ERAS Environmental, Inc.

1533 B Street
Hayward, CA 94541

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

January 9, 2015

Mr. Bob Winet
East Bay Lofts LLC
36966 Pinto Palm Street
Rancho Mirage, California 92270

Subject: Limited Soil and Groundwater Investigation
APN 19-55-11 on Calcot Place, Oakland, California
ERAS Project Number 14229A

Dear Mr. Winet:

ERAS Environmental, Inc. (ERAS) is pleased to present the results of the limited subsurface investigation for the collection of groundwater samples at APN 19-55-11 on Calcot Place in Oakland, California (the "Property").

The scope of work conducted follows the general standards of care and practice for investigations at facilities which formerly operated underground storage tanks (USTs)

The location of the Property is shown on **Figure 1** and the boring locations are shown on **Figure 2**. The figures are included as **Attachment A**.

BACKGROUND

A Phase 1 Environmental Site Assessment (ESA) report was prepared by ERAS Environmental Inc. dated November 6, 2014 for the Property. No Controlled Environmental Conditions (CREC) or historical recognized environmental conditions (HREC) or de minims conditions were identified for the Property.

Recognized Environmental Conditions (REC) identified for the Property included the following:

- The former presence of two oil USTs which were reported to have been on the Property in 1911 until prior to 1951. No indications of proper abandonment, sampling, or removal were found in the records reviewed for this report.

- The presence of large amounts of unlabeled hazardous waste on the Property, none of this waste is properly labelled and stored.

- Surface staining in the vicinity of the hazardous waste on the Property.

Based on the information obtained during the assessment, ERAS recommended the following:

- The hazardous waste located on the Property (old tires, unlabeled drums, and unlabeled containers) must be properly removed and disposed.

- The areas of staining should be cleaned and the underlying pavement or soil should be removed and the waste properly disposed.

- A subsurface investigation should be conducted in the vicinity of the former oil USTs to determine if the subsurface has been impacted by their former presence.

REGIONAL GEOLOGY / HYDROLOGY

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

The Property is at an elevation of approximately 15 feet above Mean Sea Level according to the United States Geological Survey (USGS) Oakland East Quadrangle California 7.5 Minute Series topographic map.

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

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

The regional groundwater flow follows the topography, moving from areas of higher elevation to areas of lower elevation. The regional groundwater flow direction in the area of the Property is estimated to be toward the southwest toward the Brooklyn Basin Tidal Canal.

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 **Attachment B**.

The area of the former USTs was screened using a magnetometer and ground penetrating radar (GPR) to confirm that the USTs had been removed prior to sampling. Large amounts of metal were detected to be buried in the vicinity of the area known to formerly have contained the USTs however the data collected from the GPR did not indicate the presence of the USTs still in place. The metal

in the ground is likely old foundations associated with equipment formerly located on the Property.

Three 2.5-inch diameter soil borings were drilled using a hydraulic push sampling rig by ECA of Aptos, California on December 23rd, 2014 to collect groundwater samples for laboratory analysis. The locations of the borings are shown on **Figure 2**. Boring B-1 was located at the southeastern end of the tank pit, Boring B-2 was located in the middle of the tank pit and boring B-3 was located at the northwestern end of the tank pit.

Boring B-1 was advanced to 8 feet below ground surface (bgs), boring B-2 was advance to 16.5 feet bgs, and boring B-3 was advanced to 17 feet bgs.

Soil was continuously collected for lithologic logging and monitored using an organic vapor meter (OVM) for indications of volatile organic content. The soil cores were logged by ERAS geologist Andrew Savage and the lithologic logs are included in **Attachment C**. The Standard Operating Procedures for groundwater sampling with a direct-push sample rig are included as **Attachment D**.

The subsurface vadose zone lithology encountered consisted of silty clay underlain by the water bearing zone which consisted of silt and silty sand. Groundwater was encountered at depths ranging from 3 to 16 feet bgs. A groundwater sample was collected for analysis from each boring.

Signs of contamination such as odor (strong diesel odor) and elevated OVM readings were observed during the drilling of the borings.

ANALYTICAL RESULTS

The groundwater samples were transported under chain-of-custody procedures to McCampbell Analytical, a state-certified laboratory in Pittsburg, California. One groundwater sample from each boring was submitted for analysis. The laboratory report and chain of custody form are included as **Attachment E**.

The samples were analyzed for the presence of total petroleum hydrocarbons quantified as diesel range organics (TPH-dro[1]) and oil range organics (TPH-oro) by EPA Method 8015C. Below were the compounds detected:

[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.

	TPH-dro	TPH-oro	TPH-dro*	TPH-oro*
	µg/L			
B-1	79	**440**	NA	NA
B-2	**6,100**	**5,100**	NA	NA
B-3	**15,000**	**23,000**	**20,000**	**86,000**
ESL-DW	100	100	100	100

Notes:
ESL – environmental screening limits set forth by the California Regional Water Quality Control Board as of December 2013
DW – drinking water NA – Not Analyzed * - Analyzed without silica gel clean-up

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this investigation was to assess subsurface environmental conditions beneath the Property in the vicinity of two former USTs determined to have been on the Property by ERAS.

The area of the former USTs was screened using a magnetometer and ground penetrating radar (GPR) to confirm that the USTs had been removed prior to sampling. Large amounts of metal were detected to be buried in the vicinity of the area known to formerly have contained the USTs however the data collected from the GPR did not indicate the presence of the USTs still in place. The metal in the ground is likely old foundations associated with equipment formerly located on the Property.

Three borings were drilled to investigate shallow soil and groundwater in the vicinity of two former USTs. TPH-dro and TPH-oro were detected in groundwater samples from all three borings. Concentrations of TPH-dro were detected at concentrations ranging from 79 to 15,000 µg/L (after silica gel cleanup) and TPH-oro was detected at concentrations ranging from 440 to 23,000µg/L (after silica gel cleanup). The ESL for TPH-dro and TPH-oro is 100 µg/L. This ESL is for protection of drinking water resources.

The former presence of the USTs on the Property have impacted the subsurface environmental conditions beneath the Property at concentration above the ESLs. Additional investigations will likely be needed to characterize the nature and extent of the petroleum hydrocarbon contaminants detected as well as typical organic compounds found in fuel and oil blends.

As a condition of the drilling permit issued by the ACPWA it was stated: "Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agency 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."

ERAS recommends that this report be provided to the Alameda County Department of Environmental Health and the California Regional Water Quality Control Board (RWQCB) for further oversight.

REFERENCES

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

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

Environmental Records Search (ERS) Rec Check Report Results, 19-55-11, Oakland, California 94606, dated October 20, 2014.

ERAS Environmental, Inc., Phase 1 Environmental Site Assessment, APN 19-55-11, Oakland, California, November 6, 2014.

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

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

P&D Environmental Inc., Groundwater Monitoring and Sampling Report, (October 18, 2011 Sampling Event), Mel Senna Brake Service, 2301 East 12th Street, Oakland, California, December 18, 2013.

CERTIFICATION

Our firm has prepared this report for the Client's exclusive use for this particular project and in general accordance with the accepted standard of practice that exists in Northern California at the time the investigation was performed. No other representations, expressed or implied, and no warranty or guarantee is included or intended. No subsurface investigation is complete enough to guarantee that no contamination exists on a particular site and the judgments leading to conclusions and recommendations are generally made based on the data collected according to the scope of work performed and are therefore potentially limited and incomplete. More extensive studies can tend to reduce the uncertainties associated with this type of investigation.

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.

If you have questions or comments regarding this report please contact Andrew Savage at 510-247-9885 x302, or by e-mail andrew@eras.biz.

ERAS thanks you for the opportunity to serve you.

Sincerely,
ERAS Environmental, Inc.

REGISTERED GEOLOGIST
R. CURTIS PAYTON II
No. 5608
STATE OF CALIFORNIA

Curtis Payton
California Registered Professional Geologist 5608

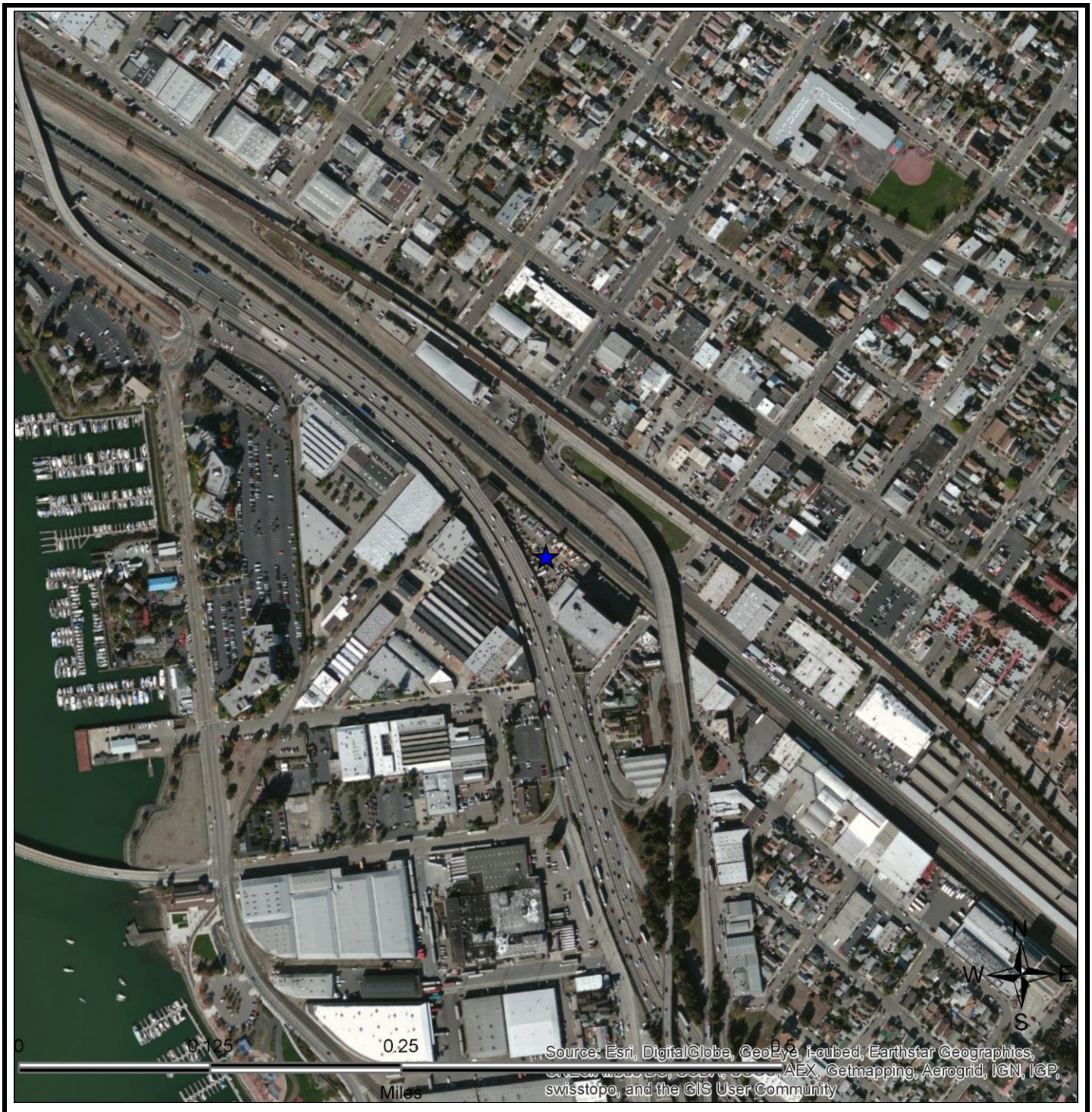
Andrew Savage
Project Geologist

Attachments

A Figures
B Permit
C Lithologic Logs
D Standard Operating Procedures
E Laboratory Reports and Chain of Custody Form

ATTACHMENT A

FIGURES



SITE LOCATION MAP

ERAS Environmental, Inc.	19-55-11 Calcot Pl. Oakland, CA	FIGURE: 1 JOB: DATE: 10/20/2014

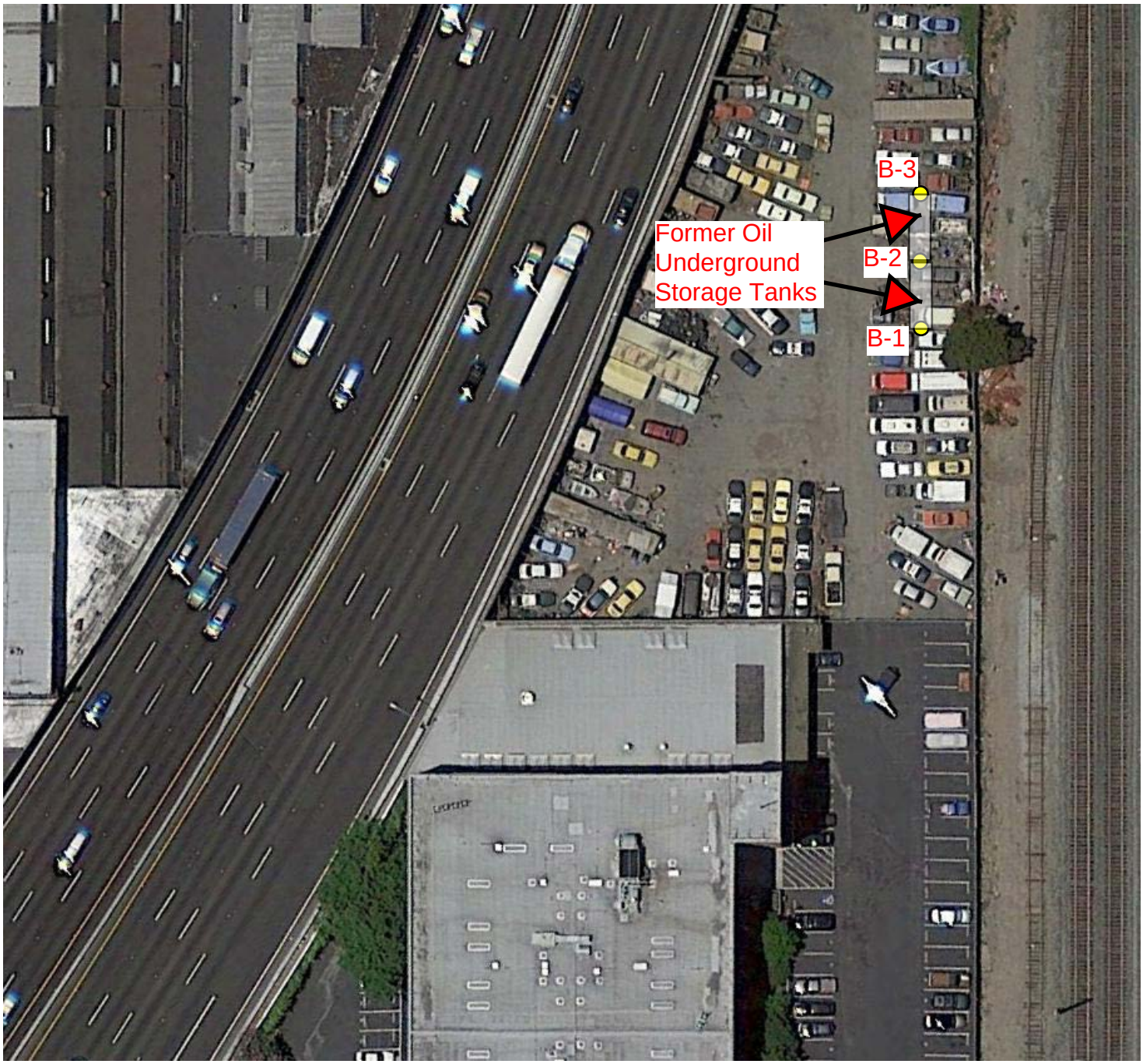


FIGURE 2
BORING LOCATION MAP
APN 19-55-11 Calcot Place, Oakland
ERAS Project # 14229A

Boring Locations

N

1 inch = 60 feet

ATTACHMENT 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: 12/16/2014 By jamesy

Permit Numbers: W2014-1157
Permits Valid from 12/23/2014 to 12/23/2014

Application Id:	1417807363051	**City of Project Site:**	Oakland
Site Location:	APN 19-55-11 on Calcot Place / Drill 3 boring to 20 feet max for soil and groundwater sampling		
Project Start Date:	12/23/2014	**Completion Date:**	12/23/2014
Assigned Inspector:	Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org		
Applicant:	ERAS Environmental, Inc. - Andrew Savage 1533 B Street, Hayward, CA 94541	**Phone:**	510-247-9885 x302
Property Owner:	Bob Winet 36966 Pinto Palm Street, Rancho Mirage, CA 92270	**Phone:**	--
Client:	** same as Property Owner **		
Contact:	Andrew Savage	**Phone:** **Cell:**	-- 925-330-8926

	Total Due:	$265.00
Receipt Number: WR2014-0508	**Total Amount Paid:**	$265.00
Payer Name : Andrew Savage	Paid By: MC	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 3 Boreholes
Driller: ECA - Lic #: 695970 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2014-1157	12/16/2014	03/23/2015	3	2.75 in.	20.00 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. 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.

5. 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.

6. 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.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a 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.

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.

ATTACHMENT C

LITHOLOGIC LOGS

ERAS Environmental	Log of Boring B-1
PROJECT: 14229A	ADDRESS: Apn 19-55-11 / Calcot Place
JOB NUMBER: 14229A	LOCATION: Nearest to Calcot Place
DATE STARTED: 12-23-14	First Water (ft. bgs.): 3 feet DATE: 12-23-14
DATE FINISHED: 12-23-14	TOTAL DEPTH: 8 feet
DRILLING METHOD: Hydraulic Push	GEOLOGIST: Andrew Savage
DRILLING COMPANY: ECA	Reviewed By:

DEPTH ft.	PID (ppm)	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION
			XX			Asphalt + 3/4 inch base rock
			XX			
						Silty Clay, dark brown (10YR3/3) damp medium stiff, medium plasticity, no hydrocarbon (HC) odor
	c2 1.2		NR		▼	
			NR			
			NR			-Large rock blocked sample barrel resulting in low recovery.
			NR			
5			NR			
			NR			
			NR			
			NR			
			NR			
			NR			
			NR			
			NR			
						Bottom of Boring 8 feet BGS 12-23-14
10						
15						
20						

ERAS Environmental	Log of Boring B-2
PROJECT: 14229A	ADDRESS: Apn 19-55-11 / Calcot Place
JOB NUMBER: 14229A	LOCATION: Middle Boring
DATE STARTED: 12-23-14	First Water (ft. bgs.): 10.5 DATE: 12-23-14
DATE FINISHED: 12-23-14	TOTAL DEPTH: 16.5 feet
DRILLING METHOD: Hydraulic Push	GEOLOGIST: Andrew Savage
DRILLING COMPANY: ECA	Reviewed By:

DEPTH ft.	PID (ppm)	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION
						Asphalt + 3/4 inch base rock
	@2' 1.2		NR NR NR NR	CL		Silty Clay, dark brown (10YR 3/3) damp, medium stiff, medium plasticity, no HC odor
5				CL		at 5 feet color change to dark yellowish brown (10YR 3/4)
	@8' 1.0					
				CL		at 9 feet color change to very dark greenish gray (GLey 1 3/1) Diesel odor present
10	@10.5' 11.6			SM	▽	Silty Sand, very dark greenish gray (GLey 1 3/1) wet, medium dense, ~40% fines, ~60% fine to coarse well graded sand, slight HC odor, does not produce enough water to sample
				CL		
	@13' 1.6					Silty Clay, very dark greenish gray (GLey 1 3/1) damp, medium stiff, medium plasticity, slight HC odor
15				CL		from 14.5 – 16 feet color change to dark yellowish brown (10YR 3/4)
	@16.5' 1.3			ML		Silt, dark yellowish brown (10YR 3/4) wet, medium stiff, low plasticity, slight HC odor once boring reached 16.5 feet water rose to 7.1 feet
						Bottom of Boring 16.5 feet bgs 12-23-14
20						

ERAS Environmental	Log of Boring B-3
PROJECT: 14229A	ADDRESS: Apn 19-55-11 / Calcot Place
JOB NUMBER: 14229A	LOCATION: Furthest from calcot place
DATE STARTED: 12-23-14	First Water (ft. bgs.): 14 feet DATE: 12-23-14
DATE FINISHED: 12-23-14	TOTAL DEPTH: 17 feet
DRILLING METHOD: Hydraulic Push	GEOLOGIST: Andrew Savage
DRILLING COMPANY: ECA	Reviewed By:

DEPTH ft.	PID (ppm)	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION
						Asphalt + 3/4 inch base rock
				CL		Silty Clay, dark brown (10YR 3/3) damp, medium stiff, medium plasticity, no HC odor
	e3 1.2		NR NR			
5				CL		at 5 feet color change to dark yellowish brown (10YR 3/4)
	e7 1.2					
				CL		at 8 feet color change to very dark greenish gray (GLEY 1 3/1)
10	e10 3.9			CL	▼	Same
	e12 2.2			CL		Same
	e14.5 1.6			CL		
15				ML	▽	Clayey Silt, yellowish brown (10YR 5/8) wet soft, low plasticity, slight HC odor
	e17 1.4					Bottom of Boring 17 feet bgs 12-23-14
20						

ATTACHMENT D

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-diamter sample barrel that is attached to the end of the rods. Soil samples are collected in sleeves inside the sample barrel as the rods are advanced. After being driven 4 to 5 feet into the ground, the rods are removed from the borehole. The sleeve containing the soil core is removed from the sample barrel, and can then be preserved for chemical analyses, or used for lithologic description. This process is repeated until the desired depth or instrument refusal is reached.

A soil core interval selected for analyses is cut from the sleeve using a pre-cleaned hacksaw. The ends of the tube are covered with aluminum foil or Teflon liner and sealed with plastic caps. The soil-filled liner is labeled with the bore number, sample depth, site location, date, and time. The samples are placed in bags and stored in a cooler containing ice. Soil from the core adjacent to the interval selected for analyses is placed in a plastic zip-top bag. The soil is allowed to volatilize for a period of time, depending on the ambient temperature. The soil is scanned with a flame-ionization detector (FID) or photo-ionization detector (PID).

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

GROUNDWATER SAMPLING FROM DIRECT PUSH BORINGS

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

ATTACHMENT E

LABORATORY REPORT AND
CHAIN OF CUSTODY FORM

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1412B41

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

Project Contact: Andrew Savage
Project P.O.:
Project Name: #14229A

Project Received: 12/24/2014

Analytical Report reviewed & approved for release on 12/31/2014 by:

Question about your data?

Click here to email McCampbell

Angela Rydelius,
Laboratory Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

Glossary of Terms & Qualifier Definitions

Client: ERAS Environmental, Inc.
Project: #14229A
WorkOrder: 1412B41

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	Data Not Reported due to matrix interference or insufficient sample amount.
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

S	spike recovery outside accepted recovery limits
e2	diesel range compounds are significant; no recognizable pattern
e3/e2	aged diesel is significant; and/or diesel range compounds are significant; no recognizable pattern
e3	aged diesel is significant
e7	oil range compounds are significant

McCampbell Analytical, Inc.
"When Quality Counts"

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

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1412B41
Project:	#14229A	**Extraction Method:**	SW3510C/3630C
Date Received:	12/24/14 14:13	**Analytical Method:**	SW8015B
Date Prepared:	12/24/14	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1	**1412B41-001A**	**Water**	**12/23/2014 08:57**	**GC6B**	**99453**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**79**	50	1	12/25/2014 18:44
TPH-Motor Oil (C18-C36)	**440**	250	1	12/25/2014 18:44

Surrogates	REC (%)	Limits	Analytical Comments: e7,e2	
C9	79	70-130		12/25/2014 18:44

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2	**1412B41-002A**	**Water**	**12/23/2014 10:52**	**GC6B**	**99453**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**6100**	50	1	12/25/2014 23:25
TPH-Motor Oil (C18-C36)	**5100**	250	1	12/25/2014 23:25

Surrogates	REC (%)	Limits	Analytical Comments: e3,e7	
C9	77	70-130		12/25/2014 23:25

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3	**1412B41-003A**	**Water**	**12/23/2014 10:33**	**GC2B**	**99453**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**15,000**	2500	50	12/30/2014 14:08
TPH-Motor Oil (C18-C36)	**23,000**	12,000	50	12/30/2014 14:08

Surrogates	REC (%)	Qualifiers	Limits	Analytical Comments: e3/e2,e7	
C26	210	S	70-130		12/30/2014 14:08
C9	115		70-130		12/30/2014 14:08

Analyst(s): TK

McCampbell Analytical, Inc.
"When Quality Counts"

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

Quality Control Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1412B41
Date Prepared:	12/24/14	**BatchID:**	99453
Date Analyzed:	12/24/14	**Extraction Method:**	SW3510C/3630C
Instrument:	GC11A, GC6B	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	#14229A	**Sample ID:**	MB/LCS-99453

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	1080	50	1000	-	108	59-151
TPH-Motor Oil (C18-C36)	ND	-	250	-	-	-	-
Surrogate Recovery							
C9	625	569		625	100	91	77-130

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1412B41 **ClientCode: ERAS**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ 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:
PO:
ProjectNo: #14229A

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

Requested TAT: 5 days

Date Received: **12/24/2014**
Date Printed: **12/24/2014**

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
1412B41-001	B-1	Water	12/23/2014 8:57	☐	A											
1412B41-002	B-2	Water	12/23/2014 10:52	☐	A											
1412B41-003	B-3	Water	12/23/2014 10:33	☐	A											

Test Legend:

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

Prepared by: Jena Alfaro

Comments:

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

McCampbell Analytical, Inc.
"When Quality Counts"

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

WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC. **QC Level:** LEVEL 2 **Work Order:** 1412B41

Project: #14229A **Client Contact:** Andrew Savage **Date Received:** 12/24/2014

Comments: Sample 003 set up for DMO W/O SG, OOHT O.K. Per A.S. 12/31/14 5D TAT **Contact's Email:** info@eras.biz; andrew@eras.biz

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1412B41-001A	B-1	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	1LA	☐	12/23/2014 8:57	5 days	Present	☐	
1412B41-002A	B-2	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	1LA	☐	12/23/2014 10:52	5 days	Present	☐	
1412B41-003A	B-3	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	1LA	☐	12/23/2014 10:33	5 days	Present	☐	
1412B41-003B	B-3	Water	SW8015B (Diesel & Motor Oil)	1	1LA	☐	12/23/2014 10:33	5 days	Present	☐	

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

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

1412B41

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 | X 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 # 14229A

Project location APN 19-55-11/Calcot

Sampler: Andrew Savage

Sample ID	Location/Field Point Name	Sampling Date	Sampling Time	# of Containers	Container Type	Matrix: Soil	Matrix: Water	Matrix: Waste	Preservative: HCL	Preservative: H2SO4	Preservative: HNO3	Preservative: ICE	Preservative: None	Analysis Requested: TPH-diesel and oil with silica gel cleanup by EPA Method 8015C	Other	Comments
B-1		12/23/2014	8:57	2	1-L		X						X	X		
B-2		12/23/2014	10:52	2	1-L		X						X	X		
B-3		12/23/2014	10:33	2	1-L		X						X	X		

Run the sample with highest concentration without silica gel cleanup in addition

RELINQUISHED BY: **RECEIVED BY:**

Relinquished by:	Date: 12/24/14	Time: 1050	Recieved by:	
Relinquished by:	Date: 12/24/14	Time: 1345	Recieved by:	
Relinquished by:	Date:	Time:	Recieved by:	

ICE/t° Condition	2.4	Comments: Please PDF
Head space absent		
Dechlorinated in lab		
Appropriate containers		
Preserved in Lab		
Preservation	VOA's O&G Metals Other pH<2	

McCampbell Analytical, Inc.
"When Quality Counts"

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

Sample Receipt Checklist

Client Name: **ERAS Environmental, Inc.** Date and Time Received: **12/24/2014 2:13:54 PM**

Project Name: **#14229A** LogIn Reviewed by: Jena Alfaro

WorkOrder №: **1412B41** Matrix: Water 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 ☐	
Sample/Temp Blank temperature	Temp: 2.4°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

UCMR3 Samples:

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

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

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1412B41 A

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

Project Contact: Andrew Savage
Project P.O.:
Project Name: #14229A

Project Received: 12/24/2014

Analytical Report reviewed & approved for release on 01/07/2015 by:

Question about your data?

Click here to email McCampbell

Angela Rydelius,
Laboratory Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

Glossary of Terms & Qualifier Definitions

Client: ERAS Environmental, Inc.
Project: #14229A
WorkOrder: 1412B41

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	Data Not Reported due to matrix interference or insufficient sample amount.
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

H	samples were analyzed out of holding time
S	spike recovery outside accepted recovery limits
e2	diesel range compounds are significant; no recognizable pattern
e3/e2	aged diesel is significant; and/or diesel range compounds are significant; no recognizable pattern
e3	aged diesel is significant
e6	one to a few isolated peaks present in the TPH(d/mo) chromatogram
e7	oil range compounds are significant

McCampbell Analytical, Inc.
"When Quality Counts"

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

Analytical Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1412B41
Project:	#14229A	**Extraction Method:**	SW3510C
Date Received:	12/24/14 14:13	**Analytical Method:**	SW8015B
Date Prepared:	12/31/14	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3	**1412B41-003B**	**Water**	**12/23/2014 10:33**	**GC11A**	**99543**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**20,000**	H	5000	100	01/02/2015 17:20
TPH-Motor Oil (C18-C36)	**86,000**	H	25,000	100	01/02/2015 17:20

Surrogates	REC (%)	Qualifiers	Limits	Analytical Comments: e7,e2,e6
C9	91	H	70-130	01/02/2015 17:20

Analyst(s): TK

McCampbell Analytical, Inc.
"When Quality Counts"

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

Quality Control Report

Client:	ERAS Environmental, Inc.	**WorkOrder:**	1412B41
Date Prepared:	12/30/14	**BatchID:**	99543
Date Analyzed:	12/30/14	**Extraction Method:**	SW3510C
Instrument:	GC2B	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	#14229A	**Sample ID:**	MB/LCS-99543

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	1170	50	1000	-	117	61-157
TPH-Motor Oil (C18-C36)	ND	-	250	-	-	-	-
Surrogate Recovery							
C9	722	725		625	116	116	70-134

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1412B41 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:
PO:
ProjectNo: #14229A

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

Requested TAT: 5 days
Date Received: **12/24/2014**
Date Add-On: **12/31/2014**
Date Printed: **01/07/2015**

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
1412B41-003	B-3	Water	12/23/2014 10:33	☐	B											

Test Legend:

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

Prepared by: Jena Alfaro

Add-On Prepared By: Jena Alfaro

Comments: Sample 003 set up for DMO W/O SG, OOHT O.K. Per A.S. 12/31/14 5D TAT

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.

McCampbell Analytical, Inc.
"When Quality Counts"

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

WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC.
QC Level: LEVEL 2
Work Order: 1412B41
Project: #14229A
Client Contact: Andrew Savage
Date Received: 12/24/2014
Comments: Sample 003 set up for DMO W/O SG, OOHT O.K. Per A.S. 12/31/14 5D TAT
Contact's Email: info@eras.biz; andrew@eras.biz
Date Add-On: 12/31/2014

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1412B41-003B	B-3	Water	SW8015B (Diesel & Motor Oil)	1	1LA	12/23/2014 10:33	5 days	Present	☐	

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

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

1412B41

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	X 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 # 14229A
Project location APN 19-55-11/Calcot
Sampler: Andrew Savage

Sample ID	Location/Field Point Name	Sampling Date	Sampling Time	# of Containers	Container Type	Matrix: Soil	Matrix: Water	Matrix: Waste	Matrix:	Preservative: HCL	Preservative: H2SO4	Preservative: HNO3	Preservative: ICE	Preservative: None	TPH-diesel and oil with silica gel cleanup by EPA Method 8015C: TPH DMO w/out SG 12/31/14 SD	Other	Comments
B-1		12/23/2014	8:57	2	1-L		X							X	X		
B-2		12/23/2014	10:52	2	1-L		X							X	X		
B-3		12/23/2014	10:33	2	1-L		X							X	X		

Run the sample with highest concentration without silica gel cleanup in addition

RELINQUISHED BY: **RECEIVED BY:**

Relinquished by:	Date: 12/24/14	Time: 1050	Recieved by:	
Relinquished by:	Date: 12/24/14	Time: 1345	Recieved by:	
Relinquished by:	Date:	Time:	Recieved by:	

ICE/t° Condition	2.4	Comments: Please PDF
Head space absent		
Dechlorinated in lab		
Appropriate containers		
Preserved in Lab		
Preservation	VOA's O&G Metals Other pH<2	