CONESTOGA-ROVERS & ASSOCIATES

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TRANSMITTAL

DATE: January 26, 2012

REFERENCE NO.: 241501

PROJECT NAME: 461 8th Street, Oakland

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

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5:53 pm, Jan 31, 2012
Alameda County
Environmental Health

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QUANTITY	DESCRIPTION
1	Subsurface Investigation Report

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

COMMENTS:
If you have any questions regarding the contents of the document, please call Peter Schaefer at (510) 420-3319.

Copy to: Denis Brown, Shell Oil Products US (electronic copy)
Leroy Griffin, Fire Prevention Bureau, 250 Frank Ogawa Plaza, 3rd Floor, Suite 3341, Oakland, CA 94612
A.F. Evans Company, c/o Anye Spivey, 1000 Broadway, Suite 300, Oakland, CA 94507
Leah Goldberg, Meyers Nave, 555 12th Street, Suite 1500, Oakland, CA 94607
Grover Buhr, Treadwell & Rollo (electronic copy)

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: **Correspondence File**

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

Re: Former Shell Service Station
461 8th Street
Oakland, California
SAP Code 129453
Incident No. 97093399
ACEH Case No. RO0000343

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 (707) 865-0251 with any questions or concerns.

Sincerely,

Denis L. Brown
Senior Program Manager

SUBSURFACE INVESTIGATION REPORT

FORMER SHELL SERVICE STATION
461 8TH STREET
OAKLAND, CALIFORNIA

SAP CODE	129453
INCIDENT NO.	97093399
AGENCY NO.	RO0000343

Prepared by:
Conestoga-Rovers & Associates

5900 Hollis Street, Suite A
Emeryville, California
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EXECUTIVE SUMMARY

- Eight nested soil vapor probes (VP-5 through VP-12) were installed.
- No constituents of concern were detected in any soil vapor samples at concentrations which exceeded RWQCB ESLs.
- Based on soil vapor results, no further soil vapor investigation is warranted.
- CRA recommends continued groundwater monitoring to further assess the stability of the groundwater plume.

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 installation and sampling. The purpose of the investigation was to assess the potential for soil gas migration to indoor air. CRA followed the scope of work and procedures presented in our July 14, 2011 work plan, which was conditionally approved by Alameda County Environmental Health's (ACEH's) August 8, 2011 letter. ACEH's November 16, 2011 electronic correspondence granted an extension of the due date for this report from December 2, 2011 to January 27, 2012.

The site is a paved parking lot located at the southwest corner of the intersection of 8th Street and Broadway in a primarily commercial area of Oakland, California (Figure 1). The former station layout included an underground storage tank complex and dispenser islands (Figure 2). The site is currently a paid public parking lot.

A summary of previous work performed at the site and additional background information is presented in CRA's July 14, 2011 *Subsurface Investigation Work Plan* and is not repeated herein.

2.0 INVESTIGATION ACTIVITIES

2.1 PERMIT

CRA obtained a drilling permit from Alameda County Public Works Agency (Appendix A).

2.2 FIELD DATES

November 8 and November 9, 2011 (soil vapor probe installation) and December 1, 2011 and January 5, 2012 (soil vapor probe sampling).

2.3 DRILLING COMPANY

Vapor Tech Services.

2.4 CRA PERSONNEL

Environmental scientist Cristina Arganbright directed the probe installation working under the supervision of California Professional Geologist Peter Schaefer.

2.5 DRILLING METHOD

Air-knife and hand auger.

2.6 NUMBER OF PROBES

CRA installed eight nested soil vapor probes (VP-5 through VP-12). The probe specifications and soil types encountered are described on the boring logs contained in Appendix B. The probe locations are shown on Figure 2.

2.7 VAPOR PROBE MATERIALS

CRA constructed the vapor probes using ¼-inch-diameter Teflon® tubing attached to 1-inch-length stainless steel screen intervals and #2/12 Monterey sand filter pack. Probe diagrams are provided with boring logs in Appendix B.

2.8 SCREENED INTERVALS

4.67 to 4.75 feet below grade.

2.9 SOIL VAPOR SAMPLING PROCEDURE

Prior to sampling, CRA purged at least three tubing volumes of air from each vapor probe using a vacuum pump. Immediately after purging, CRA collected a soil vapor sample using a laboratory-supplied Tedlar® bag. During sampling, CRA connected the Teflon® tubing for each vapor probe to a lung box containing the Tedlar® bag, and the lung box chamber was connected to the vacuum pump. CRA then drew the sample into the Tedlar® bag by reducing the pressure in the lung box with the vacuum pump. Each sample was 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, CRA placed a containment unit (or shroud) over the soil vapor probe surface casing and sampling manifold. Prior to soil vapor probe purging, CRA introduced helium into the containment unit to obtain a minimum 50 percent (%) helium content level. CRA confirmed the helium content within the containment unit using a helium meter. The helium meter readings are presented in Section 3.2. All samples were analyzed by the laboratory for helium, and CRA presents the results in Section 3.2 and on Table 1.

2.10 SOIL VAPOR SAMPLING ANALYSES

Soil vapor samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method TO-3 (modified); for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by modified EPA Method 8260B; for oxygen and argon, carbon dioxide, and methane by ASTM D-1946; and for helium by ASTM D-1946 (M).

2.11 WASTE DISPOSAL

Soil and water-knife sludge generated during field activities were stored on site in 55-gallon drums, sampled, and profiled for disposal. Waste disposal confirmation documentation is pending and will be provided by CRA upon request. The laboratory analytical report is for the waste samples is presented in Appendix C.

3.0 FINDINGS

3.1 SOIL VAPOR

The soil vapor chemical analytical data are summarized in Table 1, and TPHg and BTEX analytical results are presented on Figure 2. The laboratory analytical reports are presented in Appendix C.

3.2 LEAK TESTING

CRA performed leak testing as described above, and up to 0.792 percent by volume (%*v*) helium was detected in the samples. As shown in the following table, the detections are less than 10% 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)*
VP-5	5	<0.0100	45	4.5
VP-5	10	<0.0100	45	4.5
VP-6	5	0.276	63	6.3
VP-6	10	0.792	65	6.5
VP-7	5	<0.0100	50	5.0
VP-7	10	<0.0100	65	6.5
VP-8	5	<0.0100	40	4.0
VP-8	10	<0.0100	50	5.0
VP-9	5	0.0221	47	4.7
VP-9	10	<0.0100	64	6.4
VP-10	5	<0.0100	50	5.0
VP-10	10	<0.0100	45	4.5
VP-11	5	<0.0100	50	5.0
VP-11	10	<0.0100	50	5.0
VP-12	5	<0.0100	60	6.0
VP-12	10	<0.0100	50	5.0

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

4.0 CONCLUSIONS

TPHg, benzene, and toluene were not detected in soil vapor samples from soil vapor probes VP-5 through VP-12. Detections of ethylbenzene and total xylenes were below San Francisco Bay Regional Water Quality Control Board environmental screening levels[1] for commercial land use during the December 2011 and January 2012 sampling events.

5.0 RECOMMENDATIONS

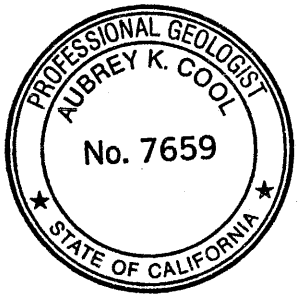
Based on soil vapor results, no further soil vapor investigation is warranted. CRA recommends continued groundwater monitoring to further assess the stability of the groundwater plume.

1 *Screening for Environmental Concerns at Site With Contaminated Soil and Groundwater,* California Regional Water Quality Control Board, Interim Final - November 2007 [Revised May 2008]

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

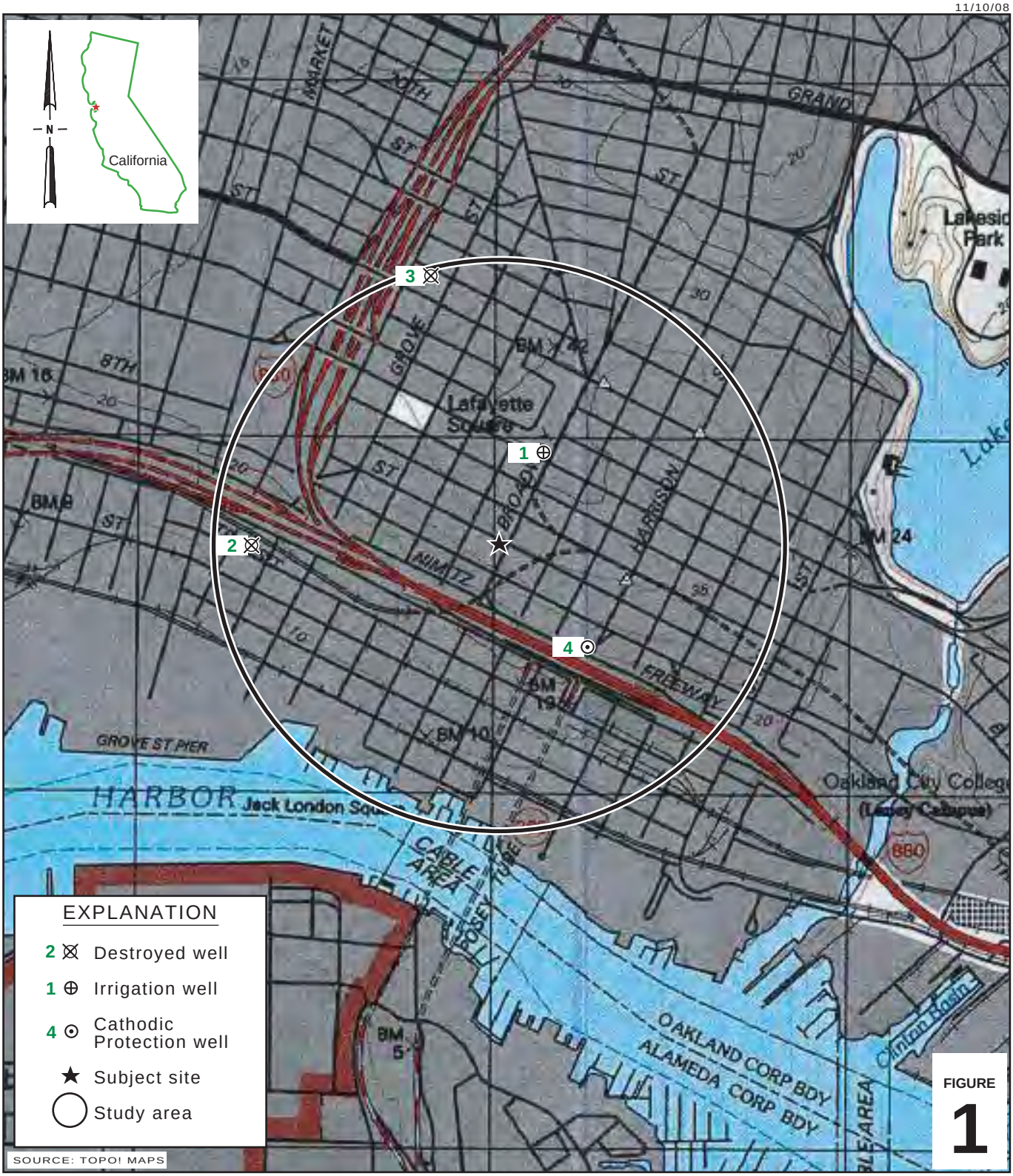
Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG



FIGURES

11/10/08



I:\Shell\6-chars\2415--\241501-Oakland 461 8th\241501-FIGURES\241501 VICINITY.Ai

FIGURE
1

0 1/8 1/4 1/2 1

SCALE (MILES)

Former Shell Service Station
461 8th Street
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

01/16/2012

Soil Vapor Concentration Map

EXPLANATION

- VP-5 — Soil vapor probe location
- B-28 — Soil boring location
- SVP-1 — Subslab soil vapor probe location
- S-4 — Monitoring well location
- S-21B — Deeper monitoring well location
- OW-1 — Observation well location
- IP-1 — Injection point
- B-25/ VP-2 — Soil boring/vapor probe location
- B-24/ VP-1 — Destroyed soil boring/ vapor probe location
- S-1 — Destroyed well location
- B-1 — Soil boring location
- TR-V1 — Soil vapor boring location

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
VP-5	12/01/2011	5	<3,800	<16	<19	57	54
VP-5	12/01/2011	10	<3,800	<16	<19	28	<43

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

8TH STREET

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
VP-10	12/01/2011	5	<3,800	<16	<19	57	58
VP-10	12/01/2011	10	<3,800	<16	<19	<22	<43

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
VP-8	12/01/2011	5	<3,800	<16	<19	32	<43
VP-8	12/01/2011	10	<3,800	<16	<19	31	<43

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
VP-12	12/01/2011	5	<3,800	<16	<19	<22	<43
VP-12	12/01/2011	10	<3,800	<16	<19	35	<43

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
VP-11	12/01/2011	5	<3,800	<16	<19	<22	<43
VP-11	12/01/2011	10	<3,800	<16	<19	30	<43

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
VP-5	12/01/2011	5	<3,800	<16	<19	57	54
VP-5	12/01/2011	10	<3,800	<16	<19	28	<43

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
VP-7	12/01/2011	5	<3,800	<16	<19	29	<43
VP-7	12/01/2011	10	<3,800	<16	<19	55	54

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
VP-9	12/01/2011	5	<3,800	<16	<19	<22	<43
VP-9	12/01/2011	10	<3,800	<16	<19	<22	<43

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
VP-6	01/05/2012	5	<3,800	<16	<19	88	120
VP-6	01/05/2012	10	<3,800	<16	<19	48	55

Former Shell Station
461 8th St.

Former USTs
Former Dispenser Islands
Former Fuel Lines
Excavation Area

S-1, S-10, VP-10, B-3, TR-V4, B-16, B-17, B-4, B-18, VP-8, TR-V3, B-15, B-6, B-19, TR-2, VP-12, B-14, B-2, B-8, S-8, B-5, VP-11, TR-V1, B-20, S-23, VP-5, S-16, B-13, B-24/ VP-1, TR-4, VP-7, B-7, IP-1, S-15, IP-2, B-12, S-21A, B-28, B-10, AS-1, S-21B, IP-3, S-14, TR-1, S-12, OW-1, B-1, S-17, B-23, S-14R, B-27/ VP-4, VP-9, TR-V2, S-22A, VP-6, B-21, B-29, B-11, S-22B, S-18, S-19, S-13, B-26/ VP-3, TR-3, SVP-2, B-22, B-9, S-20, B-25/ VP-2, S-9, SVP-1

N

0 10 20 40

Scale (ft)

BROADWAY

FIGURE

2

Former Shell Service Station
461 8th Street
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

I:\Shell\6-chars\2415--\241501-Oakland 461 8th\241501-FIGURES\241501 SITE PLAN.DWG

TABLE

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (µg/m3)*	*B (µg/m3)*	*T (µg/m3)*	*E (µg/m3)*	*X (µg/m3)*	*Isobutane (µg/m3)*	*Butane (µg/m3)*	*Propane (µg/m3)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
TR-V1 a	5/20/2005	4.5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
TR-V1 b	5/20/2005	4.5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
TR-V1 c	5/20/2005	4.5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
TR-V2 b	5/20/2005	5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
TR-V3 b	5/20/2005	5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
TR-V4 b	5/20/2005	5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
VP-1-5 e	12/11/2007	5	<19,000	170	150	56	613	---	---	---	---	---	---	---
VP-1-9.5 e	12/11/2007	9.5	160,000	9,600	4,400	1,200	12,700	---	---	---	---	---	---	---
VP-2-5	12/11/2007	5	<20,000	<2.7	6.4	<3.7	<18.7	---	---	---	---	---	---	---
VP-2-5	12/8/2008	5	<9,700	3.3	<3.2	5.1	<15	<20	<20	<46	---	---	---	---
VP-2-5	1/5/2009	5	<9,500	5.7	3.3	<3.6	<14	<20	<20	<45	---	---	---	---
VP-2-5	3/12/2009	5	<8,700	<2.4	<2.9	<3.3	<13	<18	<18	<41	---	---	---	---
VP-2-5-DUP	3/12/2009	5	<9,200	5.1	<3.0	<3.5	<14	<19	<19	<44	---	---	---	---
VP-2-5	4/27/2009	5	<8,000	<2.2	<2.6	<3.0	<12	<17	<17	<38	---	---	---	---
VP-2-5-DUP	4/27/2009	5	<8,000	<2.2	<2.6	<3.0	<12	<17	<17	<38	---	---	---	---
VP-2-9.5	12/8/2008	9.5	<9,500	13	<3.1	7.0	<14	<20	<20	<45	---	---	---	---
VP-2-9.5	1/5/2009	9.5	<8,900	<2.5	<2.9	<3.4	<14	<19	<19	<42	---	---	---	---
VP-2-9	3/12/2009	9.5	<8,500	<2.4	<2.8	<3.2	<13	<18	<18	<40	---	---	---	---
VP-2-9	4/27/2009	9.5	<8,000	<2.2	<2.6	<3.0	<12	<17	<17	<38	---	---	---	---
VP-3-5	12/11/2007	5	<17,000	<2.4	5	<3.3	<16.3	30	10	ND	---	---	---	---
VP-3-5	12/8/2008	5	<9,900	<2.7	<3.2	<3.7	<15	77	<20	<47	---	---	---	---
VP-3-5	1/5/2009	5	<8,400	<2.3	5.0	<3.2	<13	160	<17	<40	---	---	---	---
VP-3-5	3/12/2009	5	<9,200	<2.6	<3.0	<3.5	<14	<19	<19	<44	---	---	---	---
VP-3-5	4/27/2009	5	<8,800	<2.5	<2.9	<3.3	<13	<18	<18	<42	---	---	---	---
VP-3-9.5	12/11/2007	9.5	<18,000	5	20	4	36	348	---	---	---	---	---	---
VP-3-9.5	12/8/2008	9.5	<10,000	<2.8	<3.4	<3.9	<15	<21	<21	<48	---	---	---	---
VP-3-9.5	1/5/2009	9.5	<9,900	<2.8	5.5	<3.8	<15	560	21	<47	---	---	---	---
VP-3-9	3/12/2009	9.5	<9,300	<2.6	<3.1	<3.5	<14	<19	<19	<44	---	---	---	---
VP-3-9	4/27/2009	9.5	<8,600	<2.4	<2.8	<3.3	<13	<18	<18	<41	---	---	---	---
VP-4-5	12/11/2007	5	<18,000	<2.6	35	<3.5	14	---	6.9	---	---	---	---	---

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (µg/m3)*	*B (µg/m3)*	*T (µg/m3)*	*E (µg/m3)*	*X (µg/m3)*	*Isobutane (µg/m3)*	*Butane (µg/m3)*	*Propane (µg/m3)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
VP-4-5	12/8/2008	5	**170,000**	<11	<13	<15	<60	55,000	1,200	7,900	---	---	---	---
VP-4-5 DUP	12/8/2008	5	**170,000**	<11	<13	<15	<61	84,000	1,200	8,600	---	---	---	---
VP-4-5	1/5/2009	5	<8,300	<2.3	4.8	<3.1	<13	61	<17	<39	---	---	---	---
VP-4-5	3/12/2009	5	<8,800	<2.5	<2.9	<3.3	<13	<18	<18	<42	---	---	---	---
VP-4-5	4/27/2009	5	<8,400	<2.3	<2.8	<3.2	<13	<17	<17	<40	---	---	---	---
VP-4-9.5	12/11/2007	9.5	<16,000	<2.2	79	4.3	40.4	ND	ND	ND	---	---	---	---
VP-4-9.5	12/8/2008	9.5	**26,000**	<2.6	4.2	<3.5	<14	8,800	120	94	---	---	---	---
VP-4-9.5	1/5/2009	9.5	<10,000	<2.8	4.3	<3.8	<15	1,900	<21	120	---	---	---	---
VP-4-9.5-DUP	1/5/2009	9.5	<8,900	<2.5	4.4	<3.4	<14	1,600	19	<42	---	---	---	---
VP-4-9	3/12/2009	9.5	<8,500	<2.4	<2.8	<3.2	<13	<18	<18	<40	---	---	---	---
VP-4-9	4/27/2009	9.5	<8,600	<2.4	<2.8	<3.3	<13	<18	<18	<41	---	---	---	---
Outdoor Ambient	5/29/2003		<19,000	16	16	<3.1	<9.2	---	---	---	---	---	---	---
Outdoor Ambient	1/5/2009		<8,700	2.5	5.4	<3.3	<13	<18	<18	<41	---	---	---	---
Outdoor Ambient	3/12/2009		<8,900	<2.5	<2.9	<3.4	<13	<18	<18	<42	---	---	---	---
Outdoor Ambient	4/27/2009		<8,700	<2.4	<2.9	<3.3	<13	<18	<18	<41				
SVP-1	11/21/2008		<230	---	---	---	---	---	---	---	---	---	---	---
SVP-1-DUP	11/21/2008		460	---	---	---	---	---	---	---	---	---	---	---
SVP-1	1/5/2009		<9,300	<2.6	<3.1	<3.5	<14	<19	<19	<44	---	---	---	---
SVP-1	3/12/2009		<8,500	<2.4	<2.8	<3.2	<13	<18	<18	<40	---	---	---	---
SVP-1-DUP	3/12/2009		<11,000	<3.0	<3.5	<4.0	<16	<22	<22	<50	---	---	---	---
SVP-1	4/27/2009		<8,400	<2.3	<2.8	<3.2	<13	<17	<17	<40				
SVP-2	11/21/2008		360	---	---	---	---	---	---	---	---	---	---	---
SVP-2	1/5/2009		**13,000**	<2.6	4.4	<3.6	<14	1,800	51	90	---	---	---	---
SVP-2	3/13/2009		<10,000	<2.9	<3.4	<3.9	<16	<21	<21	<48	---	---	---	---
SVP-2	4/27/2009		<9,200	<2.6	<3.0	<3.5	<14	25	<19	<44	---	---	---	---
SVP-3	11/21/2008		<230	---	---	---	---	---	---	---	---	---	---	---
SVP-3	1/5/2009		<8,100	<2.4	<2.9	<3.3	<13	<18	130	<41	---	---	---	---
SVP-3-DUP	1/5/2009		<10,000	<3.2	<3.8	<4.4	<17	<24	150	<54	---	---	---	---
SVP-3	3/12/2009		<9,200	<2.6	<3.0	<3.5	<14	<19	<19	<43	---	---	---	---
SVP-3	4/27/2009		<9,900	<11	<13	<15	<60	<82	<82	<190	---	---	---	---
SVP-3-DUP	4/27/2009		<8,300	<9.3	<11	<13	<50	<69	<69	<160	---	---	---	---

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (µg/m3)*	*B (µg/m3)*	*T (µg/m3)*	*E (µg/m3)*	*X (µg/m3)*	*Isobutane (µg/m3)*	*Butane (µg/m3)*	*Propane (µg/m3)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
Indoor Ambient Air	11/21/2008		510	---	---	---	---	---	---	---	---	---	---	---
Indoor Ambient Air DUP	11/22/2008		510	---	---	---	---	---	---	---	---	---	---	---
Indoor Ambient Air	12/8/2008		<9,900	<2.7	4.2	<3.7	<15	<20	<20	<47	---	---	---	---
Indoor Ambient Air	1/5/2009		<9,300	<2.6	4.9	<3.5	<14	<19	<19	<44	---	---	---	---
Indoor Ambient Air	3/12/2009		<8,500	<2.4	3.2	<3.2	<13	28	<18	<40	---	---	---	---
Indoor Ambient Air	4/27/2009		<7,900	3.2	12	<3.0	<12	62	63	<37	---	---	---	---
VP-5	12/1/2011	5	<3,800	<16 d	<19 d	57 d	54 d	---	---	---	<0.500	7.46	16.2	<0.0100
VP-5	12/1/2011	10	<3,800	<16 d	<19 d	28 d	<43 d	---	---	---	<0.500	19.9	5.06	<0.0100
VP-6	1/5/2012	5	<3,800	<16 d	<19 d	88 d	120 d	---	---	---	<0.500	3.51	19.0	0.276
VP-6	1/5/2012	10	<3,800	<16 d	<19 d	48 d	55 d	---	---	---	<0.500	14.2	9.40	0.792
VP-7	12/1/2011	5	<3,800	<16 d	<19 d	29 d	<43 d	---	---	---	<0.500	10.3	13.6	<0.0100
VP-7	12/1/2011	10	<3,800	<16 d	<19 d	55 d	54 d	---	---	---	<0.500	20.8	4.42	<0.0100
VP-8	12/1/2011	5	<3,800	<16 d	<19 d	32 d	<43 d	---	---	---	<0.500	1.80	21.2	<0.0100
VP-8	12/1/2011	10	<3,800	<16 d	<19 d	31 d	<43 d	---	---	---	<0.500	5.98	17.1	<0.0100
VP-9	12/1/2011	5	<3,800	<16 d	<19 d	<22 d	<43 d	---	---	---	<0.500	8.19	15.9	0.0221
VP-9	12/1/2011	10	<3,800	<16 d	<19 d	<22 d	<43 d	---	---	---	<0.500	17.1	9.78	<0.0100
VP-10	12/1/2011	5	<3,800	<16 d	<19 d	57 d	58 d	---	---	---	<0.500	3.66	19.1	<0.0100
VP-10	12/1/2011	10	<3,800	<16 d	<19 d	<22 d	<43 d	---	---	---	<0.500	6.63	16.3	<0.0100
VP-11	12/1/2011	5	<3,800	<16 d	<19 d	<22 d	<43 d	---	---	---	<0.500	1.72	21.4	<0.0100
VP-11	12/1/2011	10	<3,800	<16 d	<19 d	30 d	<43 d	---	---	---	<0.500	3.53	19.7	<0.0100
VP-12	12/1/2011	5	<3,800	<16 d	<19 d	<22 d	<43 d	---	---	---	<0.500	5.00	18.2	<0.0100
VP-12	12/1/2011	10	<3,800	<16 d	<19 d	35 d	<43 d	---	---	---	<0.500	12.9	9.62	<0.0100
Commercial/Industrial Land Use ESL[s]:			***29,000***	***280***	***180,000***	***3,300***	***58,000***	***NA***	***NA***	***NA***	***NA***	***NA***	***NA***	***NA***

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by Modified EPA Method TO-3 GC/FID or EPA Method TO-3M.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by Modified EPA Method TO-15 or EPA Method TO-15 unless otherwise noted
Isobutane, butane, and propane analyzed by EPA Method TO-15.
Methane, carbon dioxide, and oxygen + argon analyzed by ASTM D-1946

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (µg/m3)*	*B (µg/m3)*	*T (µg/m3)*	*E (µg/m3)*	*X (µg/m3)*	*Isobutane (µg/m3)*	*Butane (µg/m3)*	*Propane (µg/m3)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*

fbg = Feet below grade
µg/m3 = Micrograms per cubic meter
%v = Percentage by volume
<x = Not detected at reporting limit x
--- = Not analyzed
VP = Vapor probe
SVP = Sub slab vapor probe
ESL = Environmental screening level
NA = No applicable ESL
Results in **bold** exceed ESL.
Shading indicates that the soil vapor probe location was subsequently excavated; results are likely not representative of current soil vapor conditions.

a = Sample collected after 1 purge volume; BTEX analyzed by EPA Method 8260B
b = Sample collected after 3 purge volumes; BTEX analyzed by EPA Method 8260B
c = Sample collected after 7 purge volumes; BTEX analyzed by EPA Method 8260B
d = BTEX analyzed by Modified EPA Method 8260B
f = VP-1 destroyed
g = San Francisco Bay Regional Water Quality Control Board ESLs for shallow soil gas (Table E of Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater, California Regional Water Quality Control Board, Interim Final - November 2007 [Revised May 2008])

APPENDIX A

PERMIT

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 09/07/2011 By jamesy

Permit Numbers: W2011-0578
Permits Valid from 09/21/2011 to 09/22/2011

Application Id: 1314826655716
City of Project Site: Oakland
Site Location: 461 8th street
Parking Lot
Project Start Date: 09/21/2011
Completion Date: 09/22/2011
Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org

Applicant: Conestoga Rovers & Associates - Erin Swan
5900 Hollis St, Suite A, Emeryville, CA 94608
Phone: 510-420-0700

Property Owner: Greg Lunkes
1000 Broadway, Suit 300, Oakland, CA 94507
Phone: 510-267-4686

Client: Shell Oil Products US
20945 S. Wilmington Ave, Carson, CA 90810
Phone: --

Contact: Erin Swan
Phone: 510-420-3372
Cell: 510-385-0074

Total Due: $265.00
Receipt Number: WR2011-0274 **Total Amount Paid:** $265.00
Payer Name : Conestoga Rovers & Paid By: CHECK **PAID IN FULL**
Associates

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 8 Wells
Driller: Vapor Tech Services - Lic #: 916085 - Method: other **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2011-0578	09/07/2011	12/20/2011	VP-10	3.00 in.	0.25 in.	4.00 ft	10.00 ft
W2011-0578	09/07/2011	12/20/2011	VP-11	3.00 in.	0.25 in.	4.00 ft	10.00 ft
W2011-0578	09/07/2011	12/20/2011	VP-12	3.00 in.	0.25 in.	4.00 ft	10.00 ft
W2011-0578	09/07/2011	12/20/2011	VP-5	3.00 in.	0.25 in.	4.00 ft	10.00 ft
W2011-0578	09/07/2011	12/20/2011	VP-6	3.00 in.	0.25 in.	4.00 ft	10.00 ft
W2011-0578	09/07/2011	12/20/2011	VP-7	3.00 in.	0.25 in.	4.00 ft	10.00 ft
W2011-0578	09/07/2011	12/20/2011	VP-8	3.00 in.	0.25 in.	4.00 ft	10.00 ft
W2011-0578	09/07/2011	12/20/2011	VP-9	3.00 in.	0.25 in.	4.00 ft	10.00 ft

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

2. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with

appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days, including permit number and site map.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

5. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

6. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.

7. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

8. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

9. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

10. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

11. Vapor monitoring wells above water level constructed with tubing maybe be backfilled with pancake-batter consistency bentonite. Minimum surface seal thickness is two inches of cement grout around well box.

Vapor monitoring wells above water level constructed with pvc pipe shall have a minimum seal depth (Neat Cement Seal) of 2 feet below ground surface (BGS). Minimum surface seal thickness is two inches of cement grout around well box. All other conditions for monitoring well construction shall apply.

APPENDIX B

BORING LOGS

Boring/Well Log Legend

KEY TO SYMBOLS/ABBREVIATIONS

- First encountered groundwater
- Static groundwater
- Soils logged by hand-auger or air-knife cuttings
- Soils logged by drill cuttings or disturbed sample
- Undisturbed soil sample interval
- Soil sample retained for submittal to analytical laboratory
- No recovery within interval
- Hydropunch or vapor sample screen interval

PID = Photo-ionization detector or organic vapor meter reading in parts per million (ppm)

fbg = Feet below grade

Blow Counts = Number of blows required to drive a California-modified split-spoon sampler using a 140-pound hammer falling freely 30 inches, recorded per 6-inch interval of a total 18-inch sample interval

(10YR 4/4) = Soil color according to Munsell Soil Color Charts

msl = Mean sea level

Soils logged according to the USCS.

UNIFIED SOILS CLASSIFICATION SYSTEM (USCS) SUMMARY

Major Divisions			Graphic	Group Symbol	Typical Description
Coarse-Grained Soils (>50% Sands and/or Gravels)	Gravel and Gravelly Soils	Clean Gravels (≤5% fines)		GW	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
		Gravels with Fines (≥15% fines)		GM	Silty gravels, gravel-sand-silt mixtures
				GC	Clayey gravels, gravel-sand-clay mixtures
	Sand and Sandy Soils	Clean Sands (≤5% fines)		SW	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sand, little or no fines
		Sands with Fines (≥15% fines)		SM	Silty sands, sand-silt mixtures
				SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils (>50% Silts and/or Clays)	Silts and Clays			ML	Inorganic silts, very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays			MH	Inorganic silts, micaceous or diatomaceous fine sand or silty soils
				CH	Inorganic clays of high plasticity
				OH	Organic clays of medium to high plasticity, organic silts
Highly Organic Soils				PT	Peat, humus, swamp soils with high organic contents

M:\Templates & Forms\Boring Logs\Boring Log Legend

CONESTOGA-ROVERS & ASSOCIATES

Conestoga - Rovers & Associates, Inc.
5900 Hollis Street, Suite A
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Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	VP-5
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	08-Nov-11
LOCATION	461 8th Street, Oakland, CA	**DRILLING COMPLETED**	08-Nov-11
PROJECT NUMBER	241501	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Nested Vapor points at 5ft and 10ft		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.5	
					GP		**GRAVEL with Sand (GP)**; dark yellowish brown (10YR 4/6); dry; 20% fine sand, 80% coarse gravel.	2.0	
1.4		VP-5- 5'		5	SP		**SAND (SP)** ; strong brown (7.5YR 4/6); dry; 5% silt, 95% fine sand.		Bentonite Slurry with Pellet Base; Monterey Sand #2/12; 6" Length of Stainless Steel Screen
1.6		VP-5- 9.5'		10				10.5	Bentonite Slurry with Pellet Base; Monterey Sand #2/12; 6" Length of Stainless Steel Screen; Bottom of Boring @ 10.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2415--\241501--\1243AED--1\461 8TH ST. OAKLAND.GPJ DEFAULT.GDT 1/23/12

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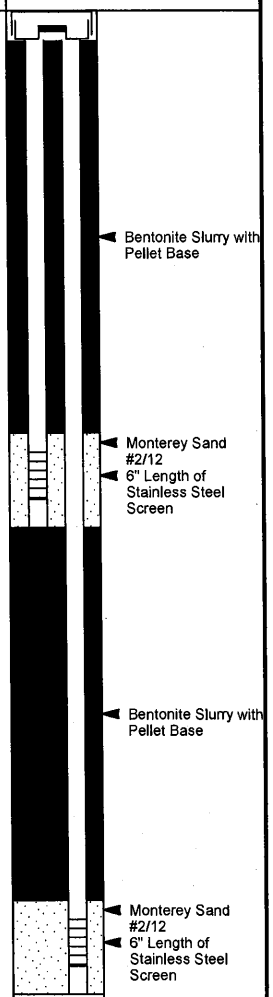
BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	VP-6
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	08-Nov-11
LOCATION	461 8th Street, Oakland, CA	**DRILLING COMPLETED**	08-Nov-11
PROJECT NUMBER	241501	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Nested Vapor points at 5ft and 10ft		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT	0.4
					GP		**GRAVEL with Sand (GP)**; dark yellowish brown (10YR 4/6); dry; 20% fine sand, 80% coarse gravel.	2.0
1.2		VP-6- 5'		5	SP		**SAND (SP)** ; strong brown (7.5YR 4/6); dry; 5% silt, 95% fine sand.	
1.2		VP-6- 9.5'		10				10.5

WELL DIAGRAM



WELL LOG (PID) I:\SHELL\6-CHARS\2415-1\241501-11243AED-1\461 8TH ST, OAKLAND.GPJ DEFAULT.GDT 1/23/12

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BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	VP-7
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	08-Nov-11
LOCATION	461 8th Street, Oakland, CA	**DRILLING COMPLETED**	08-Nov-11
PROJECT NUMBER	241501	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Nested Vapor points at 5ft and 10ft		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.5	
					GP		**GRAVEL with Sand (GP)**; dark yellowish brown (10YR 4/6); dry; 20% fine sand, 80% coarse gravel.	2.0	
1.3		VP-7- 5'		5	SP		**SAND (SP)** ; strong brown (7.5YR 4/6); dry; 5% silt, 95% fine sand.		Bentonite Slurry with Pellet Base; Monterey Sand #2/12; 6" Length of Stainless Steel Screen
1.4		VP-7- 9.5'		10				10.5	Bentonite Slurry with Pellet Base; Monterey Sand #2/12; 6" Length of Stainless Steel Screen; Bottom of Boring @ 10.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2415--1241501--11243AED--1\461 8TH ST, OAKLAND.GPJ DEFAULT.GDT 1/23/12

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BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	VP-8
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	09-Nov-11
LOCATION	461 8th Street, Oakland, CA	**DRILLING COMPLETED**	09-Nov-11
PROJECT NUMBER	241501	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Nested Vapor points at 5ft and 10ft		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.3	
							FILL; dark yellowish brown (10YR 3/6); dry.		
								4.5	
0.0		VP-8- 5'		5	SP		**SAND (SP)**; dark yellowish brown (10YR 3/6); dry; 5% silt, 95% fine sand.		
0.0		VP-8- 9.5'		10				10.5	

Bentonite Slurry with Pellet Base
Monterey Sand #2/12
6" Length of Stainless Steel Screen
Bentonite Slurry with Pellet Base
Monterey Sand #2/12
6" Length of Stainless Steel Screen
Bottom of Boring @ 10.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2415-1241501-11243AED-1\461 8TH ST, OAKLAND.GPJ DEFAULT.GDT 1/23/12

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BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	VP-9
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	08-Nov-11
LOCATION	461 8th Street, Oakland, CA	**DRILLING COMPLETED**	08-Nov-11
PROJECT NUMBER	241501	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Nested Vapor points at 5ft and 10ft		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.3	
					GP		**GRAVEL with Sand (GP)**; dark yellowish brown (10YR 4/6); dry; 20% fine sand, 80% coarse gravel.	2.0	Bentonite Slurry with Pellet Base
1.2		VP-9- 5'		5	SP		**SAND (SP)** ; strong brown (7.5YR 4/6); dry; 5% silt, 95% fine sand.		Monterey Sand #2/12 6" Length of Stainless Steel Screen
0.0		VP-9- 9.5'		10				10.5	Bentonite Slurry with Pellet Base Monterey Sand #2/12 6" Length of Stainless Steel Screen Bottom of Boring @ 10.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2415-1241501-11243AED-1\461 8TH ST, OAKLAND.GPJ DEFAULT.GDT 1/23/12

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BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	VP-10
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	09-Nov-11
LOCATION	461 8th Street, Oakland, CA	**DRILLING COMPLETED**	09-Nov-11
PROJECT NUMBER	241501	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Nested Vapor points at 5ft and 10ft		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT	0.3
							FILL; dark yellowish brown (10YR 3/6); dry.	
0.0		VP-10 -5'		5			@5 fbg; brown (10YR 4/3).	
0.0		VP-10 -9.5'		10	SP		**SAND with Gravel (SP)**; dark brown (10YR 3/3); dry; 5% silt, 80% fine sand, 15% coarse gravel.	9.5
								10.5

WELL DIAGRAM

- Bentonite Slurry with Pellet Base
- Monterey Sand #2/12
- 6" Length of Stainless Steel Screen
- Bentonite Slurry with Pellet Base
- Monterey Sand #2/12
- 6" Length of Stainless Steel Screen

Bottom of Boring @ 10.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2415-1241501-11243AED-1\461 8TH ST, OAKLAND.GPJ DEFAULT.GDT 1/23/12

Conestoga - Rovers & Associates, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	VP-11
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	09-Nov-11
LOCATION	461 8th Street, Oakland, CA	**DRILLING COMPLETED**	09-Nov-11
PROJECT NUMBER	241501	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Nested Vapor points at 5ft and 10ft		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.3	
							FILL ; dark yellowish brown (10YR 4/6); dry.		
								2.5	Bentonite Slurry with Pellet Base
0.0		VP-11 -5'		5	SP		**SAND (SP)** ; dark brown (7.5YR 3/3); dry; 5% silt, 95% fine sand.		Monterey Sand #2/12 6" Length of Stainless Steel Screen
0.0		VP-11 -9.5'		10				10.5	Bentonite Slurry with Pellet Base Monterey Sand #2/12 6" Length of Stainless Steel Screen Bottom of Boring @ 10.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2415--1241501--1\243AED--1\461 8TH ST, OAKLAND.GPJ DEFAULT.GDT 1/23/12

Conestoga - Rovers & Associates, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	VP-12
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	09-Nov-11
LOCATION	461 8th Street, Oakland, CA	**DRILLING COMPLETED**	09-Nov-11
PROJECT NUMBER	241501	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Nested Vapor points at 5ft and 10ft		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT	0.3
							FILL; dark yellowish brown (10YR 3/4).	
0.0		VP-12 -5'		5	SP		**SAND with Gravel (SP)**; dark yellowish brown (10YR 3/6); dry; 5% silt, 80% fine sand, 15% coarse gravel.	5.0
0.0		VP-12 -9.5'		10			@ 9.5 fbg; **SAND (SP)** ; 5% silt, 95% fine sand.	10.5

WELL DIAGRAM

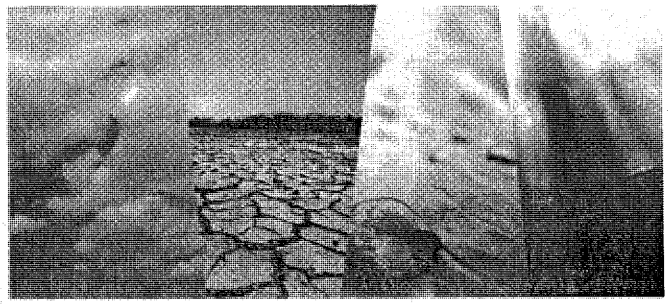
- Bentonite Slurry with Pellet Base
- Monterey Sand #2/12
- 6" Length of Stainless Steel Screen
- Bentonite Slurry with Pellet Base
- Monterey Sand #2/12
- 6" Length of Stainless Steel Screen
- Bottom of Boring @ 10.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2415-1241501-11243AED-1\461 8TH ST, OAKLAND.GPJ DEFAULT.GDT 1/23/12

Calscience Environmental Laboratories, Inc.

CALSCIENCE
WORK ORDER NUMBER: 11-12-0131

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Conestoga-Rovers & Associates

Client Project Name: 461 8th Street, Oakland, CA

Attention: Peter Schaefer
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Approved for release on 12/8/2011 by:
Xuan Dang
Project Manager

ResultLink ▸

Email your PM ▸

Calscience Environmental Laboratories 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 provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety. Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

Calscience Environmental Laboratories, Inc.

Contents

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Work Order Number: 11-12-0131

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Calscience Environmental Laboratories, Inc.

Case Narrative

Work Order # 11-12-0131

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 an 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 CalscienceTO-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 Analyte <= 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 analyte 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 Calibration 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

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Calscience Environmental Laboratories, Inc.

Client:	Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955	Work Order:	11-12-0131
		Project name:	461 8th Street, Oakland, CA
		Received:	12/02/11 10:40
Attn:	Peter Schaefer		

DETECTIONS SUMMARY

Client Sample ID Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
VP-7-5'						
Carbon Dioxide	**10.3**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**13.6**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**29**		22	ug/m3	EPA 8260B (M)	N/A
VP-7-10'						
Carbon Dioxide	**20.8**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**4.42**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**55**		22	ug/m3	EPA 8260B (M)	N/A
Xylenes (total)	**54**		43	ug/m3	EPA 8260B (M)	N/A
VP-12-5'						
Carbon Dioxide	**5.00**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**18.2**		0.500	%v	ASTM D-1946	N/A
VP-12-10'						
Carbon Dioxide	**12.9**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**9.62**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**35**		22	ug/m3	EPA 8260B (M)	N/A
VP-5-5'						
Carbon Dioxide	**7.46**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**16.2**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**57**		22	ug/m3	EPA 8260B (M)	N/A
Xylenes (total)	**54**		43	ug/m3	EPA 8260B (M)	N/A
VP-5-10'						
Carbon Dioxide	**19.9**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**5.06**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**28**		22	ug/m3	EPA 8260B (M)	N/A
VP-9-5'						
Carbon Dioxide	**8.19**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**15.9**		0.500	%v	ASTM D-1946	N/A
Helium	**0.0221**		0.0100	%v	ASTM D-1946 (M)	N/A
VP-9-10'						
Carbon Dioxide	**17.1**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**9.78**		0.500	%v	ASTM D-1946	N/A

*MDL is shown.

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Calscience Environmental Laboratories, Inc.

Client:	Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955	Work Order:	11-12-0131
		Project name:	461 8th Street, Oakland, CA
		Received:	12/02/11 10:40
Attn:	Peter Schaefer		

DETECTIONS SUMMARY

Client Sample ID Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
VP-11-5'						
Carbon Dioxide	**1.72**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**21.4**		0.500	%v	ASTM D-1946	N/A
VP-11-10'						
Carbon Dioxide	**3.53**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**19.7**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**30**		22	ug/m3	EPA 8260B (M)	N/A
VP-10-5'						
Carbon Dioxide	**3.66**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**19.1**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**57**		22	ug/m3	EPA 8260B (M)	N/A
Xylenes (total)	**58**		43	ug/m3	EPA 8260B (M)	N/A
VP-10-10'						
Carbon Dioxide	**6.63**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**16.3**		0.500	%v	ASTM D-1946	N/A
VP-8-5'						
Carbon Dioxide	**1.80**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**21.2**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**32**		22	ug/m3	EPA 8260B (M)	N/A
VP-8-10'						
Carbon Dioxide	**5.98**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**17.1**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**31**		22	ug/m3	EPA 8260B (M)	N/A

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

*MDL is shown.

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Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	12/02/11
19449 Riverside Drive, Suite 230	Work Order No:	11-12-0131
Sonoma, CA 95476-6955	Preparation:	N/A
	Method:	ASTM D-1946
	Units:	%v

Project: 461 8th Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-7-5'	11-12-0131-1-B	12/01/11 09:53	Air	GC 36	N/A	12/02/11 14:53	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	13.6	0.500	1	
Carbon Dioxide	10.3	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-7-10'	11-12-0131-2-B	12/01/11 10:03	Air	GC 36	N/A	12/02/11 15:12	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	4.42	0.500	1	
Carbon Dioxide	20.8	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-12-5'	11-12-0131-3-B	12/01/11 09:16	Air	GC 36	N/A	12/02/11 15:31	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	18.2	0.500	1	
Carbon Dioxide	5.00	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-12-10'	11-12-0131-4-B	12/01/11 09:31	Air	GC 36	N/A	12/02/11 15:52	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	9.62	0.500	1	
Carbon Dioxide	12.9	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-5-5'	11-12-0131-5-B	12/01/11 08:13	Air	GC 36	N/A	12/02/11 16:18	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	16.2	0.500	1	
Carbon Dioxide	7.46	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-5-10'	11-12-0131-6-B	12/01/11 08:20	Air	GC 36	N/A	12/02/11 16:37	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	5.06	0.500	1	
Carbon Dioxide	19.9	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-9-5'	11-12-0131-7-B	12/01/11 07:39	Air	GC 36	N/A	12/02/11 19:33	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	15.9	0.500	1	
Carbon Dioxide	8.19	0.500	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Date Received: 12/02/11
Work Order No: 11-12-0131
Preparation: N/A
Method: ASTM D-1946
Units: %v

Project: 461 8th Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-9-10'	11-12-0131-8-B	12/01/11 07:49	Air	GC 36	N/A	12/02/11 17:24	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	9.78	0.500	1	
Carbon Dioxide	17.1	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-11-5'	11-12-0131-9-B	12/01/11 07:07	Air	GC 36	N/A	12/02/11 17:44	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	21.4	0.500	1	
Carbon Dioxide	1.72	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-11-10'	11-12-0131-10-B	12/01/11 07:16	Air	GC 36	N/A	12/02/11 18:03	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	19.7	0.500	1	
Carbon Dioxide	3.53	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-10-5'	11-12-0131-11-B	12/01/11 06:33	Air	GC 36	N/A	12/02/11 18:21	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	19.1	0.500	1	
Carbon Dioxide	3.66	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-10-10'	11-12-0131-12-B	12/01/11 06:45	Air	GC 36	N/A	12/02/11 18:39	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	16.3	0.500	1	
Carbon Dioxide	6.63	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-8-5'	11-12-0131-13-B	12/01/11 05:50	Air	GC 36	N/A	12/02/11 18:57	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	21.2	0.500	1	
Carbon Dioxide	1.80	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-8-10'	11-12-0131-14-B	12/01/11 06:05	Air	GC 36	N/A	12/02/11 19:15	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	17.1	0.500	1	
Carbon Dioxide	5.98	0.500	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	12/02/11
19449 Riverside Drive, Suite 230	Work Order No:	11-12-0131
Sonoma, CA 95476-6955	Preparation:	N/A
	Method:	ASTM D-1946
	Units:	%v

Project: 461 8th Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-03-002-1,441**	**N/A**	**Air**	**GC 36**	**N/A**	**12/02/11 10:58**	**111202L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	ND	0.500	1	
Carbon Dioxide	ND	0.500	1		Nitrogen	ND	0.500	1	
Carbon Monoxide	ND	0.500	1						

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Date Received: 12/02/11
Work Order No: 11-12-0131
Preparation: N/A
Method: ASTM D-1946 (M)

Project: 461 8th Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-7-5'	11-12-0131-1-B	12/01/11 09:53	Air	GC 55	N/A	12/02/11 14:58	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-7-10'	11-12-0131-2-B	12/01/11 10:03	Air	GC 55	N/A	12/02/11 15:23	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-12-5'	11-12-0131-3-B	12/01/11 09:16	Air	GC 55	N/A	12/02/11 15:45	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-12-10'	11-12-0131-4-B	12/01/11 09:31	Air	GC 55	N/A	12/02/11 16:07	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-5-5'	11-12-0131-5-B	12/01/11 08:13	Air	GC 55	N/A	12/02/11 16:29	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-5-10'	11-12-0131-6-B	12/01/11 08:20	Air	GC 55	N/A	12/02/11 17:13	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Date Received: 12/02/11
Work Order No: 11-12-0131
Preparation: N/A
Method: ASTM D-1946 (M)

Project: 461 8th Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-9-5'	11-12-0131-7-B	12/01/11 07:39	Air	GC 55	N/A	12/02/11 17:39	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	0.0221	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-9-10'	11-12-0131-8-B	12/01/11 07:49	Air	GC 55	N/A	12/02/11 18:05	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-11-5'	11-12-0131-9-B	12/01/11 07:07	Air	GC 55	N/A	12/02/11 18:28	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-11-10'	11-12-0131-10-B	12/01/11 07:16	Air	GC 55	N/A	12/02/11 18:49	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-10-5'	11-12-0131-11-B	12/01/11 06:33	Air	GC 55	N/A	12/02/11 19:10	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-10-10'	11-12-0131-12-B	12/01/11 06:45	Air	GC 55	N/A	12/02/11 19:35	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Date Received: 12/02/11
Work Order No: 11-12-0131
Preparation: N/A
Method: ASTM D-1946 (M)

Project: 461 8th Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-8-5'	11-12-0131-13-B	12/01/11 05:50	Air	GC 55	N/A	12/02/11 19:56	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-8-10'	11-12-0131-14-B	12/01/11 06:05	Air	GC 55	N/A	12/02/11 21:09	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-872-193	N/A	Air	GC 55	N/A	12/02/11 13:13	111202L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v
Hydrogen	ND	0.0100	1		%v

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	12/02/11
19449 Riverside Drive, Suite 230	Work Order No:	11-12-0131
Sonoma, CA 95476-6955	Preparation:	N/A
	Method:	EPA 8260B (M)
	Units:	ug/m3
Project: 461 8th Street, Oakland, CA		Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-7-5'	11-12-0131-1-A	12/01/11 09:53	Air	GC/MS YY	N/A	12/02/11 18:15	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	29	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	105	47-156			1,2-Dichloroethane-d4	102	47-156		
Toluene-d8	93	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-7-10'	11-12-0131-2-A	12/01/11 10:03	Air	GC/MS YY	N/A	12/02/11 19:04	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	55	22	1	
Toluene	ND	19	1		Xylenes (total)	54	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	102	47-156			1,2-Dichloroethane-d4	104	47-156		
Toluene-d8	98	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-12-5'	11-12-0131-3-A	12/01/11 09:16	Air	GC/MS YY	N/A	12/02/11 19:54	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	ND	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	107	47-156			1,2-Dichloroethane-d4	102	47-156		
Toluene-d8	99	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-12-10'	11-12-0131-4-A	12/01/11 09:31	Air	GC/MS YY	N/A	12/02/11 20:44	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	35	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	109	47-156			1,2-Dichloroethane-d4	102	47-156		
Toluene-d8	92	47-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	12/02/11
19449 Riverside Drive, Suite 230	Work Order No:	11-12-0131
Sonoma, CA 95476-6955	Preparation:	N/A
	Method:	EPA 8260B (M)
	Units:	ug/m3
Project: 461 8th Street, Oakland, CA		Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-5-5'	11-12-0131-5-A	12/01/11 08:13	Air	GC/MS YY	N/A	12/02/11 21:33	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	57	22	1	
Toluene	ND	19	1		Xylenes (total)	54	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	103	47-156			1,2-Dichloroethane-d4	103	47-156		
Toluene-d8	97	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-5-10'	11-12-0131-6-A	12/01/11 08:20	Air	GC/MS YY	N/A	12/02/11 22:23	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	28	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	105	47-156			1,2-Dichloroethane-d4	103	47-156		
Toluene-d8	99	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-9-5'	11-12-0131-7-A	12/01/11 07:39	Air	GC/MS YY	N/A	12/02/11 23:13	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	ND	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	106	47-156			1,2-Dichloroethane-d4	102	47-156		
Toluene-d8	98	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-9-10'	11-12-0131-8-A	12/01/11 07:49	Air	GC/MS YY	N/A	12/03/11 00:03	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	ND	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	105	47-156			1,2-Dichloroethane-d4	104	47-156		
Toluene-d8	102	47-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	12/02/11
19449 Riverside Drive, Suite 230	Work Order No:	11-12-0131
Sonoma, CA 95476-6955	Preparation:	N/A
	Method:	EPA 8260B (M)
	Units:	ug/m3
Project: 461 8th Street, Oakland, CA		Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-11-5'	11-12-0131-9-A	12/01/11 07:07	Air	GC/MS YY	N/A	12/03/11 00:53	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	ND	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	103	47-156			1,2-Dichloroethane-d4	103	47-156		
Toluene-d8	98	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-11-10'	11-12-0131-10-A	12/01/11 07:16	Air	GC/MS YY	N/A	12/03/11 01:43	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	30	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	100	47-156			1,2-Dichloroethane-d4	104	47-156		
Toluene-d8	100	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-10-5'	11-12-0131-11-A	12/01/11 06:33	Air	GC/MS YY	N/A	12/03/11 02:33	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	57	22	1	
Toluene	ND	19	1		Xylenes (total)	58	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	105	47-156			1,2-Dichloroethane-d4	103	47-156		
Toluene-d8	98	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-10-10'	11-12-0131-12-A	12/01/11 06:45	Air	GC/MS YY	N/A	12/03/11 03:23	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	ND	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	105	47-156			1,2-Dichloroethane-d4	103	47-156		
Toluene-d8	101	47-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Date Received: 12/02/11
Work Order No: 11-12-0131
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 461 8th Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-8-5'	11-12-0131-13-A	12/01/11 05:50	Air	GC/MS YY	N/A	12/03/11 04:13	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	32	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	101	47-156			1,2-Dichloroethane-d4	104	47-156		
Toluene-d8	100	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-8-10'	11-12-0131-14-A	12/01/11 06:05	Air	GC/MS YY	N/A	12/03/11 05:03	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	31	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	104	47-156			1,2-Dichloroethane-d4	104	47-156		
Toluene-d8	117	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-13-041-691	N/A	Air	GC/MS YY	N/A	12/02/11 13:19	111202L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	ND	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	95	47-156			1,2-Dichloroethane-d4	106	47-156		
Toluene-d8	98	47-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Date Received: 12/02/11
Work Order No: 11-12-0131
Preparation: N/A
Method: EPA TO-3M

Project: 461 8th Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-7-5'	11-12-0131-1-A	12/01/11 09:53	Air	GC 19	N/A	12/02/11 15:08	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-7-10'	11-12-0131-2-A	12/01/11 10:03	Air	GC 19	N/A	12/02/11 15:45	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-12-5'	11-12-0131-3-A	12/01/11 09:16	Air	GC 19	N/A	12/02/11 16:24	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-12-10'	11-12-0131-4-A	12/01/11 09:31	Air	GC 19	N/A	12/02/11 17:15	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-5-5'	11-12-0131-5-B	12/01/11 08:13	Air	GC 19	N/A	12/02/11 18:06	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-5-10'	11-12-0131-6-B	12/01/11 08:20	Air	GC 19	N/A	12/02/11 18:51	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Date Received: 12/02/11
Work Order No: 11-12-0131
Preparation: N/A
Method: EPA TO-3M

Project: 461 8th Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-9-5'	11-12-0131-7-B	12/01/11 07:39	Air	GC 19	N/A	12/02/11 19:39	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-9-10'	11-12-0131-8-B	12/01/11 07:49	Air	GC 19	N/A	12/02/11 20:52	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-11-5'	11-12-0131-9-B	12/01/11 07:07	Air	GC 19	N/A	12/02/11 21:47	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-11-10'	11-12-0131-10-B	12/01/11 07:16	Air	GC 19	N/A	12/02/11 23:06	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-10-5'	11-12-0131-11-B	12/01/11 06:33	Air	GC 19	N/A	12/03/11 11:03	111203L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-10-10'	11-12-0131-12-B	12/01/11 06:45	Air	GC 19	N/A	12/03/11 11:41	111203L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Date Received: 12/02/11
Work Order No: 11-12-0131
Preparation: N/A
Method: EPA TO-3M

Project: 461 8th Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-8-5'	11-12-0131-13-B	12/01/11 05:50	Air	GC 19	N/A	12/03/11 12:18	111203L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-8-10'	11-12-0131-14-B	12/01/11 06:05	Air	GC 19	N/A	12/03/11 13:03	111203L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-431-25	N/A	Air	GC 19	N/A	12/02/11 10:43	111202L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-431-26	N/A	Air	GC 19	N/A	12/03/11 10:13	111203L01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates	Date Received:	12/02/11
19449 Riverside Drive, Suite 230	Work Order No:	11-12-0131
Sonoma, CA 95476-6955	Preparation:	N/A
	Method:	EPA TO-3M

Project: 461 8th Street, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
VP-11-10	Air	GC 19	N/A	12/02/11	111202D01

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	ND	ND	NA	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Date Received: 12/02/11
Work Order No: 11-12-0131
Preparation: N/A
Method: EPA TO-3M

Project: 461 8th Street, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
VP-8-10'	Air	GC 19	N/A	12/03/11	111203D01

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	ND	ND	NA	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates		Date Received:	N/A
19449 Riverside Drive, Suite 230		Work Order No:	11-12-0131
Sonoma, CA 95476-6955		Preparation:	N/A
		Method:	ASTM D-1946

Project: 461 8th Street, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1,441	Air	GC 36	N/A	12/02/11	111202L01

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	10.12	102	102	80-120	0	0-30	
Carbon Dioxide	10.07	113	113	80-120	0	0-30	
Carbon Monoxide	9.930	107	107	80-120	0	0-30	
Oxygen + Argon	3.500	101	100	80-120	0	0-30	
Nitrogen	10.02	98	98	80-120	0	0-30	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates	Date Received:	N/A
19449 Riverside Drive, Suite 230	Work Order No:	11-12-0131
Sonoma, CA 95476-6955	Preparation:	N/A
	Method:	ASTM D-1946 (M)

Project: 461 8th Street, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-193	Air	GC 55	N/A	12/02/11	111202L01

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Helium	1.000	86	85	80-120	1	0-30	
Hydrogen	1.000	92	91	80-120	2	0-30	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476-6955

Date Received: N/A
Work Order No: 11-12-0131
Preparation: N/A
Method: EPA 8260B (M)

Project: 461 8th Street, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-041-691	Air	GC/MS YY	N/A	12/02/11	111202L01

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	79.87	105	108	60-156	44-172	3	0-40	
Toluene	94.21	107	107	56-146	41-161	0	0-43	
Ethylbenzene	108.6	109	110	52-154	35-171	2	0-38	
Xylenes (total)	325.7	110	111	42-156	23-175	1	0-41	
Methyl-t-Butyl Ether (MTBE)	90.13	105	107	45-147	28-164	2	0-25	
Tert-Butyl Alcohol (TBA)	151.6	107	109	60-140	47-153	2	0-35	
Diisopropyl Ether (DIPE)	104.5	107	110	60-140	47-153	3	0-35	
Ethyl-t-Butyl Ether (ETBE)	104.5	108	110	60-140	47-153	2	0-35	
Tert-Amyl-Methyl Ether (TAME)	104.5	104	107	60-140	47-153	3	0-35	
Naphthalene	131.1	106	108	60-140	47-153	2	0-30	
Ethanol	188.4	107	110	47-137	32-152	2	0-35	
1,1-Difluoroethane	67.54	107	109	78-156	65-169	2	0-35	
Isopropanol	61.45	113	116	78-156	65-169	3	0-35	

Total number of LCS compounds : 13
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 Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 11-12-0131

Qualifier	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.
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.

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Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
☑ CALSCIENCE ( )
☐ SPL ( )
☐ XENCO ( )
☐ ~~TEST AMERICA~~ ( )
☐ OTHER ( )

Please Check Appropriate Box:
☐ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☑ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER

Print Bill To Contact Name: Peter Schafer 241501
PO #
INCIDENT # (ENV SERVICES) ☐ CHECK IF NO INCIDENT # APPLIES
SAP #
DATE: 2/12/2010
PAGE: 1 of 2

SAMPLING COMPANY: Conestoga-Rovers & Associates
LOG CODE: CRAW
ADDRESS: 19449 Riverside Drive, Suite 230, Sonoma, California 95476
PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer
TELEPHONE: 510-420-3319
FAX: 707-935-6649
E-MAIL: pschaefer@craworld.com

SITE ADDRESS: Street and City: 461 8th Street, Oakland
State: CA
GLOBAL ID NO.: T0600101263
EDF DELIVERABLE TO (Name, Company, Office Location): Felicia Ballard, CRA, Sonoma
PHONE NO.: 707-935-4850
E-MAIL: sonomaedf@craworld.com
CONSULTANT PROJECT NO.: 11-12-0131
SAMPLER NAME(S) (Print): Cristina Arganbright

TURNAROUND TIME (CALENDAR DAYS): ☑ 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 final report to Shell.Lab.Billing@craworld.com
Report results in µg/m³

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSES

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH-GRO, Purgeable (8015M)	TPH-DRO, Extractable (8015M)	TPHg (8015M)	BTEX (8260B)	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)	Naphthalene (8260B)	02 ASTM D1946	Isopropyl Alcohol	02 ASTM D1946	04 ASTM D1946	24 ASTM D1946	Container Pid Readings or Laboratory Notes
1	VP-7-5'	12/1	0953	Vapor						2	X			X		X				X	X			X	X	X	X	X	X	~~Container ID: LC134~~
2	VP-7-10'	12/1	1003	Vapor						2	X			X		X				X	X			X	X	X	X	X	X	~~Container ID: LC108~~
3	VP-12-5'	12/1	0916	Vapor						2	X			X		X				X	X			X	X	X	X	X	X	~~Container ID: LC269~~
4	VP-12-10'	12/1	0931	Vapor						2	X			X		X				X	X			X	X	X	X	X	X	~~Container ID:~~
5	VP-5-5'	12/1	0833	Vapor						2	X			X		X				X	X			X	X	X	X	X	X	~~Container ID: LC272~~
6	VP-5-10'	12/1	0820	Vapor						2	X			X		X				X	X			X	X	X	X	X	X	~~Container ID: LC287~~
7	VP-9-5'	12/1	0739	Vapor						2	X			X		X				X	X			X	X	X	X	X	X	~~Container ID: LC321~~
8	VP-9-10'	12/1	0749	Vapor						2	X			X		X				X	X			X	X	X	X	X	X	
9	VP-11-5'	12/1	0907	Vapor						2	X			X		X				X	X			X	X	X	X	X	X	
10	VP-11-10'	12/1	0716	Vapor						2	X			X		X				X	X			X	X	X	X	X	X	

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		12/1/11	1210
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 12/2/11	Time: 1040

05/2/06 Revision

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Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- ☑ CALSCIENCE (_____)
- ☐ SPL (_____)
- ☐ XENCO (_____)
- ☑ ~~TEST AMERICA~~ (_____)
- ☐ OTHER (_____)

Please Check Appropriate Box:
☐ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☑ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER _____

Print Bill To Contact Name: Peter Schafer 241501
PO #:
INCIDENT # (ENV SERVICES):
☐ CHECK IF NO INCIDENT # APPLIES
SAP #:
DATE: 2/12/2010
PAGE: 2 of 2

SAMPLING COMPANY: Conestoga-Rovers & Associates
LOG CODE: CRAW
SITE ADDRESS: Street and City: 461 8th Street, Oakland
State: CA
GLOBAL ID NO.: T0600101263
ADDRESS: 19449 Riverside Drive, Suite 230, Sonoma, California 95476
EDF DELIVERABLE TO (Name, Company, Office Location): Felicia Ballard, CRA, Sonoma
PHONE NO.: 707-935-4850
E-MAIL: sonomaedf@craworld.com
CONSULTANT PROJECT NO.: 241513-85-11.05
PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer
TELEPHONE: 510-420-3319
FAX: 707-935-6649
E-MAIL: pschaefer@craworld.com
SAMPLER NAME(S) (Print): Cristina Arganbright
LAB USE ONLY: 12-0131

TURNAROUND TIME (CALENDAR DAYS): ☑ 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 final report to Shell.Lab.Billing@craworld.com
Report results in µg/m³

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ 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 (TO-15/8260B)	TPH-DRO, Extractable (8015M)	TPHg (8015M)	BTEX (8260B)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA/TAME/TAETO-H (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)	Naphthalene	O2 ASTM D1946	Isopropyl Alcohol	CO2 ASTM D1946	CH4 ASTM D1946	He ASTM D1946	Container PID Readings or Laboratory Notes
11	VP-10-5'	12/1	1033	Vapor						2	X			X	X	X				X	X			X	X	X	X	X	Container ID: LC134
12	VP-10-10'	12/1	0945	Vapor						2	X			X	X	X				X	X			X	X	X	X	X	~~Container ID: LC108~~
13	VP-8-5'	12/1	0950	Vapor						2	X			X	X	X				X	X			X	X	X	X	X	~~Container ID: LC265~~
14	VP-8-10'	12/1	0905	~~Vapor~~						2	X			X	X	X				X	X			X	X	X	X	X	~~Container ID:~~
				Vapor						1	X					X				X	X					X				~~Container ID: LC272~~
				Vapor						1	X					X				X	X					X				Container ID: LC287
				Vapor						1	X					X				X	X					X				Container ID: LC324

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	CEL	12/1/11	12:10
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		12/2/11	1040

05/2/06 Revision

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0131

GSO
GOLDEN STATE OVERNIGHT

< 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 #: 517944345

NPS

ORC **D**

GARDEN GROVE

D92843A

96526456

Print Date : 12/01/11 12:59 PM

Package 1 of 1

Send Label To Printer | ☑ Print All | Edit Shipment | Finish

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.
STEP 2 - Fold this page in half.
STEP 3 - Securely attach this label to your package, do not cover the barcode.
STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

Send Label Via Email | Create Return Label

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section.
Our liability for loss or damage to any package is limited to your actual damages or $100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is $500. For other shipments the highest declared value is $10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is $500. Items of "extraordinary value" include, but or not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-12-0131

SAMPLE RECEIPT FORM

Box 1 of 1

CLIENT: CRA DATE: 12/02/11

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature ____.____ °C + 0.5 °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:** b.c

CUSTODY SEALS INTACT:

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

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

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: ☑ 2 Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** ps

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

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:**_____

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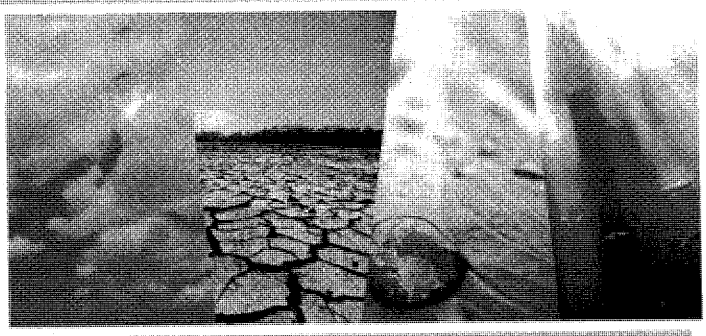
Calscience
Environmental
Laboratories, Inc.

CALSCIENCE
WORK ORDER NUMBER: 12-01-0249

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Conestoga-Rovers & Associates

Client Project Name: 461 8th St, Oakland, CA

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

Approved for release on 01/13/2012 by:
Xuan Dang
Project Manager

ResultLink ›

Email your PM ›

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: 461 8th St, Oakland, CA
Work Order Number: 12-01-0249

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Calscience Environmental Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

Case Narrative

Work Order # 12-01-0249

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 an 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 CalscienceTO-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 Analyte <= 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 analyte 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 Calibration 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.

Client:	Conestoga-Rovers & Associates 5900 Hollis Street, Suite A Emeryville, CA 94608-2008	Work Order:	12-01-0249
		Project name:	461 8th St, Oakland, CA
		Received:	01/06/12 08:00
Attn:	Peter Schaefer		

DETECTIONS SUMMARY

Client Sample ID Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
VP-6-5'						
Carbon Dioxide	**3.51**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**19.0**		0.500	%v	ASTM D-1946	N/A
Nitrogen	**77.4**		0.500	%v	ASTM D-1946	N/A
Helium	**0.276**		0.0100	%v	ASTM D-1946 (M)	N/A
Ethylbenzene	**88**		22	ug/m3	EPA 8260B (M)	N/A
Xylenes (total)	**120**		43	ug/m3	EPA 8260B (M)	N/A
VP-6-9.5'						
Carbon Dioxide	**14.2**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**9.40**		0.500	%v	ASTM D-1946	N/A
Nitrogen	**76.4**		0.500	%v	ASTM D-1946	N/A
Helium	**0.792**		0.0100	%v	ASTM D-1946 (M)	N/A
Ethylbenzene	**48**		22	ug/m3	EPA 8260B (M)	N/A
Xylenes (total)	**55**		43	ug/m3	EPA 8260B (M)	N/A

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

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 01/06/12
Work Order No: 12-01-0249
Preparation: N/A
Method: ASTM D-1946
Units: %v

Project: 461 8th St, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-6-5'	**12-01-0249-1-A**	**01/05/12 09:12**	**Air**	**GC 34**	**N/A**	**01/06/12 12:02**	**120106L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	19.0	0.500	1	
Carbon Dioxide	3.51	0.500	1		Nitrogen	77.4	0.500	1	
Carbon Monoxide	ND	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-6-9.5'	**12-01-0249-2-A**	**01/05/12 09:29**	**Air**	**GC 34**	**N/A**	**01/06/12 12:38**	**120106L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	9.40	0.500	1	
Carbon Dioxide	14.2	0.500	1		Nitrogen	76.4	0.500	1	
Carbon Monoxide	ND	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-03-002-1,468**	**N/A**	**Air**	**GC 34**	**N/A**	**01/06/12 10:52**	**120106L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	ND	0.500	1	
Carbon Dioxide	ND	0.500	1		Nitrogen	ND	0.500	1	
Carbon Monoxide	ND	0.500	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 01/06/12
Work Order No: 12-01-0249
Preparation: N/A
Method: ASTM D-1946 (M)

Project: 461 8th St, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-6-5'	**12-01-0249-1-A**	**01/05/12 09:12**	**Air**	**GC 55**	**N/A**	**01/06/12 11:42**	**120106L01**

Parameter	Result	RL	DF	Qual	Units
Helium	0.276	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-6-9.5'	**12-01-0249-2-A**	**01/05/12 09:29**	**Air**	**GC 55**	**N/A**	**01/06/12 00:00**	**120106L01**

Parameter	Result	RL	DF	Qual	Units
Helium	0.792	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-206**	**N/A**	**Air**	**GC 55**	**N/A**	**01/06/12 11:12**	**120106L01**

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0100	1		%v
Hydrogen	ND	0.0100	1		%v

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 01/06/12
Work Order No: 12-01-0249
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 461 8th St, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-6-5'	**12-01-0249-1-A**	**01/05/12 09:12**	**Air**	**GC/MS YY**	**N/A**	**01/06/12 23:23**	**120106L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	88	22	1	
Toluene	ND	19	1		Xylenes (total)	120	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	106	47-156			1,2-Dichloroethane-d4	101	47-156		
Toluene-d8	93	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-6-9.5'	**12-01-0249-2-A**	**01/05/12 09:29**	**Air**	**GC/MS YY**	**N/A**	**01/07/12 00:35**	**120106L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	48	22	1	
Toluene	ND	19	1		Xylenes (total)	55	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	104	47-156			1,2-Dichloroethane-d4	105	47-156		
Toluene-d8	101	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-13-041-749**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**01/06/12 16:05**	**120106L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Ethylbenzene	ND	22	1	
Toluene	ND	19	1		Xylenes (total)	ND	43	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	102	47-156			1,2-Dichloroethane-d4	104	47-156		
Toluene-d8	96	47-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates		Date Received:	01/06/12
5900 Hollis Street, Suite A		Work Order No:	12-01-0249
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	EPA TO-3M

Project: 461 8th St, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-6-5'	**12-01-0249-1-A**	**01/05/12 09:12**	**Air**	**GC 19**	**N/A**	**01/06/12 12:55**	**120106L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-6-9.5'	**12-01-0249-2-A**	**01/05/12 09:29**	**Air**	**GC 19**	**N/A**	**01/06/12 13:37**	**120106L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-431-33**	**N/A**	**Air**	**GC 19**	**N/A**	**01/06/12 12:16**	**120106L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	3800	1		ug/m3

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 01/06/12
Work Order No: 12-01-0249
Preparation: N/A
Method: EPA TO-3M

Project: 461 8th St, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
VP-6-9.5'	**Air**	**GC 19**	**N/A**	**01/06/12**	**120106D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	ND	ND	NA	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: N/A
Work Order No: 12-01-0249
Preparation: N/A
Method: ASTM D-1946

Project: 461 8th St, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1,468	Air	GC 34	N/A	01/06/12	120106L01

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	10.12	94	95	80-120	1	0-30	
Carbon Dioxide	10.07	97	97	80-120	0	0-30	
Carbon Monoxide	9.930	103	104	80-120	1	0-30	
Oxygen + Argon	3.500	96	97	80-120	1	0-30	
Nitrogen	10.02	97	98	80-120	1	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates		Date Received:	N/A
5900 Hollis Street, Suite A		Work Order No:	12-01-0249
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	ASTM D-1946 (M)

Project: 461 8th St, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-206	Air	GC 55	N/A	01/06/12	120106L01

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Helium	1.000	91	90	80-120	1	0-30	
Hydrogen	1.000	87	86	80-120	1	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates		Date Received:	N/A
5900 Hollis Street, Suite A		Work Order No:	12-01-0249
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	EPA 8260B (M)

Project: 461 8th St, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-041-749	Air	GC/MS YY	N/A	01/06/12	120106L01

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	79.87	106	110	60-156	4	0-40	
Toluene	94.21	109	112	56-146	3	0-43	
Ethylbenzene	108.6	110	114	52-154	4	0-38	
Xylenes (total)	325.7	110	115	42-156	4	0-41	
1,1-Difluoroethane	67.54	107	112	78-156	4	0-35	
Isopropanol	61.45	193	116	78-156	50	0-35	X

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

Work Order Number: 12-01-0249

Qualifier	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.
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.
MPN - Most Probable Number

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)

☑ CALSCIENCE (_____)
☐ SPL (_____)
☐ XENCO (_____)
☐ TEST AMERICA (_____)
☐ OTHER (_____)

Please Check Appropriate Box:

☐ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☑ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER _____

Print Bill To Contact Name: Peter Schaefer 241501

INCIDENT # (ENV SERVICES): ~~9 [illegible] 9~~

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 2/12/2010

PAGE: 1 of 1

PO #

SAP #

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	GLOBAL ID NO.:
Conestoga-Rovers & Associates	CRAW	461 8th Street, Oakland	CA	T06000101263

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.: 241501-05-11.05

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

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

SAMPLER NAME(S) (Print): Cristina Arganbright

LAB USE ONLY: 12-01-0249

TURNAROUND TIME (CALENDAR DAYS):
☑ 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

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ 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 (8260B)	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	Argon ASTMD 1946	O2 ASMD 1946	Helium ASTMD 1946 (M)	CO2 ASTMD 1946			TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
1	VP-6-5'	1/5/12	0912	Vapor						1	X				X									X	X	X	X	X			Container ID: LC134
2	VP-6-9.5'	1/5/12	0929	Vapor						1	X				X									X	X	X	X	X			Container ID: LC108
																															Container ID: LC265
																															~~Container ID:~~
																															Container ID: LC272
																															Container ID: LC287
																															Container ID: LC321

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	Tom O'Malley CCR	1/5/12	1255
Relinquished by: (Signature) Tom O'Malley TO 650 1730 1/5/12	Received by: (Signature) CCR	Date: 01/06/12	Time: 0800
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

05/2/08 Revision

0249

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 #: 518179814

NPS

ORC

A

GARDEN GROVE

D92841A

97477485

Print Date : 01/05/12 13:06 PM

Package 1 of 1

Send Label To Printer | ☑ Print All | Edit Shipment | Finish

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.
STEP 2 - Fold this page in half.
STEP 3 - Securely attach this label to your package, do not cover the barcode.
STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

Send Label Via Email | Create Return Label

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section.
Our liability for loss or damage to any package is limited to your actual damages or $100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is $500. For other shipments the highest declared value is $10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is $500. Items of "extraordinary value" include, but or not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-01-0249

SAMPLE RECEIPT FORM

Box 1 of 1

CLIENT: CRA

DATE: 01/06/12

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

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 Initial: NC

CUSTODY SEALS INTACT:

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

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

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® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** NC

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

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:**_____