CONESTOGA-ROVERS & ASSOCIATES

5900 Hollis Street, Suite A
Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
www.CRAworld.com

TRANSMITTAL

DATE: August 14, 2013

REFERENCE NO.: 241513

PROJECT NAME: 500 40th Street, Oakland

TO: Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED
By Alameda County Environmental Health at 4:14 pm, Aug 15, 2013

Please find enclosed:
- ☐ Draft
- ☐ Originals
- ☐ Prints
- ☒ Final
- ☐ Other

Sent via:
- ☐ Mail
- ☐ Overnight Courier
- ☐ Same Day Courier
- ☒ Other GeoTracker and Alameda County FTP

QUANTITY	DESCRIPTION
1	Soil Vapor Sampling Report

- ☐ As Requested
- ☐ For Your Use
- ☒ For Review and Comment
- ☐
- ☐

COMMENTS:
If you have any questions regarding the contents of this document, please call the CRA project manager Peter Schaefer at (510) 420-3319 or the Shell program manager Marvin Katz at (310) 550-5846.

Copy to: Marvin Katz, Shell Oil Products US (electronic copy)
Young Song and In Song, Trustees (property owners), 1015 Sanders Drive, Moraga, CA 94556

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: **Correspondence File**

Shell Oil Products US
Soil and Groundwater Focus Delivery Group
20945 S. Wilmington Avenue
Carson, CA 90810
Tel (310) 550 5846
Fax (281) 582 4172
Email marvin.katz@shell.com
Internet http://www.shell.com

Mr. Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: 500 40th Street
Oakland, California
SAP Code 129452
Incident No. 97093400
ACEH Case No. RO0000264

Dear Mr. Wickham:

The attached document is provided for your review and comment. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

As always, please feel free to contact me directly at (310) 550-5846 with any questions or concerns.

Sincerely,
Shell Oil Products US

Marvin Katz
Senior Program Manager

SOIL VAPOR SAMPLING REPORT

FORMER SHELL SERVICE STATION
500 40TH STREET
OAKLAND, CALIFORNIA

SAP CODE 129452
INCIDENT NO. 97093400
AGENCY NO. RO0000264

Prepared by:
Conestoga-Rovers & Associates

5900 Hollis Street, Suite A
Emeryville, California
U.S.A. 94608

Office: (510) 420-0700
Fax: (510) 420-9170

web: http://www.CRAworld.com

AUGUST 14, 2013
REF. NO. 241513 (14)
This report is printed on recycled paper.

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EXECUTIVE SUMMARY

On July 9, 2013, CRA sampled nested soil vapor probes SVP-1 and SVP-2 for TPHg, BTEX, and naphthalene.

- No BTEX or naphthalene was detected in the soil vapor samples.
- Soil vapor samples contained up to 72,000,000 µg/m^3 TPHg. TPHg results were comparable to previous sampling events.
- Previous sub-slab soil vapor sampling has demonstrated that residual soil and groundwater impacts are unlikely to pose a risk to receptors.
- Based on these soil vapor results and current soil and groundwater conditions, CRA recommends closure of this environmental case.

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to document the recent soil vapor probe monitoring event, as proposed in CRA's May 29, 2013 *Soil Vapor Sampling Work Plan* and conditionally approved in Alameda County Environmental Health's June 6, 2013 letter.

The site is a former Shell Service Station located on the northwestern corner of 40th Street and Telegraph Avenue in Oakland, California (Figure 1). The site was an operating service station prior to 1987 and is occupied currently by a strip mall. The former site layout included four underground storage tanks and four dispenser islands (Figure 2). The area surrounding the site is of mixed commercial and residential use. The parking lot for the MacArthur Bay Area Rapid Transit station is located to the southwest across 40th Street.

A summary of previous work performed at the site and additional background information was submitted in CRA's May 29, 2013 work plan and is not repeated herein.

2.0 SAMPLING ACTIVITIES

2.1 PERSONNEL PRESENT

CRA Staff Scientist Cristina Arganbright sampled nested soil vapor probes SVP-1 and SVP-2 under the supervision of California Professional Geologist Peter Schaefer.

2.2 SAMPLING DATE

July 9, 2013.

2.3 SOIL VAPOR SAMPLING

CRA sampled nested soil vapor probes SVP-1 and SVP-2 using a lung box and Tedlar® bag. Prior to sampling, CRA purged at least three tubing volumes of air from each vapor probe using a vacuum pump. Immediately after purging, a soil vapor sample was collected using a laboratory-supplied Tedlar® bag. During sampling, the Teflon® tubing for the vapor probe was connected to a lung box containing the Tedlar®

bag, and the lung box chamber was connected to the vacuum pump. The sample was then drawn into the Tedlar® bag by reducing the pressure in the lung box with the vacuum pump. The samples were labeled, documented on a chain-of-custody, and submitted to Calscience Environmental Laboratories, Inc. of Garden Grove, California for analysis within 72 hours.

To check the system for leaks, a containment unit (or shroud) was placed to cover the soil gas probes surface casing and sampling manifold. Prior to soil gas probe purging, helium was introduced into the containment unit to obtain a minimum 50 percent (%) helium content level. The helium content within the containment unit was confirmed using a helium meter. The helium meter readings are presented in Section 3.2. The samples were analyzed by the laboratory for helium, and CRA presents the results in Section 3.2 and on Table 1.

3.0 FINDINGS

3.1 SOIL VAPOR

The soil vapor samples collected from nested soil vapor probes SVP-1 and SVP-2 on July 9, 2013 contained up to 72,000,000 micrograms per cubic meter ($\mu g/m^3$) total petroleum hydrocarbons as gasoline (TPHg). No other constituents of concern were detected.

Table 1 summarizes historical soil vapor analytical data. TPHg, benzene, and naphthalene results are shown on Figure 2, and the laboratory analytical report is presented in Appendix A.

3.2 LEAK TESTING

CRA performed leak testing as described above, and up to 0.772 percent by volume (%*v*) helium was detected in the samples. As seen in the following table, the helium detections are below 5% of the concentration detected in the shroud, and the samples are considered valid.

Probe ID	*Depth (fbg)*	*Helium concentration in sample (%v)*	*Minimum helium concentration detected in shroud (%v)*	*Maximum acceptable helium concentration in sample (%v)*
SVP-1	2.5	<0.0100	52	2.6
SVP-1	5.0	0.772	51	2.5
SVP-2	2.5	0.0151	52	2.6
SVP-2	5.0	0.0154	55	2.7

fbg = Feet below grade

The laboratory analytical reports for helium are presented in Appendix A, and CRA includes the results on Table 1.

4.0 CONCLUSIONS AND RECOMMENDATIONS

No benzene, toluene, ethylbenzene, and total xylenes (BTEX) or naphthalene was detected in the soil vapor samples. TPHg concentrations in SVP-1 at 2.5 and 5.0 fbg exceeded the San Francisco Bay Regional Water Quality Control Board (RWQCB) environmental screening level (ESL) for commercial land use during this sampling event. These results were comparable to previous sampling events.

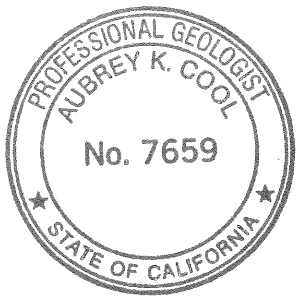
It should be noted that RWQCB ESL guidance advises that "TPH ESLs must be used in conjunction with ESLs for related chemicals (e.g. BTEX, polynuclear aromatic hydrocarbons, oxidizers, etc.)." In this case, BTEX and naphthalene would be the appropriate related chemicals, and no BTEX or naphthalene was detected.

Previous sub-slab soil vapor sampling has demonstrated that residual soil and groundwater impacts are unlikely to pose a risk to receptors. Based on these soil vapor results and current soil and groundwater conditions, CRA recommends closure of this environmental case.

All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG



FIGURES

10/21/09

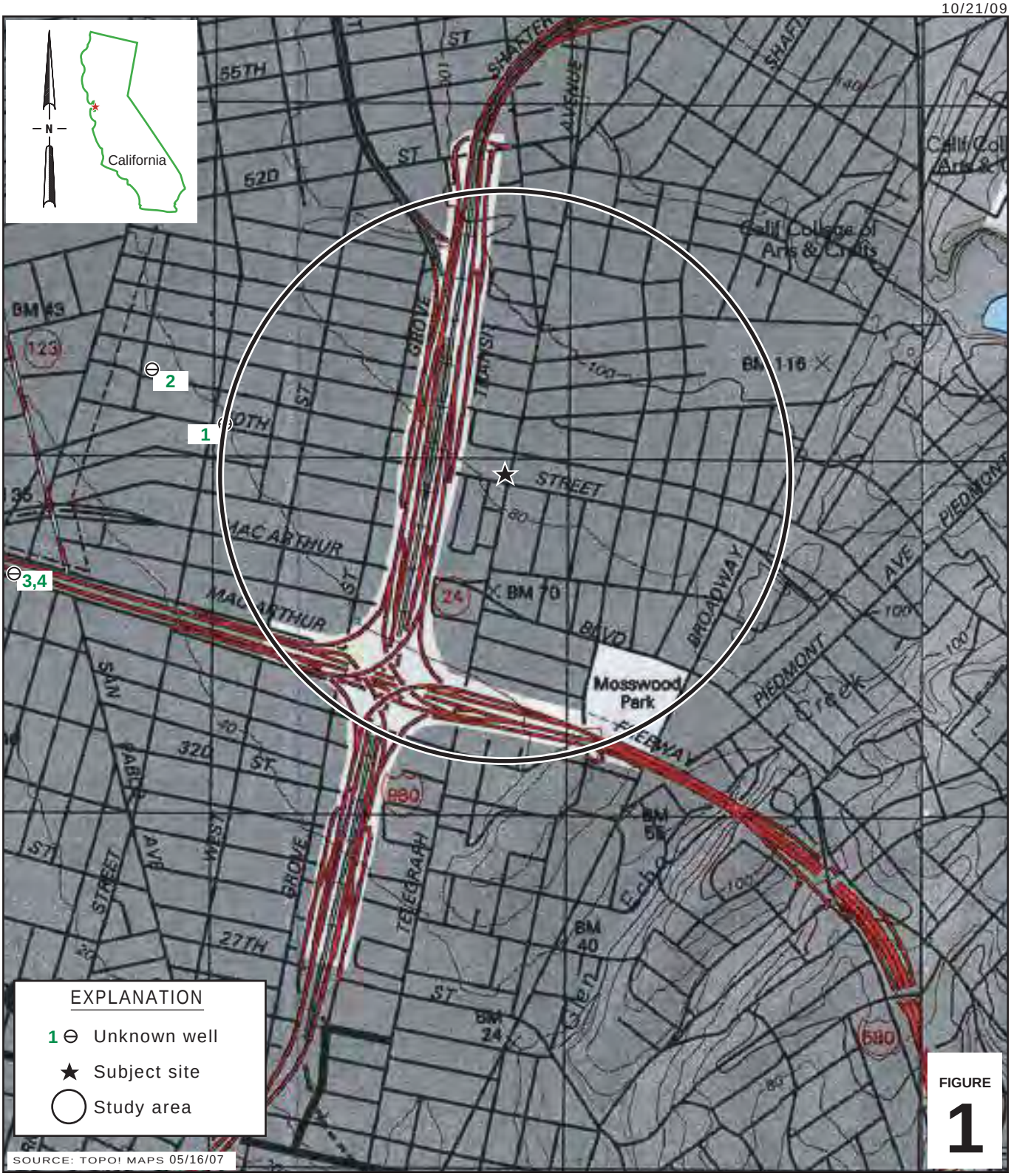


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FIGURE
1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Former Shell Service Station

500 40th Street

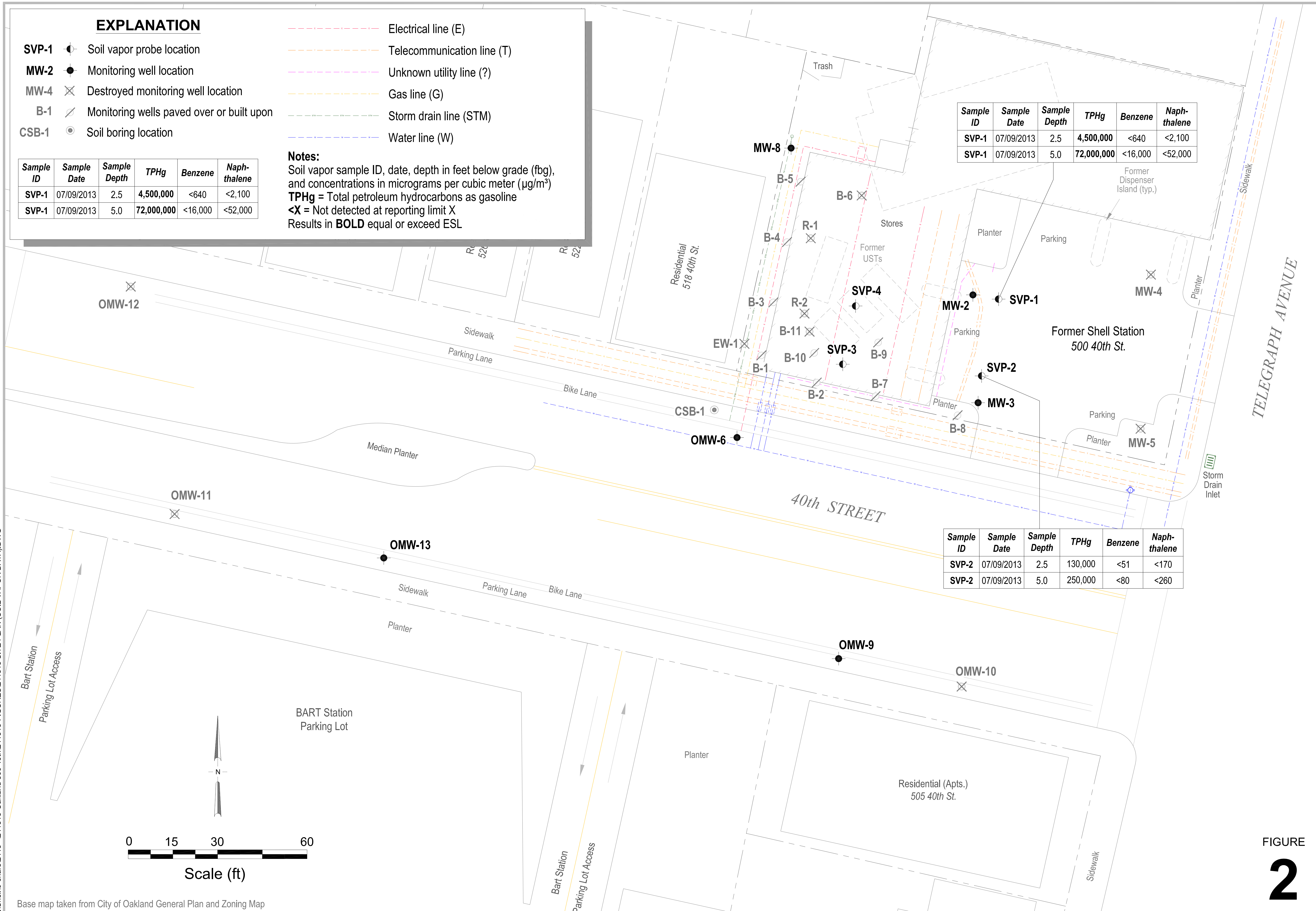
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

07/29/2013

Soil Vapor Concentration Map



EXPLANATION

- **SVP-1** Soil vapor probe location
- **MW-2** Monitoring well location
- MW-4 Destroyed monitoring well location
- B-1 Monitoring wells paved over or built upon
- CSB-1 Soil boring location
- Electrical line (E)
- Telecommunication line (T)
- Unknown utility line (?)
- Gas line (G)
- Storm drain line (STM)
- Water line (W)

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Naph-thalene
SVP-1	07/09/2013	2.5	**4,500,000**	<640	<2,100
SVP-1	07/09/2013	5.0	**72,000,000**	<16,000	<52,000

Notes:
Soil vapor sample ID, date, depth in feet below grade (fbg), and concentrations in micrograms per cubic meter (µg/m³)
TPHg = Total petroleum hydrocarbons as gasoline
<X = Not detected at reporting limit X
Results in **BOLD** equal or exceed ESL

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Naph-thalene
SVP-1	07/09/2013	2.5	**4,500,000**	<640	<2,100
SVP-1	07/09/2013	5.0	**72,000,000**	<16,000	<52,000

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Naph-thalene
SVP-2	07/09/2013	2.5	130,000	<51	<170
SVP-2	07/09/2013	5.0	250,000	<80	<260

Base map taken from City of Oakland General Plan and Zoning Map

I:\Shell6-chars\2415--\241513-Oakland 500 40th\241513-FIGURES\241513 SITE PLAN (SOIL VAPOR DATA).DWG

CONESTOGA-ROVERS & ASSOCIATES

FIGURE 2

Former Shell Service Station
500 40th Street
Oakland, California

TABLE

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
500 40TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg ($\mu g/m^3$)*	*B ($\mu g/m^3$)*	*T ($\mu g/m^3$)*	*E ($\mu g/m^3$)*	*X ($\mu g/m^3$)*	*Naphthalene ($\mu g/m^3$)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
SVP-1	11/30/2011	2.5	1,100,000	<64	<75	210	<170	---	0.559	4.78	2.52	<0.0100
SVP-1	1/18/2012	2.5	28,000	--- a	--- a	--- a	--- a	---	2.61	10.7	11.3	0.123
SVP-1	7/9/2013	2.5	**4,500,000**	<640	<750	<870	<870	<2,100	0.712	12.0	2.72	<0.0100
SVP-1	11/30/2011	5.0	**51,000,000**	<4,000	<4,700	**14,000**	<11,000	---	7.38	37.4	1.42	<0.0100
SVP-1	1/18/2012	5.0	150,000	<32	<38	120	120	---	3.28	28.2	2.80	0.0945
SVP-1	7/9/2013	5.0	**72,000,000**	<16,000	<19,000	<22,000	<22,000	<52,000	6.08	35.1	4.51	0.772
SVP-2	11/30/2011	2.5	140,000	56	<19	32	<43	---	2.29	17.2	10.5	10.8
SVP-2	1/18/2012	2.5	450,000	<80	<94	160	<220	---	<0.500	5.14	3.00	0.0710
SVP-2	7/9/2013	2.5	130,000	<51	<60	<69	<69	<170	1.85	27.3	2.69	0.0151
SVP-2	11/30/2011	5.0	430,000	17	<19	36	<43	---	3.25	32.8	2.04	0.0125
SVP-2	1/18/2012	5.0	**48,000,000**	<4,000	<4,700	**13,000**	<11,000	---	5.04	30.6	3.25	0.0710
SVP-2	7/9/2013	5.0	250,000	<80	<94	<110	<110	<260	1.95	30.4	2.70	0.0154
SVP-3	11/30/2011	0.5	<3,800	<16	20	82	110	---	<0.500	5.43	16.3	2.19
SVP-3	1/18/2012	0.5	<3,800	<16	<19	38	47	---	<0.500	5.38	18.0	0.686
SVP-4	11/30/2011	0.3	<3,800	<16	<19	45	45	---	<0.500	<0.500	22.9	32.7
SVP-4	1/18/2012	0.3	<3,800	<16	<19	63	94	---	<0.500	1.01	22.1	1.29
ESLs -Commercial[b]:			***1,200,000***	***420***	***1,300,000***	***4,900***	***440,000***	***360***	***NA***	***NA***	***NA***	***NA***
ESLs - Residential[b]:			***150,000***	***42***	***160,000***	***490***	***52,000***	***36***	***NA***	***NA***	***NA***	***NA***

Notes:
fbg = Feet below grade
$\mu g/m^3$ = Micrograms per cubic meter
%v = Percent by volume
TPHg = Total petroleum hydrocarbons as gasoline analyzed by Modified EPA Method TO-3M
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B (M)
Naphthalene analyzed by EPA Method 8260B (M)
Methane, carbon disulfide, and oxygen + argon analyzed by ASTM-D1946 (M)
Helium analyzed by ASTM-D1946 (M)
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
NA = No applicable ESL
Results in **bold** equal or exceed ESL
Shading indicates invalid sample due to helium in sample

a = Not analyzed due to insufficient sample volume
b = San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) shallow soil gas screening level for evaluation of potential vapor intrusion concerns from Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater, SFBRWQCB, Interim Final - November 2007 (Revised May 2008) - Updated May 2013.

APPENDIX A

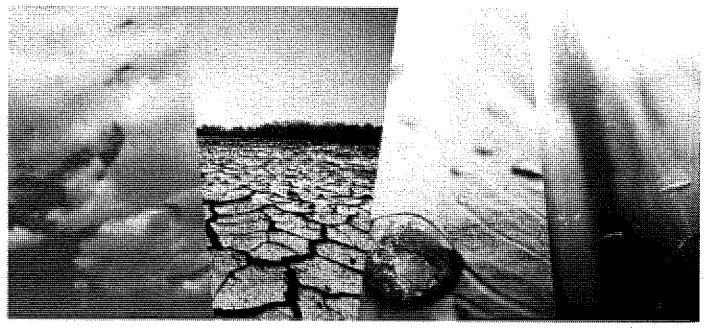
CALSCIENCE ENVIRONMENTAL LABORATORIES, INC. - ANALYTICAL REPORT

Calscience
Environmental
Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-07-0674

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Conestoga-Rovers & Associates

Client Project Name: 500 40th Street, Oakland, CA

Attention: Peter Schaefer
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Approved for release on 07/18/2013 by:
Xuan Dang
Project Manager

ResultLink ▸

Email your PM ▸

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: 500 40th Street, Oakland, CA
Work Order Number: 13-07-0674

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-07-0674

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 07/11/13. They were assigned to Work Order 13-07-0674.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	Conestoga-Rovers & Associates	Work Order:	13-07-0674
	5900 Hollis Street, Suite A	Project Name:	500 40th Street, Oakland, CA
	Emeryville, CA 94608-2008	PO Number:	
		Date Received:	07/11/13
Attn:	Peter Schaefer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SVP-2-2.5'	13-07-0674-1	07/09/13 13:12	1	Air
SVP-2-5'	13-07-0674-2	07/09/13 14:11	1	Air
SVP-1-2.5'	13-07-0674-3	07/09/13 16:54	1	Air
SVP-1-5'	13-07-0674-4	07/09/13 16:46	1	Air

Calscience Environmental Laboratories, Inc.

Case Narrative

Work Order: 13-07-0674

Modified EPA 8260 in Air

This method is used to determine the concentration of BTEX/Oxygenates/Naphthalene having a vapor pressure greater than 10^{-1} torr at 25°C at standard pressure in a air matrix. The method is similar to EPA TO-15 and uses air standards for calibration. Method specifics are listed in the table below. A known volume of sample is directed from the container (Summa® canister or Tedlar™ bag) through a solid multi-module (glass beads, tenex, cryofocuser) concentrator. Following concentration, the VOCs are thermally desorbed onto a gas chromatographic column for separation and then detected on a mass selective detector.

Comparison of Calscience TO-15 (Modified) versus EPA 8260 (Modified) in Air

Requirement	Calscience TO-15(M)	Calscience EPA 8260(M) in Air
BFB Acceptance Criteria	SW846 Protocol	SW846 Protocol
Initial Calibration	Allowable % RSD for each Target <= 30%, 10% of analytes allowed <= 40%	Allowable % RSD for each Target Analyte < 30%, 10% of analytes allowed < 40%
Initial Calibration Verification (ICV) - Second Source Standard (LCS)	Analytes contained in the LCS standard evaluated against historical control limits for the LCS	BTEX and MTBE only - <= 30%D
Daily Calibration Verification (CCV)	**Full List Analysis:** Allowable % Difference for each CCC analytes is <= 30%	BTEX and MTBE only - <= 30%D
	Target List Analysis: Allowable % Difference for each target analytes is <= 30%	
Daily Calibration Verification (CCV) - Internal Standard Area Response	Allowable +/- 50% (Range: 50% to 150%)	Allowable +/- 50% (Range: 50% to 150%)
Method Blank, Laboratory Control Sample and Sample - Internal Standard Area Response	Allowable +/- 50% of the mean area response of most recent Calibration Verification (Range: 50% to 150%)	Allowable +/- 50% of the mean area response of the most recent Calilbration Verification (Range: 50% to 150%)
Surrogates	1,4-Bromoflurobenzene, 1,2-Dichloroethane-d4 and Toluene-d8 - % Recoveries based upon historical control limits +/- 3S	1,4-Bromoflurobenzene, 1,2-Dichloroethane-d4 and Toluene-d8 - % Recoveries based upon historical control limits +/- 3S

Calscience Environmental Laboratories, Inc.

Detections Summary

Client: Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Attn: Peter Schaefer

Work Order: 13-07-0674
Project Name: 500 40th Street, Oakland, CA
Received: 07/11/13

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
SVP-2-2.5' (13-07-0674-1)						
Methane	1.85		0.500	%v	ASTM D-1946	N/A
Carbon Dioxide	27.3		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	2.69		0.500	%v	ASTM D-1946	N/A
Helium	0.0151		0.0100	%v	ASTM D-1946 (M)	N/A
Gasoline Range Organics (C6-C12)	130000		3800	ug/m3	EPA TO-3M	N/A
SVP-2-5' (13-07-0674-2)						
Methane	1.95		0.500	%v	ASTM D-1946	N/A
Carbon Dioxide	30.4		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	2.70		0.500	%v	ASTM D-1946	N/A
Helium	0.0154		0.0100	%v	ASTM D-1946 (M)	N/A
Gasoline Range Organics (C6-C12)	250000		3800	ug/m3	EPA TO-3M	N/A
SVP-1-2.5' (13-07-0674-3)						
Methane	0.712		0.500	%v	ASTM D-1946	N/A
Carbon Dioxide	12.0		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	2.72		0.500	%v	ASTM D-1946	N/A
Gasoline Range Organics (C6-C12)	4500000		19000	ug/m3	EPA TO-3M	N/A
SVP-1-5' (13-07-0674-4)						
Methane	6.08		0.500	%v	ASTM D-1946	N/A
Carbon Dioxide	35.1		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	4.51		0.500	%v	ASTM D-1946	N/A
Helium	0.772		0.0100	%v	ASTM D-1946 (M)	N/A
Gasoline Range Organics (C6-C12)	72000000		380000	ug/m3	EPA TO-3M	N/A

Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates		Date Received:	07/11/13
5900 Hollis Street, Suite A		Work Order:	13-07-0674
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	ASTM D-1946
		Units:	%v
Project: 500 40th Street, Oakland, CA			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2-2.5'	**13-07-0674-1-A**	**07/09/13 13:12**	**Air**	**GC 65**	**N/A**	**07/11/13 17:50**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Methane	1.85	0.500	1	
Carbon Dioxide	27.3	0.500	1	
Oxygen + Argon	2.69	0.500	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2-5'	**13-07-0674-2-A**	**07/09/13 14:11**	**Air**	**GC 65**	**N/A**	**07/11/13 18:08**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Methane	1.95	0.500	1	
Carbon Dioxide	30.4	0.500	1	
Oxygen + Argon	2.70	0.500	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1-2.5'	**13-07-0674-3-A**	**07/09/13 16:54**	**Air**	**GC 65**	**N/A**	**07/11/13 18:25**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Methane	0.712	0.500	1	
Carbon Dioxide	12.0	0.500	1	
Oxygen + Argon	2.72	0.500	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1-5'	**13-07-0674-4-A**	**07/09/13 16:46**	**Air**	**GC 65**	**N/A**	**07/11/13 18:45**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Methane	6.08	0.500	1	
Carbon Dioxide	35.1	0.500	1	
Oxygen + Argon	4.51	0.500	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-03-002-1850**	**N/A**	**Air**	**GC 65**	**N/A**	**07/11/13 10:32**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1	
Carbon Dioxide	ND	0.500	1	
Oxygen + Argon	ND	0.500	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Project: 500 40th Street, Oakland, CA

Date Received: 07/11/13
Work Order: 13-07-0674
Preparation: N/A
Method: ASTM D-1946 (M)
Units: %v

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2-2.5'	**13-07-0674-1-A**	**07/09/13 13:12**	**Air**	**GC 55**	**N/A**	**07/11/13 16:27**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.0151	0.0100	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2-5'	**13-07-0674-2-A**	**07/09/13 14:11**	**Air**	**GC 55**	**N/A**	**07/11/13 17:27**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.0154	0.0100	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1-2.5'	**13-07-0674-3-A**	**07/09/13 16:54**	**Air**	**GC 55**	**N/A**	**07/11/13 18:10**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1-5'	**13-07-0674-4-A**	**07/09/13 16:46**	**Air**	**GC 55**	**N/A**	**07/11/13 18:30**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.772	0.0100	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-467**	**N/A**	**Air**	**GC 55**	**N/A**	**07/11/13 16:06**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates		Date Received:	07/11/13
5900 Hollis Street, Suite A		Work Order:	13-07-0674
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	EPA 8260B (M)
		Units:	ug/m3
Project: 500 40th Street, Oakland, CA			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2-2.5'	**13-07-0674-1-A**	**07/09/13 13:12**	**Air**	**GC/MS KKK**	**N/A**	**07/12/13 17:42**	**130712L01**

Comment(s): - Reporting limit is elevated due to high levels of non-target hydrocarbons.

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	51	3.2	
Toluene	ND	60	3.2	
Ethylbenzene	ND	69	3.2	
p/m-Xylene	ND	140	3.2	
o-Xylene	ND	69	3.2	
Xylenes (total)	ND	69	1	
Naphthalene	ND	170	3.2	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	106	47-156	
1,2-Dichloroethane-d4	108	47-156	
Toluene-d8	114	47-156	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2-5'	**13-07-0674-2-A**	**07/09/13 14:11**	**Air**	**GC/MS KKK**	**N/A**	**07/12/13 15:08**	**130712L01**

Comment(s): - Reporting limit is elevated due to high levels of non-target hydrocarbons.

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	80	5	
Toluene	ND	94	5	
Ethylbenzene	ND	110	5	
p/m-Xylene	ND	220	5	
o-Xylene	ND	110	5	
Xylenes (total)	ND	110	1	
Naphthalene	ND	260	5	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	106	47-156	
1,2-Dichloroethane-d4	108	47-156	
Toluene-d8	122	47-156	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Project: 500 40th Street, Oakland, CA

Date Received: 07/11/13
Work Order: 13-07-0674
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1-2.5'	**13-07-0674-3-A**	**07/09/13 16:54**	**Air**	**GC/MS KKK**	**N/A**	**07/12/13 18:33**	**130712L01**

Comment(s): - Reporting limit is elevated due to high levels of non-target hydrocarbons.

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	640	40	
Toluene	ND	750	40	
Ethylbenzene	ND	870	40	
p/m-Xylene	ND	1700	40	
o-Xylene	ND	870	40	
Xylenes (total)	ND	870	1	
Naphthalene	ND	2100	40	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	133	47-156	
1,2-Dichloroethane-d4	105	47-156	
Toluene-d8	95	47-156	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1-5'	**13-07-0674-4-A**	**07/09/13 16:46**	**Air**	**GC/MS KKK**	**N/A**	**07/12/13 16:52**	**130712L01**

Comment(s): - Reporting limit is elevated due to high levels of non-target hydrocarbons.

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16000	1000	
Toluene	ND	19000	1000	
Ethylbenzene	ND	22000	1000	
p/m-Xylene	ND	43000	1000	
o-Xylene	ND	22000	1000	
Xylenes (total)	ND	22000	1	
Naphthalene	ND	52000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	122	47-156	
1,2-Dichloroethane-d4	98	47-156	
Toluene-d8	110	47-156	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates		Date Received:	07/11/13
5900 Hollis Street, Suite A		Work Order:	13-07-0674
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	EPA 8260B (M)
		Units:	ug/m3
Project: 500 40th Street, Oakland, CA			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-13-041-1368**	**N/A**	**Air**	**GC/MS KKK**	**N/A**	**07/12/13 13:29**	**130712L01**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1	
Toluene	ND	19	1	
Ethylbenzene	ND	22	1	
p/m-Xylene	ND	43	1	
o-Xylene	ND	22	1	
Xylenes (total)	ND	22	1	
Naphthalene	ND	52	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	103	47-156	
1,2-Dichloroethane-d4	97	47-156	
Toluene-d8	96	47-156	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates		Date Received:	07/11/13
5900 Hollis Street, Suite A		Work Order:	13-07-0674
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	EPA TO-3M
		Units:	ug/m3
Project: 500 40th Street, Oakland, CA			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2-2.5'	**13-07-0674-1-A**	**07/09/13 13:12**	**Air**	**GC 38**	**N/A**	**07/11/13 16:07**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	130000	3800	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2-5'	**13-07-0674-2-A**	**07/09/13 14:11**	**Air**	**GC 38**	**N/A**	**07/11/13 16:50**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	250000	3800	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1-2.5'	**13-07-0674-3-A**	**07/09/13 16:54**	**Air**	**GC 38**	**N/A**	**07/11/13 17:31**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	4500000	19000	5	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1-5'	**13-07-0674-4-A**	**07/09/13 16:46**	**Air**	**GC 38**	**N/A**	**07/11/13 18:10**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	72000000	380000	100	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-431-154**	**N/A**	**Air**	**GC 38**	**N/A**	**07/11/13 10:14**	**130711L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	ND	3800	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

Conestoga-Rovers & Associates		Date Received:	07/11/13
5900 Hollis Street, Suite A		Work Order:	13-07-0674
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	EPA TO-3M
Project: 500 40th Street, Oakland, CA			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
13-07-0660-1	**Air**	**GC 38**	**N/A**	**07/11/13 15:21**	**130711D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	19690000	20930000	6	0-20	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Project: 500 40th Street, Oakland, CA

Date Received: 07/11/13
Work Order: 13-07-0674
Preparation: N/A
Method: ASTM D-1946
Page 1 of 4

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1850	Air	GC 65	N/A	07/11/13 09:50	130711L01

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Methane	4.510	4.378	97	4.356	97	80-120	1	0-30	
Carbon Dioxide	15.02	15.53	103	15.50	103	80-120	0	0-30	
Carbon Monoxide	7.010	7.057	101	7.029	100	80-120	0	0-30	
Oxygen + Argon	4.010	4.094	102	4.240	106	80-120	3	0-30	
Nitrogen	69.45	67.73	98	68.02	98	80-120	0	0-30	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

Conestoga-Rovers & Associates	Date Received: 07/11/13
5900 Hollis Street, Suite A	Work Order: 13-07-0674
Emeryville, CA 94608-2008	Preparation: N/A
	Method: ASTM D-1946 (M)
Project: 500 40th Street, Oakland, CA	Page 2 of 4

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-467	**Air**	**GC 55**	**N/A**	**07/11/13 15:24**	**130711L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Helium	1.000	0.9403	94	0.9590	96	80-120	2	0-30	
Hydrogen	1.000	0.8972	90	0.9114	91	80-120	2	0-30	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Project: 500 40th Street, Oakland, CA

Date Received: 07/11/13
Work Order: 13-07-0674
Preparation: N/A
Method: EPA 8260B (M)
Page 3 of 4

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-041-1368	Air	GC/MS KKK	N/A	07/12/13 11:50	130712L01

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	79.87	77.35	97	73.03	91	60-156	44-172	6	0-40	
Toluene	94.21	93.85	100	86.51	92	56-146	41-161	8	0-43	
Ethylbenzene	108.6	109.2	101	99.99	92	52-154	35-171	9	0-38	
p/m-Xylene	217.1	222.8	103	203.2	94	42-156	23-175	9	0-41	
o-Xylene	108.6	110.0	101	100.1	92	52-148	36-164	9	0-38	
Methyl-t-Butyl Ether (MTBE)	90.13	84.42	94	80.08	89	45-147	28-164	5	0-25	
Tert-Butyl Alcohol (TBA)	151.6	141.0	93	132.8	88	60-140	47-153	6	0-35	
Diisopropyl Ether (DIPE)	104.5	95.48	91	90.06	86	60-140	47-153	6	0-35	
Ethyl-t-Butyl Ether (ETBE)	104.5	96.77	93	91.37	87	60-140	47-153	6	0-35	
Tert-Amyl-Methyl Ether (TAME)	104.5	97.84	94	92.36	88	60-140	47-153	6	0-35	
Naphthalene	131.1	131.1	100	124.0	95	60-140	47-153	6	0-30	
Ethanol	188.4	153.0	81	142.8	76	47-137	32-152	7	0-35	
1,1-Difluoroethane	67.54	65.11	96	60.92	90	78-156	65-169	7	0-35	
Isopropanol	61.45	53.45	87	50.08	81	78-156	65-169	7	0-35	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

Conestoga-Rovers & Associates	Date Received:	07/11/13
5900 Hollis Street, Suite A	Work Order:	13-07-0674
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-3M
Project: 500 40th Street, Oakland, CA		Page 4 of 4

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-431-154	**Air**	**GC 38**	**07/11/13 09:34**	**130711L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Gasoline Range Organics (C6-C12)	382400	378200	99	80-120	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-07-0674

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- [x] CALSCIENCE (_____)
- [ ] SPL (_____)
- [ ] XENCO (_____)
- [ ] TEST AMERICA (_____)
- [ ] OTHER (_____)

Please Check Appropriate Box:
- [ ] ENV. SERVICES
- [ ] MOTIVA RETAIL
- [ ] SHELL RETAIL
- [ ] MOTIVA SD&CM
- [x] CONSULTANT
- [ ] LUBES
- [ ] SHELL PIPELINE
- [ ] OTHER _____

Print Bill To Contact Name: Peter Schaefer 241513

INCIDENT # (ENV SERVICES): 9 7 0 9 3 4 0 0 — [ ] CHECK IF NO INCIDENT # APPLIES

DATE: _____

PO # _____

SAP # 1 2 9 4 5 2

PAGE: _____ of _____

SAMPLING COMPANY: Conestoga-Rovers & Associates

LOG CODE: CRAW

SITE ADDRESS: Street and City: 500 40th Street, Oakland

State: CA

GLOBAL ID NO.: T0600101265

ADDRESS: 5900 Hollis Street, Suite A, Emeryville, CA 94608

EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter, CRA, Emeryville

PHONE NO.: 510-420-3343

E-MAIL: shell.em.edf@craworld.com

CONSULTANT PROJECT NO.: 241513-95-12.03

PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer

SAMPLER NAME(S) (Print): Cristina Arganbright

LAB USE ONLY: 13-07-0674

TELEPHONE: 510.420.3319 | FAX: 510-420-9170 | E-MAIL: pschaefer@CRAworld.com

TURNAROUND TIME (CALENDAR DAYS):
- [x] STANDARD (14 DAY)
- [ ] 5 DAYS
- [ ] 3 DAYS
- [ ] 2 DAYS
- [ ] 24 HOURS
- [ ] RESULTS NEEDED ON WEEKEND

- [ ] LA - RWQCB REPORT FORMAT
- [ ] UST AGENCY:

SPECIAL INSTRUCTIONS OR NOTES :

Copy of final report to Shell.Lab.Billing@craworld.com

- [x] SHELL CONTRACT RATE APPLIES
- [ ] STATE REIMBURSEMENT RATE APPLIES
- [ ] EDD NOT NEEDED
- [x] RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH -GRO, Purgeable (8260B)	TPH -DRO, Extractable (8015M)	TPHg (8015M)	TPHg EPA TO-3M	BTEX (8260B) (M)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA (8260B)	BTEX + 5 OXYs (MTBE, TBA, DIPE, TAME, ETBE) 8260B	Full VOC list (8260B)	Single Compound: _____ (8260B)	1,2-DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	CH_4 ASTM-D1947 (M)	CO_2 ASTM-D1947 (M)	O_2 ASTM-D1947 (M)	Helium ASTM-D1947 (M)	Naphthalene (8260B)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
1	SVP-2-2.5'	7/9	1312	Vapor						1				x	x										x	x	x	x	X	
2	SVP-2-5'	7/9	1411	Vapor						1				x	x										x	x	x	x	X	
3	SVP-1-2.5'	7/9	1654	Vapor						1				x	x										x	x	x	x	X	
4	SVP-1-5'	7/9	1646	Vapor						1				x	x										x	x	x	x	X	

Relinquished by: (Signature) Kathleen	Received by: (Signature) Secure location in office KW	Date: 7/9/13	Time: 1800
Relinquished by: (Signature)	Received by: (Signature) Tom O'Malley CRA	Date: 7/10/13	Time: 1025
Relinquished by: (Signature) Tom O'Malley TOGO 7/10/13 1730	Received by: (Signature) [illegible]	Date: 7/11/13	Time: 10:30

05/2/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-07-0674

SAMPLE RECEIPT FORM

Box 1 of 1

CLIENT: CRA

DATE: 07/11/13

TEMPERATURE: Thermometer ID: SC3 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature _____.____ °C - 0.2 °C (CF) = _____.____ °C ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☑ Air ☐ Filter **Initial:** PS

CUSTODY SEALS INTACT:

☑ Box ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A **Initial:** MC

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** ____

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☑	☐	☐

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☑Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** MC

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** C

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:**