CONESTOGA-ROVERS & ASSOCIATES

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TRANSMITTAL

DATE: June 5, 2015

REFERENCE NO.: 240897

PROJECT NAME: 4411 Foothill Boulevard, Oakland

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

RECEIVED
By Alameda County Environmental Health 3:22 pm, Jun 05, 2015

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QUANTITY	DESCRIPTION
1	Subsurface Investigation Report

- ☐ As Requested
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- ☐
- ☐

COMMENTS:
If you have any questions regarding the contents of this document, please call the CRA project manager Peter Schaefer at (510) 420-3319 or the Shell program manager Perry Pineda at (425) 413-1164.

Copy to: Perry Pineda, Shell Oil Products US (electronic copy)
Laura Wong, Phua Management (property owner representative) (electronic copy)
Jasleen and Kamaljit Assi, 6562 Graham Avenue, Newark, California 94560-3713

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: Correspondence File

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

Re: 4411 Foothill Boulevard
Oakland, California
SAP Code 135686
Incident No. 98995746
ACEH Case No. RO0000415

Dear Mr. Wickham:

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

As always, please feel free to contact me directly at (425) 413-1164 with any questions or concerns.

Sincerely,
Shell Oil Products US

Perry Pineda
Senior Environmental Program Manager

SUBSURFACE INVESTIGATION REPORT

FORMER SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD
OAKLAND, CALIFORNIA

SAP CODE **135686**
INCIDENT NO. **98995746**
AGENCY NO. **RO0000415**

Prepared by:
Conestoga-Rovers & Associates

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JUNE 5, 2015
REF. NO. 240897 (31)
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EXECUTIVE SUMMARY

- Four off-site soil vapor probes (V-13 through V-16) were installed.
- Due to water in probe V-15, we were unable to collect a sample.
- No COCs were detected in any soil vapor samples at concentrations exceeding RWQCB ESLs, with the exception of 830,000 µg/m^3 TPHg in the sample collected from probe V-16.
- Benzene, ethylbenzene, and naphthalene were not detected in the soil vapor, which demonstrates that the site meets SWRCB Low-Threat Closure Policy media-specific soil vapor criteria.
- Based on these soil vapor results, no additional off-site investigation is recommended. CRA recommends completing a site conceptual model.

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 to the residence at 1724-1728 High Street, Oakland. CRA followed the scope of work and procedures presented in our September 10, 2014 *Subsurface Investigation Work Plan*, which was approved by Alameda County Environmental Health (ACEH) in their September 23, 2014 letter. ACEH's January 14, 2015 electronic correspondence extended the due date for this report to June 6, 2015.

The site is a former Shell service station located on the southern corner of the intersection of Foothill Boulevard and High Street in Oakland, California (Figure 1). The former station layout included three first-generation underground storage tanks (USTs) (1958 to 1971), three second-generation USTs (1971 to 1984), three third-generation gasoline USTs (1984 to 2002), a waste oil UST (removed 1992), and four product dispensers (removed 2002) as shown on Figure 2. Land use in the vicinity of the site is a mix of commercial and residential, with gasoline service stations occupying the northern and western corners of the intersection. The subject property is currently developed as a strip mall with a variety of commercial and retail uses.

A summary of previous work performed at the site and additional background information is presented in CRA's September 10, 2014 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

April 14, 2015 (soil vapor probe installation) and April 27, 2015 (soil vapor probe sampling).

2.3 DRILLING COMPANY

National Exploration, Wells, & Pumps.

2.4 CRA PERSONNEL

Geologist Belew Yifru directed the probe installation working under the supervision of California Professional Geologist Peter Schaefer.

2.5 DRILLING METHOD

Hand auger.

2.6 NUMBER OF PROBES

CRA installed four soil vapor probes (V-13 through V-16). 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 a 1-inch length plastic screen implant and #2/12 Monterey sand filter pack. Probe diagrams are provided with boring logs in Appendix B.

2.8 SCREENED INTERVALS

4.9 to 5.0 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.

Due to water in probe V-15, we were unable to collect a sample.

2.10 SOIL VAPOR SAMPLING ANALYSES

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

2.11 WASTE DISPOSAL

Soil generated during field activities was stored on site in a 55-gallon drum and profiled for disposal. Disposal documentation is pending and will be provided upon request.

3.0 FINDINGS

3.1 SOIL VAPOR

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

3.2 LEAK TESTING

CRA performed leak testing as described above, and helium was not detected in any of the samples. As shown in the following table, the reporting limit for helium (0.0100 percent by volume [%*v*]) is less than 5% of the concentration detected in the shroud, and the samples are considered valid.

Probe ID	*Minimum helium concentration detected in shroud (%v)*	*Maximum acceptable helium concentration in sample (%v)*	*Helium concentration in sample (%v)*
V-13	54.2	2.71	<0.0100
V-14	51.2	2.56	<0.0100
V-16	51.9	2.60	<0.0100

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

4.0 CONCLUSIONS

TPHg was the only constituent of concern detected in soil vapor samples from probes V-13, V-14, and V-16, at concentrations ranging from 7,600 to 830,000 micrograms per cubic meter. Only the detection in V-16 exceeded the San Francisco Bay Regional Water Quality Control Board (RWQCB) environmental screening level[1].

Because benzene, ethylbenzene, and naphthalene were not detected in the soil vapor, the site meets California State Water Resources Control Board's *Low-Threat Underground Storage Tank Case Closure Policy* media-specific residential soil vapor criteria.

5.0 RECOMMENDATIONS

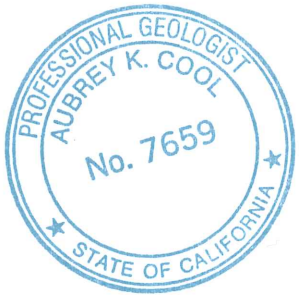
Based on these soil vapor results, no additional off-site investigation is warranted. CRA recommends completing a site conceptual model to compile historical data and identify any data gaps.

1 *User's Guide: Derivation and Application of Environmental Screening Levels,* RWQCB, Interim Final 2013

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

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG



FIGURES

11/03/08

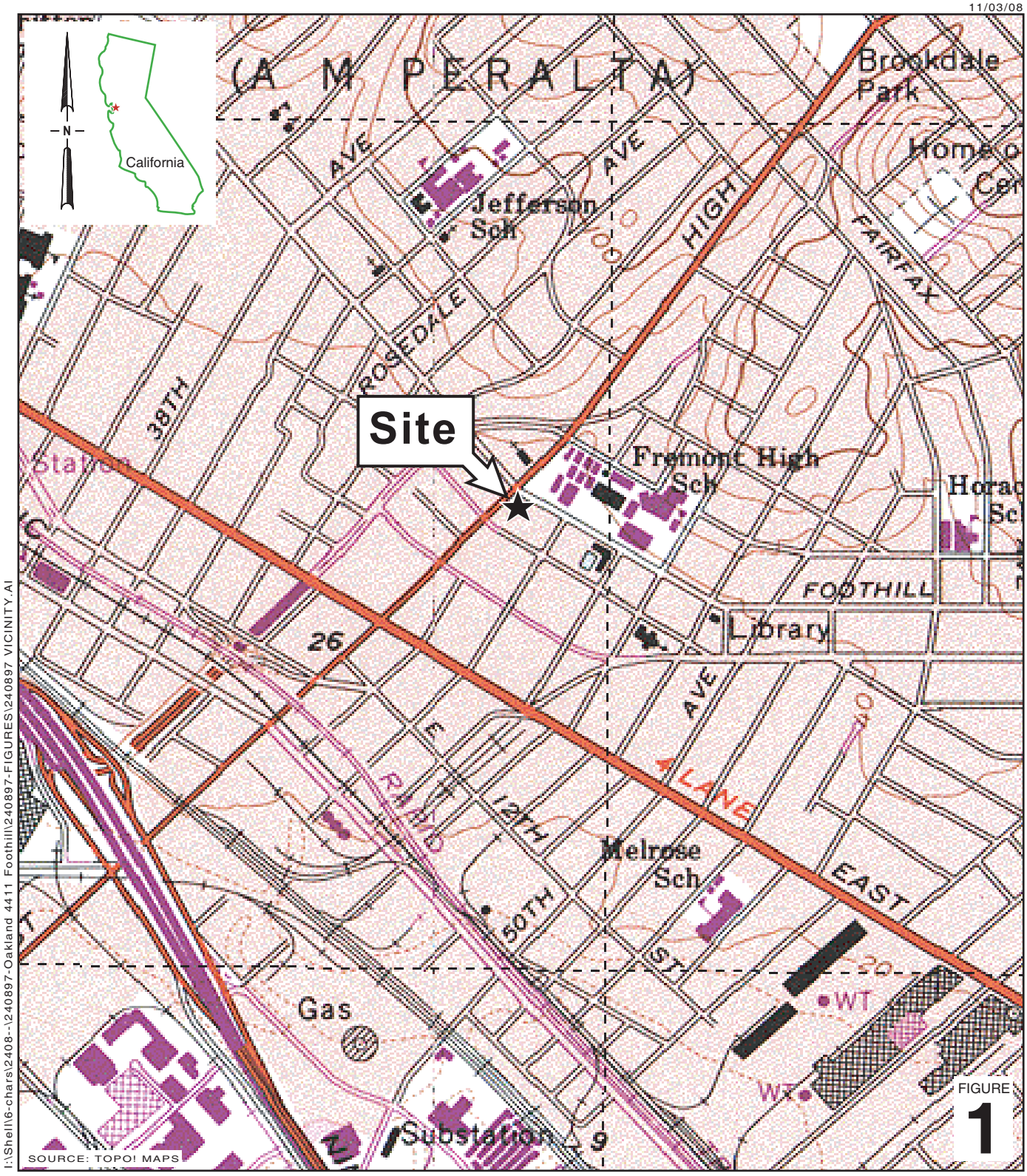


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FIGURE 1

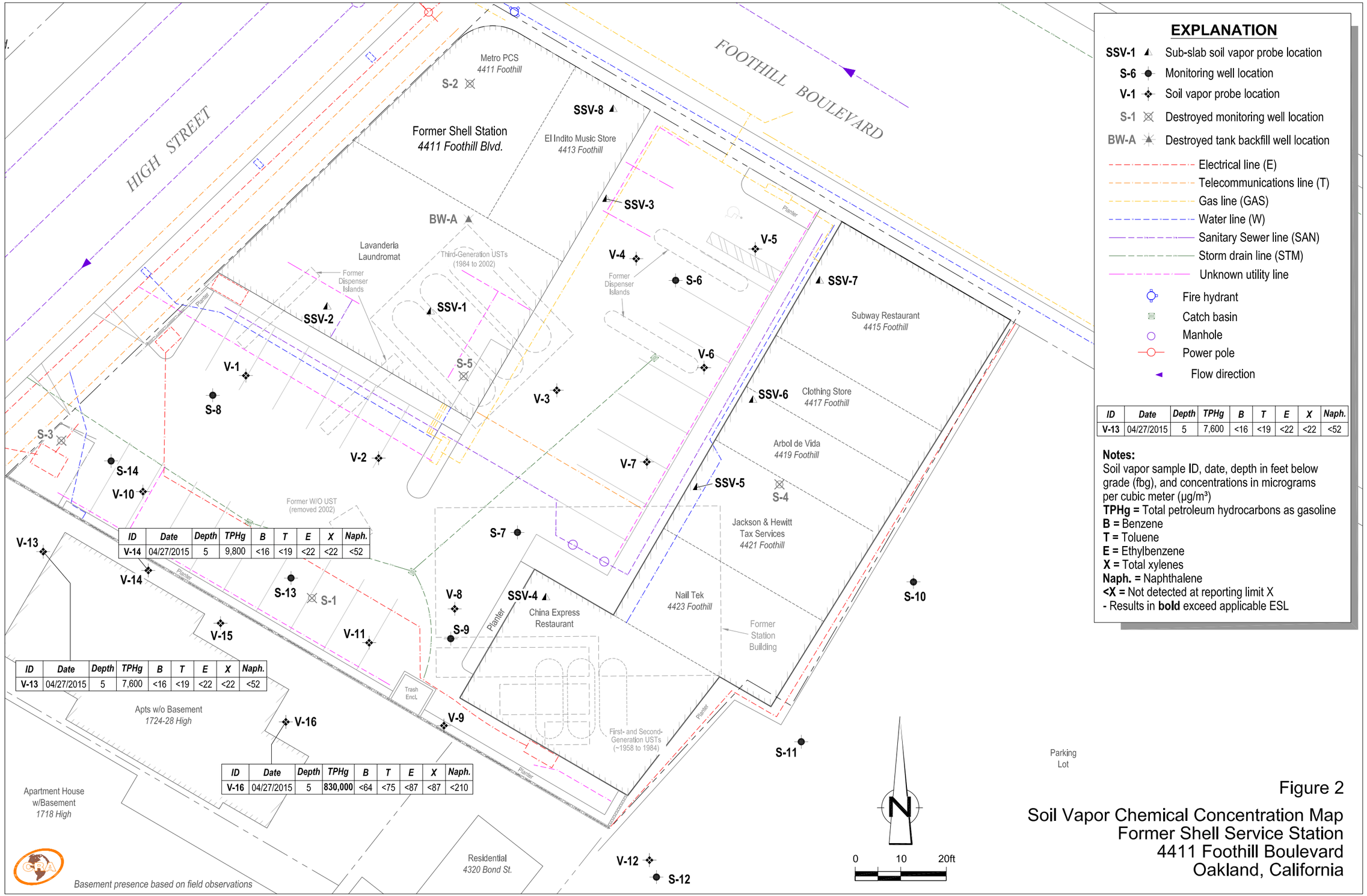
0 1/6 1/3 1/2 1

SCALE : 1" = 1/6 MILE

Former Shell Service Station
4411 Foothill Boulevard
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map



ID	Date	Depth	TPHg	B	T	E	X	Naph.
V-14	04/27/2015	5	9,800	<16	<19	<22	<22	<52

ID	Date	Depth	TPHg	B	T	E	X	Naph.
V-13	04/27/2015	5	7,600	<16	<19	<22	<22	<52

ID	Date	Depth	TPHg	B	T	E	X	Naph.
V-16	04/27/2015	5	**830,000**	<64	<75	<87	<87	<210

EXPLANATION

- SSV-1 — Sub-slab soil vapor probe location
- S-6 — Monitoring well location
- V-1 — Soil vapor probe location
- S-1 — Destroyed monitoring well location
- BW-A — Destroyed tank backfill well location
- Electrical line (E)
- Telecommunications line (T)
- Gas line (GAS)
- Water line (W)
- Sanitary Sewer line (SAN)
- Storm drain line (STM)
- Unknown utility line
- Fire hydrant
- Catch basin
- Manhole
- Power pole
- Flow direction

ID	Date	Depth	TPHg	B	T	E	X	Naph.
V-13	04/27/2015	5	7,600	<16	<19	<22	<22	<52

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
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
Naph. = Naphthalene
<X = Not detected at reporting limit X
- Results in **bold** exceed applicable ESL

Figure 2

Soil Vapor Chemical Concentration Map
Former Shell Service Station
4411 Foothill Boulevard
Oakland, California

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TABLE

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

Sample ID	*Depth (fbg)*	*Date*	*TPHg ($\mu g/m^3$)*	*B ($\mu g/m^3$)*	*T ($\mu g/m^3$)*	*E ($\mu g/m^3$)*	*X ($\mu g/m^3$)*	*MTBE ($\mu g/m^3$)*	*TBA ($\mu g/m^3$)*	*Naph-thalene ($\mu g/m^3$)*	*Helium (%v)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*
V-1	4.5-4.8	01/14/2008	**16,000,000**	<1,200	<1,400	<1,700	<5,000	<5,500	<4,600	---	---	---	---	---
V-1	4.5-4.8	06/26/2008	1,000,000	<160	<190	<220	<220	<180	<610	---	---	---	---	---
V-1	4.5-4.8	10/22/2008	340,000	<45	<53	<61	<120	<51	<170	---	---	---	---	---
V-1	4.5-4.8	04/21/2009 b	---	58	<38	49	<170	---	---	---	<0.0100	---	---	---
V-1	4.5-4.8	05/9/2011 b	<7,000	<16	<19	110	160	<36	<30	---	<0.0100	<0.500	16.2	3.01
V-2	4.5-4.8	01/14/2008	**15,000,000**	**9,000**	<1,100	**20,000**	7,700	<4,100	<3,500	---	---	---	---	---
V-2	4.5-4.8	05/22/2008	**8,300,000**	**7,000**	2,400	**5,600**	<1,400	<1,200	<4,000	---	---	---	---	---
V-2	4.5-4.8	10/22/2008	**5,000,000 a**	**8,300**	<380	**9,800**	7,700	<360	<1,200	---	---	---	---	---
V-2	4.5-4.8	04/21/2009 b	---	**7,100**	2,900	3,100	<6,100	---	---	---	<0.0100	---	---	---
V-2	4.5-4.8	05/9/2011 b	**36,000,000**	**2,400**	<940	<1,100	<2,200	<1,800	<1,500	---	0.0161	<0.500	14.7	2.30
V-3	4.5-4.8	01/14/2008	**20,000,000**	**3,800**	<2,800	<3,300	<9,800	<11,000	<9,100	---	---	---	---	---
V-3	4.5-4.8	05/22/2008	**22,000,000**	**1,600**	1,700	<1,300	<1,300	<1,100	<3,700	---	---	---	---	---
V-3	4.5-4.8	10/22/2008	**51,000,000 a**	**4,200**	<4,600	<5,200	<10,000	<4,400	<15,000	---	---	---	---	---
V-3	4.5-4.8	04/21/2009 b	---	**25,000**	17,000	<8,700	<35,000	---	---	---	0.0205	---	---	---
V-3	4.5-4.8	05/9/2011 b	**66,000,000**	**8,100**	<3,800	<4,300	<8,700	<7,200	<6,100	---	<0.0100	4.59	13.7	2.14
V-4	4.5-4.8	01/14/2008	1,300,000	<150	<180	<210	<620	<680	<570	---	---	---	---	---
V-4	4.5-4.8	06/26/2008	980,000	<160	<190	<220	<220	<180	<620	---	---	---	---	---
V-4	4.5-4.8	10/22/2008	**4,300,000**	270	<240	<280	<560	<230	<780	---	---	---	---	---
V-4	4.5-4.8	04/21/2009 b	---	65	<75	360	520	---	---	---	0.0171	---	---	---
V-4	4.5-4.8	05/9/2011 b	**2,700,000**	<320	<380	<430	<870	<720	<610	---	<0.0100	0.964	7.98	2.18
V-5	4.5-4.8	01/14/2008	**2,500,000**	<290	<340	<400	<1,190	<1,300	<1,100	---	---	---	---	---
V-5	4.5-4.8	05/22/2008	**3,300,000**	<1,600	3,100	<2,200	<2,200	<1,800	<6,100	---	---	---	---	---
V-5	4.5-4.8	10/22/2008	2,400,000	<340	<400	<460	<920	<380	<1,300	---	---	---	---	---
V-5	4.5-4.8	04/21/2009 b	---	<64	110	350	510	---	---	---	1.24	---	---	---
V-5	4.5-4.8	05/9/2011 b	960,000	<130	<150	220	<350	<290	<240	---	<0.0100	<0.500	9.30	3.29

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

Sample ID	*Depth (fbg)*	*Date*	*TPHg ($\mu g/m^3$)*	*B ($\mu g/m^3$)*	*T ($\mu g/m^3$)*	*E ($\mu g/m^3$)*	*X ($\mu g/m^3$)*	*MTBE ($\mu g/m^3$)*	*TBA ($\mu g/m^3$)*	*Naph-thalene ($\mu g/m^3$)*	*Helium (%v)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*
V-6	4.5-4.8	01/14/2008	**15,000,000**	**9,100**	<270	<310	<930	<1,000	<860	---	---	---	---	---
V-6	4.5-4.8	05/22/2008	2,300,000	<130	<150	<180	<180	<140	<490	---	---	---	---	---
V-6	4.5-4.8	10/22/2008	**5,400,000**	<970	<1,100	<1,300	<2,600	<1,100	<3,700	---	---	---	---	---
V-6	4.5-4.8	04/21/2009 b	---	<20	34	55	<110	---	---	---	<0.0100	---	---	---
V-6	4.5-4.8	05/9/2011 b	240,000	<40	<47	170	280	<90	<76	---	<0.0100	<0.500	8.67	6.92
V-7	4.5-4.8	01/14/2008	170,000	<19	<22	<25	<76	<84	<71	---	---	---	---	---
V-7	4.5-4.8	05/22/2008	790	<4.2	<5.0	<5.7	<5.7	<4.8	<16	---	---	---	---	---
V-7	4.5-4.8	10/22/2008	3,700	<2.6	<3.0	26	120	<2.9	<9.8	---	---	---	---	---
V-7	4.5-4.8	05/9/2011 b	<7,000	<16	<19	42	48	<36	<30	---	<0.0100	<0.500	4.95	15.2
V-8	5.0-5.2	10/23/2008	7,000	<3.8	<4.5	<5.2	<10	<4.3	<14	---	---	---	---	---
V-8	5.0-5.2	05/9/2011 b	250,000	<64	<75	150	<170	<140	<120	---	<0.0100	<0.500	13.9	6.39
V-9	5.0-5.2	10/23/2008	870	<3.7	<4.4	<5.0	<10	<4.2	<14	---	---	---	---	---
V-9	5.0-5.2	05/9/2011 b	<7,000	<16	<19	130	170	<36	<30	---	<0.0100	<0.500	6.75	16.4
V-9	5.0-5.2	02/20/2013	<3,800	<16	<19	<22	<43	<36	<30	<52	<0.0100	<0.500	6.18	16.4
V-10	4.5-4.8	01/14/2008	Unable to sample due to water in sample tube					---	---	---	---	---	---	---
V-10	4.5-4.8	05/22/2008	750	<4.1	<4.9	<5.6	<5.6	<4.6	<16	---	---	---	---	---
V-10	4.5-4.8	10/23/2008	280	<4.2	<5.0	<5.7	<11	<4.8	<16	---	---	---	---	---
V-10	4.5-4.8	05/09/2011	Unable to sample due to water in sample tube					---	---	---	---	---	---	---
V-10	4.5-4.8	02/20/2013	<3,800	<16	<19	<22	<43	<36	<30	<52	0.0726	<0.500	7.09	13.3
V-11	4.5-4.8	01/14/2008	18,000	<2.2	5.1	<3.0	<8.9	<9.8	<8.2	---	---	---	---	---
V-11	4.5-4.8	06/26/2008	<260	<4.0	<4.8	<5.5	<5.5	<4.6	<15	---	---	---	---	---
V-11	4.5-4.8	10/23/2008	<220	<3.5	<4.1	<4.8	<9.6	<4.0	<13	---	---	---	---	---
V-11	4.5-4.8	05/09/2011	<7,000	<16	<19	43	49	<36	<30	---	<0.0100	<0.500	7.76	12.6

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

Sample ID	*Depth (fbg)*	*Date*	*TPHg ($\mu g/m^3$)*	*B ($\mu g/m^3$)*	*T ($\mu g/m^3$)*	*E ($\mu g/m^3$)*	*X ($\mu g/m^3$)*	*MTBE ($\mu g/m^3$)*	*TBA ($\mu g/m^3$)*	*Naph-thalene ($\mu g/m^3$)*	*Helium (%v)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*
V-11	4.5-4.8	02/20/2013	<3,800	<16	<19	<22	<43	<36	<30	<52	<0.0100	<0.500	6.40	14.5
V-12	4.2-4.3	10/01/2009	Unable to sample due to water in sample tube					---	---	---	---	---	---	---
V-12	4.2-4.3	11/19/2009	Unable to sample due to water in sample tube					---	---	---	---	---	---	---
V-12	4.2-4.3	07/29/2010 c	<5,700	<32	<38	<43	<87	<72	<61	---	<0.0100	---	---	---
V-12	4.2-4.3	05/09/2011	Unable to sample due to water in sample tube					---	---	---	---	---	---	---
SSV-1	0.58	05/19/2009	---	8.8	11	4.4	<12	---	---	---	0.251	---	---	---
SSV-1	0.5	10/23/2012 b	<3,800	<16	<19	26	<43	<36	63	---	0.0339	<0.500	<0.500	15.6
SSV-1	0.5	02/20/2013	<3,800	<16	<19	<22	<43	<36	<30	<52	0.0150	<0.500	<0.500	17.6
SSV-2	1	05/15/2009	---	<2.1	<2.4	<2.8	<11	---	---	---	0.261	---	---	---
SSV-2	1	10/23/2012 b	<3,800	<16	<19	<22	<43	<36	<30	---	<0.0100	<0.500	<0.500	21.1
SSV-2	1	02/20/2013	<3,800	<16	<19	<22	<43	<36	<30	<52	<0.0100	<0.500	<0.500	20.8
SSV-3	0.67	10/23/2012 b	<3,800	<16	<19	<22	<43	<36	<30	---	<0.0100	<0.500	<0.500	19.8
SSV-3	0.67	02/20/2013	**3,400,000**	<400	<470	<540	<1,100	<900	<760	<1,300	0.0192	0.883	5.52	2.81
SSV-4	0.5	10/23/2012 b	<3,800	<16	<19	<22	<43	<36	<30	---	0.0621	<0.500	<0.500	21.3
SSV-4	0.5	02/20/2013	<3,800	<16	<19	<22	<43	<36	<30	<52	<0.0100	<0.500	<0.500	21.0
SSV-5	0.5	10/23/2012 b	<3,800	<16	<19	30	<43	<36	37	---	0.235	<0.500	<0.500	21.8
SSV-5	0.5	02/20/2013	<3,800	<16	<19	<22	<43	<36	<30	<52	0.200	<0.500	<0.500	21.3
SSV-6	0.5	10/23/2012 b	<3,800	<16	<19	<22	<43	<36	<30	---	0.107	<0.500	<0.500	20.3
SSV-6	0.5	02/20/2013	<3,800	<16	<19	<22	<43	<36	<30	<52	<0.0100	<0.500	<0.500	20.3
SSV-7	0.5	10/23/2012 b	<3,800	<16	<19	25	<43	<36	44	---	<0.0100	<0.500	<0.500	21.4
SSV-7	0.5	02/20/2013	<3,800	<16	<19	<22	<43	<36	<30	<52	0.0416	<0.500	<0.500	21.2

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

Sample ID	*Depth (fbg)*	*Date*	*TPHg ($\mu g/m^3$)*	*B ($\mu g/m^3$)*	*T ($\mu g/m^3$)*	*E ($\mu g/m^3$)*	*X ($\mu g/m^3$)*	*MTBE ($\mu g/m^3$)*	*TBA ($\mu g/m^3$)*	*Naph-thalene ($\mu g/m^3$)*	*Helium (%v)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*
SSV-8	0.5	09/04/2013	5,900	<16	26	<22	<22	---	---	<52	0.516	<0.500	<0.500	19.6
V-13	5	04/27/2015	7,600	<16	<19	<22	<22	---	---	<52	<0.0100	<0.500	1.35	20.9
V-14	5	04/27/2015	9,800	<16	<19	<22	<22	---	---	<52	<0.0100	<0.500	4.79	8.90
V-16	5	04/27/2015	**830,000**	<64	<75	<87	<87	---	---	<210	<0.0100	<0.500	3.72	7.82
Ambient Air	---	01/14/2008	<17,000	<2.4	4.1	<3.2	<9.7	<11	<9.0	---	---	---	---	---
RWQCB ESLs for Soil Gas [d]	***Commercial Land Use***	***2,500,000***	***420***	***1,300,000***	***4,900***	***440,000***	***47,000***	***NA***	***360***	***NA***	***NA***	***NA***	***NA***
	Residential Land Use	***300,000***	***42***	***160,000***	***490***	***52,000***	***4,700***	***NA***	***36***	***NA***	***NA***	***NA***	***NA***

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method TO-3M; before 5/9/11, analyzed by modified EPA Method TO-3 GC/FID.
BTEX = Benzene, toluene, ethylbenzene and total xylenes analyzed by EPA Method 8260B (M); before 7/29/09, analyzed by modified EPA Method TO-15.
MTBE = Methyl-tertiary butyl ether analyzed by EPA Method 8260B (M); before 7/29/09, analyzed by modified EPA Method TO-15.
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B (M); before 7/29/09, analyzed by Modified EPA Method TO-15.
Naphthalene analyzed by EPA Method 8260B (M)
Helium analyzed by ASTM D-1946 (M)
Methane, carbon dioxide, and oxygen + argon analyzed by ASTM D-1946
fbg = Feet below grade
$\mu g/m^3$ = Micrograms per cubic meter
%v = Percent by volume
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
RWQCB = San Francisco Bay Regional Water Quality Control Board

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

Sample ID	*Depth (fbg)*	*Date*	*TPHg* ($\mu g/m^3$)	*B* ($\mu g/m^3$)	*T* ($\mu g/m^3$)	*E* ($\mu g/m^3$)	*X* ($\mu g/m^3$)	*MTBE* ($\mu g/m^3$)	*TBA* ($\mu g/m^3$)	*Naph-thalene* ($\mu g/m^3$)	*Helium* (%v)	*Methane* (%v)	*Carbon Dioxide* (%v)	*Oxygen + Argon* (%v)

NA = No applicable ESL
Results in **bold** exceed ESL for commercial land use
All samples were collected in Summa canisters unless otherwise noted.

a = Exceeds quality control limits, possibly due to matrix effects.
b = Samples collected in Tedlar bags.
c = Sample received by laboratory with very low volume.
d = San Francisco Bay Regional Water Quality Control Board (RWQCB) ESLs (Table E of *User's Guide: Derivation and Application of Environmental Screening Levels* , RWQCB, Interim Final 2013)

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: 04/08/2015 By jamesy

Permit Numbers: W2015-0304
Permits Valid from 04/14/2015 to 04/14/2015

Application Id:	1427924985777	**City of Project Site:**	Oakland
Site Location:	1724 HIGH Street.		
Project Start Date:	04/14/2015	**Completion Date:**	04/14/2015
Assigned Inspector:	Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org		
Applicant:	Conestoga Rovers & Associates - Belew Yifru 5900 Hollis St., Suite A, Emeryville, CA 94608	**Phone:**	510-420-3356
Property Owner:	Jasleen and Kamaljit Assi 6562 Graham Avenue, Newark, CA 94560	**Phone:**	510-386-4160
Client:	Shell Shell Oil Products US 20945 S. Wilmington Ave, Carson, CA 90815	**Phone:**	--
Contact:	Belew Yifru	**Phone:** **Cell:**	510-420-3356 510-385-0307

	Total Due:	$265.00
Receipt Number: WR2015-0168	**Total Amount Paid:**	$265.00
Payer Name : Conestoga Rovers & **Associates**	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 4 Wells
Driller: National EWP, Inc. - Lic #: 953646 - Method: auger **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2015-0304	04/08/2015	07/13/2015	V-13	3.00 in.	0.25 in.	4.50 ft	5.00 ft
W2015-0304	04/08/2015	07/13/2015	V-14	3.00 in.	0.25 in.	4.50 ft	5.00 ft
W2015-0304	04/08/2015	07/13/2015	V-15	3.00 in.	0.25 in.	4.50 ft	5.00 ft
W2015-0304	04/08/2015	07/13/2015	V-16	3.00 in.	0.25 in.	4.50 ft	5.00 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 10 days.

8. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

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
5900 Hollis Street Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax:

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	V-13
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	14-Apr-15
LOCATION	4411 Foothill Blvd, Oakland, California	**DRILLING COMPLETED**	14-Apr-15
PROJECT NUMBER	240897	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	National Exploration,Wells & Pumps C-57#953646	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3.25"	**SCREENED INTERVALS**	4.9 to 5 fbg
LOGGED BY	B. Yifru	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer, PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand Augered to 5.5 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							CONCRETE	0.5	Bentonite Seal
					ML		**SILT With Sand (ML)** ; Dark gray (7.5YR 3/1); moist; 5% clay, 80% silt, 15% ; non plastic.		1/4" teflon sample tubing
0				5			@ 4 fbg - light brown (7.5YR 6/4); low plasticity.	5.5	Sand #2/12 1" Stainless Steel Screen Bottom of Boring @ 5.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2408--\240897-OAKLAND 4411 FOOTHILL\240897-GINT\0897.GPJ DEFAULT.GDT 5/21/15

Conestoga Rovers & Associates
5900 Hollis Street Suite A
Emeryville, CA 94608
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Fax:

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	V-14
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	14-Apr-15
LOCATION	4411 Foothill Blvd, Oakland, California	**DRILLING COMPLETED**	14-Apr-15
PROJECT NUMBER	240897	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	National Exploration,Wells & Pumps C-57#953646	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3.25"	**SCREENED INTERVALS**	4.9 to 5 fbg
LOGGED BY	B. Yifru	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer, PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand Augered to 5.5 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							TOP SOIL	0.5	Bentonite Seal
					ML		**SILT (ML)** ; Dark gray (7.5YR 3/1); moist; 25% clay, 70% silt, 15% ; medium plastic.	4.0	1/4" teflon sample tubing
0				5	CL		**CLAY (CL)** ; Light brown (7.5YR 6/4); moist; 25% clay, 70% silt, 15% ; high plasticity.	5.0	Sand #2/12 1" Stainless Steel Screen Bottom of Boring @ 5.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2408--\240897-OAKLAND 4411 FOOTHILL\240897-GINT\0897.GPJ DEFAULT.GDT 5/21/15

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

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	V-15
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	14-Apr-15
LOCATION	4411 Foothill Blvd, Oakland, California	**DRILLING COMPLETED**	14-Apr-15
PROJECT NUMBER	240897	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	National Exploration,Wells & Pumps C-57#953646	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3.25"	**SCREENED INTERVALS**	4.9 to 5 fbg
LOGGED BY	B. Yifru	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer, PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand Augered to 5.5 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
0				5	ML		**CONCRETE** 0.5 **SILT (ML)** ; Dark gray (7.5YR 3/1); moist; 25% clay, 70% silt, 5% ; medium plasticity. @ 4 fbg - light brown (7.5YR 6/4). 5.5		Bentonite Seal 1/4" teflon sample tubing Sand #2/12 1" Stainless Steel Screen Bottom of Boring @ 5.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2408--\240897-OAKLAND 4411 FOOTHILL\240897-GINT\0897.GPJ DEFAULT.GDT 5/21/15

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

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	V-16
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	14-Apr-15
LOCATION	4411 Foothill Blvd, Oakland, California	**DRILLING COMPLETED**	14-Apr-15
PROJECT NUMBER	240897	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	National Exploration,Wells & Pumps C-57#953646	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3.25"	**SCREENED INTERVALS**	4.9 to 5 fbg
LOGGED BY	B. Yifru	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer, PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand Augered to 5.5 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							CONCRETE	0.5	Bentonite Seal
					ML		**SILT With Sand (ML)** ; Dark gray (7.5YR 3/1); moist; 25% clay, 70% silt, 5% ; medium plasticity.		1/4" teflon sample tubing
0				5			@ 3.5 fbg - light brown (7.5YR 6/4).	5.5	Sand #2/12 1" Stainless Steel Screen Bottom of Boring @ 5.5 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\2408--\240897-OAKLAND 4411 FOOTHILL\240897-GINT\0897.GPJ DEFAULT.GDT 5/21/15

APPENDIX C

CERTIFIED ANALYTICAL REPORT

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WORK ORDER NUMBER: 15-04-2147

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Conestoga-Rovers & Associates

Client Project Name: 4411 Foothill Boulevard, Oakland, CA

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

Approved for release on 05/05/2015 by:
Xuan Dang
Project Manager

ResultLink

Email your PM

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

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Contents

Client Project Name: 4411 Foothill Boulevard, Oakland, CA
Work Order Number: 15-04-2147

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Work Order Narrative

Work Order: 15-04-2147 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/29/15. They were assigned to Work Order 15-04-2147.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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Sample Summary

Client:	Conestoga-Rovers & Associates 5900 Hollis Street, Suite A Emeryville, CA 94608-2008	Work Order:	15-04-2147
		Project Name:	4411 Foothill Boulevard, Oakland, CA
		PO Number:	
		Date/Time Received:	04/29/15 10:25
		Number of Containers:	3
Attn:	Peter Schaefer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
V-13-5	15-04-2147-1	04/27/15 13:45	1	Air
V-14-5	15-04-2147-2	04/27/15 14:30	1	Air
V-16-5	15-04-2147-3	04/27/15 15:30	1	Air

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Case Narrative

Work Order: 15-04-2147 Page 1 of 1

Modified EPA 8260 in Air

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

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

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

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Detections Summary

Client:	Conestoga-Rovers & Associates	Work Order:	15-04-2147
	5900 Hollis Street, Suite A	Project Name:	4411 Foothill Boulevard, Oakland, CA
	Emeryville, CA 94608-2008	Received:	04/29/15
Attn:	Peter Schaefer		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
V-13-5 (15-04-2147-1)						
Carbon Dioxide	1.35		0.500	%v	ASTM D-1946	N/A
Oxygen (+ Argon)	20.9		0.500	%v	ASTM D-1946	N/A
TPH as Gasoline	7600		7000	ug/m3	EPA TO-3M	N/A
V-14-5 (15-04-2147-2)						
Carbon Dioxide	4.79		0.500	%v	ASTM D-1946	N/A
Oxygen (+ Argon)	8.90		0.500	%v	ASTM D-1946	N/A
TPH as Gasoline	9800		7000	ug/m3	EPA TO-3M	N/A
V-16-5 (15-04-2147-3)						
Carbon Dioxide	3.72		0.500	%v	ASTM D-1946	N/A
Oxygen (+ Argon)	7.82		0.500	%v	ASTM D-1946	N/A
TPH as Gasoline	830000		7000	ug/m3	EPA TO-3M	N/A

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

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* MDL is shown

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Analytical Report

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

Date Received: 04/29/15
Work Order: 15-04-2147
Preparation: N/A
Method: ASTM D-1946
Units: %v

Project: 4411 Foothill Boulevard, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-13-5	**15-04-2147-1-A**	**04/27/15 13:45**	**Air**	**GC 65**	**N/A**	**04/29/15 16:47**	**150428L03**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	1.35	0.500	1.00	
Oxygen (+ Argon)	20.9	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-14-5	**15-04-2147-2-A**	**04/27/15 14:30**	**Air**	**GC 65**	**N/A**	**04/29/15 17:08**	**150428L03**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	4.79	0.500	1.00	
Oxygen (+ Argon)	8.90	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-16-5	**15-04-2147-3-A**	**04/27/15 15:30**	**Air**	**GC 65**	**N/A**	**04/29/15 17:29**	**150428L03**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	3.72	0.500	1.00	
Oxygen (+ Argon)	7.82	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-444-182**	**N/A**	**Air**	**GC 65**	**N/A**	**04/28/15 20:32**	**150428L03**

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

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

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Analytical Report

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

Project: 4411 Foothill Boulevard, Oakland, CA

Date Received: 04/29/15
Work Order: 15-04-2147
Preparation: N/A
Method: ASTM D-1946 (M)
Units: %v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-13-5	**15-04-2147-1-A**	**04/27/15 13:45**	**Air**	**GC 55**	**N/A**	**05/02/15 10:42**	**150502L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-14-5	**15-04-2147-2-A**	**04/27/15 14:30**	**Air**	**GC 55**	**N/A**	**05/02/15 11:02**	**150502L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-16-5	**15-04-2147-3-A**	**04/27/15 15:30**	**Air**	**GC 55**	**N/A**	**05/02/15 11:25**	**150502L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-790**	**N/A**	**Air**	**GC 55**	**N/A**	**05/02/15 10:15**	**150502L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1.00	

Return to Contents

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

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Analytical Report

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

Project: 4411 Foothill Boulevard, Oakland, CA

Date Received:	04/29/15
Work Order:	15-04-2147
Preparation:	N/A
Method:	EPA 8260B (M)
Units:	ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-13-5	**15-04-2147-1-A**	**04/27/15 13:45**	**Air**	**GC/MS YY**	**N/A**	**04/30/15 04:48**	**150429L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1.00	
Toluene	ND	19	1.00	
Ethylbenzene	ND	22	1.00	
p/m-Xylene	ND	43	1.00	
o-Xylene	ND	22	1.00	
Xylenes (total)	ND	22	1.00	
Naphthalene	ND	52	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	105	47-156	
1,2-Dichloroethane-d4	104	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
V-14-5	**15-04-2147-2-A**	**04/27/15 14:30**	**Air**	**GC/MS YY**	**N/A**	**04/30/15 05:39**	**150429L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1.00	
Toluene	ND	19	1.00	
Ethylbenzene	ND	22	1.00	
p/m-Xylene	ND	43	1.00	
o-Xylene	ND	22	1.00	
Xylenes (total)	ND	22	1.00	
Naphthalene	ND	52	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	104	47-156	
1,2-Dichloroethane-d4	101	47-156	
Toluene-d8	101	47-156	

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

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Analytical Report

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

Date Received: 04/29/15
Work Order: 15-04-2147
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 4411 Foothill Boulevard, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-16-5	**15-04-2147-3-A**	**04/27/15 15:30**	**Air**	**GC/MS YY**	**N/A**	**04/30/15 08:53**	**150429L03**

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

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	64	4.00	
Toluene	ND	75	4.00	
Ethylbenzene	ND	87	4.00	
p/m-Xylene	ND	170	4.00	
o-Xylene	ND	87	4.00	
Xylenes (total)	ND	87	1.00	
Naphthalene	ND	210	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	106	47-156	
1,2-Dichloroethane-d4	101	47-156	
Toluene-d8	66	47-156	

Method Blank	099-16-116-728	N/A	Air	GC/MS YY	N/A	04/29/15 17:33	150429L03

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1.00	
Toluene	ND	19	1.00	
Ethylbenzene	ND	22	1.00	
p/m-Xylene	ND	43	1.00	
o-Xylene	ND	22	1.00	
Xylenes (total)	ND	22	1.00	
Naphthalene	ND	52	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	105	47-156	
1,2-Dichloroethane-d4	106	47-156	
Toluene-d8	98	47-156	

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

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Analytical Report

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

Project: 4411 Foothill Boulevard, Oakland, CA

Date Received:	04/29/15
Work Order:	15-04-2147
Preparation:	N/A
Method:	EPA TO-3M
Units:	ug/m3
	Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-13-5	**15-04-2147-1-A**	**04/27/15 13:45**	**Air**	**GC 60**	**N/A**	**04/29/15 16:51**	**150429L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	7600	7000	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-14-5	**15-04-2147-2-A**	**04/27/15 14:30**	**Air**	**GC 60**	**N/A**	**04/29/15 17:02**	**150429L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	9800	7000	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-16-5	**15-04-2147-3-A**	**04/27/15 15:30**	**Air**	**GC 60**	**N/A**	**04/29/15 17:12**	**150429L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	830000	7000	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-6304**	**N/A**	**Air**	**GC 60**	**N/A**	**04/29/15 09:37**	**150429L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7000	1.00	

Return to Contents

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

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Quality Control - Sample Duplicate

Conestoga-Rovers & Associates		Date Received:	04/29/15
5900 Hollis Street, Suite A		Work Order:	15-04-2147
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	EPA TO-3M
Project: 4411 Foothill Boulevard, Oakland, CA			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
15-04-2154-1	**Sample**	**Air**	**GC 60**	**N/A**	**04/29/15 14:59**	**150429D01**
15-04-2154-1	**Sample Duplicate**	**Air**	**GC 60**	**N/A**	**04/29/15 15:12**	**150429D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
TPH as Gasoline	247800	244100	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

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

Project: 4411 Foothill Boulevard, Oakland, CA

Date Received: 04/29/15
Work Order: 15-04-2147
Preparation: N/A
Method: ASTM D-1946
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-444-182	**LCS**	**Air**	**GC 65**	**N/A**	**04/28/15 19:55**	**150428L03**
099-16-444-182	**LCSD**	**Air**	**GC 65**	**N/A**	**04/28/15 20:15**	**150428L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Methane	4.500	4.247	94	4.269	95	80-120	1	0-30	
Carbon Dioxide	15.00	14.52	97	14.65	98	80-120	1	0-30	
Carbon Monoxide	6.990	6.601	94	6.632	95	80-120	0	0-30	
Oxygen (+ Argon)	4.010	4.067	101	4.079	102	80-120	0	0-30	
Nitrogen	69.50	68.30	98	68.57	99	80-120	0	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Conestoga-Rovers & Associates		Date Received:	04/29/15
5900 Hollis Street, Suite A		Work Order:	15-04-2147
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	ASTM D-1946 (M)
Project: 4411 Foothill Boulevard, Oakland, CA			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-790	**LCS**	**Air**	**GC 55**	**N/A**	**05/02/15 09:23**	**150502L01**
099-12-872-790	**LCSD**	**Air**	**GC 55**	**N/A**	**05/02/15 09:43**	**150502L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Helium	1.000	0.9668	97	0.9891	99	80-120	2	0-30	
Hydrogen	1.000	0.9043	90	0.9222	92	80-120	2	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Conestoga-Rovers & Associates		Date Received:	04/29/15
5900 Hollis Street, Suite A		Work Order:	15-04-2147
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	EPA 8260B (M)
Project: 4411 Foothill Boulevard, Oakland, CA			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-116-728	**LCS**	**Air**	**GC/MS YY**	**N/A**	**04/29/15 11:39**	**150429L03**
099-16-116-728	**LCSD**	**Air**	**GC/MS YY**	**N/A**	**04/29/15 12:29**	**150429L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	79.87	78.88	99	78.68	99	60-156	44-172	0	0-40	
Toluene	94.21	93.62	99	94.71	101	56-146	41-161	1	0-43	
Ethylbenzene	108.6	111.0	102	110.5	102	52-154	35-171	0	0-38	
p/m-Xylene	217.1	226.7	104	226.6	104	42-156	23-175	0	0-41	
o-Xylene	108.6	112.5	104	112.6	104	52-148	36-164	0	0-38	
Methyl-t-Butyl Ether (MTBE)	90.13	88.60	98	89.04	99	45-147	28-164	0	0-25	
Tert-Butyl Alcohol (TBA)	151.6	137.9	91	137.6	91	60-140	47-153	0	0-35	
Diisopropyl Ether (DIPE)	104.5	93.23	89	93.02	89	60-140	47-153	0	0-35	
Ethyl-t-Butyl Ether (ETBE)	104.5	96.93	93	96.94	93	60-140	47-153	0	0-35	
Tert-Amyl-Methyl Ether (TAME)	104.5	91.48	88	91.24	87	60-140	47-153	0	0-35	
Naphthalene	131.1	131.1	100	135.7	104	60-140	47-153	3	0-30	
Ethanol	188.4	193.4	103	194.3	103	47-137	32-152	0	0-35	
1,1-Difluoroethane	67.54	68.44	101	68.50	101	78-156	65-169	0	0-35	
Isopropanol	61.45	54.19	88	54.26	88	78-156	65-169	0	0-35	

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

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Conestoga-Rovers & Associates		Date Received:	04/29/15
5900 Hollis Street, Suite A		Work Order:	15-04-2147
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	EPA TO-3M
Project: 4411 Foothill Boulevard, Oakland, CA			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
098-01-005-6304	**LCS**	**Air**	**GC 60**	**N/A**	**04/29/15 09:20**	**150429L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	932500	795300	85	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Glossary of Terms and Qualifiers

Work Order: 15-04-2147 Page 1 of 1

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

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

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

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

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SHELL Chain Of Custody Record

LAB: TA

- [ ] TA - Irvine, California
- [ ] TA - Morgan Hill, California
- [ ] TA - Sacramento, California
- [ ] TA - Nashville, Tennessee
- [x] Calscience
- [ ] Other_____

NAME OF PERSON TO BILL: Denis Brown

- [x] ENVIRONMENTAL SERVICES
- [ ] NETWORK DEV / FE
- [ ] BILL CONSULTANT
- [ ] COMPLIANCE
- [ ] RMT/CRMT

[ ] CHECK BOX TO VERIFY IF NO INCIDENT # APPLIES

INCIDENT # (ES ONLY): 9 8 9 9 5 7 4 6

PO #:

SAP or CRMT #: 1 3 5 6 8 6

Date:

PAGE: 1 of 1

SAMPLING COMPANY:	LOG CODE:
Conestoga-Rovers & Associates (CRA)	CRAW

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

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

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

SITE ADDRESS: Street and City: 4411 Foothill Boulevard, Oakland

State: CA

GLOBAL ID NO.: T0600101065

EDF DELIVERABLE TO (Name, Company, Office Location): Kreml, Anni, CRA, Emeryville

PHONE NO.: 510-420-3335

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

CONSULTANT PROJECT NO.: 240897

SAMPLER NAME(S) (Print): BELEW YIFRU

LAB USE ONLY: 15-04-2147

TAT (STD IS 10 BUSINESS DAYS / RUSH IS CALENDAR DAYS): [x] STD [ ] 5 DAY [ ] 3 DAY [ ] 2 DAY [ ] 24 HOURS

[ ] RESULTS NEEDED ON WEEKEND

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

SPECIAL INSTRUCTIONS OR NOTES:

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

Please report EPA 8260 & TO-3 results in $\mu g/m^3$ and CH_4, CO_2, O_2+Ar, and He results in %v

No partial lab reports, send final PDF report only.

REQUESTED ANALYSIS

FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPHg (TO-3)	TPHd - Extractable (8015M)	BTEX & naphthalene (EPA 8260B)	MTBE (TO-15)	TBA (TO-15)	O2, CO2, & Methane (ASTM 1946)	isobutane, butane, & propane (TO-15, GC/MS)	Helium (ASTM 1946M)	TEMPERATURE ON RECEIPT C°
1	V-13-5	4/27/15	1345	Vapor	1	X		X			X		X	
2	V-14-5	4/27/15	1430	Vapor	1	X		X			X		X	
—	~~V-15-5~~	~~4/27/15~~		~~Vapor~~	~~1~~	~~X~~		~~X~~			~~X~~		~~X~~	SAMPLE NOT COLLECTED
3	V-16-5	4/27/15	1530	Vapor	1	X		X			X		X	

Relinquished by: (Signature)	Received by: (Signature) SECURE LOCATION	Date: 4/27/2015	Time: 5:00
Relinquished by: (Signature)	Received by: (Signature) Tom Malley ECI	Date: 4/28/15	Time: 1400
Relinquished by: (Signature) Tom Malley TO 650 4/28/15 1730	Received by: (Signature)	Date: 4/29/15	Time: 1025

05/02/06 Revision

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GSO

800-322-5555 www.gso.com

2147

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

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

COD: $0.00
Weight: 0 lb(s)
Reference:
CRA
Delivery Instructions:

Signature Type: REQUIRED

Tracking #: 527737403

NPS

ORC A
GARDEN GROVE

D92845A

37070029

Print Date: 4/28/2015 2:59 PM

LABEL INSTRUCTIONS:

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

Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer. Securely attach this label to your package, do not cover the barcode.

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WORK ORDER NUMBER: 15-04- 2147

SAMPLE RECEIPT CHECKLIST

BOX 1 OF 1

CLIENT: CRA

DATE: 04 / 29 / 2015

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

Thermometer ID: SC2 (CF:-0.3°C); Temperature (w/o CF): _____°C (w/ 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

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☑ Air ☐ Filter Checked by: 836

CUSTODY SEAL:

Box ☑ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A Checked by: 836

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☑	☐	☐

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

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

Air: ☑ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

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

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 862

Reviewed by: 836

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