CONESTOGA-ROVERS & ASSOCIATES

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

TRANSMITTAL

DATE: June 4, 2014

REFERENCE NO.: 240523

PROJECT NAME: 4212 First Street, Pleasanton

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

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 content of this document, please call the CRA project manager Peter Schaefer at (510) 420-3319 or the Shell program manager Perry Pineda at (425) 413-1164.

Copy to:
Perry Pineda, Shell Oil Products US (electronic copy)
Douglas E. & Mary M. Safreno (property owners), 1627 Vineyard Avenue, Pleasanton, CA 94566-6389 (electronic and hard copy)
Danielle Stefani, Livermore-Pleasanton Fire Department, 3560 Nevada Street, Pleasanton, CA 94566-6267
Clint Mercer (lessee), SC Fuels, 1800 West Katella Avenue, Orange, CA 92867
Colleen Winey, Zone 7 Water Agency (electronic copy)
Aaron O'Brien, Tamalpais Environmental Consultants (electronic copy)

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 (425) 413 1164
Fax (425) 413 0988
Email perry.pineda@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: 4212 First Street
Pleasanton, California
SAP Code 135782
Incident No. 98995840
ACEH Case No. RO0000360

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 (425) 413-1164 with any questions or concerns.

Sincerely,
Shell Oil Products US

Perry Pineda
Senior Environmental Program Manager

SOIL VAPOR SAMPLING REPORT

SHELL-BRANDED SERVICE STATION
4212 FIRST STREET
PLEASANTON, CALIFORNIA

SAP CODE: **135782**
INCIDENT NO. **98995840**
AGENCY NO. **RO0000360**

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

JUNE 4, 2014
REF. NO. 240523 (26)
This report is printed on recycled paper.

TABLE OF CONTENTS

LIST OF FIGURES
(Following Text)

LIST OF TABLES
(Following Text)

LIST OF APPENDICES

EXECUTIVE SUMMARY

- CRA sampled soil vapor probes SV-1 through SV-4, SV-7, and SV-8 (all 5 fbg). Soil vapor probes SV-5 and SV-6 could not be sampled due to water in the sampling tubing.
- No COCs were detected in soil vapor samples.
- All of the probes contained at least 8.83%v oxygen + argon. These oxygen concentrations indicate good potential for aerobic decay of hydrocarbons in soil vapors.
- Based on these results, no further soil vapor monitoring of the probes is warranted.

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 requested in Alameda County Environmental Health's February 3, 2014 letter.

This Shell-branded service station is located on the southeasterly corner of First Street and Vineyard Avenue, in a mixed residential and commercial area of Pleasanton, California (Figure 1). The site layout includes three current fuel underground storage tanks (USTs), a former fuel UST complex, two fuel dispenser islands, a former waste oil UST, and a station building (Figure 2).

A summary of previous work performed at the site and additional background information is contained in CRA's December 23, 2013 *Petroleum Hydrocarbon Mass Removal Event Report* and is not repeated herein.

2.0 SAMPLING ACTIVITIES

2.1 PERSONNEL PRESENT

CRA Staff Geologist Patrick O'Connell sampled the soil vapor probes under the supervision of California Professional Geologist Peter Schaefer.

2.2 SAMPLING DATE

April 8, 2014.

2.3 SOIL VAPOR SAMPLING

CRA sampled soil vapor probes SV-1 through SV-4, SV-7, and SV-8 (all 5 feet below grade) using a lung box and Tedlar® bags. Approximately 1 liter of water was purged from each sample location at soil vapor probes SV-5 and SV-6 during the event prior to abandoning the sampling efforts.

Prior to sampling, CRA purged at least three tubing volumes of air from each vapor probe sample point 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 probe 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

No total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, total xylenes, methyl tertiary-butyl ether (MTBE), tertiary-butyl alcohol, di-isopropyl ether, ethyl tertiary-butyl ether, tertiary amyl methyl ether, naphthalene, or ethanol was detected in soil vapor samples.

Table 1 summarizes historical soil vapor analytical data. TPHg, benzene, and MTBE 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 0.116 percent helium was detected in the samples. As shown in the following table, the helium detections are below 5 percent by volume (%*v*) of the concentrations detected in the shrouds, and the samples are considered valid.

Probe ID	*Helium concentration in sample (%v)*	*Minimum helium concentration detected in shroud (%v)*	*Maximum acceptable helium concentration in sample (%v)*
SV-1	0.114	52.8	2.64
SV-2	0.116	51.0	2.55
SV-3	0.0553	51.3	2.56
SV-4	0.0328	68.1	3.40
SV-7	0.0396	58.2	2.91
SV-8	0.0449	54.0	2.70

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

4.0 CONCLUSIONS AND RECOMMENDATIONS

No constituents of concern were detected in soil vapor samples collected during this sampling event. All of the probes contained at least 8.83%*v* oxygen + argon. These oxygen concentrations indicate good potential for aerobic decay of hydrocarbons in soil vapors. Based on these results, no further soil vapor monitoring of the probes is warranted.

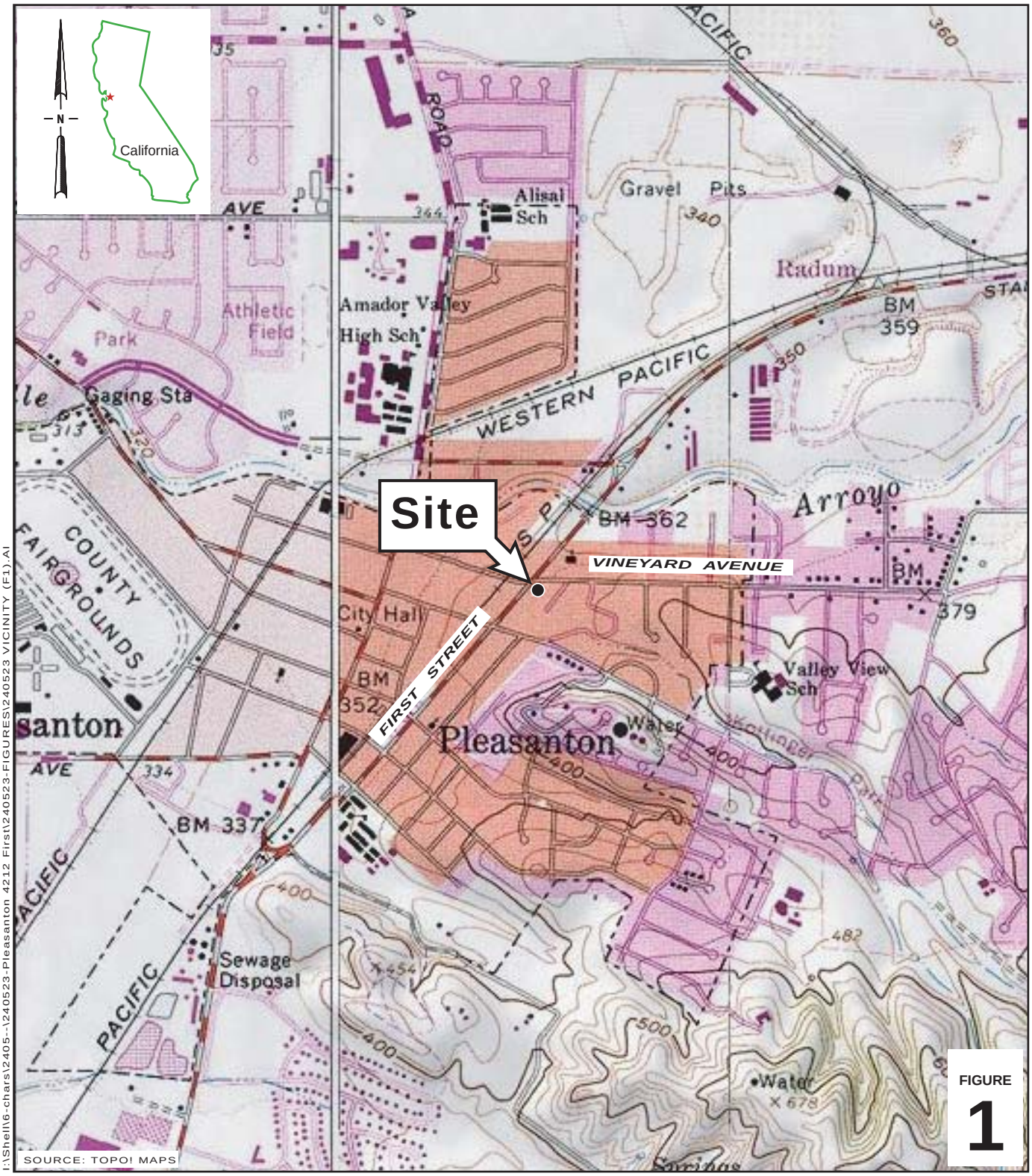
All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG

FIGURES

01/18/2011



I:\Shell\6-chars\2405-\240523-Pleasanton 4212 First\240523-FIGURES\240523 VICINITY (F1).AI

FIGURE 1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

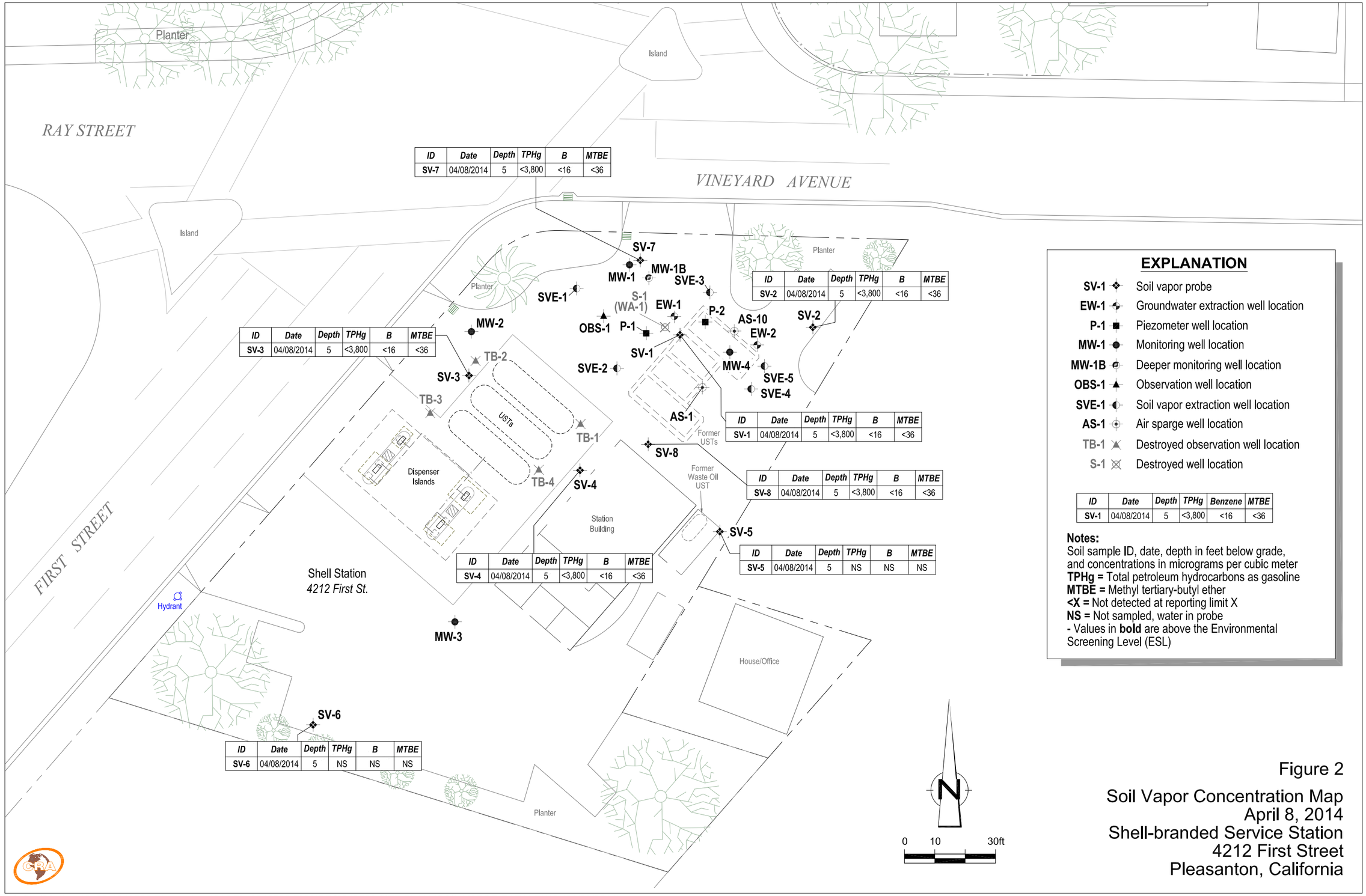
Shell-branded Service Station

4212 First Street

Pleasanton, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map



ID	Date	Depth	TPHg	B	MTBE
SV-7	04/08/2014	5	<3,800	<16	<36

ID	Date	Depth	TPHg	B	MTBE
SV-2	04/08/2014	5	<3,800	<16	<36

ID	Date	Depth	TPHg	B	MTBE
SV-3	04/08/2014	5	<3,800	<16	<36

ID	Date	Depth	TPHg	B	MTBE
SV-1	04/08/2014	5	<3,800	<16	<36

ID	Date	Depth	TPHg	B	MTBE
SV-8	04/08/2014	5	<3,800	<16	<36

ID	Date	Depth	TPHg	B	MTBE
SV-4	04/08/2014	5	<3,800	<16	<36

ID	Date	Depth	TPHg	B	MTBE
SV-5	04/08/2014	5	NS	NS	NS

ID	Date	Depth	TPHg	B	MTBE
SV-6	04/08/2014	5	NS	NS	NS

EXPLANATION

- SV-1 — Soil vapor probe
- EW-1 — Groundwater extraction well location
- P-1 — Piezometer well location
- MW-1 — Monitoring well location
- MW-1B — Deeper monitoring well location
- OBS-1 — Observation well location
- SVE-1 — Soil vapor extraction well location
- AS-1 — Air sparge well location
- TB-1 — Destroyed observation well location
- S-1 — Destroyed well location

ID	Date	Depth	TPHg	Benzene	MTBE
SV-1	04/08/2014	5	<3,800	<16	<36

Notes:
Soil sample ID, date, depth in feet below grade, and concentrations in micrograms per cubic meter
TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tertiary-butyl ether
<X = Not detected at reporting limit X
NS = Not sampled, water in probe
- Values in **bold** are above the Environmental Screening Level (ESL)

Figure 2

Soil Vapor Concentration Map
April 8, 2014
Shell-branded Service Station
4212 First Street
Pleasanton, California

I:\Shell\6-chars\2405--\240523-Pleasanton 4212 First\240523-FIGURES\240523 SITE PLAN (SOIL VAPOR DATA).DWG (04/29/2014)

TABLE

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, 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 ($\mu g/m^3$)*	*MTBE ($\mu g/m^3$)*	*TBA ($\mu g/m^3$)*	*DIPE ($\mu g/m^3$)*	*ETBE ($\mu g/m^3$)*	*TAME ($\mu g/m^3$)*	*Naph-thalene ($\mu g/m^3$)*	*Ethanol ($\mu g/m^3$)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
SV-1	9/5/2012	5	<3,800	<16	53	<22	<43	<36	---	---	---	---	---	---	<0.500	12.9	7.66	<0.0100
SV-1	4/8/2014	5	<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	6.4	8.83	0.144
SV-2	9/5/2012	5	<3,800	<16	23	<22	<43	<36	---	---	---	---	---	---	<0.500	6.85	15.5	<0.0100
SV-2	4/8/2014	5	<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	4.42	15.8	0.116
SV-3	9/5/2012	5	<3,800	<16	24	<22	<43	<36	---	---	---	---	---	---	<0.500	7.44	11.8	<0.0100
SV-3	4/8/2014	5	<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	3.40	14.9	0.0553
SV-4	9/5/2012	5	<3,800	<16	33	<22	<43	<36	---	---	---	---	---	---	<0.500	5.22	15.1	<0.0100
SV-4	4/8/2014	5	<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	2.50	14.2	0.0328
SV-5	9/5/2012	5	<3,800	<16	21	<22	<43	<36	---	---	---	---	---	---	<0.500	2.44	19.4	<0.0100
SV-5	4/8/2014	5	Unable to sample, water in probe			---	---	---	---	---	---	---	---	---	---	---	---	---
SV-6	9/5/2012	5	<3,800	<16	24	<22	<43	<36	---	---	---	---	---	---	<0.500	4.08	18.7	<0.0100
SV-6	4/8/2014	5	Unable to sample, water in probe			---	---	---	---	---	---	---	---	---	---	---	---	---
SV-7	9/5/2012	5	<3,800	<16	24	<22	<43	<36	---	---	---	---	---	---	<0.500	11.4	9.66	<0.0100
SV-7	4/8/2014		<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	7.10	10.1	0.0396
SV-8	9/5/2012	5	<3,800	<16	26	<22	<43	<36	---	---	---	---	---	---	<0.500	5.50	15.5	<0.0100
SV-8	4/8/2014		<3,800	<16	<19	<22	<43	<36	<30	<42	<42	<42	<52	<94	<0.500	3.32	13.0	0.0449
Residential land use ESLs [a]:			***300,000***	***42***	***160,000***	***490***	***52,000***	***4,700***	***NA***	***NA***	***NA***	***NA***	***36***	***NA***	***NA***	***NA***	***NA***	***NA***
Commercial land use ESLs [a]:			***250,000***	***420***	***1,300,000***	***4,900***	***440,000***	***47,000***	***NA***	***NA***	***NA***	***NA***	***360***	***NA***	***NA***	***NA***	***NA***	***NA***

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method TO-3M
BTEX = Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8260B (M)
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B (M)
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B (M)
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B (M)
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B (M)
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B (M)
Naphthalene and ethanol analyzed by EPA Method 8260B (M)
Methane, carbon dioxide, and oxygen + argon analyzed by ASTM D-1946

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Helium analyzed by ASTM D-1946 (M)
fbg = Feet below grade
µg/m^3 = Micrograms per cubic meter
%v = Percent by volume
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
NA = No applicable ESL

a = San Francisco Bay Regional Water Quality Control Board (RWQCB) shallow soil gas screening level for evaluation of potential vapor intrusion concerns from RWQCB's *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater*, California Regional Water Quality Control Board, Interim Final - November 2007 (Revised May 2008) - Updated December

APPENDIX A

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC. - ANALYTICAL REPORT

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0710

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Conestoga-Rovers & Associates

Client Project Name: 4212 First Street, Pleasanton, CA

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

Approved for release on 04/23/2014 by:
Xuan Dang
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: 4212 First Street, Pleasanton, CA
Work Order Number: 14-04-0710

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0710 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/10/14. They were assigned to Work Order 14-04-0710.

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 a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

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:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

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.

Return to Contents

Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	Conestoga-Rovers & Associates	Work Order:	14-04-0710
	5900 Hollis Street, Suite A	Project Name:	4212 First Street, Pleasanton, CA
	Emeryville, CA 94608-2008	PO Number:	
		Date/Time Received:	04/10/14 11:40
		Number of Containers:	7
Attn:	Peter Schaefer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SV-1	14-04-0710-1	04/08/14 12:55	1	Air
SV-2	14-04-0710-2	04/08/14 14:09	1	Air
SV-3	14-04-0710-3	04/08/14 11:35	1	Air
SV-4	14-04-0710-4	04/08/14 10:44	1	Air
SV-6	14-04-0710-5	04/08/14 15:15	1	Air
SV-7	14-04-0710-6	04/08/14 12:17	1	Air
SV-8	14-04-0710-7	04/08/14 13:41	1	Air

Return to Contents

Calscience Environmental Laboratories, Inc.

Case Narrative

Work Order: 14-04-0710 Page 1 of 1

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

Return to Contents

Calscience Environmental Laboratories, Inc.

Detections Summary

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

Work Order: 14-04-0710
Project Name: 4212 First Street, Pleasanton, CA
Received: 04/10/14

Attn: Peter Schaefer

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
SV-1 (14-04-0710-1)						
Carbon Dioxide	6.38		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	8.83		0.500	%v	ASTM D-1946	N/A
Helium	0.144		0.0100	%v	ASTM D-1946 (M)	N/A
SV-2 (14-04-0710-2)						
Carbon Dioxide	4.42		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	15.8		0.500	%v	ASTM D-1946	N/A
Helium	0.116		0.0100	%v	ASTM D-1946 (M)	N/A
SV-3 (14-04-0710-3)						
Carbon Dioxide	3.40		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	14.9		0.500	%v	ASTM D-1946	N/A
Helium	0.0553		0.0100	%v	ASTM D-1946 (M)	N/A
SV-4 (14-04-0710-4)						
Carbon Dioxide	2.50		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	14.2		0.500	%v	ASTM D-1946	N/A
Helium	0.0328		0.0100	%v	ASTM D-1946 (M)	N/A
SV-7 (14-04-0710-6)						
Carbon Dioxide	7.10		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	10.1		0.500	%v	ASTM D-1946	N/A
Helium	0.0396		0.0100	%v	ASTM D-1946 (M)	N/A
SV-8 (14-04-0710-7)						
Carbon Dioxide	3.32		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	13.0		0.500	%v	ASTM D-1946	N/A
Helium	0.0449		0.0100	%v	ASTM D-1946 (M)	N/A

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

Return to Contents

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: ASTM D-1946
Units: %v

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-1	**14-04-0710-1-A**	**04/08/14 12:55**	**Air**	**GC 65**	**N/A**	**04/10/14 14:20**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	6.38	0.500	1.00	
Oxygen + Argon	8.83	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-2	**14-04-0710-2-A**	**04/08/14 14:09**	**Air**	**GC 65**	**N/A**	**04/10/14 14:37**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	4.42	0.500	1.00	
Oxygen + Argon	15.8	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-3	**14-04-0710-3-A**	**04/08/14 11:35**	**Air**	**GC 65**	**N/A**	**04/10/14 14:55**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	3.40	0.500	1.00	
Oxygen + Argon	14.9	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-4	**14-04-0710-4-A**	**04/08/14 10:44**	**Air**	**GC 65**	**N/A**	**04/10/14 15:13**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	2.50	0.500	1.00	
Oxygen + Argon	14.2	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-7	**14-04-0710-6-A**	**04/08/14 12:17**	**Air**	**GC 65**	**N/A**	**04/10/14 15:32**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	7.10	0.500	1.00	
Oxygen + Argon	10.1	0.500	1.00	

Return to Contents

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: ASTM D-1946
Units: %v

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-8	**14-04-0710-7-A**	**04/08/14 13:41**	**Air**	**GC 65**	**N/A**	**04/10/14 15:50**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	3.32	0.500	1.00	
Oxygen + Argon	13.0	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-03-002-2037**	**N/A**	**Air**	**GC 65**	**N/A**	**04/10/14 11:04**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	ND	0.500	1.00	
Oxygen + Argon	ND	0.500	1.00	

Return to Contents

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: ASTM D-1946 (M)
Units: %v

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-1	**14-04-0710-1-A**	**04/08/14 12:55**	**Air**	**GC 55**	**N/A**	**04/10/14 13:49**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.144	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-2	**14-04-0710-2-A**	**04/08/14 14:09**	**Air**	**GC 55**	**N/A**	**04/10/14 14:34**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.116	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-3	**14-04-0710-3-A**	**04/08/14 11:35**	**Air**	**GC 55**	**N/A**	**04/10/14 15:16**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.0553	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-4	**14-04-0710-4-A**	**04/08/14 10:44**	**Air**	**GC 55**	**N/A**	**04/10/14 15:59**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.0328	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-7	**14-04-0710-6-A**	**04/08/14 12:17**	**Air**	**GC 55**	**N/A**	**04/10/14 16:44**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.0396	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-8	**14-04-0710-7-A**	**04/08/14 13:41**	**Air**	**GC 55**	**N/A**	**04/10/14 17:28**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.0449	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-596**	**N/A**	**Air**	**GC 55**	**N/A**	**04/10/14 10:46**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1.00	

Return to Contents

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-1	**14-04-0710-1-A**	**04/08/14 12:55**	**Air**	**GC/MS YY**	**N/A**	**04/10/14 22:34**	**140410L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1.00	
Toluene	ND	19	1.00	
Ethylbenzene	ND	22	1.00	
p/m-Xylene	ND	43	1.00	
o-Xylene	ND	22	1.00	
Xylenes (total)	ND	22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	36	1.00	
Tert-Butyl Alcohol (TBA)	ND	30	1.00	
Diisopropyl Ether (DIPE)	ND	42	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	42	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	42	1.00	
Naphthalene	ND	52	1.00	
Ethanol	ND	94	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	47-156	
1,2-Dichloroethane-d4	100	47-156	
Toluene-d8	98	47-156	

Return to Contents

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-2	**14-04-0710-2-A**	**04/08/14 14:09**	**Air**	**GC/MS YY**	**N/A**	**04/10/14 23:25**	**140410L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1.00	
Toluene	ND	19	1.00	
Ethylbenzene	ND	22	1.00	
p/m-Xylene	ND	43	1.00	
o-Xylene	ND	22	1.00	
Xylenes (total)	ND	22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	36	1.00	
Tert-Butyl Alcohol (TBA)	ND	30	1.00	
Diisopropyl Ether (DIPE)	ND	42	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	42	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	42	1.00	
Naphthalene	ND	52	1.00	
Ethanol	ND	94	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	47-156	
1,2-Dichloroethane-d4	100	47-156	
Toluene-d8	98	47-156	

Return to Contents

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-3	**14-04-0710-3-A**	**04/08/14 11:35**	**Air**	**GC/MS YY**	**N/A**	**04/11/14 00:19**	**140410L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1.00	
Toluene	ND	19	1.00	
Ethylbenzene	ND	22	1.00	
p/m-Xylene	ND	43	1.00	
o-Xylene	ND	22	1.00	
Xylenes (total)	ND	22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	36	1.00	
Tert-Butyl Alcohol (TBA)	ND	30	1.00	
Diisopropyl Ether (DIPE)	ND	42	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	42	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	42	1.00	
Naphthalene	ND	52	1.00	
Ethanol	ND	94	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	47-156	
1,2-Dichloroethane-d4	99	47-156	
Toluene-d8	99	47-156	

Return to Contents

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-4	**14-04-0710-4-A**	**04/08/14 10:44**	**Air**	**GC/MS YY**	**N/A**	**04/11/14 01:10**	**140410L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1.00	
Toluene	ND	19	1.00	
Ethylbenzene	ND	22	1.00	
p/m-Xylene	ND	43	1.00	
o-Xylene	ND	22	1.00	
Xylenes (total)	ND	22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	36	1.00	
Tert-Butyl Alcohol (TBA)	ND	30	1.00	
Diisopropyl Ether (DIPE)	ND	42	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	42	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	42	1.00	
Naphthalene	ND	52	1.00	
Ethanol	ND	94	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	47-156	
1,2-Dichloroethane-d4	99	47-156	
Toluene-d8	97	47-156	

Return to Contents

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-7	**14-04-0710-6-A**	**04/08/14 12:17**	**Air**	**GC/MS YY**	**N/A**	**04/11/14 02:02**	**140410L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1.00	
Toluene	ND	19	1.00	
Ethylbenzene	ND	22	1.00	
p/m-Xylene	ND	43	1.00	
o-Xylene	ND	22	1.00	
Xylenes (total)	ND	22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	36	1.00	
Tert-Butyl Alcohol (TBA)	ND	30	1.00	
Diisopropyl Ether (DIPE)	ND	42	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	42	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	42	1.00	
Naphthalene	ND	52	1.00	
Ethanol	ND	94	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	47-156	
1,2-Dichloroethane-d4	99	47-156	
Toluene-d8	98	47-156	

Return to Contents

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-8	**14-04-0710-7-A**	**04/08/14 13:41**	**Air**	**GC/MS YY**	**N/A**	**04/11/14 02:52**	**140410L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1.00	
Toluene	ND	19	1.00	
Ethylbenzene	ND	22	1.00	
p/m-Xylene	ND	43	1.00	
o-Xylene	ND	22	1.00	
Xylenes (total)	ND	22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	36	1.00	
Tert-Butyl Alcohol (TBA)	ND	30	1.00	
Diisopropyl Ether (DIPE)	ND	42	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	42	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	42	1.00	
Naphthalene	ND	52	1.00	
Ethanol	ND	94	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	47-156	
1,2-Dichloroethane-d4	100	47-156	
Toluene-d8	98	47-156	

Return to Contents

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-116-269**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**04/10/14 21:42**	**140410L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1.00	
Toluene	ND	19	1.00	
Ethylbenzene	ND	22	1.00	
p/m-Xylene	ND	43	1.00	
o-Xylene	ND	22	1.00	
Xylenes (total)	ND	22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	36	1.00	
Tert-Butyl Alcohol (TBA)	ND	30	1.00	
Diisopropyl Ether (DIPE)	ND	42	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	42	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	42	1.00	
Naphthalene	ND	52	1.00	
Ethanol	ND	94	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	47-156	
1,2-Dichloroethane-d4	100	47-156	
Toluene-d8	98	47-156	

Return to Contents

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

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: EPA TO-3M
Units: ug/m3

Project: 4212 First Street, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-1	**14-04-0710-1-A**	**04/08/14 12:55**	**Air**	**GC 43**	**N/A**	**04/10/14 15:44**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	ND	3800	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-2	**14-04-0710-2-A**	**04/08/14 14:09**	**Air**	**GC 43**	**N/A**	**04/10/14 16:18**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	ND	3800	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-3	**14-04-0710-3-A**	**04/08/14 11:35**	**Air**	**GC 43**	**N/A**	**04/10/14 16:53**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	ND	3800	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-4	**14-04-0710-4-A**	**04/08/14 10:44**	**Air**	**GC 43**	**N/A**	**04/10/14 20:12**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	ND	3800	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-7	**14-04-0710-6-A**	**04/08/14 12:17**	**Air**	**GC 43**	**N/A**	**04/10/14 21:22**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	ND	3800	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-8	**14-04-0710-7-A**	**04/08/14 13:41**	**Air**	**GC 43**	**N/A**	**04/10/14 14:33**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	ND	3800	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-431-303**	**N/A**	**Air**	**GC 43**	**N/A**	**04/10/14 10:37**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	ND	3800	1.00	

Return to Contents

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

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

Conestoga-Rovers & Associates		Date Received:	04/10/14
5900 Hollis Street, Suite A		Work Order:	14-04-0710
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	EPA TO-3M
Project: 4212 First Street, Pleasanton, CA			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
SV-1	**Sample**	**Air**	**GC 43**	**N/A**	**04/10/14 15:44**	**140410D01**
SV-1	**Sample Duplicate**	**Air**	**GC 43**	**N/A**	**04/10/14 17:29**	**140410D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	ND	ND	N/A	0-20	

Return to Contents

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: 4212 First Street, Pleasanton, CA

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: ASTM D-1946

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-2037	**LCS**	**Air**	**GC 65**	**N/A**	**04/10/14 10:08**	**140410L01**
099-03-002-2037	**LCSD**	**Air**	**GC 65**	**N/A**	**04/10/14 10:31**	**140410L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Methane	4.500	4.326	96	4.339	96	80-120	0	0-30	
Carbon Dioxide	15.00	15.41	103	15.93	106	80-120	3	0-30	
Carbon Monoxide	6.990	7.559	108	7.562	108	80-120	0	0-30	
Oxygen + Argon	4.010	4.028	100	4.004	100	80-120	1	0-30	
Nitrogen	69.50	69.37	100	69.25	100	80-120	0	0-30	

Return to Contents

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: 4212 First Street, Pleasanton, CA

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: ASTM D-1946 (M)
Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-596	**LCS**	**Air**	**GC 55**	**N/A**	**04/10/14 09:48**	**140410L01**
099-12-872-596	**LCSD**	**Air**	**GC 55**	**N/A**	**04/10/14 10:11**	**140410L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Helium	1.000	0.9190	92	1.018	102	80-120	10	0-30	
Hydrogen	1.000	0.8724	87	0.9647	96	80-120	10	0-30	

Return to Contents

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: 4212 First Street, Pleasanton, CA

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: EPA 8260B (M)
Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-116-269	**LCS**	**Air**	**GC/MS YY**	**N/A**	**04/10/14 18:28**	**140410L03**
099-16-116-269	**LCSD**	**Air**	**GC/MS YY**	**N/A**	**04/10/14 19:18**	**140410L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	79.87	83.31	104	84.37	106	60-156	44-172	1	0-40	
Toluene	94.21	99.12	105	100.3	106	56-146	41-161	1	0-43	
Ethylbenzene	108.6	112.0	103	113.2	104	52-154	35-171	1	0-38	
p/m-Xylene	217.1	223.1	103	225.1	104	42-156	23-175	1	0-41	
o-Xylene	108.6	108.9	100	109.7	101	52-148	36-164	1	0-38	
Methyl-t-Butyl Ether (MTBE)	90.13	88.90	99	91.31	101	45-147	28-164	3	0-25	
Tert-Butyl Alcohol (TBA)	151.6	149.2	98	154.0	102	60-140	47-153	3	0-35	
Diisopropyl Ether (DIPE)	104.5	93.14	89	94.10	90	60-140	47-153	1	0-35	
Ethyl-t-Butyl Ether (ETBE)	104.5	98.40	94	101.2	97	60-140	47-153	3	0-35	
Tert-Amyl-Methyl Ether (TAME)	104.5	96.19	92	98.53	94	60-140	47-153	2	0-35	
Naphthalene	131.1	144.3	110	141.7	108	60-140	47-153	2	0-30	
Ethanol	188.4	179.3	95	189.6	101	47-137	32-152	6	0-35	
1,1-Difluoroethane	67.54	67.91	101	69.38	103	78-156	65-169	2	0-35	
Isopropanol	61.45	58.12	95	59.47	97	78-156	65-169	2	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

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

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

Project: 4212 First Street, Pleasanton, CA

Date Received: 04/10/14
Work Order: 14-04-0710
Preparation: N/A
Method: EPA TO-3M

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-431-303	**LCS**	**Air**	**GC 43**	**N/A**	**04/10/14 09:53**	**140410L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Gasoline Range Organics (C6-C12)	382400	328400	86	80-120	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0710 Page 1 of 1

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 suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
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.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
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.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

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.

Return to Contents

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 240523

INCIDENT # (ENV SERVICES): 9 8 9 9 5 8 4 0 — [ ] CHECK IF NO INCIDENT # APPLIES

DATE: _____

PAGE: 1 of 1

PO #:

SAP #: 1 3 5 7 8 2

SAMPLING COMPANY: Conestoga-Rovers & Associates

LOG CODE: CRAW

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

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

TELEPHONE: 510-420-3319 FAX: 510-420-9170 E-MAIL: pschaefer@craworld.com

SITE ADDRESS: Street and City: 4212 First Street, Pleasanton

State: CA

GLOBAL ID NO.: T0600101259

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.: 240523-2014-02

SAMPLER NAME(S) (Print): Patrick O'Connell

LAB USE ONLY: **14-04-0710**

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

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

SPECIAL INSTRUCTIONS OR NOTES :

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

Report results in µg/m³

- [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 C6-C12 (TO-3M)	TPH -DRO, Extractable (8015M)	TPHg (8015M)	BTEX (8260B)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA (TO-15)	BTEX + 5 OXYs (MTBE, TBA, DIPE, TAME, ETBE) 8260B	Full VOC list (8260B)	Single Compound: _____ (8260B)	1,2-DCA (8260B)	EDB (8260B)	Ethanol (8260B)	CH4 ASTMD 1946	O2 + Argon ASTMD 1946	Helium ASTMD 1946 (M)	CO2 ASTMD 1946	NAPHTHALENE (8260B)	TEMPERATURE ON RECEIPT C°	Container PID Readings or Laboratory Notes
1	SV-1	4/8/14	12:55	Vapor				X		1	X				X								X	X	X	X	X		
2	SV-2		14:09	Vapor				X		1	X				X								X	X	X	X	X		
3	SV-3		11:35	Vapor				X		1	X				X								X	X	X	X	X		
4	SV-4		10:44	Vapor				X		1	X				X								X	X	X	X	X		
	SV-5			Vapor						1	X				X								X	X	X	X	X		
5	SV-6		15:15	Vapor				X		1	X				X								X	X	X	X	X		
6	SV-7		12:47	Vapor				X		1	X				X								X	X	X	X	X		
7	SV-8		13:41	Vapor				X		1	X				X								X	X	X	X	X		

Relinquished by: (Signature) Patrick O'Connell — Received by: (Signature) for Molly CER — Date: 4/8/14 — Time: 1855

Relinquished by: (Signature) for Molly TO 6-30 — Date: 4/9/14 — Time: 1730

Received by: (Signature) [signature] CER — Date: 4/10/14 — Time: 1140

Relinquished by: (Signature) — Received by: (Signature) — Date: — Time:

05/2/08 Revision

PO 4/8/14

Return to Contents

0710

Page 1 of 1

GSO

WebShip > > > > >

800-322-5555 www.gso.com

Ship From:
ALAN KEMP
CAL SCIENCE- CONCORD
5063 COMMERCIAL CIRCLE #H
CONCORD, CA 94520

Ship To:
SAMPLE RECEIVING
CEL
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD:
$0.00

Reference:
CRA

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 524360946

NPS

ORC

A

GARDEN GROVE

D92843A

23157841

Print Date : 04/09/14 15:06 PM

Package 1 of 1

Return to Contents

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0510

SAMPLE RECEIPT FORM

Box 1 of 1

CLIENT: CRA

DATE: 04/10/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature _____ °C - 0.3 °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 Checked by: 300

CUSTODY SEALS INTACT:

☑ Box ☐ _____ ☐ No (Not Intact) ☐ Not Present ☐ N/A Checked by: 300

☐ Sample ☐ _____ ☐ No (Not Intact) ☑ Not Present Checked by: 300

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	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
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® ☐_____

Aqueous: ☐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:** 300

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 836

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:** 300

Return to Contents

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0710

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **Sample(s) NOT RECEIVED but listed on COC**
- ☐ **Sample(s) received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample label(s) do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Container(s)**
  - ☐ **Analysis**
- ☐ **Sample container(s) compromised** – Note in comments
  - ☐ **Water present in sample container**
  - ☐ **Broken**
- ☐ **Sample container(s) not labeled**
- ☑ **Air sample container(s) compromised** – Note in comments: (-5) SV-6 received flat
  - ☑ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (Not transferred - duplicate bag submitted)**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferrec at Client's request.

Initial / Date: BDD 04/10/14

Return to Contents