*From Kearney Foundation of Soil Science March 1996 report *Background Concentrations of Trace and Major Elements in California Soils*. Background concentrations of metals are considered to be within one standard deviation from the mean metal concentrations determined by the study. Concentrations indicated in milligrams per kilogram (mg/kg).

**From a thesis submitted to the Faculty of San Francisco State University and the San Francisco Bay RWQCB December 2011 report *Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region*.

CAM = California Administrative Manual

mg/kg = milligrams per kilogram

< = not detected above indicated laboratory Method Detection Limit (MDL)

NA = Not Applicable

Table 5: Groundwater Sample TPH-cc Laboratory Results

EPA Method	TPH-cc via 8015C		
Units	(mg/L)		
Sample Identification	TPH-g	TPH-d	TPH-o
PES-B1-GW	< 0.50	< 0.50	< 0.50
PES-B2-GW	NA	< 0.50	< 0.50
Groundwater ESL	0.5	0.64	0.64

Notes:

TPH-cc = carbon chain total petroleum hydrocarbons

EPA = Environmental Protection Agency

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

TPH-o = total petroleum hydrocarbons as oil

mg/L = milligrams per liter

< = not detected above indicated laboratory Method Detection Limit (MDL)

NA = Not Applicable

Table 6: Groundwater Sample VOCs Laboratory Results

EPA Method	VOCs via 8260B						
Units	(µg/L)						
Sample Identification	Benzene	Toluene	Ethyl-benzene	Xylenes	Napthalene	Trichloro-ethene	Other VOCs
PES-B1-GW	ND	ND	ND	ND	NA	ND	ND
PES-B2-GW	NA	NA	NA	NA	ND	NA	NA
Groundwater ESL	27	130	43	100	63	130	NA

Notes:

VOCs = volatile organic compounds

EPA = Environmental Protection Agency

µg/L = micrograms per liter

< = not detected above indicated laboratory Method Detection Limit (MDL)

ND = not detected above laboratory PQLs

ESLs = Environmental Screening Levels (EPA Region 9 - 2013)

NA = not applicable

Table 7: Comparison of Metal Laboratory Results and STLC/TTLC (mg/kg)

Metal Exceeding Background*	PES-B2-3	10xSTLC	TTLC
Copper (Cu)	1200	250	2,500
Lead (Pb)	140	50	1,000
Zinc (Zn)	530	2,500	5,000

Notes:

*From Kearney Foundation of Soil Science March 1996 report
Background Concentrations of Trace and Major Elements in California Soils.

mg/kg = milligrams per kilogram

STLC = Soluble Threshold Limit Concentration

TTLC = Total Threshold Limit Concentration

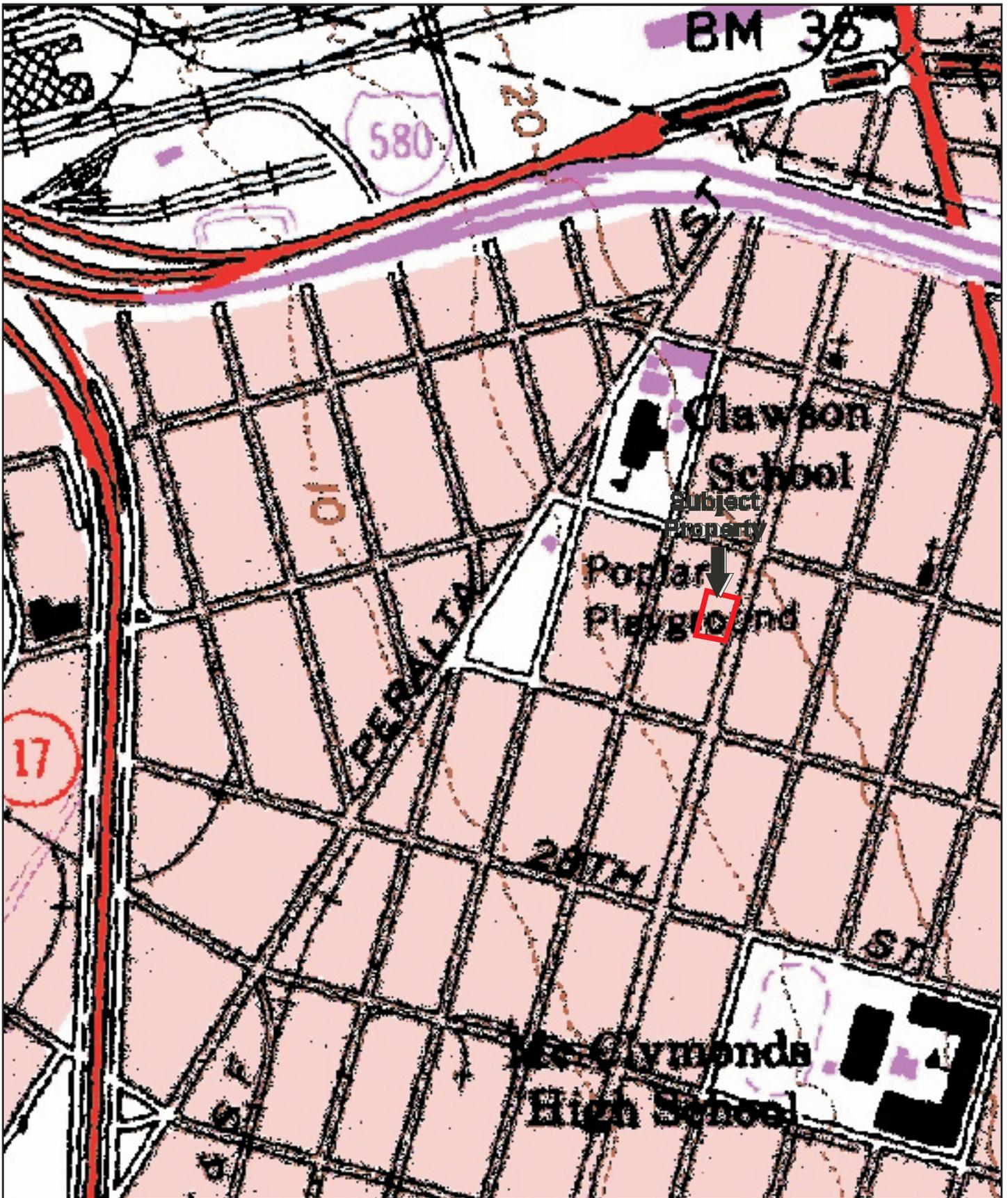
Table 8: Comparison of Metal Laboratory Results and STLCs (mg/L)

Element	PES-B2-3	STLC
Copper (Cu)	81	25
Lead (Pb)	9.8	5

Notes:

mg/L = milligrams per liter

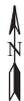
STLC = Soluble Threshold Limit Concentration



PARTNER

Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

Project Number: 13-99891.2



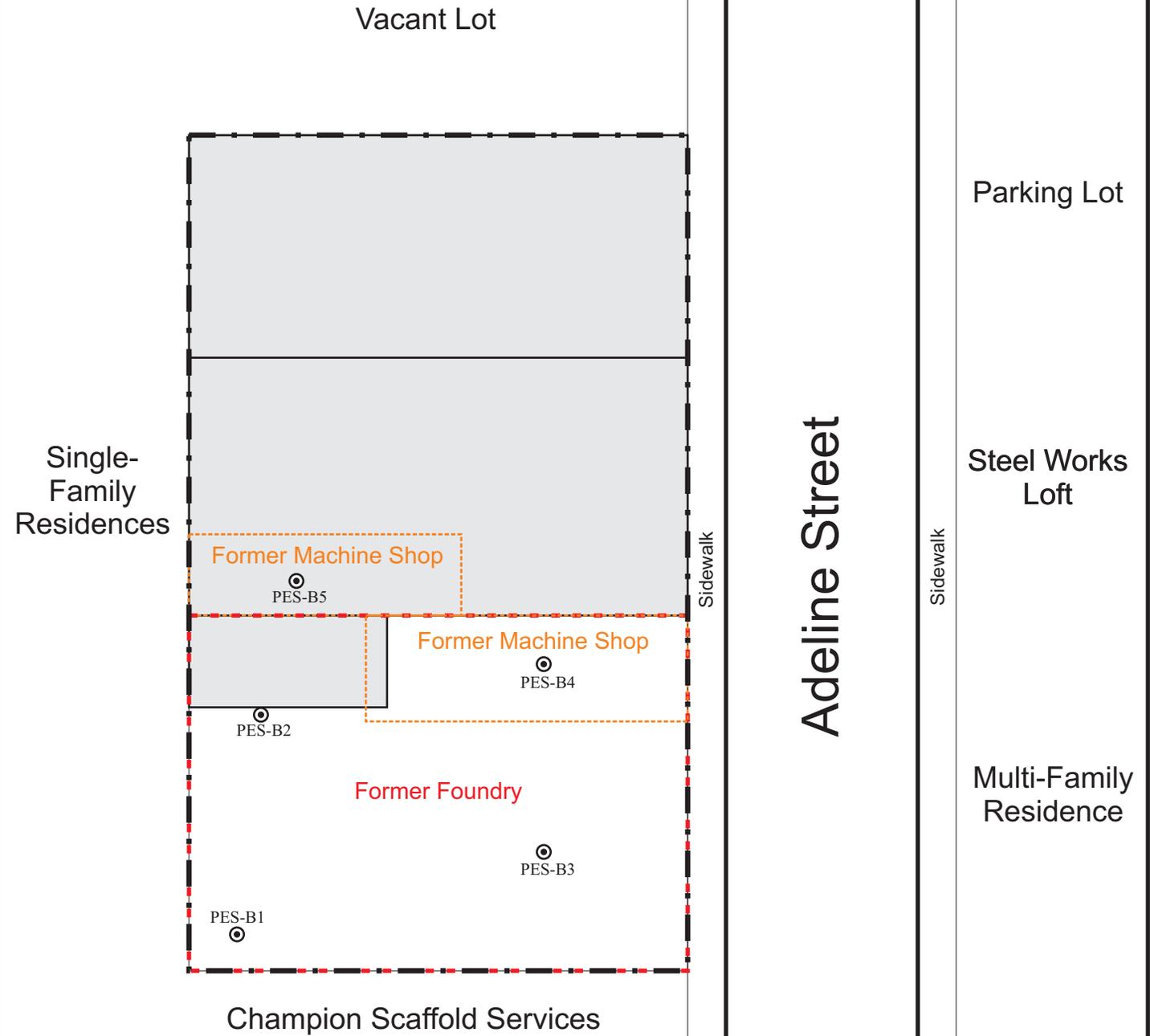
USGS Oakland West Quadrangle
Version: 1980

Site Vicinity Map

Figure	Prepared By	Date
1	E. French	May 2013

3037, 3101 & 3115 Adeline Street
Oakland, California 94608

Notes:
 -Scale is Approximate



PARTNER
 Engineering and Science, Inc.
 2154 Torrance Boulevard, Suite 200
 Torrance, California 90501
 Project Number: 13-99891.2



Legend

- Subject Site 
- Boring Location 

Boring Locations

Figure	Prepared By	Date
2	T. Men	May 2013

3037, 3101 & 3115 Adeline St.
 Oakland, California 94608

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: 10/14/2014 By jamesy

Permit Numbers: W2014-0940
Permits Valid from 10/21/2014 to 10/21/2014

Application Id: 1412634326085
Site Location: 3037-3115 Adeline Street in Oakland
(Seven Borings to 16 feet below ground surface)

City of Project Site:Oakland

Project Start Date: 10/21/2014
Assigned Inspector: Contact Sam Brathwaite at (925) 570-7609 or sbrathwaite@groundzonees.com

Completion Date:10/21/2014

Applicant: ERAS Environmental, Inc. - Andrew Savage
1533 B Street, Hayward, CA 94541
Property Owner: Reid Settlemeir
6114 La Salle Avenue, Ste 535, Oakland, CA 94611
Client: ** same as Property Owner **
Contact: Andrew Savage

Phone: 510-247-9885 x302

Phone: --

Phone: 510-247-9885 x302
Cell: 925-330-8926

Receipt Number: WR2014-0411 Total Due: \$265.00
Payer Name : Andrew Savage Total Amount Paid: \$265.00
Paid By: MC PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 7 Boreholes
Driller: Environmental Control Associates (ECA) - Lic #: 695970 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2014-0940	10/14/2014	01/19/2015	7	2.75 in.	16.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. 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.
3. 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.
4. 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.

Alameda County Public Works Agency - Water Resources Well Permit

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. 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.

7. 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.

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

APPENDIX C

Standard Operating Procedures

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-diameter 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.

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. Peristaltic 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.

APPENDIX D
Lithologic Logs

PROJECT: **14063B**

ADDRESS: **3037-3115 Adeline Street**

JOB NUMBER: **14063B**

LOCATION: **North of former Storage Shed**

DATE STARTED: **10-21-14**

First Water (ft. bgs.): **NA** DATE: **10-21-14**

DATE FINISHED: **10-21-14**

TOTAL DEPTH: **12 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	WELL DIAGRAM
0							Asphalt + sand/rock fill	
2'							Silty Clay (CL), very dark brown (10YR 2/2), damp, medium stiff, medium plasticity, no HC (hydrocarbon) odor	
3.5'							at 4 feet, color change to yellowish brown (10YR 5/4)	
5								
8'								
9.5'							Silty Sand (SM), very dark grayish brown (10YR 3/2), damp, medium dense, 30% silt, 70% fine to medium grain poorly graded sand, no HC odor	
10							Silty Clay (CL), yellowish brown (10YR 5/4), damp, very stiff, medium plasticity, 30% 1/8 - 1 inch gravel, no HC odor	
11'								
							Bottom of Boring 12 feet bgs, 10-21-14	
15								
20								

PROJECT: 14063B	ADDRESS: 3037-3115 Adeline Street
JOB NUMBER: 14063B	LOCATION: South of PES-B2
DATE STARTED: 10-21-14	First Water (ft. bgs.): NA DATE: 10-21-14
DATE FINISHED: 10-21-14	TOTAL DEPTH: 16 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	WELL DIAGRAM
							Asphalt + sand/rock fill	
2.5' 3.1							Silty Clay (CL), very dark brown (10YR 2/2), damp, medium stiff, medium plasticity, very strong HC (hydrocarbon) odor, free product appears to be present	
3.5' 3.2				NR			at 5 feet, color change to dark greenish gray (Gley 1 4/1), 10% 1/8-1/2 inch rock	
7' 3.1								
8' 12.8'							Gravelly Sand (SW), dark greenish gray (Gley 1 4/1), damp, dense, 60% fine to to coarse well graded sand, 40% 1/8-1/2 inch rock, hydrocarbon odor present	
10' 2.6							Silty Clay (CL), dark greenish gray (Gley 1 4/1), damp, stiff, medium plasticity, 10% 1/8 - 1 inch rock, hydrocarbon odor present	
							at 11 feet, mottled with yellowish brown (10YR 5/4)	
13' 0								
15								
16' 0							at 16 feet, still mottled and a slight hydrocarbon odor was present	
							Bottom of Boring 16 feet bgs, 10-21-14	
20								

PROJECT: **14063B**

ADDRESS: **3037-3115 Adeline Street**

JOB NUMBER: **14063B**

LOCATION: **West of PES-B2**

DATE STARTED: **10-21-14**

First Water (ft. bgs.): **NA** DATE: **10-21-14**

DATE FINISHED: **10-21-14**

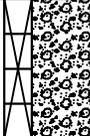
TOTAL DEPTH: **12 feet**

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	WELL DIAGRAM
							Asphalt + sand/rock fill	
2.5'							Silty Clay (CL), very dark brown (10YR 2/2), damp, medium stiff, medium plasticity, strong HC (hydrocarbon) odor	
3.5'							at 5 feet, color change to yellowish brown (10YR 5/4), hydrocarbon odor present	
7'							at 7 feet, very slight hydrocarbon odor	
8'							at 8 feet, very stiff, no HC odor, 5% 1/8-1 inch rock	
10'								
12'							Bottom of Boring 12 feet bgs, 10-21-14	
15'								
20'								

PROJECT: 14063B

ADDRESS: 3037-3115 Adeline Street

JOB NUMBER: 14063B

LOCATION: West of PES-B4

DATE STARTED: 10-21-14

First Water (ft. bgs.): NA DATE: 10-21-14

DATE FINISHED: 10-21-14

TOTAL DEPTH: 12 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	WELL DIAGRAM
							Asphalt + sand/rock fill	
1.5' 0							Silty Clay (CL), very dark grayish brown (10YR 2/2), damp, medium stiff, medium plasticity, no HC (hydrocarbon) odor	
3.5' 0							at 4.5 feet, color change to yellowish brown (10YR 5/4)	
5								
7' 0							at 7-10 feet, 10% 1/8-1/4 inch rock	
8' 0								
10' 0							Sandy Gravel (GW), dark yellowish brown (10YR 4/6), damp, medium dense, 35% fine to coarse well graded sand, 65% 1/8-1/2 inch rock, no HC odor	
12' 0							at 11 feet, small amount of perched water was observed	
							Bottom of Boring 12 feet bgs, 10-21-14	
15								
20								

PROJECT: **14063B**

ADDRESS: **3037-3115 Adeline Street**

JOB NUMBER: **14063B**

LOCATION: **East of PES-B2**

DATE STARTED: **10-21-14**

First Water (ft. bgs.): **NA** DATE: **10-21-14**

DATE FINISHED: **10-21-14**

TOTAL DEPTH: **16 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	WELL DIAGRAM
							Asphalt + sand/rock fill	
2'							Silty Clay (CL), very dark brown (10YR 2/2), damp, medium stiff, medium plasticity, HC (hydrocarbon) odor present	
1.2								
3'							at 5 feet, dark gray (10YR 4/1), very stiff, HC odor present	
1.2								
5							at 11 feet, color change to yellowish brown (10YR 5/4), no HC odor present	
7'								
2.9							Bottom of Boring 16 feet bgs, 10-21-14	
8'								
2.1								
10'								
0.6								
13'								
0								
15								
16'								
0								
20								

PROJECT: **14063B**

ADDRESS: **3037-3115 Adeline Street**

JOB NUMBER: **14063B**

LOCATION: **Southeast of PES-B2**

DATE STARTED: **10-21-14**

First Water (ft. bgs.): **NA** DATE: **10-21-14**

DATE FINISHED: **10-21-14**

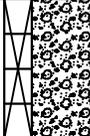
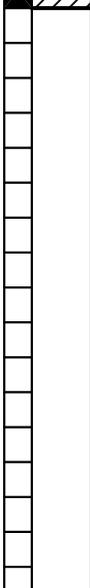
TOTAL DEPTH: **12 feet**

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	WELL DIAGRAM
							Asphalt + sand/rock fill	
2.5' 0							Silty Clay (CL), very dark brown (10YR 2/2), damp, medium stiff, medium plasticity, no HC (hydrocarbon) odor	
3.5' 0								
5							at 5 feet, color change to yellowish brown (10YR 5/4)	
7' 0								
8' 0							same	
10' 0								
12' 0								
							Bottom of Boring 12 feet bgs, 10-21-14	
15								
20								

PROJECT: 14063B	ADDRESS: 3037-3115 Adeline Street
JOB NUMBER: 14063B	LOCATION: Southwest corner
DATE STARTED: 10-21-14	First Water (ft. bgs.): NA DATE: 10-21-14
DATE FINISHED: 10-21-14	TOTAL DEPTH: 4 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	WELL DIAGRAM
2' 0.1				X			Asphalt + sand/rock fill	
							Silty Clay (CL), very dark brown (10YR 2/2), damp, medium stiff, medium plasticity, no HC (hydrocarbon) odor	
5				NR			Bottom of Boring 4 feet bgs, 10-21-14	
10								
15								
20								

APPENDIX E
Soil – Analytical Results



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1410831

Report Created for: ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541

Project Contact: Andrew Savage
Project P.O.:
Project Name: #14063B; 3037-3115 Adeline Street

Project Received: 10/22/2014

Analytical Report reviewed & approved for release on 10/31/2014 by:

*Question about
your data?*

[Click here to email
McC Campbell](#)

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
WorkOrder: 1410831

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
EDL	Estimated Detection Limit
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
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
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
TEQ	Toxicity Equivalence

Analytical Qualifiers

B	analyte detected in the associated Method Blank
d7	strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
e1	unmodified or weakly modified diesel is significant
e2	diesel range compounds are significant; no recognizable pattern
e6	one to a few isolated peaks present in the TPH(d/mo) chromatogram
e7	oil range compounds are significant
e10	fuel oil



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14-10/27/14

WorkOrder: 1410831
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1, 1.5-2	1410831-001A	Soil	10/21/2014 08:24	GC7	96843

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/25/2014 07:16
MTBE	---	0.050	1	10/25/2014 07:16
Benzene	---	0.0050	1	10/25/2014 07:16
Toluene	---	0.0050	1	10/25/2014 07:16
Ethylbenzene	---	0.0050	1	10/25/2014 07:16
Xylenes	---	0.0050	1	10/25/2014 07:16

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	104	70-130	10/25/2014 07:16

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1, 9-9.5	1410831-003A	Soil	10/21/2014 09:14	GC3	96970

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/28/2014 01:59
MTBE	---	0.050	1	10/28/2014 01:59
Benzene	---	0.0050	1	10/28/2014 01:59
Toluene	---	0.0050	1	10/28/2014 01:59
Ethylbenzene	---	0.0050	1	10/28/2014 01:59
Xylenes	---	0.0050	1	10/28/2014 01:59

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	101	70-130	10/28/2014 01:59

Analyst(s): IA



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14-10/27/14

WorkOrder: 1410831
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1, 10.5-11	1410831-004A	Soil	10/21/2014 09:10	GC3	96843

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/25/2014 19:15
MTBE	---	0.050	1	10/25/2014 19:15
Benzene	---	0.0050	1	10/25/2014 19:15
Toluene	---	0.0050	1	10/25/2014 19:15
Ethylbenzene	---	0.0050	1	10/25/2014 19:15
Xylenes	---	0.0050	1	10/25/2014 19:15

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	99	70-130	10/25/2014 19:15

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 2-2.5	1410831-005A	Soil	10/21/2014 10:52	GC7	96843

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	540	50	50	10/25/2014 16:11
MTBE	---	2.5	50	10/25/2014 16:11
Benzene	---	0.25	50	10/25/2014 16:11
Toluene	---	0.25	50	10/25/2014 16:11
Ethylbenzene	---	0.25	50	10/25/2014 16:11
Xylenes	---	0.25	50	10/25/2014 16:11

Surrogates	REC (%)	Limits	Analytical Comments: d7	Date Analyzed
2-Fluorotoluene	94	70-130		10/25/2014 16:11

Analyst(s): IA



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14-10/27/14

WorkOrder: 1410831
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 3-3.5	1410831-006A	Soil	10/21/2014 10:52	GC7	96843

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	190	50	50	10/25/2014 17:49
MTBE	---	2.5	50	10/25/2014 17:49
Benzene	---	0.25	50	10/25/2014 17:49
Toluene	---	0.25	50	10/25/2014 17:49
Ethylbenzene	---	0.25	50	10/25/2014 17:49
Xylenes	---	0.25	50	10/25/2014 17:49

Surrogates	REC (%)	Limits	Analytical Comments: d7	Date Analyzed
aaa-TFT_2	94	70-130		10/25/2014 17:49

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 7.5-8	1410831-007A	Soil	10/21/2014 11:01	GC7	96843

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	200	50	50	10/25/2014 18:48
MTBE	---	2.5	50	10/25/2014 18:48
Benzene	---	0.25	50	10/25/2014 18:48
Toluene	---	0.25	50	10/25/2014 18:48
Ethylbenzene	---	0.25	50	10/25/2014 18:48
Xylenes	---	0.25	50	10/25/2014 18:48

Surrogates	REC (%)	Limits	Analytical Comments: d7	Date Analyzed
aaa-TFT_2	94	70-130		10/25/2014 18:48

Analyst(s): IA

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14-10/27/14

WorkOrder: 1410831
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 15.5-16	1410831-008A	Soil	10/21/2014 11:16	GC3	96843

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	4.1	1.0	1	10/25/2014 19:45
MTBE	---	0.050	1	10/25/2014 19:45
Benzene	---	0.0050	1	10/25/2014 19:45
Toluene	---	0.0050	1	10/25/2014 19:45
Ethylbenzene	---	0.0050	1	10/25/2014 19:45
Xylenes	---	0.0050	1	10/25/2014 19:45

Surrogates	REC (%)	Limits	Analytical Comments: d7	Date Analyzed
2-Fluorotoluene	88	70-130		10/25/2014 19:45

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3, 2-2.5	1410831-009A	Soil	10/21/2014 09:26	GC3	96843

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/26/2014 02:06
MTBE	---	0.050	1	10/26/2014 02:06
Benzene	---	0.0050	1	10/26/2014 02:06
Toluene	---	0.0050	1	10/26/2014 02:06
Ethylbenzene	---	0.0050	1	10/26/2014 02:06
Xylenes	---	0.0050	1	10/26/2014 02:06

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	96	70-130	10/26/2014 02:06

Analyst(s): IA



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14-10/27/14

WorkOrder: 1410831
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3, 3-3.5	1410831-010A	Soil	10/21/2014 09:24	GC7	96843

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	150	50	50	10/25/2014 20:17
MTBE	---	2.5	50	10/25/2014 20:17
Benzene	---	0.25	50	10/25/2014 20:17
Toluene	---	0.25	50	10/25/2014 20:17
Ethylbenzene	---	0.25	50	10/25/2014 20:17
Xylenes	---	0.25	50	10/25/2014 20:17

Surrogates	REC (%)	Limits	Analytical Comments: d7	Date Analyzed
2-Fluorotoluene	118	70-130		10/25/2014 20:17

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3, 7.5-8	1410831-011A	Soil	10/21/2014 09:37	GC3	96843

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/25/2014 20:14
MTBE	---	0.050	1	10/25/2014 20:14
Benzene	---	0.0050	1	10/25/2014 20:14
Toluene	---	0.0050	1	10/25/2014 20:14
Ethylbenzene	---	0.0050	1	10/25/2014 20:14
Xylenes	---	0.0050	1	10/25/2014 20:14

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	99	70-130	10/25/2014 20:14

Analyst(s): IA



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14-10/27/14

WorkOrder: 1410831
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3, 11.5-12	1410831-012A	Soil	10/21/2014 09:43	GC3	96866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/25/2014 20:43
MTBE	---	0.050	1	10/25/2014 20:43
Benzene	---	0.0050	1	10/25/2014 20:43
Toluene	---	0.0050	1	10/25/2014 20:43
Ethylbenzene	---	0.0050	1	10/25/2014 20:43
Xylenes	---	0.0050	1	10/25/2014 20:43

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	96	70-130	10/25/2014 20:43

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4, 7.5-8	1410831-014A	Soil	10/21/2014 12:05	GC3	96866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/25/2014 21:13
MTBE	---	0.050	1	10/25/2014 21:13
Benzene	---	0.0050	1	10/25/2014 21:13
Toluene	---	0.0050	1	10/25/2014 21:13
Ethylbenzene	---	0.0050	1	10/25/2014 21:13
Xylenes	---	0.0050	1	10/25/2014 21:13

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	98	70-130	10/25/2014 21:13

Analyst(s): IA

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14-10/27/14

WorkOrder: 1410831
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1410831-015A	Soil	10/21/2014 12:07	GC3	96866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/25/2014 21:42
MTBE	---	0.050	1	10/25/2014 21:42
Benzene	---	0.0050	1	10/25/2014 21:42
Toluene	---	0.0050	1	10/25/2014 21:42
Ethylbenzene	---	0.0050	1	10/25/2014 21:42
Xylenes	---	0.0050	1	10/25/2014 21:42
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	94	70-130		10/25/2014 21:42

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6, 1.5-2	1410831-016A	Soil	10/21/2014 10:03	GC7	96866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	55	50	50	10/25/2014 20:47
MTBE	---	2.5	50	10/25/2014 20:47
Benzene	---	0.25	50	10/25/2014 20:47
Toluene	---	0.25	50	10/25/2014 20:47
Ethylbenzene	---	0.25	50	10/25/2014 20:47
Xylenes	---	0.25	50	10/25/2014 20:47
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: d7	
2-Fluorotoluene	108	70-130		10/25/2014 20:47

Analyst(s): IA



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14-10/27/14

WorkOrder: 1410831
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6, 2.5-3	1410831-017A	Soil	10/21/2014 10:04	GC7	96866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	180	50	50	10/25/2014 21:17
MTBE	---	2.5	50	10/25/2014 21:17
Benzene	---	0.25	50	10/25/2014 21:17
Toluene	---	0.25	50	10/25/2014 21:17
Ethylbenzene	---	0.25	50	10/25/2014 21:17
Xylenes	---	0.25	50	10/25/2014 21:17

Surrogates	REC (%)	Limits	Analytical Comments: d7
2-Fluorotoluene	128	70-130	10/25/2014 21:17

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6, 7.5-8	1410831-018A	Soil	10/21/2014 10:14	GC7	96866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	40	10	10	10/28/2014 00:26
MTBE	---	0.50	10	10/28/2014 00:26
Benzene	---	0.050	10	10/28/2014 00:26
Toluene	---	0.050	10	10/28/2014 00:26
Ethylbenzene	---	0.050	10	10/28/2014 00:26
Xylenes	---	0.050	10	10/28/2014 00:26

Surrogates	REC (%)	Limits	Analytical Comments: d7
2-Fluorotoluene	107	70-130	10/28/2014 00:26

Analyst(s): IA



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14-10/27/14

WorkOrder: 1410831
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6, 15.5-16	1410831-019A	Soil	10/21/2014 10:28	GC3	96866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/25/2014 22:11
MTBE	---	0.050	1	10/25/2014 22:11
Benzene	---	0.0050	1	10/25/2014 22:11
Toluene	---	0.0050	1	10/25/2014 22:11
Ethylbenzene	---	0.0050	1	10/25/2014 22:11
Xylenes	---	0.0050	1	10/25/2014 22:11

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	97	70-130	10/25/2014 22:11

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7, 2-2.5	1410831-020A	Soil	10/21/2014 11:32	GC3	96866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/26/2014 00:09
MTBE	---	0.050	1	10/26/2014 00:09
Benzene	---	0.0050	1	10/26/2014 00:09
Toluene	---	0.0050	1	10/26/2014 00:09
Ethylbenzene	---	0.0050	1	10/26/2014 00:09
Xylenes	---	0.0050	1	10/26/2014 00:09

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	99	70-130	10/26/2014 00:09

Analyst(s): IA



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14-10/27/14

WorkOrder: 1410831
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7, 7.5-8	1410831-022A	Soil	10/21/2014 11:38	GC3	96866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/24/2014 21:36
MTBE	---	0.050	1	10/24/2014 21:36
Benzene	---	0.0050	1	10/24/2014 21:36
Toluene	---	0.0050	1	10/24/2014 21:36
Ethylbenzene	---	0.0050	1	10/24/2014 21:36
Xylenes	---	0.0050	1	10/24/2014 21:36
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	94	70-130		10/24/2014 21:36

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7,11.5-12	1410831-023A	Soil	10/21/2014 11:41	GC3	96866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	10/26/2014 00:38
MTBE	---	0.050	1	10/26/2014 00:38
Benzene	---	0.0050	1	10/26/2014 00:38
Toluene	---	0.0050	1	10/26/2014 00:38
Ethylbenzene	---	0.0050	1	10/26/2014 00:38
Xylenes	---	0.0050	1	10/26/2014 00:38
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	94	70-130		10/26/2014 00:38

Analyst(s): IA



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1,1.5-2	1410831-001A	Soil/TOTAL	10/21/2014 08:24	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	210	5.0	10	10/27/2014 19:09
Lead	25	0.50	1	10/24/2014 22:48
Tin	ND	5.0	1	10/24/2014 22:48

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	99	70-130	10/24/2014 22:48

Analyst(s): DB, DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1,3-3.5	1410831-002A	Soil/TOTAL	10/21/2014 08:25	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	22	0.50	1	10/24/2014 22:54
Lead	6.7	0.50	1	10/24/2014 22:54
Tin	ND	5.0	1	10/24/2014 22:54

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	110	70-130	10/24/2014 22:54

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 2-2.5	1410831-005A	Soil/TOTAL	10/21/2014 10:52	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	1200	10	20	10/27/2014 19:15
Lead	650	10	20	10/27/2014 19:15
Tin	78	5.0	1	10/24/2014 23:00

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	102	70-130	10/24/2014 23:00

Analyst(s): DB, DVH

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 3-3.5	1410831-006A	Soil/TOTAL	10/21/2014 10:52	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	24	0.50	1	10/24/2014 23:06
Lead	7.8	0.50	1	10/24/2014 23:06
Tin	ND	5.0	1	10/24/2014 23:06

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	94	70-130	10/24/2014 23:06

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3, 2-2.5	1410831-009A	Soil/TOTAL	10/21/2014 09:26	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	31	0.50	1	10/24/2014 23:12
Lead	7.0	0.50	1	10/24/2014 23:12
Tin	ND	5.0	1	10/24/2014 23:12

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	103	70-130	10/24/2014 23:12

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3, 3-3.5	1410831-010A	Soil/TOTAL	10/21/2014 09:24	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	22	0.50	1	10/24/2014 23:18
Lead	8.8	0.50	1	10/24/2014 23:18
Tin	ND	5.0	1	10/24/2014 23:18

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	106	70-130	10/24/2014 23:18

Analyst(s): DB

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4, 3-3.5	1410831-013A	Soil/TOTAL	10/21/2014 11:55	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	18	0.50	1	10/24/2014 23:25
Lead	5.8	0.50	1	10/24/2014 23:25
Tin	ND	5.0	1	10/24/2014 23:25

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	116	70-130	10/24/2014 23:25

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6, 1.5-2	1410831-016A	Soil/TOTAL	10/21/2014 10:03	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	380	5.0	10	10/27/2014 19:21
Lead	120	5.0	10	10/27/2014 19:21
Tin	20	5.0	1	10/24/2014 23:43

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	105	70-130	10/24/2014 23:43

Analyst(s): DB, DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6, 2.5-3	1410831-017A	Soil/TOTAL	10/21/2014 10:04	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	22	0.50	1	10/24/2014 23:49
Lead	7.1	0.50	1	10/24/2014 23:49
Tin	ND	5.0	1	10/24/2014 23:49

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	104	70-130	10/24/2014 23:49

Analyst(s): DB

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7, 2-2.5	1410831-020A	Soil/TOTAL	10/21/2014 11:32	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	87	0.50	1	10/24/2014 23:55
Lead	18	0.50	1	10/24/2014 23:55
Tin	ND	5.0	1	10/24/2014 23:55

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	109	70-130	10/24/2014 23:55

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7, 3-3.5	1410831-021A	Soil/TOTAL	10/21/2014 11:30	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	18	0.50	1	10/25/2014 00:02
Lead	7.1	0.50	1	10/25/2014 00:02
Tin	ND	5.0	1	10/25/2014 00:02

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	93	70-130	10/25/2014 00:02

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-8, 1.5-2	1410831-024A	Soil/TOTAL	10/21/2014 08:11	ICP-MS2	96860

Analytes	Result	RL	DF	Date Analyzed
Copper	23	0.50	1	10/25/2014 00:08
Lead	10	0.50	1	10/25/2014 00:08
Tin	ND	5.0	1	10/25/2014 00:08

Surrogates	REC (%)	Limits	Date Analyzed
Tb 350.917	104	70-130	10/25/2014 00:08

Analyst(s): DB



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1,1.5-2	1410831-001A	Soil	10/21/2014 08:24	GC2B	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	B	1.0	1	10/31/2014 12:54
TPH-Motor Oil (C18-C36)	ND		5.0	1	10/31/2014 12:54

Surrogates	REC (%)	Limits	
C9	112	70-130	10/31/2014 12:54

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1, 9-9.5	1410831-003A	Soil	10/21/2014 09:14	GC31A	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	11	B	10	1	10/31/2014 08:09
TPH-Motor Oil (C18-C36)	100		50	1	10/31/2014 08:09

Surrogates	REC (%)	Limits	Analytical Comments: e7,e2
C9	115	70-130	10/31/2014 08:09

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1,10.5-11	1410831-004A	Soil	10/21/2014 09:10	GC11A	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	B	1.0	1	10/31/2014 13:49
TPH-Motor Oil (C18-C36)	ND		5.0	1	10/31/2014 13:49

Surrogates	REC (%)	Limits	
C9	126	70-130	10/31/2014 13:49

Analyst(s): TK



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 2-2.5	1410831-005A	Soil	10/21/2014 10:52	GC31B	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	17,000	B	500	50	10/31/2014 02:25
TPH-Motor Oil (C18-C36)	8700		2500	50	10/31/2014 02:25

Surrogates	REC (%)	Limits	Analytical Comments: e1,e7		
C9	118	70-130			10/31/2014 02:25

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 3-3.5	1410831-006A	Soil	10/21/2014 10:52	GC31A	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	270	B	50	5	10/31/2014 01:50
TPH-Motor Oil (C18-C36)	ND		250	5	10/31/2014 01:50

Surrogates	REC (%)	Limits	Analytical Comments: e10		
C9	111	70-130			10/31/2014 01:50

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 7.5-8	1410831-007A	Soil	10/21/2014 11:01	GC31A	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	2700	B	50	5	10/31/2014 04:09
TPH-Motor Oil (C18-C36)	1700		250	5	10/31/2014 04:09

Surrogates	REC (%)	Limits	Analytical Comments: e1,e7		
C9	111	70-130			10/31/2014 04:09

Analyst(s): HD

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 15.5-16	1410831-008A	Soil	10/21/2014 11:16	GC9a	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	49	B	1.0	1	10/31/2014 13:16
TPH-Motor Oil (C18-C36)	38		5.0	1	10/31/2014 13:16

Surrogates	REC (%)	Limits	Analytical Comments:
C9	123	70-130	e10

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3, 2-2.5	1410831-009A	Soil	10/21/2014 09:26	GC31B	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	480	B	50	5	10/31/2014 07:00
TPH-Motor Oil (C18-C36)	430		250	5	10/31/2014 07:00

Surrogates	REC (%)	Limits	Analytical Comments:
C9	100	70-130	e2,e7

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3, 3-3.5	1410831-010A	Soil	10/21/2014 09:24	GC31B	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	370	B	50	5	10/31/2014 04:43
TPH-Motor Oil (C18-C36)	ND		250	5	10/31/2014 04:43

Surrogates	REC (%)	Limits	Analytical Comments:
C9	101	70-130	e10

Analyst(s): HD



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3, 7.5-8	1410831-011A	Soil	10/21/2014 09:37	GC31A	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	120	B	10	1	10/31/2014 14:04
TPH-Motor Oil (C18-C36)	100		50	1	10/31/2014 14:04

Surrogates	REC (%)	Limits	Analytical Comments: e7,e2		
C9	99	70-130			10/31/2014 14:04

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3, 11.5-12	1410831-012A	Soil	10/21/2014 09:43	GC6A	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	B	5.0	1	10/31/2014 11:29
TPH-Motor Oil (C18-C36)	ND		5.0	1	10/31/2014 11:29

Surrogates	REC (%)	Limits			
C9	95	70-130			10/31/2014 11:29

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4, 7.5-8	1410831-014A	Soil	10/21/2014 12:05	GC6B	96829

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	B	5.0	1	10/31/2014 13:52
TPH-Motor Oil (C18-C36)	ND		5.0	1	10/31/2014 13:52

Surrogates	REC (%)	Limits			
C9	110	70-130			10/31/2014 13:52

Analyst(s): TK

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1410831-015A	Soil	10/21/2014 12:07	GC6A	96864

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.2	1.0	1	10/31/2014 13:52
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/31/2014 13:52

Surrogates	REC (%)	Limits	Analytical Comments:	Date Analyzed
C9	78	70-130	e2	10/31/2014 13:52

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6, 1.5-2	1410831-016A	Soil	10/21/2014 10:03	GC31A	96864

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1400	50	5	10/30/2014 23:32
TPH-Motor Oil (C18-C36)	1200	250	5	10/30/2014 23:32

Surrogates	REC (%)	Limits	Analytical Comments:	Date Analyzed
C9	104	70-130	e2,e7	10/30/2014 23:32

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6, 2.5-3	1410831-017A	Soil	10/21/2014 10:04	GC31A	96864

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	670	50	5	10/31/2014 06:26
TPH-Motor Oil (C18-C36)	280	250	5	10/31/2014 06:26

Surrogates	REC (%)	Limits	Analytical Comments:	Date Analyzed
C9	108	70-130	e10	10/31/2014 06:26

Analyst(s): HD

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6, 7.5-8	1410831-018A	Soil	10/21/2014 10:14	GC31B	96864

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	480	10	1	10/31/2014 13:29
TPH-Motor Oil (C18-C36)	280	50	1	10/31/2014 13:29

Surrogates	REC (%)	Limits	Analytical Comments: e2,e7
C9	114	70-130	10/31/2014 13:29

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6, 15.5-16	1410831-019A	Soil	10/21/2014 10:28	GC6A	96864

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/31/2014 07:22
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/31/2014 07:22

Surrogates	REC (%)	Limits
C9	98	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7, 2-2.5	1410831-020A	Soil	10/21/2014 11:32	GC2B	96864

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/31/2014 15:27
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/31/2014 15:27

Surrogates	REC (%)	Limits
C9	115	70-130

Analyst(s): TK



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7, 7.5-8	1410831-022A	Soil	10/21/2014 11:38	GC6B	96864

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	3.1	1.0	1	10/31/2014 09:56
TPH-Motor Oil (C18-C36)	14	5.0	1	10/31/2014 09:56

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: e6,e2
C9	130	70-130	10/31/2014 09:56

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7,11.5-12	1410831-023A	Soil	10/21/2014 11:41	GC2B	96864

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	10/31/2014 14:10
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/31/2014 14:10

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	130	70-130

Analyst(s): TK



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 10/22/14
Date Analyzed: 10/23/14
Instrument: GC3
Matrix: Soil
Project: #14063B; 3037-3115 Adeline Street

WorkOrder: 1410831
BatchID: 96843
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS-96843
 1410816-003AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.670	0.40	0.60	-	112	70-130
MTBE	ND	0.0907	0.050	0.10	-	91	70-130
Benzene	ND	0.108	0.0050	0.10	-	108	70-130
Toluene	ND	0.110	0.0050	0.10	-	110	70-130
Ethylbenzene	ND	0.110	0.0050	0.10	-	110	70-130
Xylenes	ND	0.334	0.0050	0.30	-	111	70-130

Surrogate Recovery

2-Fluorotoluene	0.106	0.101		0.10	106	101	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.663	0.627	0.60	ND	110	105	70-130	5.54	20
MTBE	0.0833	0.0880	0.10	ND	83	88	70-130	5.42	20
Benzene	0.106	0.103	0.10	ND	106	103	70-130	2.35	20
Toluene	0.110	0.105	0.10	ND	110	105	70-130	4.58	20
Ethylbenzene	0.107	0.106	0.10	ND	107	106	70-130	1.53	20
Xylenes	0.321	0.320	0.30	ND	107	107	70-130	0	20

Surrogate Recovery

2-Fluorotoluene	0.100	0.0969	0.10		100	97	70-130	3.21	20
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(Cont.)



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 10/23/14
Date Analyzed: 10/24/14
Instrument: GC3
Matrix: Soil
Project: #14063B; 3037-3115 Adeline Street

WorkOrder: 1410831
BatchID: 96866
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS-96866
 1410831-022AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.646	0.40	0.60	-	108	70-130
MTBE	ND	0.0976	0.050	0.10	-	98	70-130
Benzene	ND	0.112	0.0050	0.10	-	112	70-130
Toluene	ND	0.112	0.0050	0.10	-	113	70-130
Ethylbenzene	ND	0.112	0.0050	0.10	-	112	70-130
Xylenes	ND	0.340	0.0050	0.30	-	113	70-130

Surrogate Recovery

2-Fluorotoluene	0.109	0.105		0.10	109	105	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.644	0.591	0.60	ND	107	98	70-130	8.64	20
MTBE	0.0904	0.0893	0.10	ND	90	89	70-130	1.21	20
Benzene	0.103	0.107	0.10	ND	103	107	70-130	3.71	20
Toluene	0.104	0.108	0.10	ND	104	108	70-130	3.46	20
Ethylbenzene	0.104	0.106	0.10	ND	104	106	70-130	1.64	20
Xylenes	0.314	0.323	0.30	ND	105	108	70-130	2.92	20

Surrogate Recovery

2-Fluorotoluene	0.0939	0.0980	0.10		94	98	70-130	4.35	20
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(Cont.)



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 10/27/14
Date Analyzed: 10/27/14
Instrument: GC7
Matrix: Soil
Project: #14063B; 3037-3115 Adeline Street

WorkOrder: 1410831
BatchID: 96970
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS-96970
 1410976-002AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.723	0.40	0.60	-	120	70-130
MTBE	ND	0.0862	0.050	0.10	-	86	70-130
Benzene	ND	0.115	0.0050	0.10	-	115	70-130
Toluene	ND	0.114	0.0050	0.10	-	114	70-130
Ethylbenzene	ND	0.116	0.0050	0.10	-	116	70-130
Xylenes	ND	0.363	0.0050	0.30	-	121	70-130

Surrogate Recovery

2-Fluorotoluene	0.123	0.112		0.10	123	112	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.660	0.665	0.60	ND	110	111	70-130	0.794	20
MTBE	0.0919	0.0927	0.10	ND	92	93	70-130	0.874	20
Benzene	0.0956	0.0925	0.10	ND	96	93	70-130	3.32	20
Toluene	0.0973	0.0957	0.10	ND	96	94	70-130	1.71	20
Ethylbenzene	0.0976	0.0965	0.10	ND	98	96	70-130	1.19	20
Xylenes	0.296	0.294	0.30	ND	99	98	70-130	0.564	20

Surrogate Recovery

2-Fluorotoluene	0.0886	0.0866	0.10		89	87	70-130	2.29	20
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Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 10/22/14
Date Analyzed: 10/24/14
Instrument: ICP-MS2
Matrix: Soil
Project: #14063B; 3037-3115 Adeline Street

WorkOrder: 1410831
BatchID: 96860
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-96860
 1410829-031AMS/MSD

QC Summary Report for SW6020

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Copper	ND	56.9	0.50	50	-	114	75-125
Lead	ND	58.0	0.50	50	-	116	75-125
Tin	ND	58.1	5.0	50	-	116	75-125

Surrogate Recovery

Tb 350.917	558	628		500	112	126	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Copper	67.6	70.1	50	25	86	91	75-125	3.66	20
Lead	47.8	50.1	50	5.4	85	89	75-125	4.66	20
Tin	44.2	47.2	50	ND	88	94	75-125	6.50	20

Surrogate Recovery

Tb 350.917	469	479	500		94	96	70-130	2.15	20
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Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 10/22/14
Date Analyzed: 10/24/14
Instrument: GC6A, GC6B
Matrix: Soil
Project: #14063B; 3037-3115 Adeline Street

WorkOrder: 1410831
BatchID: 96829
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-96829
 1410801-006AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	1.22	44.6	1.0	40	-	111	70-130
Surrogate Recovery							
C9	24.4	23.0		25	98	92	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		16000	NR	NR	-	NR	
Surrogate Recovery									
C9	NR	NR			NR	NR	-	NR	



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 10/23/14
Date Analyzed: 10/24/14 - 10/25/14
Instrument: GC11A
Matrix: Soil
Project: #14063B; 3037-3115 Adeline Street

WorkOrder: 1410831
BatchID: 96864
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-96864

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	43.9	1.0	40	-	110	70-130
Surrogate Recovery							
C9	29.6	28.9		25	119	116	70-130

1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1410831

ClientCode: ERAS

WaterTrax WriteOn EDF Excel EQulS Email HardCopy ThirdParty J-flag

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: dave@eras.biz; kasey@eras.biz;
PO:
ProjectNo: #14063B; 3037-3115 Adeline Street

Bill to:

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

Requested TAT:

5 days

Date Received: 10/22/2014

Date Printed: 10/31/2014

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
1410831-001	B-1,1.5-2	Soil	10/21/2014 8:24	<input type="checkbox"/>	A	A										
1410831-002	B-1,3-3.5	Soil	10/21/2014 8:25	<input type="checkbox"/>	A											
1410831-003	B-1, 9-9.5	Soil	10/21/2014 9:14	<input type="checkbox"/>		A										
1410831-004	B-1,10.5-11	Soil	10/21/2014 9:10	<input type="checkbox"/>		A										
1410831-005	B-2, 2-2.5	Soil	10/21/2014 10:52	<input type="checkbox"/>	A	A										
1410831-006	B-2, 3-3.5	Soil	10/21/2014 10:52	<input type="checkbox"/>	A	A										
1410831-007	B-2, 7.5-8	Soil	10/21/2014 11:01	<input type="checkbox"/>		A										
1410831-008	B-2, 15.5-16	Soil	10/21/2014 11:16	<input type="checkbox"/>		A										
1410831-009	B-3, 2-2.5	Soil	10/21/2014 9:26	<input type="checkbox"/>	A	A										
1410831-010	B-3, 3-3.5	Soil	10/21/2014 9:24	<input type="checkbox"/>	A	A										
1410831-011	B-3, 7.5-8	Soil	10/21/2014 9:37	<input type="checkbox"/>		A										
1410831-012	B-3, 11.5-12	Soil	10/21/2014 9:43	<input type="checkbox"/>		A										
1410831-013	B-4, 3-3.5	Soil	10/21/2014 11:55	<input type="checkbox"/>	A											
1410831-014	B-4, 7.5-8	Soil	10/21/2014 12:05	<input type="checkbox"/>		A										
1410831-015	B-4, 9.5-10	Soil	10/21/2014 12:07	<input type="checkbox"/>		A										
1410831-016	B-6, 1.5-2	Soil	10/21/2014 10:03	<input type="checkbox"/>	A	A										

Test Legend:

1	METALSMS_S	2	TPH(DMO)WSG_S	3		4		5	
6		7		8		9		10	
11		12							

The following SamplIDs: 001A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 014A, 015A, 016A, 017A, 018A, 019A, 020A, 022A, 023A contain testgroup.

Prepared by: Agustina Venegas

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.



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1410831

ClientCode: ERAS

WaterTrax WriteOn EDF Excel EQUS Email HardCopy ThirdParty J-flag

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: dave@eras.biz; kasey@eras.biz;
PO:
ProjectNo: #14063B; 3037-3115 Adeline Street

Bill to:

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

Requested TAT:

5 days

Date Received: 10/22/2014

Date Printed: 10/31/2014

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
1410831-017	B-6, 2.5-3	Soil	10/21/2014 10:04	<input type="checkbox"/>	A	A										
1410831-018	B-6, 7.5-8	Soil	10/21/2014 10:14	<input type="checkbox"/>		A										
1410831-019	B-6, 15.5-16	Soil	10/21/2014 10:28	<input type="checkbox"/>		A										
1410831-020	B-7, 2-2.5	Soil	10/21/2014 11:32	<input type="checkbox"/>	A	A										
1410831-021	B-7, 3-3.5	Soil	10/21/2014 11:30	<input type="checkbox"/>	A											
1410831-022	B-7, 7.5-8	Soil	10/21/2014 11:38	<input type="checkbox"/>		A										
1410831-023	B-7, 11.5-12	Soil	10/21/2014 11:41	<input type="checkbox"/>		A										
1410831-024	B-8, 1.5-2	Soil	10/21/2014 8:11	<input type="checkbox"/>	A											

Test Legend:

1	METALSMS_S	2	TPH(DMO)WSG_S	3		4		5	
6		7		8		9		10	
11		12							

The following SamplIDs: 001A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 014A, 015A, 016A, 017A, 018A, 019A, 020A, 022A, 023A contain testgroup.

Prepared by: Agustina Venegas

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.



WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC.
Project: #14063B; 3037-3115 Adeline Street
Comments:

QC Level: LEVEL 2
Client Contact: Andrew Savage
Contact's Email: info@eras.biz; andrew@eras.biz

Work Order: 1410831
Date Received: 10/22/2014

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1410831-001A	B-1,1.5-2	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW6020 (Metals) <Copper, Lead, Tin>	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 8:24	5 days		<input type="checkbox"/>	
1410831-002A	B-1,3-3.5	Soil	SW6020 (Metals) <Copper, Lead, Tin>	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 8:25	5 days		<input type="checkbox"/>	
1410831-003A	B-1, 9-9.5	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 9:14	5 days		<input type="checkbox"/>	
1410831-004A	B-1,10.5-11	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 9:10	5 days		<input type="checkbox"/>	
1410831-005A	B-2, 2-2.5	Soil	SW6020 (Metals) <Copper, Lead, Tin> Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 10:52	5 days		<input type="checkbox"/>	
1410831-006A	B-2, 3-3.5	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW6020 (Metals) <Copper, Lead, Tin>	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 10:52	5 days		<input type="checkbox"/>	
1410831-007A	B-2, 7.5-8	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 11:01	5 days		<input type="checkbox"/>	
1410831-008A	B-2, 15.5-16	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 11:16	5 days		<input type="checkbox"/>	
1410831-009A	B-3, 2-2.5	Soil	SW6020 (Metals) <Copper, Lead, Tin> Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 9:26	5 days		<input type="checkbox"/>	
1410831-010A	B-3, 3-3.5	Soil	SW6020 (Metals) <Copper, Lead, Tin>	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 9:24	5 days		<input type="checkbox"/>	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

Acetate Liner = Acetate Liner



WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC.
Project: #14063B; 3037-3115 Adeline Street
Comments:

QC Level: LEVEL 2
Client Contact: Andrew Savage
Contact's Email: info@eras.biz; andrew@eras.biz

Work Order: 1410831
Date Received: 10/22/2014

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1410831-010A	B-3, 3-3.5	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 9:24	5 days		<input type="checkbox"/>	
1410831-011A	B-3, 7.5-8	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 9:37	5 days		<input type="checkbox"/>	
1410831-012A	B-3, 11.5-12	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 9:43	5 days		<input type="checkbox"/>	
1410831-013A	B-4, 3-3.5	Soil	SW6020 (Metals) <Copper, Lead, Tin>	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 11:55	5 days		<input type="checkbox"/>	
1410831-014A	B-4, 7.5-8	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 12:05	5 days		<input type="checkbox"/>	
1410831-015A	B-4, 9.5-10	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 12:07	5 days		<input type="checkbox"/>	
1410831-016A	B-6, 1.5-2	Soil	SW6020 (Metals) <Copper, Lead, Tin> Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/> <input type="checkbox"/>	10/21/2014 10:03	5 days 5 days		<input type="checkbox"/> <input type="checkbox"/>	
1410831-017A	B-6, 2.5-3	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW6020 (Metals) <Copper, Lead, Tin>	1	Acetate Liner	<input type="checkbox"/> <input type="checkbox"/>	10/21/2014 10:04	5 days 5 days		<input type="checkbox"/> <input type="checkbox"/>	
1410831-018A	B-6, 7.5-8	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 10:14	5 days		<input type="checkbox"/>	
1410831-019A	B-6, 15.5-16	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 10:28	5 days		<input type="checkbox"/>	
1410831-020A	B-7, 2-2.5	Soil	SW6020 (Metals) <Copper, Lead, Tin>	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 11:32	5 days		<input type="checkbox"/>	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

Acetate Liner = Acetate Liner



WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC.
Project: #14063B; 3037-3115 Adeline Street
Comments:

QC Level: LEVEL 2
Client Contact: Andrew Savage
Contact's Email: info@eras.biz; andrew@eras.biz

Work Order: 1410831
Date Received: 10/22/2014

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1410831-020A	B-7, 2-2.5	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 11:32	5 days		<input type="checkbox"/>	
1410831-021A	B-7, 3-3.5	Soil	SW6020 (Metals) <Copper, Lead, Tin>	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 11:30	5 days		<input type="checkbox"/>	
1410831-022A	B-7, 7.5-8	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 11:38	5 days		<input type="checkbox"/>	
1410831-023A	B-7,11.5-12	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 11:41	5 days		<input type="checkbox"/>	
1410831-024A	B-8, 1.5-2	Soil	SW6020 (Metals) <Copper, Lead, Tin>	1	Acetate Liner	<input type="checkbox"/>	10/21/2014 8:11	5 days		<input type="checkbox"/>	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

Acetate Liner = Acetate Liner

1410831

CHAIN OF CUSTODY FORM

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

Turnaround Time: Rush 24Hr 48 Hr 72 Hr 5 Day
 Geotracker: PDF Excel Write On (DW)

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

Email: info@eras.biz

Telephone: 510-247-9885 Fax: 510-886-5399

Project # 14063B

Project location 3037-3115 Adeline Street

Sampler: Andrew Savage

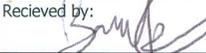
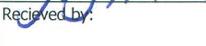
Sample ID	Location/Field Point Name	Sampling		# of Containers	Container Type	Matrix			Preservative					
		Date	Time			Soil	Water	Waste	HCL	H2SO4	HNO3	ICE	None	
B-1, 1.5-2		10/21/2014	8:24	1	Tube	X							X	
B-1, 3-3.5		10/21/2014	8:25	1	Tube	X							X	
B-1, 9-9.5		10/21/2014	9:14	1	Tube	X							X	
B-1, 10.5-11		10/21/2014	9:10	1	Tube	X							X	
B-2, 2-2.5		10/21/2014	10:52	1	Tube	X							X	
B-2, 3-3.5		10/21/2014	10:52	1	Tube	X							X	
B-2, 7.5-8		10/21/2014	11:01	1	Tube	X							X	
B-2, 15.5-16		10/21/2014	11:16	1	Tube	X							X	
B-3, 2-2.5		10/21/2014	9:26	1	Tube	X							X	
B-3, 3-3.5		10/21/2014	9:24	1	Tube	X							X	
B-3, 7.5-8		10/21/2014	9:37	1	Tube	X							X	
B-3, 11.5-12		10/21/2014	9:43	1	Tube	X							X	

Analysis Requested										Other	Comments	
TPH-g, TPH-d, TPH-mo by EPA Method 8015 with silica gel												
Lead												
Copper												
Tin												

RELINQUISHED BY:

Relinquished by:  Date: 10-22-14 Time: 1310
 Relinquished by:  Date: 10/22/14 Time: 1925
 Relinquished by:  Date: Time:

RECEIVED BY:

Received by: 
 Received by:  *Agustina Venegas*
 Received by: 

ICE/Condition: 9°
 Head space absent
 Dechlorinated in lab
 Appropriate containers
 Preserved in Lab
 Preservation: VOA's O&G Metals Other pH<2

Comments: Please PDF
 *Run highest hit of Tph-d without silica gel also

Page 2 of 2

CHAIN OF CUSTODY FORM

McC Campbell 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 # 14063B

Project location 3037-3115 Adeline Street

Sampler: Andrew Savage

Sample ID	Location/Field Point Name	Sampling		# of Containers	Container Type	Matrix			Preservative				
		Date	Time			Soil	Water	Waste	HCL	H2SO4	HNO3	ICE	None
B-4, 3-3.5		10/21/2014	11:55	1	Tube	X						X	
B-4, 7.5-8		10/21/2014	12:05	1	Tube	X						X	
B-4, 9.5-10		10/21/2014	12:07	1	Tube	X						X	
B-6, 1.5-2		10/21/2014	10:03	1	Tube	X						X	
B-6, 2.5-3		10/21/2014	10:04	1	Tube	X						X	
B-6, 7.5-8		10/21/2014	10:14	1	Tube	X						X	
B-6, 15.5-16		10/21/2014	10:28	1	Tube	X						X	
B-7, 2-2.5		10/21/2014	11:32	1	Tube	X						X	
B-7, 3-3.5		10/21/2014	11:30	1	Tube	X						X	
B-7, 7.5-8		10/21/2014	11:38	1	Tube	X						X	
B-7, 11.5-12		10/21/2014	11:41	1	Tube	X						X	
B-8, 1.5-2		10/21/2014	8:11	1	Tube	X						X	

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

Geotracker: PDF Excel Write On (DW)

Analysis Requested										Other	Comments	
TPH-g, TPH-d, TPH-mo by EPA Method 8015 with silica gel	Lead	Copper	Tin									
X	X	X	X									
X												
X												
X	X	X	X									
X	X	X	X									
X												
X	X	X	X									
X	X	X	X									
X												
X												
X	X	X	X									
X	X	X	X									
X												
X												
X	X	X	X									
X	X	X	X									
X												
X												
X	X	X	X									

RELINQUISHED BY:			RECEIVED BY:		
Relinquished by:	Date: 10-22-14	Time: 1310	Relieved by:	Date:	Time:
Relinquished by:	Date: 10/22/14	Time: 1925	Relieved by:	Date:	Time:
Relinquished by:	Date:	Time:	Relieved by:	Date:	Time:

ICE/t+ Condition	_____	Comments: Please PDF * Run highest hit as TPH-d without silica gel also
Head space absent	_____	
Dechlorinated in lab	_____	
Appropriate containers	_____	
Preserved in Lab	_____	
Preservation	VOA's O&G Metals Other pH<2	

pg 2 of 2



Sample Receipt Checklist

Client Name: **ERAS Environmental, Inc.** Date and Time Received: **10/22/2014 7:25:00 PM**
 Project Name: **#14063B; 3037-3115 Adeline Street** LogIn Reviewed by: **Agustina Venegas**
 WorkOrder No: **1410831** Matrix: Soil Carrier: Benjamin Yslas (MAI Courier)

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
 Container/Temp Blank temperature Cooler Temp: 9°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: pH<2; 522: pH<4)? Yes No NA
 Samples Received on Ice? Yes No
 (Ice Type: WET ICE)
 Total Chlorine tested and acceptable upon receipt for EPA 522? Yes No NA

* NOTE: If the "No" box is checked, see comments below.

 Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1410831 A

Report Created for: ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541

Project Contact: Andrew Savage
Project P.O.:
Project Name: #14063B; 3037-3115 Adeline Street

Project Received: 10/22/2014

Analytical Report reviewed & approved for release on 11/03/2014 by:

Question about
your data?

[Click here to email
McC Campbell](#)

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
WorkOrder: 1410831

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
EDL	Estimated Detection Limit
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
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
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
TEQ	Toxicity Equivalence

Analytical Qualifiers

B	analyte detected in the associated Method Blank
d7	strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
e1	unmodified or weakly modified diesel is significant
e2	diesel range compounds are significant; no recognizable pattern
e6	one to a few isolated peaks present in the TPH(d/mo) chromatogram
e7	oil range compounds are significant
e10	fuel oil



Analytical Report

Client: ERAS Environmental, Inc.
Project: #14063B; 3037-3115 Adeline Street
Date Received: 10/22/14 19:25
Date Prepared: 10/23/14

WorkOrder: 1410831
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2, 2-2.5	1410831-005A	Soil	10/21/2014 10:52	GC31B	97238

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	20,000	500	50	11/03/2014 14:19
TPH-Motor Oil (C18-C36)	11,000	2500	50	11/03/2014 14:19

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: e1,e7
C9	128	70-130	11/03/2014 14:19

Analyst(s): HD



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 10/31/14
Date Analyzed: 11/1/14
Instrument: GC11A
Matrix: Soil
Project: #14063B; 3037-3115 Adeline Street

WorkOrder: 1410831
BatchID: 97238
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-97238

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	43.0	1.0	40	-	105	70-130
Surrogate Recovery							
C9	27.1	26.6		25	108	107	70-130



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1410831 **A** ClientCode: ERAS

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

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: dave@eras.biz; kasey@eras.biz;
PO:
ProjectNo: #14063B; 3037-3115 Adeline Street

Bill to:

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

Requested TAT:

5 days

Date Received: 10/22/2014

Date Add-On: 10/31/2014

Date Printed: 11/03/2014

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	
1410831-005	B-2, 2-2.5	Soil	10/21/2014 10:52	<input type="checkbox"/>	A												

Test Legend:

1	TPH(DMO)_S	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Agustina Venegas

Add-On Prepared By: Shana Carter

Comments: Add on TPH-D/Mo 10/31/14 1day rush.

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.



WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC.
Project: #14063B; 3037-3115 Adeline Street
Comments: Add on TPH-D/Mo 10/31/14 1day rush.

QC Level: LEVEL 2
Client Contact: Andrew Savage
Contact's Email: info@eras.biz; andrew@eras.biz

Work Order: 1410831
Date Received: 10/22/2014
Date Add-On: 10/31/2014

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1410831-005A	B-2, 2-2.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	10/21/2014 10:52	5 days		<input type="checkbox"/>	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

Acetate Liner = Acetate Liner

1410831

CHAIN OF CUSTODY FORM

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

Turnaround Time: Rush 24Hr 48 Hr 72 Hr 5 Day
 Geotracker: PDF Excel Write On (DW)

				Analysis Requested	Other	Comments
TPH-g, TPH-d, TPH-mo by EPA Method 8015 with silica gel	Lead	Copper	Tin			
	X	X	X			
	X	X	X			
	X					
	X					
	X	X	X			
	X	X	X			
	X					
	X	X	X			
	X	X	X			
	X					
	X					

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

Email: info@eras.biz

Telephone: 510-247-9885 Fax: 510-886-5399

Project # 14063B
 Project location 3037-3115 Adeline Street
 Sampler: Andrew Savage

Sample ID	Location/Field Point Name	Sampling		# of Containers	Container Type	Matrix			Preservative				
		Date	Time			Soil	Water	Waste	HCL	H2SO4	HNO3	ICE	None
		B-1, 1.5-2				10/21/2014	8:24	1	Tube	X			
B-1, 3-3.5		10/21/2014	8:25	1	Tube	X						X	
B-1, 9-9.5		10/21/2014	9:14	1	Tube	X						X	
B-1, 10.5-11		10/21/2014	9:10	1	Tube	X						X	
B-2, 2-2.5		10/21/2014	10:52	1	Tube	X						X	
B-2, 3-3.5		10/21/2014	10:52	1	Tube	X						X	
B-2, 7.5-8		10/21/2014	11:01	1	Tube	X						X	
B-2, 15.5-16		10/21/2014	11:16	1	Tube	X						X	
B-3, 2-2.5		10/21/2014	9:26	1	Tube	X						X	
B-3, 3-3.5		10/21/2014	9:24	1	Tube	X						X	
B-3, 7.5-8		10/21/2014	9:37	1	Tube	X						X	
B-3, 11.5-12		10/21/2014	9:43	1	Tube	X						X	

RELINQUISHED BY:

Relinquished by: [Signature] Date: 10-22-14 Time: 1310
 Relinquished by: [Signature] Date: 10/22/14 Time: 1925
 Relinquished by: _____ Date: _____ Time: _____

RECEIVED BY:

Received by: [Signature]
 Received by: Agustina Venegas
 Received by: _____

ICE/Temp Condition: 9°
 Head space absent
 Dechlorinated in lab
 Appropriate containers
 Preserved in Lab
 Preservation: VOA's O&G Metals Other pH<2

Comments: Please PDF
 * Run highest + hit of Tph-d without silica gel also

Add on 10/31/14 TPH D/MO 1 day

