

### SOIL ASSESSMENT OF DISPENSERS REPORT

Park Gas & Food Service Station 1397 7<sup>th</sup> Street, Oakland, California

### PREPARED FOR:

Mr. Chris Tougeron Sr. Hazardous Materials Specialist Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, Alameda, CA 94502

EIS PROJECT No. 1526-2

April 20, 2015

### PREPARED BY:

Environmental Investigation Services, Inc. 15951 Los Gatos Boulevard, Suite #17, Los Gatos CA 95032 Phone: (408) 402-9800 Fax: (408) 402-9830



April 20, 2015

Mr. Chris Tougeron Sr. Hazardous Materials Specialist Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, Alameda, CA 94502

SUBJECT: Soil Assessment of Dispensers Park Gas and Food Service Station 1397 7<sup>th</sup> Street, Oakland, California EIS Project # 1526-2

Dear Mr. Tougeron:

Environmental Investigation Services, Inc. (EIS) has prepared this letter report to document the soil sampling in area beneath the four dispensers associated with the underground fuel tanks from Park and Food Gas, 1397 7<sup>th</sup> Street, Oakland, California. Soil assessment activities involved soil sampling, laboratory analysis, and preparation of a letter report of findings.

### BACKGROUND

The subject site is located on the southwest corner of Mandela Parkway and 7<sup>th</sup> Street in Oakland, California. The existing site layout is presented in Figure 1. The subject site is currently occupied by a Park Gas and Food underground tank fueling station. The dispensers and fuel piping were being replaced and the Alameda County Department of Environmental Health (ACDEH) required a soil investigation for petroleum hydrocarbons, BTEX, MTBE, and lead associated with diesel and gasoline fuel beneath the former dispensers.

### FIELD ACTIVITIES

### **Dispenser Upgrade**

On April 9, 2015, Cal Phase Construction (Cal Phase) of San Jose, California, excavated fill gravel to expose the area beneath the dispensers in preparation for dispenser upgrade.

### Soil Sampling

On April 9, 2014, under ACDEH supervision, Emlyn Stokes, Staff Geologist of EIS, Inc. advanced four soil borings using hand auger equipment under each dispenser location. The soil borings and sample designations were D-1 through D-4 (see Figure 2). Soil borings designated D-1 through D-4 were advanced below dispenser locations into native soil, between approximately three and five feet below ground surface (bgs). Soil samples were collected with hand auger equipment with clean stainless steel sleeves. The stainless steel sleeves were sealed with Teflon sheets and plastic caps, labeled, logged onto a chain

of custody document, placed into a chilled ice chest, and transported to the analytical laboratory.

### LABORATORY ANALYSIS

Soil samples were delivered to McCampbell Analytical, Inc. a California-certified laboratory, for analysis.

Samples from below the dispensers were analyzed for the following: Total petroleum hydrocarbons as diesel (TPH-d) by EPA Method 8015M and Total petroleum hydrocarbons as gasoline (TPH-g), BTEX and MTBE by EPA Method 8021, and total lead by EPA Method 6010.

The analytical reports and chain-of-custody documents for the soil samples are included in Attachment A of this report.

### FINDINGS Site Conditions

The native subsurface materials encountered during the investigation were silty clay.

Native soil encountered below the dispensers appeared to have petroleum hydrocarbon staining and odor. Soil samples were collected at a depth of three to five feet below ground surface.

### **Analytical Results**

Analytical data from the soil samples are summarized in Table 1. The data is compared to applicable Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residential and commercial land use where groundwater is a current or potential source of drinking water (RWQCB, December 2013). Laboratory analytical reports and chain-of-custody documents for the soil samples are included in Attachment A of this report.

Analytical results for soil samples D-1, D-2, and D-3 revealed low detections of TPH-d concentrations ranging from 5.1 mg/kg to 17 mg/kg and TPH-g ranging from <1.0 mg/kg to 44 mg/kg. All four samples had low concentrations of benzene ranging from <0.005 mg/kg to 0.38 mg/kg, toluene ranging from <0.005 mg/kg to <0.5 mg/kg, ethylbenzene ranging from <0.005 mg/kg to 0.63 mg/kg, and xylenes ranging from <0.005 mg/kg to 1.1 mg/kg. Concentrations of MTBE in soil samples D-1 and D-2 were <0.05 mg/kg, <0.25 mg/kg for sample D-3, and <5.0 mg/kg for sample D-4.

Soil sample D-4 had concentrations of TPH-d at 3,100 mg/kg and TPH-g at 560 mg/kg.

Lead was detected in soil sample D-1 at 280 mg/kg, at 36 mg/kg in soil sample D-2, at 160 mg/kg in soil sample D-3, and at 290 mg/kg in D-4.

Soil sample analytical data is included in table 1 of this report, and full analytical reports and chain-of-custody documents are included in Attachment A of this report.

### CONCLUSIONS

Based on the soil sampling analytical data, and documentation presented in this report, EIS offers the following conclusions and recommendations:

- There were no detections of BTEX in soil samples D-1 through D-4 exceeding residential or commercial RWQCB ESLs.
- Concentrations of TPH-d at 3,100 mg/kg and TPH-g at 560 mg/kg were present in soil sample D-4, both of which are above the respective residential and commercial RWQCB ESLs. Soil samples D-1 through D-3 revealed no concentrations of TPH-g or TPH-d in excess of residential and commercial RWQCB ESLs.
- Because the soil sample D-4 had concentrations of TPH-g at 560 mg/kg and TPHd at 3,100 mg/kg, each above their respective commercial RWQCB ESLs, EIS recommends this report be submitted to Alameda County Environmental Health Department.
- Lead was detected in sample D-1 at 280 mg/kg, in D-3 at 160 mg/kg, and in D-4 at 290 mg/kg, all of which are above residential RWQCB ESLs, but below RWQCB commercial ESLs. Lead was detected in sample D-2 at 36 mg/kg, which is below both residential and commercial ESLs.
- There were no detections of MTBE in samples D-1 through D-4. However, detection limits in samples D-1 through D-4 range from <0.05 mg/kg to <5.0 mg/kg, which are in excess of the respective residential and commercial ESL of 0.023 mg/kg. Therefore, concentrations of MTBE may be present in samples D-1 through D-4 at levels exceeding residential and commercial RWQCB ESLs.
- Based on the results of soil sampling performed in area of former fuel dispensers, there appears to be petroleum hydrocarbon impact in site soils.
- Because the soil sample D-4 had concentrations of TPH-g at 560 mg/kg and TPHd at 3,100 mg/kg, each above their respective commercial RWQCB ESLs, EIS recommends this report be submitted to Alameda County Environmental Health Department.

### LIMITATIONS

All reports and findings are based on the conditions and practices observed and information made available to Environmental Investigation Services, Inc. Our services consist of professional opinions and conclusions made herein were in accordance with generally accepted engineering principles and practices.

If you have any questions or comments regarding this report, please contact EIS at (408) 402-9800.

Sincerely,

**Environmental Investigation Services, Inc.** 

Emlyn Stokes Staff Geologist

Long Ching, P.E. #C39467 Senior Engineer



#### **Attachments:**

Table 1 – Summary of Soil Analytical Results

Figure 1 – Site Map Figure 2 – Boring Locations

Attachment A – Laboratory Analytical Reports and Chain of Custody Documents

# Table 1 - Summary of Soil Sample Analytical Results1397 7th Street, Oakland, California

							Ethyl			
Boring ID	Depth	Date	TPH-g	TPH-d	Benzene	Toluene	benzene	Xylenes	MTBE	Lead
RWQCB ES	Ls (Resid	ential A.1)	100	100	0.044	2.9	3.3	2.3	0.023	80
RWQCB ES	Ls (Comn	nercial A.2)	500	110	0.044	2.9	3.3	2.3	0.023	320
D-1	3'	4/9/2015	32	17	0.38	0.2	0.63	0.89	<0.05	280
D-2	4'	4/9/2015	<1.0	5.1	<0.005	<0.005	<0.005	<0.005	<0.05	36
D-3	5'	4/9/2015	44	6.4	0.19	0.12	0.061	0.37	<0.25	160
D-4	3'	4/9/2015	560	3,100	<0.5	<0.5	<0.5	1.1	<5.0	290

Notes

Data are reported in micrograms per lited (mg/kg)

EPA Method SW8021B/8015Bm for TPH, MTBE, and BTEX analysis

EPA Method SW6010B for Lead analysis

*VOCs* = *Volatile Organic Compounds* 

**Bold** = results which are greater than ESLs

ND = Not detected

-- = Not established

*RWQCB ESLs = Regional Water Quality Control Board's Environmental* 







McCampbell Analytical, Inc.

"When Quality Counts"

# **Analytical Report**

WorkOrder:	1504449
Report Created for:	Environmental Investigation Services, Inc.
	15951 Los Gatos Blvd., Suite 17 Los Gatos, CA 95032
Project Contact:	Peter Littman
Project P.O.: Project Name:	Oakland
Project Received:	04/09/2015

Analytical Report reviewed & approved for release on 04/15/2015 by:

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.



1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com NELAP: 4033ORELAP ♦ ELAP: 1644 ♦ ISO/IEC: 17025:2005 ♦ WSDE: C972-11 ♦ ADEC: UST-098 ♦ UCMR3



# **Glossary of Terms & Qualifier Definitions**

Client:Environmental Investigation Services, Inc.Project:Oakland

**WorkOrder:** 1504449

### **Glossary Abbreviation**

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 $\mu m$ filtered and acidified water sample)
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
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

# **Glossary of Terms & Qualifier Definitions**

**Client:** Environmental Investigation Services, Inc.

Project:OaklandWorkOrder:1504449

#### **Analytical Qualifiers**

d1	weakly modified or unmodified gasoline is significant
d7	strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
d9	no recognizable pattern
e2	diesel range compounds are significant; no recognizable pattern
e4/e11	gasoline range compounds are significant.; and/or stoddard solvent/mineral spirit (?)
e4/e	gasoline range compounds are significant.; and/or value above quantitation range
e4	gasoline range compounds are significant.
e7	oil range compounds are significant
e8	kerosene/kerosene range/jet fuel range



MTBE

Benzene

Toluene

**Xylenes** 

**Surrogates** 

2-Fluorotoluene

Analyst(s): IA

Ethylbenzene

ND

ND

ND

ND

ND

94

REC (%)

# **Analytical Report**

Client:	Environmental Investigation Services, Inc.	WorkOrder:	1504449
Project:	Oakland	<b>Extraction Method:</b>	SW5030B
Date Received:	4/9/15 20:43	Analytical Method:	SW8021B/8015Bm
Date Prepared:	4/9/15-4/13/15	Unit:	mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Co	ollected	Instrument	Batch ID
D1	1504449-001A	Soil	04/09/201	15 07:48	GC7	103461
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>		Date Analyzed
TPH(g)	32		1.0	1		04/11/2015 14:49
MTBE	ND		0.050	1		04/11/2015 14:49
Benzene	0.38		0.0050	1		04/11/2015 14:49
Toluene	0.20		0.0050	1		04/11/2015 14:49
Ethylbenzene	0.63		0.0050	1		04/11/2015 14:49
Xylenes	0.89		0.0050	1		04/11/2015 14:49
Surrogates	<u>REC (%)</u>		<u>Limits</u>			
2-Fluorotoluene	102		70-130			04/11/2015 14:49
Analyst(s): IA		Anal	ytical Comm	<u>nents:</u> d1		
Client ID	Lab ID	Matrix/ExtType	Date Co	ollected	Instrument	Batch ID
D2	1504449-002A	Soil	<b>04/09/20</b> 1	15 08:19	GC19	103578
Analytes	Result		<u>RL</u>	DF		Date Analyzed
TPH(g)	ND		1.0	1		04/14/2015 01:43

0.050

0.0050

0.0050

0.0050

0.0050

Limits

70-130

1

1

1

1

1

04/14/2015 01:43

04/14/2015 01:43

04/14/2015 01:43

04/14/2015 01:43

04/14/2015 01:43

04/14/2015 01:43



Ethylbenzene

**Xylenes** 

aaa-TFT

Analyst(s):

IA

**Surrogates** 

ND

100

1.1

<u>REC (%)</u>

# **Analytical Report**

Client:	Environmental Investigation Services, Inc.	WorkOrder:	1504449
Project:	Oakland	<b>Extraction Method:</b>	SW5030B
Date Received:	4/9/15 20:43	Analytical Method:	SW8021B/8015Bm
Date Prepared:	4/9/15-4/13/15	Unit:	mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Co	ollected	Instrument	Batch ID
D3	1504449-003A	Soil	04/09/20 <sup>-</sup>	15 07:57	GC19	103461
Analytes	<u>Result</u>		<u>RL</u>	DF		Date Analyzed
TPH(g)	44		5.0	5		04/13/2015 15:05
MTBE	ND		0.25	5		04/13/2015 15:05
Benzene	0.19		0.025	5		04/13/2015 15:05
Toluene	0.12		0.025	5		04/13/2015 15:05
Ethylbenzene	0.061		0.025	5		04/13/2015 15:05
Xylenes	0.37		0.025	5		04/13/2015 15:05
Surrogates	<u>REC (%)</u>		<u>Limits</u>			
2-Fluorotoluene	105		70-130			04/13/2015 15:05
Analyst(s): IA		Anal	ytical Comn	nents: di	7,d9	
Client ID	Lab ID	Matrix/ExtType	Date Co	ollected	Instrument	Batch ID
D4	1504449-004A	Soil	04/09/20 <sup>-</sup>	15 08:09	GC19	103461
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>		Date Analyzed
TPH(g)	560		100	100		04/10/2015 18:07
MTBE	ND		5.0	100		04/10/2015 18:07
Benzene	ND		0.50	100		04/10/2015 18:07
Toluene	ND		0.50	100		04/10/2015 18:07

0.50

0.50

Limits

70-130

Analytical Comments: d7,d9

100

100

04/10/2015 18:07

04/10/2015 18:07

04/10/2015 18:07



# **Analytical Report**

Client:	Environmental Investigation Services, Inc.	WorkOrder:	1504449
Project:	Oakland	<b>Extraction Method:</b>	SW3050B
Date Received:	4/9/15 20:43	Analytical Method:	SW6010B
Date Prepared:	4/9/15	Unit:	mg/Kg

#### Lead

Client ID	Lab ID	Matrix/ExtType	Date (	Collected Instrument	Batch ID
D1	1504449-001A	Soil	04/09/2	015 07:48 ICP-JY	103435
Analytes	Result		<u>RL</u>	DF	Date Analyzed
Lead	280		5.0	1	04/13/2015 10:25
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Tb 350.917	105		70-130		04/13/2015 10:25
Analyst(s): DB					

Client ID	Lab ID	Matrix/ExtType	Date Co	ollected Instrument	Batch ID
D2	1504449-002A	Soil	04/09/20	15 08:19 ICP-JY	103435
Analytes	<u>Result</u>		<u>RL</u>	DF	Date Analyzed
Lead	36		5.0	1	04/13/2015 10:18
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Tb 350.917	104		70-130		04/13/2015 10:18
Analyst(s): DB					

Client ID	Lab ID	Matrix/ExtType	Date C	Collected Instrument	Batch ID
D3	1504449-003A	Soil	04/09/2	015 07:57 ICP-JY	103435
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	DF	Date Analyzed
Lead	160		5.0	1	04/13/2015 10:15
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Tb 350.917	101		70-130		04/13/2015 10:15
Analyst(s): DB					

Client ID	Lab ID	Matrix/ExtType	Date C	ollected Instrument	Batch ID
D4	1504449-004A	Soil	04/09/20	15 08:09 ICP-JY	103435
Analytes	<u>Result</u>		<u>RL</u>	DF	Date Analyzed
Lead	290		5.0	1	04/13/2015 10:13
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Tb 350.917	103		70-130		04/13/2015 10:13
Analyst(s): DB					



# **Analytical Report**

Client:	Environmental Investigation Services, Inc.	WorkOrder:	1504449
Project:	Oakland	<b>Extraction Method:</b>	SW3550B
Date Received:	4/9/15 20:43	Analytical Method:	SW8015B
Date Prepared:	4/9/15	Unit:	mg/Kg

#### **Total Extractable Petroleum Hydrocarbons**

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
D1	1504449-001A	Soil	04/09/2015 07:48	GC6B	103478
Analytes	<u>Result</u>		<u>RL DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	17		1.0 1		04/13/2015 14:33
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
C9	97		70-130		04/13/2015 14:33
<u>Analyst(s):</u> TK		Anal	<u>/tical Comments:</u> e	7,e2	
Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
D2	1504449-002A	Soil	04/09/2015 08:19	GC11B	103478
Analytes	<u>Result</u>		<u>RL</u> <u>DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	5.1		1.0 1		04/13/2015 12:02
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
C9	107		70-130		04/13/2015 12:02
<u>Analyst(s):</u> TK		Analy	vtical Comments: e	7,e2	
Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
D3	1504449-003A	Soil	04/09/2015 07:57	GC11B	103478
Analytes	<u>Result</u>		<u>RL DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	6.4		1.0 1		04/13/2015 15:37
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
C9	117		70-130		04/13/2015 15:37
Analyst(s): TK		Analy	vtical Comments: e	7,e2,e4/e11	
Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
D4	1504449-004A	Soil	04/09/2015 08:09	GC6A	103478
Analytes	<u>Result</u>		<u>RL</u> <u>DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	3100		200 200		04/14/2015 20:53
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
C9	99		70-130		04/14/2015 20:53
Analvst(s): TK		Analy	/tical Comments: e2	2.e8.e4	



McCampbell Analytical, Inc. "When Quality Counts"

Client:	Environmental Investigation Services, Inc.	WorkOrder:	1504449
Date Prepared:	4/9/15	BatchID:	103461
Date Analyzed:	4/10/15	<b>Extraction Method:</b>	SW5030B
Instrument:	GC3	Analytical Method:	SW8021B/8015Bm
Matrix:	Soil	Unit:	mg/Kg
Project:	Oakland	Sample ID:	MB/LCS-103461 1504439-001AMS/MSD

	QC Summary	y Report f	for SW	8021B/801	5Bm				
Analyte	MB Result	LCS Result		RL	SPK Val	MB %R	SS LCS EC %RE	EC	LCS Limits
TPH(btex)	ND	0.707		0.40	0.60	-	118		70-130
MTBE	ND	0.0901		0.050	0.10	-	90		70-130
Benzene	ND	0.102		0.0050	0.10	-	102		70-130
Toluene	ND	0.104		0.0050	0.10	-	104		70-130
Ethylbenzene	ND	0.104		0.0050	0.10	-	104		70-130
Xylenes	ND	0.311		0.0050	0.30	-	104		70-130
Surrogate Recovery									
2-Fluorotoluene	0.0979	0.0949			0.10	98	95		70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		5.5	NR	NR	-	NR	
MTBE	NR	NR		ND<0.5	NR	NR	-	NR	
Benzene	NR	NR		ND<0.05	NR	NR	-	NR	
Toluene	NR	NR		4.6	NR	NR	-	NR	
Ethylbenzene	NR	NR		ND<0.05	NR	NR	-	NR	
Xylenes	NR	NR		ND<0.05	NR	NR	-	NR	
Surrogate Recovery									
2-Fluorotoluene	NR	NR			NR	NR	-	NR	

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McCampbell Analytical, Inc. "When Quality Counts"

Client:	Environmental Investigation Services, Inc.	WorkOrder:	1504449
Date Prepared:	4/13/15	BatchID:	103578
Date Analyzed:	4/13/15	<b>Extraction Method:</b>	SW5030B
Instrument:	GC19	Analytical Method:	SW8021B/8015Bm
Matrix:	Soil	Unit:	mg/Kg
Project:	Oakland	Sample ID:	MB/LCS-103578 1504559-001AMS/MSD

QC Summary Report for SW8021B/8015Bm													
Analyte	MB Result	LCS Result		RL	SPK Val	M %	B SS REC	LCS %REC	L ; L	.CS .imits			
TPH(btex)	ND	0.620		0.40	0.60	-		103	7	0-130			
MTBE	ND	0.0884		0.050	0.10	-		88	7	0-130			
Benzene	ND	0.115		0.0050	0.10	-		115	7	0-130			
Toluene	ND	0.115		0.0050	0.10	-		115	7	0-130			
Ethylbenzene	ND	0.118		0.0050	0.10	-		118	7	0-130			
Xylenes	ND	0.380		0.0050	0.30	-		127	7	0-130			
Surrogate Recovery													
2-Fluorotoluene	0.114	0.114			0.10	11	4	114	7	0-130			
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/M Limit	ISD s	RPD	RPD Limit			
TPH(btex)	0.618	0.613	0.60	ND	103	102	70-13	60	0.794	20			
МТВЕ	0.0809	0.0803	0.10	ND	81	80	70-13	0	0.691	20			
Benzene	0.108	0.108	0.10	ND	108	108	70-13	0	0	20			
Toluene	0.111	0.110	0.10	ND	111	110	70-13	0	0.546	20			
Ethylbenzene	0.115	0.114	0.10	ND	115	114	70-13	0	1.47	20			
Xylenes	0.372	0.366	0.30	ND	124	122	70-13	0	1.83	20			
Surrogate Recovery													
2-Fluorotoluene	0.112	0.111	0.10		112	111	70-13	0	0.821	20			

QA/QC Officer Page 9 of 15



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

Client:	Environmental Investigation Services, Inc.	WorkOrder:	1504449
Date Prepared:	4/9/15	BatchID:	103435
Date Analyzed:	4/10/15	<b>Extraction Method:</b>	SW3050B
Instrument:	ICP-JY	Analytical Method:	SW6010B
Matrix:	Soil	Unit:	mg/Kg
Project:	Oakland	Sample ID:	MB/LCS-103435

QC Summary Report for Lead										
Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits			
Lead	ND	45.9	5.0	50	-	92	75-125			
Surrogate Recovery Tb 350.917	513	508		500	103	101	70-130			





Client:	Environmental Investigation Services, Inc.	WorkOrder:	1504449
Date Prepared:	4/9/15	BatchID:	103478
Date Analyzed:	4/10/15	<b>Extraction Method:</b>	SW3550B
Instrument:	GC11A, GC9b	Analytical Method:	SW8015B
Matrix:	Soil	Unit:	mg/Kg
Project:	Oakland	Sample ID:	MB/LCS-103478 1504448-001AMS/MSD

QC Summary Report for SW8015B													
Analyte	MB Result	LCS Result		RL	SPK Val	M %	B SS REC	LCS %REC	LCS Limits				
TPH-Diesel (C10-C23)	ND	39.2		1.0	40	-		98	70-130				
TPH-Motor Oil (C18-C36)	ND	-		5.0	-	-		-	-				
Surrogate Recovery													
C9	23.7	20.6			25	95	5	83	70-130				
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/M Limits	SD RP s	D RPD Limit				
TPH-Diesel (C10-C23)	53.2	55.4	40	13.30	100	105	70-13	0 4.1	4 30				
Surrogate Recovery													
C9	25.0	25.1	25		100	100	70-13	0 0	30				

QA/QC Officer Page 11 of 15

McCamp 1534 Wil Pittsburg (925) 252	bell Analytical, Now Pass Rd CA 94565-1701 2-9262	Inc.			CH/	<b>N</b> orkO	I-OF	<b>-CU</b>	STODY	<b>R</b> entC	ECO ode: EI	RD ISI	J	Page	1 of	1
		WaterTrax	WriteOn	EDF	Ex	cel		EQuIS	🖌 Email		Hard	Сору	ThirdPa	ırty	_J-fla	ıg
Report to:						В	sill to:					Req	uested TAT:		5 d	lays
Peter Littman Environmental Investigation Services, Ir 15951 Los Gatos Blvd., Suite 17 Los Gatos, CA 95032 (408) 871-1470 FAX: (408) 871-1520		Email: cc/3rd Party: PO: ProjectNo:	plittman@eis1.n Oakland	iet; emlyn@eis1.r	et; Ichin	g	Barbar Env. In 15951 Los Ga barbar	a nvestiga Los Ga atos, CA a@eis1	tion Svcs., Inc tos Blvd., Suit \ 95032 .net	e 17		Dat Dat	e Received: e Printed:	,	04/09/2 04/09/2	015 015
									Requested	l Test	s (See le	gend	below)			
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4 5	6	7	8	9	10	11	12
1504449-001	D1		Soil	4/9/2015 7:48		А	А	А								1
1504449-002	D2		Soil	4/9/2015 8:19		А	Α	Α								

4/9/2015 7:57

4/9/2015 8:09

А

А

А

А

А

А

#### Test Legend:

1504449-003

1504449-004

1	G-MBTEX_S
6	
11	

2	PB_S
7	
12	

Soil

Soil

D3

D4

3	TPH(D)_S
8	

4	
9	

5	
10	

#### 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.

1504449-003A D3

1504449-004A D4

Soil

Soil

SW6010B (Lead)

SW8015B (Diesel)

SW6010B (Lead)

SW8015B (Diesel)

SW6010B (Lead)

SW8021B/8015Bm (G/MBTEX)

SW8021B/8015Bm (G/MBTEX)

SW8021B/8015Bm (G/MBTEX)

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Stainless Steel tube 2"x6"

Stainless Steel tube 2"x6"

### WORK ORDER SUMMARY

Client Name: Project: Comments:	ENVIRONM Oakland	ENTAL INVESTIG	ATION SERVI	CES, INC.	QC Lev Client Conta Contact's Ema	el: LE ct: Pe uil: pli	Worl Date R	k Order: Received:	1504449 4/9/2015			
		WaterTrax	WriteOn	EDF	Excel		]Fax 🖌 Email	HardC	opyThirdPart	ty 🔲 J	l-flag	
Lab ID	Client ID	Matrix	Test Name		Conta /Comj	niners posites	Bottle & Preservative	De- chlorinated	Collection Date & Time	ТАТ	Sediment Content	Hold SubOut
1504449-001A	D1	Soil	SW8015B (Die	sel)		1	Stainless Steel tube 2"x6"		4/9/2015 7:48	5 days		
			SW6010B (Lea	d)						5 days		
			SW8021B/801	5Bm (G/MBTE	X)					5 days		
1504449-002A	D2	Soil	SW8015B (Die	sel)		1	Stainless Steel tube 2"x6"		4/9/2015 8:19	5 days		

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

1

1

- 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.

5 days

4/9/2015 7:57

4/9/2015 8:09

										1	S	E	C	f	14	9																			
	McC	am	npbe	ell	Α	nc	ylx	/tio	CC	лI,	In	IC							С	HÆ	٨I	IC	)F	С	US	TC	D	γ	RE	C	O	RD	1		
1534 Willow Pass Rd. / Pittsburg. Cg. 94565-1701												TURN AROUND TIME: RUSH 🔲 1 DAY 🔄 2 DAY 🛄 3 DAY 🔲 5 DAY 🔀																							
www.mccampbell.com / main@mccampbell.com												Ge	oTra	cker	EDF		PDF	M	EDI		Writ	te On	(DV	NП	EC	)uIS			10 E	AY [	ם				
Telephone: (877) 252-9262 / Fax: (925) 252-9269											FA		+ Sa.	mnlo	Dog		······································	flog	-	UCT	Clar		- Eu	nd D.		 									
											En	nuen	t Sai	npie	Req	uiring	g . J	nag		051	Clea	in U	p ru	10 PI	ojeci	<b>с</b> Ц;	Clai	m #		-					
Report To: Peter	Report To: Peter Littman / Emlyn Stokes Bill To: EIS, Inc.																			Ana	lysis	Rec	lues	t		_		_	_						
Company: Envir	Company: Environmental Investigation Services, Inc.												-		£																				
Los Gatos, CA 95	6032	21/			F-	Mail	• em	ulvn <i>í</i>	Deis	1 net								E/B&			2										sis				
Tele: ( 408 ) 40	2 9800				Fa	x: (	408	) 4	02 98	300						15)		520			gene							020)	020)		analy				
Project #:					Pr	oject	Nai	me:	Oal	lar	d					21/80		64/5	18.1)		Con		ides)	(0			As)	10 / 6	0 / 6		tals :				
Project Location: 397 7th St. Oahland Purchase Order#										s (802		e (16	ns (4	cides	lors /	(sa	erbic	\$ (826	6	(s)	/ PN	8 / 60	/ 601	6020)	Dme										
Sampler Signatu	re: fen	zni		<del>.</del> .	<u> </u>		N	<b>7 A T</b>	DIV			_	M	FTH	OD	is Ga		Greas	arbo	Pesti	Aroc	ticid	CIH	s Ga	VOC	SVO	PAHs	200.8	200.8	10/	LVE				
		SAM	PLING	1			IV		RIA				PRE	SER	VED	PH a	15)	il & (	ydroe	1 (C	B's;	P Pes	cidic	PH a	260 (	270 (	310 (	00.7 /	0.7/	.8 / 6(	ISSO				
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	<b>Ground Water</b>	Waste Water	<b>Drinking Water</b>	sea Water	soil	Lir	sludge	Other	ICL	1NO3	Other	STEX/ MTBE & T	(PH as Diesel (801	otal Petroleum Oi	fotal Petroleum Hy	CPA 505/ 608 / 808	CPA 608 / 8082 PC	CPA 507 / 8141 (N	CPA 515 / 8151 (A	STEX/ MTBE & T	CPA 524.2 / 624 / 8	CPA 525.2 / 625 / 8	CPA 8270 SIM / 83	CAM 17 Metals (20	UFT 5 Metals (20	Aetals (200.7 / 200.	ilter sample for D	ead			
DI		U/g/IS	7140	*	<b>–</b>	-	_		V			H	1	-	ľ	~		- -	<u> </u>	-	-	-	-	-	-	-	-	Ĕ	-	~	-	1			$\vdash$
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**MAI clients MUST	disclose any	dangerou	us chemica	ls kn	own t	o be p	reser	it in t	heir s	ubmi	tted s	amp	ples i	n cor	icent	ration	s tha	t may	y caus	e im	nedia	te hai	rm or	serio	us fut	ture h	ealth	enda	ingeri	ment	as a r	esult	of bri	ef,	
us to work safely.	pre nanoning			aisen	Suit	incurs		(	are a	2308	aren	arge	, and	the t	aent	5			i iega	1 1140	inty fo	, nai	in su	neret	14	ank y	<b>JU</b> 10	, you	i und	ersta	num	; anu 1	or al	IO WIL	5
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Bal	e	ila	173	$\langle \rangle$	1000		Y	2			2				APPF	PROPRIATE CONTAINERS																			
Relinquished By:	elinquished By: Date: Time: Received By: P								PRES	SERV	ATIC	VO N	DAS	08	:G 1	мет. H<2_	ALS	от	HER	]	HAZ	ARD	OUS:												



### Sample Receipt Checklist

Client Name:	Environmental Inv	estigation Services, Inc.			Date and T	ime Received:	4/9/2015 8:43:13 PM						
Project Name:	Oakland				LogIn Revi	ewed by:	Jena Alfaro						
WorkOrder №:	1504449	Matrix: <u>Soil</u>			Carrier:	<u>Benjamin Yslas</u>	(MAI Courier)						
		Chain of C	ustody	<u>/ (COC) lı</u>	nformation								
Chain of custody	present?		Yes	✓	No 🗌								
Chain of custody	signed when relinqu	ished and received?	Yes	✓	No 🗌								
Chain of custody	agrees with sample	labels?	Yes	✓	No 🗌								
Sample IDs note	d 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 int	act on shipping con	ainer/cooler?	Yes		No 🗌		NA 🗹						
Shipping containe	er/cooler in good co	ndition?	Yes		No 🗌								
Samples in prope	er containers/bottles	?	Yes	✓	No 🗌								
Sample containe	rs intact?		Yes	✓	No 🗌								
Sufficient sample	volume for indicate	d test?	Yes	✓	No 🗌								
		Sample Preservatio	on and	Hold Tin	ne (HT) Info	rmation							
All samples recei	ved within holding ti	me?	Yes	✓	No 🗌								
Sample/Temp Bla	ank temperature			Temp:	5°C								
Water - VOA vial	s have zero headspa	ace / no bubbles?	Yes		No		NA 🗹						
Sample labels ch	ecked for correct pr	eservation?	Yes	✓	No								
pH acceptable up	oon receipt (Metal: <	2; 522: <4; 218.7: >8)?	Yes		No 🗌		NA 🗹						
Samples Receive	ed on Ice?		Yes		No								
		(Ісе Туре	: WE	TICE )									
UCMR3 Samples Total Chlorine t	:: ested and acceptab	le upon receipt for EPA 522?	Yes		No 🗌		NA 🗹						
Free Chlorine to 300.1, 537, 539	ested and acceptabl	e upon receipt for EPA 218.7,	Yes		No 🗌		NA 🗹						

\_\_\_\_\_

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

\_\_\_\_

Comments:

\_\_\_\_\_

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