CONESTOGA-ROVERS & ASSOCIATES

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Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
www.CRAworld.com

TRANSMITTAL

DATE: November 22, 2013 **REFERENCE NO.:** 240483

PROJECT NAME: 5755 Broadway, Oakland

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

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

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- ☐ Same Day Courier
- ☒ Other GeoTracker and Alameda County FTP

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 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)
Clint Mercer, SC Fuels (lessee), 1800 West Katella Avenue, Suite 400, Orange, CA 92867
Orkin, Inc. (property owner), PO Box 2128, Santa Fe Springs, CA 90670

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: **Correspondence File**

Shell Oil Products US
Soil and Groundwater Focus Delivery Group
20945 S. Wilmington Avenue
Carson, CA 90810
Tel (425) 413 1164
Fax (425) 413 0988
Email perry.pineda@shell.com
Internet http://www.shell.com

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

Re: 5755 Broadway
Oakland, California
SAP Code 135699
Incident No. 98995756
ACEH Case No. RO0000026

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

SHELL-BRANDED SERVICE STATION
5755 BROADWAY
OAKLAND, CALIFORNIA

SAP CODE	135699
INCIDENT NO.	98995756
AGENCY NO.	RO0000026

Prepared by:
Conestoga-Rovers & Associates

5900 Hollis Street, Suite A
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NOVEMBER 22, 2013
REF. NO. 240483 (20)
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EXECUTIVE SUMMARY

- Two soil vapor probes (VP-1 and VP-2) were installed.
- All TPHg, BTEX, and MTBE concentrations in soil samples collected from the vapor probe borings were below RWQCB ESLs.
- TPHg and benzene concentrations in the soil vapor sample collected from vapor probe VP-1 exceeded commercial ESLs, and TPHg concentrations in the soil vapor sample collected from vapor probe VP-2 exceeded residential ESLs.
- Based on these soil vapor results, on behalf of Shell, CRA requests ACEH's assistance in obtaining cooperation from the adjacent property owner to conduct an additional soil vapor investigation as originally proposed in CRA's April 2, 2013 *Subsurface Investigation Work Plan*.

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 May 31, 2013 *Revised Subsurface Investigation Work Plan* as modified by our August 8, 2013 work plan addendum (submitted electronically), which was approved by Alameda County Environmental Health (ACEH) in their August 8, 2013 electronic correspondence. This ACEH correspondence also extended the due date for this report to November 24, 2013.

The subject site is a Shell-branded service station located on the northern corner of the Broadway and Taft Street intersection in a mixed residential and commercial area of Oakland, California (Figure 1). Current site features include three gasoline underground storage tanks, four dispenser islands, and a station building (Figure 2).

A summary of previous work performed at the site and other background information was presented in CRA's April 2, 2013 *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

September 9, 2013 (soil vapor probe installation) and September 24 and 25, 2013 (soil vapor probe sampling).

2.3 DRILLING COMPANY

Gregg Drilling & Testing, Inc.

2.4 CRA PERSONNEL

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

2.5 DRILLING METHOD

Air-knife.

2.6 NUMBER OF PROBES

CRA installed two soil vapor probes (VP-1 and VP-2). 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 one-quarter-inch-diameter Teflon® tubing attached to 1-inch-length plastic screen intervals and #2/12 Monterey sand filter pack. Probe diagrams are provided with boring logs in Appendix B.

2.8 SCREENED INTERVAL

3 feet below grade.

2.9 SAMPLING PROCEDURES

2.9.1 SOIL SAMPLING PROCEDURE

Soil samples for chemical analyses were retained in Encore® samplers. The Encore® samplers were sealed, labeled, entered onto a chain-of-custody record, placed into a cooler with ice and submitted to TestAmerica Laboratories, Inc. of Irvine, California for analyses.

2.9.2 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 by volume (%v) helium content level. CRA confirmed the helium content within the containment unit using a helium meter. The helium meter readings are presented in Section 3.2.1. All samples were analyzed by the laboratory for helium, and CRA presents the results in Section 3.2.1 and on Table 1.

2.10 SAMPLING ANALYSES

Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) by EPA Method 8260B.

Soil vapor samples were analyzed for TPHg by EPA Method TO-3 (modified); BTEX, MTBE, tertiary-butyl alcohol, and naphthalene by modified EPA Method 8260B; oxygen and argon, and carbon dioxide by ASTM D-1946; and helium by ASTM D-1946 (M).

2.11 WASTE DISPOSAL

Soil generated during field activities was stored on site in 55-gallon drums, sampled, and profiled for disposal. The laboratory analytical report is presented in Appendix C. Disposal documentation is pending and will be provided upon request.

3.0 FINDINGS

3.1 SOIL ANALYTICAL RESULTS

The soil chemical analytical data from the borings are summarized in Table 2, and the TPHg, benzene, and MTBE analytical results are presented on Figure 2. The laboratory analytical report is presented in Appendix C.

3.2 SOIL VAPOR

3.2.1 LEAK TESTING

CRA performed leak testing as described above, and as shown in the following table, up to 1.35%v helium was detected in the samples, which is less than 5% of the concentration detected in the shrouds, and the samples are considered valid.

Probe ID	*Helium concentration in sample (%v)*	*Minimum helium concentration detected in shroud (%v)*	*Maximum acceptable helium concentration in sample (%v)*
VP-1	0.622	81	4.05
VP-2	1.35	53	2.65

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

3.2.2 SOIL VAPOR ANALYTICAL RESULTS

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

4.0 CONCLUSIONS

All TPHg, BTEX, and MTBE concentrations in soil samples collected from the vapor probe borings were below San Francisco Bay Regional Water Quality Control Board's environmental screening levels (ESLs) for residential land use[1].

---

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] – Updated May 2013

TPHg and benzene concentrations in the soil vapor sample collected from vapor probe VP-1 exceeded commercial ESLs, and the TPHg concentration in the soil vapor sample collected from vapor probe VP-2 exceeded residential ESLs.

5.0 RECOMMENDATIONS

Based on these soil vapor results, on behalf of Shell, CRA requests ACEH's assistance in obtaining cooperation from the adjacent property owner to conduct an additional soil vapor investigation as originally proposed in CRA's April 2, 2013 *Subsurface Investigation Work Plan*.

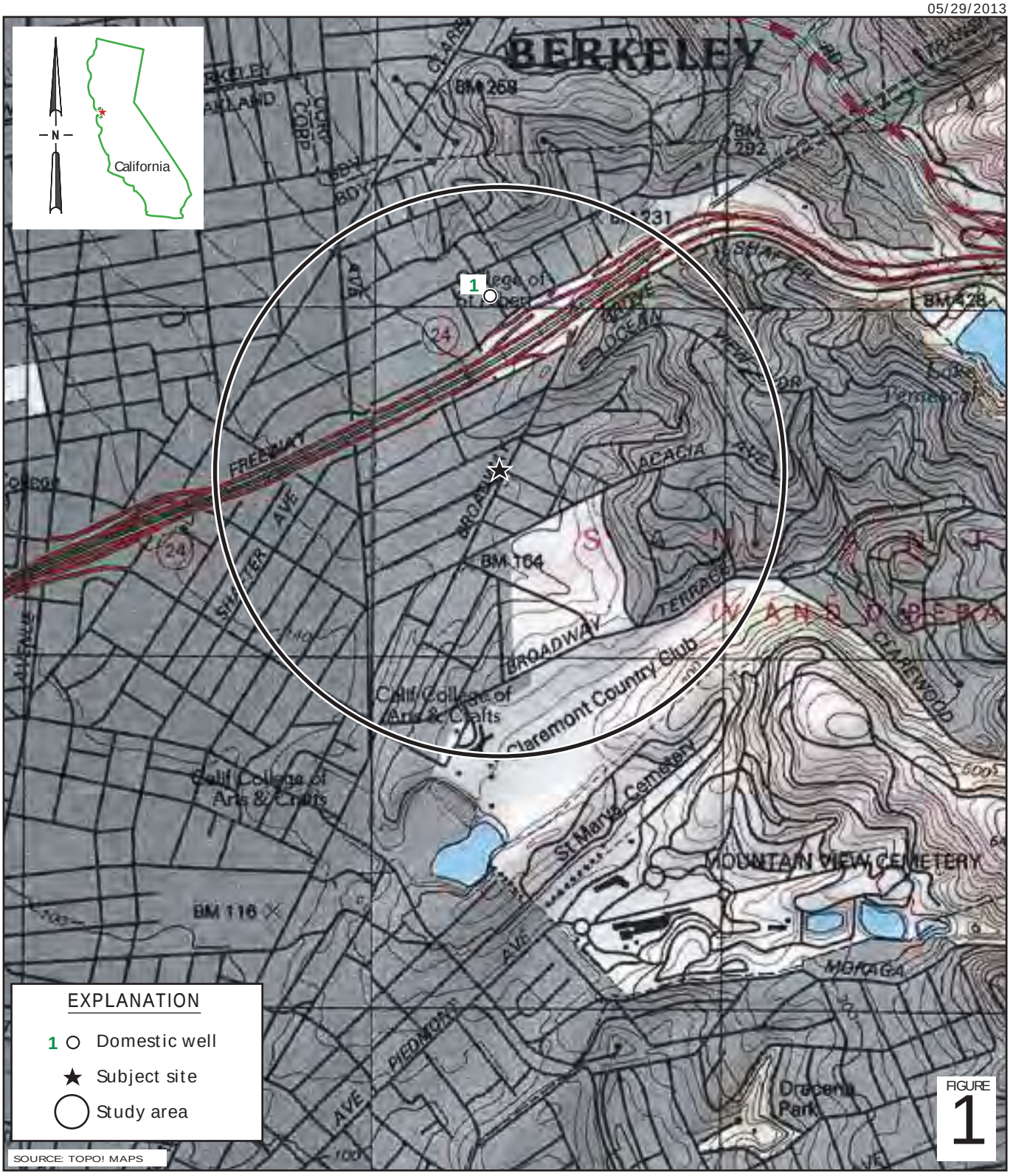
All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG

FIGURES

05/29/2013



I:\6-chars\2404--\240483-Oakland 5755 Broadway\240483-FIGURES\240483 VICINITY.AI

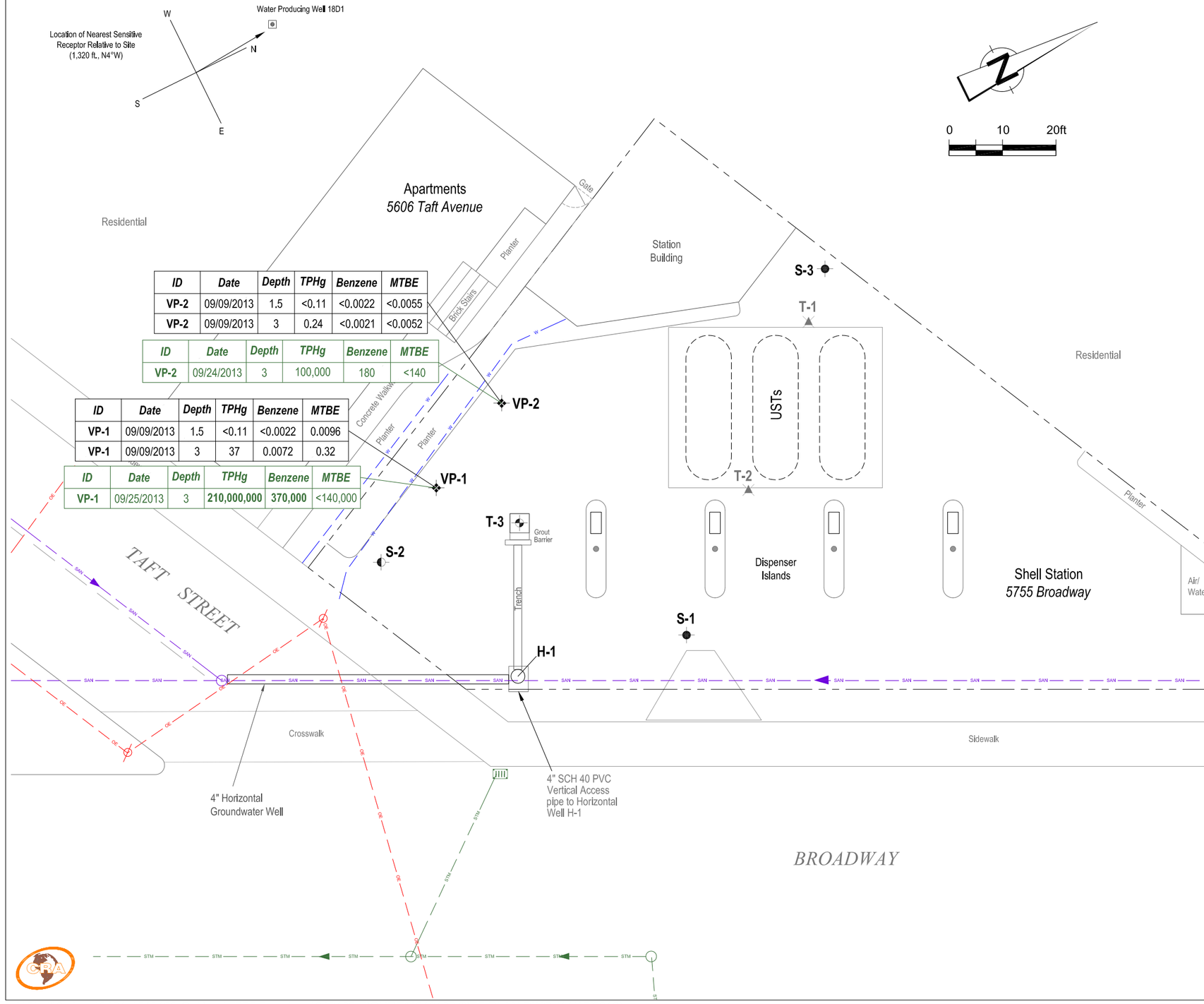
0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Shell-branded Service Station
5755 Broadway
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map



ID	Date	Depth	TPHg	Benzene	MTBE
VP-2	09/09/2013	1.5	<0.11	<0.0022	<0.0055
VP-2	09/09/2013	3	0.24	<0.0021	<0.0052

ID	Date	Depth	TPHg	Benzene	MTBE
VP-2	09/24/2013	3	100,000	180	<140

ID	Date	Depth	TPHg	Benzene	MTBE
VP-1	09/09/2013	1.5	<0.11	<0.0022	0.0096
VP-1	09/09/2013	3	37	0.0072	0.32

ID	Date	Depth	TPHg	Benzene	MTBE
VP-1	09/25/2013	3	**210,000,000**	**370,000**	<140,000

EXPLANATION

- **VP-1** Soil vapor probe location (CRA, 2013)
- **S-1** Monitoring well location
- **S-2** Groundwater monitoring well previously used for extraction
- **T-1** Destroyed tank backfill well location
- **T-3** Pre-pack monitoring well location
- **H-1** Horizontal extraction well location
- OE Overhead electrical line (OE)
- STM Storm drain line (STM)
- SAN Sanitary sewer line (SAN)
- W Water line (W)
- Flow direction
- Manhole

ID	Date	Depth	TPHg	Benzene	MTBE
VP-1	09/09/2013	1.5	<0.11	<0.0022	0.0096
VP-1	09/09/2013	3	<0.11	0.0072	0.32

Notes:
Soil sample ID, date, depth in feet below grade, and concentrations in milligrams per kilogram
TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tertiary-butyl ether
<X = Not detected at reporting limit X

ID	Date	Depth	TPHg	Benzene	MTBE
VP-1	09/25/2013	3	**210,000,000**	**370,000**	<140,000

Notes:
Soil vapor sample ID, date, and concentrations in micrograms per cubic meter
Results in **bold** exceed ESL for commercial land use

Figure 2

Soil and Soil Vapor Concentration Map
Shell-branded Service Station
5755 Broadway
Oakland, California

I:\Shell\6-chars\2404--\240483-Oakland 5755 Broadway\240483-FIGURES\240483 SITE PLAN.DWG (11/15/2013)

TABLES

TABLE 1

SOIL VAPOR ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
5755 BROADWAY, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg ($\mu g/m^3$)*	*B ($\mu g/m^3$)*	*T ($\mu g/m^3$)*	*E ($\mu g/m^3$)*	*X ($\mu g/m^3$)*	*MTBE ($\mu g/m^3$)*	*TBA ($\mu g/m^3$)*	*Naph-thalene ($\mu g/m^3$)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
VP-1	9/25/2013	3	**210,000,000**	**370,000**	<75,000	<87,000	<87,000	<140,000	<120,000	<210,000	8.55	4.66	0.622
VP-2	9/24/2013	3	100,000	180	<75	180	<87	<140	<120	<210	3.07	14.8	1.35
Commercial land use ESLs[a]:			*1,200,000*	*420*	*1,300,000*	*4,900*	*440,000*	*47,000*	*NA*	*360*	*NA*	*NA*	*NA*
Residential land use ESLs[a]:			*150,000*	*42*	*160,000*	*490*	*52,000*	*4,700*	*NA*	*36*	*NA*	*NA*	*NA*

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method TO-3M
BTEX = Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8260B (M)
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B (M)
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B (M)
Naphthalene analyzed by EPA Method 8260B (M)
Carbon dioxide and oxygen + argon analyzed by ASTM D-1946
Helium analyzed by ASTM D-1946 (M)
fbg = Feet below grade
$\mu g/m^3$ = Micrograms per cubic meter
%v = Percent by volume
<x = Not detected at reporting limit x
ESL = Environmental screening level
NA = No applicable ESL
Results in bold exceed ESL for commercial land use

a = San Francisco Bay Regional Water Quality Control Board (RWQCB) shallow soil gas screening level for evaluation of potential vapor intrusion concerns from RWQCB's *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater*, California Regional Water Quality Control Board, Interim Final - November 2007 (Revised May 2008) - Updated May 2013.

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
5755 BROADWAY, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*Total Oil & Grease (mg/kg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (mg/kg)*	*MTBE (mg/kg)*	*TBA (mg/kg)*	*DIPE (mg/kg)*	*ETBE (mg/kg)*	*TAME (mg/kg)*	*1,2-DCA (mg/kg)*	*EDB (mg/kg)*	*Lead (mg/kg)*
S-A	6/12/1985	4	---	---	3 a	---	---	---	---	---	---	---	---	---	---	---	---
S-A	6/12/1985	8.5	---	---	2 a	---	---	---	---	---	---	---	---	---	---	---	---
S-A	6/12/1985	10	---	---	<2.0 a	---	---	---	---	---	---	---	---	---	---	---	---
S-2-1	9/18/1993	3	---	---	92 b	0.12 b	0.80 b	0.58 b	4.2 b	---	---	---	---	---	---	---	---
S-3-1	9/18/1993	3	---	---	<10 b	<0.025 b	0.062 b	<0.025 b	0.12 b	---	---	---	---	---	---	---	---
S-C	2/2/1993	1.5	---	---	7.9	0.094	0.0098	0.12	1.1	---	---	---	---	---	---	---	---
S-E	2/4/1993	3.5	---	---	150	0.90	2.3	1.5	7.7	---	---	---	---	---	---	---	---
S-F	2/4/1993	5	---	---	<1	0.021	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-G	2/4/1993	2.5	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-H	2/4/1993	3.5	---	---	<1	0.024	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-H	2/4/1993	5	---	---	290	0.55	1.8	1.8	6.5	---	---	---	---	---	---	---	---
S-H	2/12/1993	8	---	---	2	0.074	0.0064	0.0097	0.075	---	---	---	---	---	---	---	---
S-H	2/12/1993	10	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-H	2/12/1993	11.5	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-I	2/4/1993	5	---	---	1.7	0.074	0.095	0.0038	0.10	---	---	---	---	---	---	---	---
S-I	2/11/1993	8	---	---	<1	0.011	0.0079	<0.0025	0.013	---	---	---	---	---	---	---	---
S-I	2/11/1993	10	---	---	<1	0.021	0.011	<0.0025	0.021	---	---	---	---	---	---	---	---
S-I	2/11/1993	12	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-J	2/9/1993	2	---	---	140	0.40	1.1	0.71	4.1	---	---	---	---	---	---	---	---
S-J	2/9/1993	4	---	---	**1,300**	1.1	**9.5**	**8.1**	**44**	---	---	---	---	---	---	---	---
S-K	2/9/1993	6.5	---	---	1.0	0.35	0.23	0.31	0.64	---	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
5755 BROADWAY, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*Total Oil & Grease (mg/kg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (mg/kg)*	*MTBE (mg/kg)*	*TBA (mg/kg)*	*DIPE (mg/kg)*	*ETBE (mg/kg)*	*TAME (mg/kg)*	*1,2-DCA (mg/kg)*	*EDB (mg/kg)*	*Lead (mg/kg)*
S-L	2/10/1993	2	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-L	2/10/1993	4	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-L	2/10/1993	6	---	---	320	0.99	2.0	1.5	5.2	---	---	---	---	---	---	---	---
S-L	2/11/1993	7.5	---	---	<1	0.039	0.042	0.0074	0.045	---	---	---	---	---	---	---	---
S-L	2/11/1993	10	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-L	2/11/1993	12	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-M	2/10/1993	2	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-M	2/10/1993	4	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-M	2/10/1993	7.5	---	---	<1	0.020	0.028	0.0072	0.053	---	---	---	---	---	---	---	---
S-M	2/11/1993	10	---	---	5.9	0.020	0.038	0.023	0.17	---	---	---	---	---	---	---	---
S-M	2/11/1993	12	---	---	<1	0.0026	0.0069	0.0028	0.027	---	---	---	---	---	---	---	---
S-N	2/10/1993	2	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-N	2/10/1993	4	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-N	2/10/1993	7.5	---	---	11	0.067	0.51	0.18	1.1	---	---	---	---	---	---	---	---
S-N	2/10/1993	10	---	---	<1	0.0035	0.0061	0.0033	0.019	---	---	---	---	---	---	---	---
S-N	2/10/1993	12	---	---	1.2	<0.0025	<0.0025	<0.0025	0.025	---	---	---	---	---	---	---	---
S-O	2/12/1993	7.5	---	---	<1	0.021	<0.0025	<0.0025	0.0043	---	---	---	---	---	---	---	---
S-O	2/12/1993	10	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
S-O	2/12/1993	11.5	---	---	1.3	0.013	0.0046	<0.0025	0.032	---	---	---	---	---	---	---	---
S-O	2/12/1993	14	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---
D-2	3/12/1998	2	---	---	260	**1.7**	<0.50	3.3	5.4	<2.5	---	---	---	---	---	---	---
D-3	3/12/1998	2	---	---	**750**	<0.50	3.4	**6.5**	**41**	**9.8**	---	---	---	---	---	---	---
D-4	3/12/1998	2	---	---	**990**	**1.8**	2.3	**13**	**68**	25	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
5755 BROADWAY, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*Total Oil & Grease (mg/kg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (mg/kg)*	*MTBE (mg/kg)*	*TBA (mg/kg)*	*DIPE (mg/kg)*	*ETBE (mg/kg)*	*TAME (mg/kg)*	*1,2-DCA (mg/kg)*	*EDB (mg/kg)*	*Lead (mg/kg)*
B-1-5.0	8/6/2002	5	---	---	<1.0	<0.005	<0.005	<0.005	<0.010	<0.5	---	---	---	---	---	---	---
B-1-9.0	8/6/2002	9	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-1-15.5	8/6/2002	15.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-2-5.0	8/6/2002	5	---	---	<1.0	<0.005	<0.005	<0.005	<0.010	<0.5	---	---	---	---	---	---	---
B-2-10.0	8/6/2002	10	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-2-15.5	8/6/2002	15.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-3-5.0	8/6/2002	5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-3-10.0	8/6/2002	10	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-3-15.5	8/6/2002	15.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-4-5.0	8/6/2002	5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-4-10.0	8/6/2002	10	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-4-15.5	8/6/2002	15.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-5-5.5	8/6/2002	5.5	---	---	260	<0.005	<0.005	1.6	6.7	<0.5	---	---	---	---	---	---	---
B-5-10.0	8/6/2002	10	---	---	4.5	<0.005	<0.005	0.018	0.021	<0.5	---	---	---	---	---	---	---
B-5-15.5	8/6/2002	15.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-6-5.0	8/7/2002	5	---	---	110	0.039	<0.025	1.5	0.3	<0.5	---	---	---	---	---	---	---
B-6-10.0	8/7/2002	10	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-6-15.5	8/7/2002	15.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-7-5.0	8/7/2002	5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-7-10.5	8/7/2002	10.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-8-5.0	8/6/1998	5	---	---	210	<0.025	<0.025	2.2	3.8	<0.5	---	---	---	---	---	---	---
B-8-10.5	8/6/1998	10.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
5755 BROADWAY, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*Total Oil & Grease (mg/kg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (mg/kg)*	*MTBE (mg/kg)*	*TBA (mg/kg)*	*DIPE (mg/kg)*	*ETBE (mg/kg)*	*TAME (mg/kg)*	*1,2-DCA (mg/kg)*	*EDB (mg/kg)*	*Lead (mg/kg)*
B-9.5.0	8/7/2002	5	---	---	82	0.096	0.028	0.85	4.3	0.9	---	---	---	---	---	---	---
B-9-10.5	8/7/2002	10.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
B-10-5.0	8/7/2002	5	---	---	29	0.016	<0.005	0.060	0.018	<0.5	---	---	---	---	---	---	---
B-10-10.5	8/7/2002	10.5	---	---	<1.0	<0.005	<0.005	<0.005	0.014	<0.5	---	---	---	---	---	---	---
B-11-5.0	8/7/2002	5	---	---	1.7	0.0063	<0.005	0.019	0.018	<0.5	---	---	---	---	---	---	---
B-11-10.5	8/7/2002	10.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	---	---	---	---	---	---	---
TP-1-14	1/31/2005	14	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	---	---	---
TP-2-14	1/31/2005	14	---	---	1.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	---	---	---
TP-3-14	1/31/2005	14	---	---	32	<0.023	<0.023	<0.023	<0.023	0.082	<0.047	<0.047	<0.023	<0.023	---	---	---
TP-4-14	1/31/2005	14	---	---	29	<0.024	<0.024	<0.024	<0.024	<0.024	<0.049	<0.049	<0.024	<0.024	---	---	---
TP-5-14	2/9/2005	14	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	---	---	---
TP-6-14	2/9/2005	14	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	---	---	---
TP-7-14	2/9/2005	14	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	---	---	---
TP-8-14	2/9/2005	14	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	---	---	---
DS-1-2	2/17/2005	2	---	---	190	<0.50	<0.50	1.1	1.0	<0.50	<2.5	<1.0	<0.50	<0.50	---	---	6.1
DS-2-2	2/17/2005	2	---	---	150	<0.50	<0.50	0.51	0.55	<0.50	<2.5	<1.0	<0.50	<0.50	---	---	6.5
DS-3-2	2/17/2005	2	---	---	**1,100**	<0.50	0.63	**10**	**75**	<0.50	<2.5	<1.0	<0.50	<0.50	---	---	6.8
DS-4-2	2/17/2005	2	---	---	460	<0.50	<0.50	1.8	3.5	<0.50	<2.5	<1.0	<0.50	<0.50	---	---	7.4
			---	---													
P-1-1	2/17/2005	1	---	---	180	<0.50	<0.50	0.97	1.4	<0.50	<2.5	<1.0	<0.50	<0.50	---	---	5.9
P-2-2	2/17/2005	2	---	---	130	<0.50	<0.50	<0.50	<0.50	<0.50	4.1	<1.0	<0.50	<0.50	---	---	7.3
P-3-2	2/17/2005	2	---	---	420	<0.50	<0.50	**6.2**	**23**	0.84	<2.5	<1.0	<0.50	<0.50	---	---	17

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
5755 BROADWAY, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*Total Oil & Grease (mg/kg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (mg/kg)*	*MTBE (mg/kg)*	*TBA (mg/kg)*	*DIPE (mg/kg)*	*ETBE (mg/kg)*	*TAME (mg/kg)*	*1,2-DCA (mg/kg)*	*EDB (mg/kg)*	*Lead (mg/kg)*
DS-1-4'	2/24/2005	4	---	---	26	<0.025	<0.025	<0.025	0.034	0.035	0.060	<0.050	<0.025	<0.025	---	---	6.7
DS-2-6'	2/24/2005	6	---	---	**1,000**	<0.50	<0.50	**13**	**24**	1.7	<2.5	<1.0	<0.50	<0.50	---	---	6.5
DS-3-6'	2/24/2005	6	---	---	1.8	<0.0050	<0.0050	0.0073	0.013	0.13	0.13	<0.010	<0.0050	<0.0050	---	---	5.5
DS-4-4'	2/24/2005	4	---	---	44	<0.025	<0.025	<0.025	0.066	<0.025	0.093	<0.050	<0.025	<0.025	---	---	6.4
P-1-6'	2/24/2005	6	---	---	410	0.66	<0.50	**5.2**	8.2	1.9	<2.5	<1.0	<0.50	<0.50	---	---	5.6
P-2-4'	2/24/2005	4	---	---	260	<0.50	<0.50	1.5	6.0	<0.50	<2.5	<1.0	<0.50	<0.50	---	---	7.3
P-3-6'	2/24/2005	6	---	---	480	<0.50	<0.50	4.1	3.9	0.61	<2.5	<1.0	<0.50	<0.50	---	---	6.0
SB-12-2	11/18/2005	2	210	8.7 c	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	---
SB-12-5	11/18/2005	5	<100	34 d	100	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<1.0	<0.50	<0.50	<0.50	<0.50	---
SB-13-2	11/18/2005	2	<100	2.2 e	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	---
SB-13-5	11/18/2005	5	<100	68 d	180	<0.50	<0.50	0.84	1.9	<0.50	<2.5	<1.0	<0.50	<0.50	<0.50	<0.50	---
SB-13-8	11/18/2005	8	<100	2.2 c	<1.0	<0.0050	0.0072	0.014	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	---
SB-14-2	11/18/2005	2	300	9.9 c	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	---
SB-14-5	11/18/2005	5	<100	9.2 d	99	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<1.0	<0.50	<0.50	<0.50	<0.50	---
SB-14-8	11/18/2005	8	<100	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	---
VP-1-1.5	9/9/2013	1.5	---	---	<0.11	<0.0022	<0.0022	<0.0022	<0.0022	0.0096	---	---	---	---	---	---	---
VP-1-3	9/9/2013	3	---	---	37 f	0.0072	<0.0016	0.24 f	0.27	0.32	---	---	---	---	---	---	---
VP-2-1.5	9/9/2013	1.5	---	---	<0.11	<0.0022	<0.0022	<0.0022	<0.0022	<0.0055	---	---	---	---	---	---	---
VP-2-3	9/9/2013	3	---	---	0.24	<0.0021	<0.0021	<0.0021	<0.0021	<0.0052	---	---	---	---	---	---	---
Shallow Soil (≤10 fbg) ESL[g]:			NA	500	500	1.2	9.3	4.7	11	8.4	110	NA	NA	NA	0.51	0.91	320
Deep Soil (>10 fbg) ESL[g]:			NA	1,100	2,400	1.2	9.3	4.7	11	8.4	110	NA	NA	NA	0.51	0.91	320

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
5755 BROADWAY, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*Total Oil & Grease (mg/kg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (mg/kg)*	*MTBE (mg/kg)*	*TBA (mg/kg)*	*DIPE (mg/kg)*	*ETBE (mg/kg)*	*TAME (mg/kg)*	*1,2-DCA (mg/kg)*	*EDB (mg/kg)*	*Lead (mg/kg)*

Notes:
Total oil and grease analyzed by EPA Method 9071B
TPHd = Total petroleum hydrocarbons as diesel analyzed by EPA Method 8015
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; before August 6, 2002, analyzed by EPA Method 8015 unless otherwise noted.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; before August 6, 2002, analyzed by EPA Method 8020.
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B; before August 6, 2002, analyzed by EPA Method 8020.
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
1,2-DCA = 1,2-Dichloroethane analyzed by EPA Method 8260B
EDB = 1,2-Dibromoethane analyzed by EPA Method 8260B
Lead analyzed by EPA Method 6010B
fbg = Feet below grade
mg/kg = Milligrams per kilogram
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
NA = No applicable ESL
Results in **bold** equal or exceed applicable ESL
Shading indicates that soil sample location was subsequently excavated; results are not representative of residual soil.

a = Analyzed by GC/FID
b = Analytical method unknown
c = Hydrocarbon reported is in the late Diesel range, and does not match laboratory Diesel standard
d = Hydrocarbon reported is in the early Diesel range, and does not match laboratory Diesel standard
e = Hydrocarbon reported does not match the pattern of laboratory Diesel standard
f = Result exceeded calibration range

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
5755 BROADWAY, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*Total Oil & Grease (mg/kg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (mg/kg)*	*MTBE (mg/kg)*	*TBA (mg/kg)*	*DIPE (mg/kg)*	*ETBE (mg/kg)*	*TAME (mg/kg)*	*1,2-DCA (mg/kg)*	*EDB (mg/kg)*	*Lead (mg/kg)*

g = San Francisco Bay Regional Water Quality Control Board commercial/industrial ESL for soil where groundwater is not a source of drinking water (Tables B and D 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] - Updated May 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: 09/06/2013 By jamesy

Permit Numbers: W2013-0749
Permits Valid from 09/09/2013 to 09/09/2013

Application Id:	1377892163723	**City of Project Site:** Oakland
Site Location:	5755 Broadway, Oakland, CA Shell-branded Service Station	
Project Start Date:	09/09/2013	**Completion Date:** 09/09/2013
Assigned Inspector:	Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org	
Applicant:	Conestoga-Rovers and Associates - Cristina Arganbright 10969 Trade Center Drive, Suite 107, Rancho Cordova, CA 95670	**Phone:** 916-889-8915
Property Owner:	Orkin Inc PO Box 2128, Santa Fe Springs, CA 90670	**Phone:** --
Client:	Shell Oil Products US 20945 South Wilmington Ave, Carson, CA 90815	**Phone:** --
Contact:	Cristina Arganbright	**Phone:** 916-889-8915 **Cell:** 707-758-1660

Total Due: $265.00
Receipt Number: WR2013-0338 **Total Amount Paid:** $265.00
Payer Name : Conestoga-Rovers and Assocaites Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 2 Wells
Driller: Gregg Drilling - Lic #: 485165 - Method: other **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2013-0749	09/06/2013	12/08/2013	VP-1	4.00 in.	0.25 in.	1.00 ft	3.50 ft
W2013-0749	09/06/2013	12/08/2013	VP-2	4.00 in.	0.25 in.	1.00 ft	3.50 ft

Specific Work Permit Conditions

1. 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.

2. 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.

3. 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.

4. 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.

5. 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.

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

7. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@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.

8. 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.

9. 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.

10. 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, California, 94608
Telephone: 510-420-3300
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	VP-1
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	09-Sep-13
LOCATION	5755 Broadway, Oakland, California	**DRILLING COMPLETED**	09-Sep-13
PROJECT NUMBER	240483	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	1"	**SCREENED INTERVAL**	3 to 3.1 fbg
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer, PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					ASPHAL		**ASPHALT**	0.4	Bentonite Slurry
1012		VP-1-1.5			SM		**Fill: Silty SAND with Gravel (SM)**; very dark gray (7.5YR 3/1); 30% silt, 50% fine to coarse sand, 20% fine to coarse gravel; dry.	2.0	1/4" diam. Teflon Tubing
					ML		**Sandy SILT with Gravel (ML)**; very dark gray (7.5YR 3/1); 5% clay, 60% silt, 20% fine to coarse sand, 15% fine to coarse gravel; dry; low plasticity.		Dry Bentonite
619		VP-1-3						3.5	1" - Polyethylene Vapor Implant Monterey Sand #2/12
				5					Bottom of Boring @ 3.5 ft
				10					
				15					

WELL LOG (PID) I:\SONOMA~1.PUB\0-USERS\MDUTRA\DRAFTR~1\240483-5755-GINT.GPJ DEFAULT.GDT 11/18/13

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, California, 94608
Telephone: 510-420-3300
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	VP-2
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	09-Sep-13
LOCATION	5755 Broadway, Oakland, California	**DRILLING COMPLETED**	09-Sep-13
PROJECT NUMBER	240483	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	1"	**SCREENED INTERVAL**	3 to 3.1 fbg
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer, PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					ASPHAL		**ASPHALT**	0.4	
					GM		**Silty GRAVEL with Sand (GM)**; dark brown (7.5YR 3/2); 25% silt, 35% medium to coarse sand, 40% fine to coarse gravel; dry.	1.0	
1311		VP-2-1.5			ML		**Gravelly SILT (ML)**; dark brown (7.5YR 3/2); 60% silt, 10% fine to coarse sand, 30% fine to coarse gravel; dry; low plasticity. @2' - brown (7.5YR 4/3); 70% silt, 10% fine to medium sand, 20% fine to coarse gravel.		Bentonite Slurry 1/4" diam. Teflon Tubing Dry Bentonite
50.3		VP-2-3						3.5	1" - Polyethylene Vapor Implant Monterey Sand #2/12 Bottom of Boring @ 3.5 ft
				5					
				10					
				15					

WELL LOG (PID) I:\SONOMA~1.PUB\0-USERS\MDUTRAIDRAFTR~1\240483-5755-GINT.GPJ DEFAULT.GDT 11/18/13

APPENDIX C

ANALYTICAL REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-56743-1
Client Project/Site: 5755 Broadway, Oakland, CA

For:
Conestoga-Rovers & Associates, Inc.
5900 Hollis Street
Suite A
Emeryville, California 94608

Attn: Peter Schaefer

Authorized for release by:
9/24/2013 1:28:12 PM

Philip Sanelle, Project Manager I
philip.sanelle@testamericainc.com

Table of Contents

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 5755 Broadway, Oakland, CA

TestAmerica Job ID: 440-56743-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-56743-1	CRA-1A	Solid	09/09/13 13:00	09/11/13 09:30

Job ID: 440-56743-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-56743-1

Comments
No additional comments.

Receipt
The sample was received on 9/11/2013 9:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9° C.

GC/MS VOA
No analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Metals
Method(s) 6010B: matrix spike duplicate (MSD) recovery of Copper for batch 131276 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. (440-57037-9 MSD)

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample ID: CRA-1A

Lab Sample ID: 440-56743-1

Date Collected: 09/09/13 13:00
Date Received: 09/11/13 09:30

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	0.43		0.10		mg/Kg			09/13/13 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 125*		*09/13/13 16:08*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*09/13/13 16:08*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/13/13 16:08*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010		mg/Kg			09/13/13 16:08	1
Ethylbenzene	ND		0.0010		mg/Kg			09/13/13 16:08	1
Toluene	ND		0.0010		mg/Kg			09/13/13 16:08	1
Xylenes, Total	ND		0.0020		mg/Kg			09/13/13 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*09/13/13 16:08*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 125*		*09/13/13 16:08*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/13/13 16:08*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	5.7		5.0		mg/Kg		09/12/13 11:31	09/12/13 22:56	1
ORO (C29-C40)	ND		5.0		mg/Kg		09/12/13 11:31	09/12/13 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*40 - 140*	*09/12/13 11:31*	*09/12/13 22:56*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Arsenic	3.0		3.0		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Barium	130		1.5		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Beryllium	1.2		0.50		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Cadmium	ND		0.50		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Chromium	110		1.0		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Cobalt	13		1.0		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Copper	20		2.0		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Lead	4.7		2.0		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Molybdenum	ND		2.0		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Nickel	100		2.0		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Selenium	ND		3.0		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Thallium	ND		10		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Vanadium	42		1.0		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Zinc	32		5.0		mg/Kg		09/16/13 11:08	09/16/13 21:14	5
Silver	ND		1.5		mg/Kg		09/16/13 11:08	09/16/13 21:14	5

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		09/19/13 20:06	09/20/13 14:54	1

Client Sample ID: CRA-1A
Date Collected: 09/09/13 13:00
Date Received: 09/11/13 09:30

Lab Sample ID: 440-56743-1
Matrix: Solid

Method: 6010B - Metals (ICP) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.26		0.10		mg/L			09/23/13 11:09	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.020		mg/Kg		09/17/13 11:05	09/17/13 15:06	1

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 5755 Broadway, Oakland, CA

TestAmerica Job ID: 440-56743-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
7471A	Mercury (CVAA)	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 5755 Broadway, Oakland, CA

TestAmerica Job ID: 440-56743-1

Client Sample ID: CRA-1A

Lab Sample ID: 440-56743-1

Date Collected: 09/09/13 13:00
Matrix: Solid
Date Received: 09/11/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	10 mL	130828	09/13/13 16:08	AT	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 g	10 mL	130829	09/13/13 16:08	HR	TAL IRV
Total/NA	Prep	CA LUFT			30.01 g	1 mL	130663	09/12/13 11:31	SJ	TAL IRV
Total/NA	Analysis	8015B		1			130667	09/12/13 22:56	KW	TAL IRV
Total/NA	Prep	3050B			2.00 g	50 mL	131276	09/16/13 11:08	DT	TAL IRV
Total/NA	Analysis	6010B		5			131477	09/16/13 21:14	VS	TAL IRV
Total/NA	Prep	7471A			0.5 g	50 mL	131416	09/17/13 11:05	DB	TAL IRV
Total/NA	Analysis	7471A		1			131667	09/17/13 15:06	DB	TAL IRV
TCLP	Leach	1311			100.02 g	2000 mL	132023	09/18/13 22:14	CH	TAL IRV
TCLP	Prep	3010A			5 mL	50 mL	132291	09/19/13 20:06	SN	TAL IRV
TCLP	Analysis	6010B		1			132496	09/20/13 14:54	TK	TAL IRV
STLC Citrate	Leach	CA WET Citrate			50.03 g	500 mL	132025	09/18/13 22:24	CH	TAL IRV
STLC Citrate	Analysis	6010B		20			132779	09/23/13 11:09	MP	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-130828/4
Matrix: Solid
Analysis Batch: 130828

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010		mg/Kg			09/13/13 09:07	1
Ethylbenzene	ND		0.0010		mg/Kg			09/13/13 09:07	1
Toluene	ND		0.0010		mg/Kg			09/13/13 09:07	1
Xylenes, Total	ND		0.0020		mg/Kg			09/13/13 09:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*09/13/13 09:07*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 125*		*09/13/13 09:07*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*09/13/13 09:07*	*1*

Lab Sample ID: LCS 440-130828/5
Matrix: Solid
Analysis Batch: 130828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0528		mg/Kg		106	65 - 120
Ethylbenzene	0.0500	0.0566		mg/Kg		113	70 - 125
m,p-Xylene	0.100	0.108		mg/Kg		108	70 - 125
o-Xylene	0.0500	0.0551		mg/Kg		110	70 - 125
Toluene	0.0500	0.0551		mg/Kg		110	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 125*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-56776-A-1 MS
Matrix: Solid
Analysis Batch: 130828

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		0.0499	0.0524		mg/Kg		105	65 - 130
Ethylbenzene	ND		0.0499	0.0596		mg/Kg		120	70 - 135
m,p-Xylene	ND		0.0998	0.113		mg/Kg		113	70 - 130
o-Xylene	ND		0.0499	0.0559		mg/Kg		112	65 - 130
Toluene	ND		0.0499	0.0552		mg/Kg		111	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*80 - 125*
Toluene-d8 (Surr)	*96*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-56776-A-1 MSD
Matrix: Solid
Analysis Batch: 130828

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		0.0499	0.0520		mg/Kg		104	65 - 130	1	20
Ethylbenzene	ND		0.0499	0.0589		mg/Kg		118	70 - 135	1	25
m,p-Xylene	ND		0.0998	0.111		mg/Kg		111	70 - 130	2	25
o-Xylene	ND		0.0499	0.0557		mg/Kg		112	65 - 130	0	25
Toluene	ND		0.0499	0.0532		mg/Kg		107	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*92*		*80 - 125*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-130829/4
Matrix: Solid
Analysis Batch: 130829

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.10		mg/Kg			09/13/13 09:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*80 - 125*		*09/13/13 09:07*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*09/13/13 09:07*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*09/13/13 09:07*	*1*

Lab Sample ID: LCS 440-130829/6
Matrix: Solid
Analysis Batch: 130829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	1.00	0.765		mg/Kg		77	60 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-56776-A-1 MS
Matrix: Solid
Analysis Batch: 130829

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	ND		3.44	2.39		mg/Kg		69	55 - 140

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 440-56776-A-1 MS
Matrix: Solid
Analysis Batch: 130829

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*90*		*80 - 125*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 440-56776-A-1 MSD
Matrix: Solid
Analysis Batch: 130829

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		3.44	2.38		mg/Kg		69	55 - 140	0	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*92*		*80 - 125*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-130663/1-A
Matrix: Solid
Analysis Batch: 130667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 130663

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		5.0		mg/Kg		09/12/13 11:31	09/12/13 21:14	1
ORO (C29-C40)	ND		5.0		mg/Kg		09/12/13 11:31	09/12/13 21:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*75*		*40 - 140*	*09/12/13 11:31*	*09/12/13 21:14*	*1*

Lab Sample ID: LCS 440-130663/2-A
Matrix: Solid
Analysis Batch: 130667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130663

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (C10-C28)	33.3	18.2		mg/Kg		54	45 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*63*		*40 - 140*

Lab Sample ID: 440-56785-B-1-A MS
Matrix: Solid
Analysis Batch: 130667

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 130663

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (C10-C28)	ND		33.3	23.2		mg/Kg		70	40 - 120

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 440-56785-B-1-A MS
Matrix: Solid
Analysis Batch: 130667

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 130663

Surrogate	MS %Recovery	MS Qualifier	Limits
n-Octacosane	71		40 - 140

Lab Sample ID: 440-56785-B-1-B MSD
Matrix: Solid
Analysis Batch: 130667

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 130663

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C28)	ND		33.3	22.1		mg/Kg		66	40 - 120	5	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
n-Octacosane	71		40 - 140

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-131276/1-A ^5
Matrix: Solid
Analysis Batch: 131477

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Arsenic	ND		3.0		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Barium	ND		1.5		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Beryllium	ND		0.50		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Cadmium	ND		0.50		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Chromium	ND		1.0		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Cobalt	ND		1.0		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Copper	ND		2.0		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Lead	ND		2.0		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Molybdenum	ND		2.0		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Nickel	ND		2.0		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Selenium	ND		3.0		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Thallium	ND		10		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Vanadium	ND		1.0		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Zinc	ND		5.0		mg/Kg		09/16/13 11:08	09/16/13 20:33	5
Silver	ND		1.5		mg/Kg		09/16/13 11:08	09/16/13 20:33	5

Lab Sample ID: LCS 440-131276/2-A ^5
Matrix: Solid
Analysis Batch: 131477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	49.5	45.6		mg/Kg		92	80 - 120
Arsenic	49.5	44.8		mg/Kg		90	80 - 120
Barium	49.5	46.0		mg/Kg		93	80 - 120
Beryllium	49.5	44.5		mg/Kg		90	80 - 120
Cadmium	49.5	44.2		mg/Kg		89	80 - 120
Chromium	49.5	44.5		mg/Kg		90	80 - 120
Cobalt	49.5	46.5		mg/Kg		94	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-131276/2-A ^5
Matrix: Solid
Analysis Batch: 131477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	49.5	46.0		mg/Kg		93	80 - 120
Lead	49.5	45.9		mg/Kg		93	80 - 120
Molybdenum	49.5	45.9		mg/Kg		93	80 - 120
Nickel	49.5	46.9		mg/Kg		95	80 - 120
Selenium	49.5	41.2		mg/Kg		83	80 - 120
Thallium	49.5	44.8		mg/Kg		90	80 - 120
Vanadium	49.5	45.1		mg/Kg		91	80 - 120
Zinc	49.5	42.4		mg/Kg		86	80 - 120
Silver	24.8	22.3		mg/Kg		90	80 - 120

Lab Sample ID: 440-57037-A-9-D MS ^5
Matrix: Solid
Analysis Batch: 131477

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 131276

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		49.8	42.1		mg/Kg		85	75 - 125
Arsenic	ND		49.8	45.4		mg/Kg		91	75 - 125
Barium	1.7		49.8	47.9		mg/Kg		93	75 - 125
Beryllium	ND		49.8	45.3		mg/Kg		91	75 - 125
Cadmium	ND		49.8	44.9		mg/Kg		90	75 - 125
Chromium	7.0		49.8	55.7		mg/Kg		98	75 - 125
Cobalt	ND		49.8	46.9		mg/Kg		94	75 - 125
Copper	20		49.8	71.0		mg/Kg		102	75 - 125
Lead	ND		49.8	46.6		mg/Kg		92	75 - 125
Molybdenum	ND		49.8	45.9		mg/Kg		92	75 - 125
Nickel	6.6		49.8	51.7		mg/Kg		91	75 - 125
Selenium	ND		49.8	42.0		mg/Kg		85	75 - 125
Thallium	ND		49.8	44.3		mg/Kg		89	75 - 125
Vanadium	3.1		49.8	48.3		mg/Kg		91	75 - 125
Zinc	850		49.8	1010	4	mg/Kg		319	75 - 125
Silver	ND		24.9	22.7		mg/Kg		91	75 - 125

Lab Sample ID: 440-57037-A-9-E MSD ^5
Matrix: Solid
Analysis Batch: 131477

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 131276

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		49.5	40.0		mg/Kg		81	75 - 125	5	20
Arsenic	ND		49.5	45.1		mg/Kg		91	75 - 125	0	20
Barium	1.7		49.5	46.3		mg/Kg		90	75 - 125	3	20
Beryllium	ND		49.5	43.9		mg/Kg		89	75 - 125	3	20
Cadmium	ND		49.5	42.7		mg/Kg		86	75 - 125	5	20
Chromium	7.0		49.5	53.5		mg/Kg		94	75 - 125	4	20
Cobalt	ND		49.5	45.6		mg/Kg		92	75 - 125	3	20
Copper	20		49.5	85.9	F	mg/Kg		132	75 - 125	19	20
Lead	ND		49.5	45.4		mg/Kg		90	75 - 125	3	20
Molybdenum	ND		49.5	44.5		mg/Kg		90	75 - 125	3	20
Nickel	6.6		49.5	50.5		mg/Kg		89	75 - 125	2	20
Selenium	ND		49.5	40.8		mg/Kg		82	75 - 125	3	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-57037-A-9-E MSD ^5 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 131477 — **Prep Batch: 131276**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thallium	ND		49.5	43.1		mg/Kg		87	75 - 125	3	20
Vanadium	3.1		49.5	46.0		mg/Kg		87	75 - 125	5	20
Zinc	850		49.5	1040	4	mg/Kg		387	75 - 125	3	20
Silver	ND		24.8	21.7		mg/Kg		88	75 - 125	4	20

Lab Sample ID: MB 440-132023/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 132496 — **Prep Batch: 132291**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		09/19/13 20:06	09/20/13 14:49	1

Lab Sample ID: LCS 440-132023/2-B — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 132496 — **Prep Batch: 132291**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	2.00	1.95		mg/L		98	80 - 120

Lab Sample ID: 440-56743-1 MS — **Client Sample ID: CRA-1A**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 132496 — **Prep Batch: 132291**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	ND		2.00	1.97		mg/L		99	75 - 125

Lab Sample ID: MB 440-132025/1-A ^20 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: STLC Citrate**
Analysis Batch: 132779

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L			09/23/13 11:04	20

Lab Sample ID: LCS 440-132025/2-A ^20 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: STLC Citrate**
Analysis Batch: 132779

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	20.0	20.6		mg/L		103	80 - 120

Lab Sample ID: 440-56743-1 MS — **Client Sample ID: CRA-1A**
Matrix: Solid — **Prep Type: STLC Citrate**
Analysis Batch: 132779

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.26		20.0	21.0		mg/L		104	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-56743-1 MSD
Matrix: Solid
Analysis Batch: 132779

Client Sample ID: CRA-1A
Prep Type: STLC Citrate

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	0.26		20.0	20.5		mg/L		101	75 - 125	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 440-131416/1-A
Matrix: Solid
Analysis Batch: 131667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131416

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		09/17/13 11:05	09/17/13 15:01	1

Lab Sample ID: LCS 440-131416/2-A
Matrix: Solid
Analysis Batch: 131667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131416

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.800	0.769		mg/Kg		96	80 - 120

Lab Sample ID: 440-56743-1 MS
Matrix: Solid
Analysis Batch: 131667

Client Sample ID: CRA-1A
Prep Type: Total/NA
Prep Batch: 131416

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.039		0.800	0.799		mg/Kg		95	70 - 130

Lab Sample ID: 440-56743-1 MSD
Matrix: Solid
Analysis Batch: 131667

Client Sample ID: CRA-1A
Prep Type: Total/NA
Prep Batch: 131416

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.039		0.800	0.789		mg/Kg		94	70 - 130	1	20

GC/MS VOA

Analysis Batch: 130828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	Total/NA	Solid	8260B	
440-56776-A-1 MS	Matrix Spike	Total/NA	Solid	8260B	
440-56776-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	
LCS 440-130828/5	Lab Control Sample	Total/NA	Solid	8260B	
MB 440-130828/4	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 130829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	Total/NA	Solid	8260B/CA_LUFT MS	
440-56776-A-1 MS	Matrix Spike	Total/NA	Solid	8260B/CA_LUFT MS	
440-56776-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 440-130829/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
MB 440-130829/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 130663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	Total/NA	Solid	CA LUFT	
440-56785-B-1-A MS	Matrix Spike	Total/NA	Solid	CA LUFT	
440-56785-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	CA LUFT	
LCS 440-130663/2-A	Lab Control Sample	Total/NA	Solid	CA LUFT	
MB 440-130663/1-A	Method Blank	Total/NA	Solid	CA LUFT	

Analysis Batch: 130667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	Total/NA	Solid	8015B	130663
440-56785-B-1-A MS	Matrix Spike	Total/NA	Solid	8015B	130663
440-56785-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	130663
LCS 440-130663/2-A	Lab Control Sample	Total/NA	Solid	8015B	130663
MB 440-130663/1-A	Method Blank	Total/NA	Solid	8015B	130663

Metals

Prep Batch: 131276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	Total/NA	Solid	3050B	
440-57037-A-9-D MS ^5	Matrix Spike	Total/NA	Solid	3050B	
440-57037-A-9-E MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	3050B	
LCS 440-131276/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
MB 440-131276/1-A ^5	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 131416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	Total/NA	Solid	7471A	
440-56743-1 MS	CRA-1A	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 131416 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1 MSD	CRA-1A	Total/NA	Solid	7471A	
LCS 440-131416/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 440-131416/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 131477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	Total/NA	Solid	6010B	131276
440-57037-A-9-D MS ^5	Matrix Spike	Total/NA	Solid	6010B	131276
440-57037-A-9-E MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	6010B	131276
LCS 440-131276/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	131276
MB 440-131276/1-A ^5	Method Blank	Total/NA	Solid	6010B	131276

Analysis Batch: 131667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	Total/NA	Solid	7471A	131416
440-56743-1 MS	CRA-1A	Total/NA	Solid	7471A	131416
440-56743-1 MSD	CRA-1A	Total/NA	Solid	7471A	131416
LCS 440-131416/2-A	Lab Control Sample	Total/NA	Solid	7471A	131416
MB 440-131416/1-A	Method Blank	Total/NA	Solid	7471A	131416

Leach Batch: 132023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	TCLP	Solid	1311	
440-56743-1 MS	CRA-1A	TCLP	Solid	1311	
LCS 440-132023/2-B	Lab Control Sample	TCLP	Solid	1311	
MB 440-132023/1-B	Method Blank	TCLP	Solid	1311	

Leach Batch: 132025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	STLC Citrate	Solid	CA WET Citrate	
440-56743-1 MS	CRA-1A	STLC Citrate	Solid	CA WET Citrate	
440-56743-1 MSD	CRA-1A	STLC Citrate	Solid	CA WET Citrate	
LCS 440-132025/2-A ^20	Lab Control Sample	STLC Citrate	Solid	CA WET Citrate	
MB 440-132025/1-A ^20	Method Blank	STLC Citrate	Solid	CA WET Citrate	

Prep Batch: 132291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	TCLP	Solid	3010A	132023
440-56743-1 MS	CRA-1A	TCLP	Solid	3010A	132023
LCS 440-132023/2-B	Lab Control Sample	TCLP	Solid	3010A	132023
MB 440-132023/1-B	Method Blank	TCLP	Solid	3010A	132023

Analysis Batch: 132496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	TCLP	Solid	6010B	132291
440-56743-1 MS	CRA-1A	TCLP	Solid	6010B	132291
LCS 440-132023/2-B	Lab Control Sample	TCLP	Solid	6010B	132291
MB 440-132023/1-B	Method Blank	TCLP	Solid	6010B	132291

Metals (Continued)

Analysis Batch: 132779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56743-1	CRA-1A	STLC Citrate	Solid	6010B	132025
440-56743-1 MS	CRA-1A	STLC Citrate	Solid	6010B	132025
440-56743-1 MSD	CRA-1A	STLC Citrate	Solid	6010B	132025
LCS 440-132025/2-A ^20	Lab Control Sample	STLC Citrate	Solid	6010B	132025
MB 440-132025/1-A ^20	Method Blank	STLC Citrate	Solid	6010B	132025

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	MS/MSD Recovery and/or RPD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 5755 Broadway, Oakland, CA

TestAmerica Job ID: 440-56743-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-14
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-28-14 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-14
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

Revised COC

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 240483

INCIDENT # (ENV. SERVICES) ☐ CHECK IF NO INCIDENT # APPLIES

PO #

SAR #

DATE: 9/9/2013

PAGE: 1 of 2

SAMPLING COMPANY: Conestoga-Rovers & Associates	LOG CODE: CRAW	SITE ADDRESS: Street and City: 5755 Broadway, Oakland	State: CA
GLOBAL ID NO.: T0600101270			
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.: 240483-2013-04		
PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer		SAMPLER NAME(S) (Print): Cristina Arganbright	LAB USE ONLY
TELEPHONE: 510-420-3319	FAX: 510-420-3394	E-MAIL: pschaefer@craworld.com	

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:

Call composite sample ID and field point name CRA-A

Marked TAT except for those contingent tests needed for Aquatic Bioassay

cc: Derek Eisman, Deisman@craworld.com and Shell.Lab.Billing@craworld.com

- ☑ 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 - Purgeable (8260B)	TPH - Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TPH - MO (8015M)	CAM 17 Metals - Total (6010)	SVOCs (8270C)	VOCs (8260)	PCBs (8082)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
	CRA-1A	9/9	1350	SOIL						1	X	X	X											X	X				Please call composite sample CRA-A

440-56743 Chain of Custody

Relinquished by: (Signature)	Received by: (Signature)	Date: 9/11/13	Time: 1100
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received By: (Signature)	Date:	Time:

05/2/06 Revision

9/11/13 CT

9/24/2013

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-56743-1

Login Number: 56743
List Number: 1
Creator: King, Ronald

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Cristina Arganbright
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-09-1695

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Conestoga-Rovers & Associates

Client Project Name: 5755 Broadway, Oakland, CA

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

Approved for release on 10/08/2013 by:
Xuan Dang
Project Manager

ResultLink ▸

Email your PM ▸

ACCREDITED IN ACCORDANCE WITH nelac

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

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: 5755 Broadway, Oakland, CA
Work Order Number: 13-09-1695

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-09-1695 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 09/26/13. They were assigned to Work Order 13-09-1695.

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

Holding Times:

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

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

Quality Control:

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

Additional Comments:

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

Subcontractor Information:

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

Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	Conestoga-Rovers & Associates	Work Order:	13-09-1695
	5900 Hollis Street, Suite A	Project Name:	5755 Broadway, Oakland, CA
	Emeryville, CA 94608-2008	PO Number:	
		Date/Time Received:	09/26/13 11:00
		Number of Containers:	1
Attn:	Peter Schaefer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
VP-1	13-09-1695-1	09/25/13 10:23	1	Air

Calscience Environmental Laboratories, Inc.

Case Narrative

Work Order: 13-09-1695

Modified EPA 8260 in Air

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

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

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

Calscience Environmental Laboratories, Inc.

Detections Summary

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

Work Order: 13-09-1695
Project Name: 5755 Broadway, Oakland, CA
Received: 09/26/13

Attn: Peter Schaefer

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
VP-1 (13-09-1695-1)						
Carbon Dioxide	8.55		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	4.66		0.500	%v	ASTM D-1946	N/A
Helium	0.622		0.0100	%v	ASTM D-1946 (M)	N/A
Benzene	370000		64000	ug/m3	EPA 8260B (M)	N/A
Gasoline Range Organics (C6-C12)	210000000		1500000	ug/m3	EPA TO-3M	N/A

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

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 09/26/13
Work Order: 13-09-1695
Preparation: N/A
Method: ASTM D-1946
Units: %v

Project: 5755 Broadway, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-1	**13-09-1695-1-A**	**09/25/13 10:23**	**Air**	**GC 65**	**N/A**	**09/26/13 15:21**	**130926L01**

Parameter	Result	RL	DF	Qualifiers
Carbon Dioxide	8.55	0.500	1	
Oxygen + Argon	4.66	0.500	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-03-002-1903**	**N/A**	**Air**	**GC 65**	**N/A**	**09/26/13 10:56**	**130926L01**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/26/13
Work Order: 13-09-1695
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
VP-1	**13-09-1695-1-A**	**09/25/13 10:23**	**Air**	**GC 55**	**N/A**	**09/26/13 21:18**	**130926L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.622	0.0100	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-504**	**N/A**	**Air**	**GC 55**	**N/A**	**09/26/13 20:53**	**130926L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/26/13
Work Order: 13-09-1695
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
VP-1	**13-09-1695-1-A**	**09/25/13 10:23**	**Air**	**GC/MS NN**	**N/A**	**09/28/13 01:29**	**130927L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	370000	64000	4000	
Toluene	ND	75000	4000	
Ethylbenzene	ND	87000	4000	
p/m-Xylene	ND	170000	4000	
o-Xylene	ND	87000	4000	
Xylenes (total)	ND	87000	1	
Methyl-t-Butyl Ether (MTBE)	ND	140000	4000	
Tert-Butyl Alcohol (TBA)	ND	120000	4000	
Naphthalene	ND	210000	4000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	47-156	
1,2-Dichloroethane-d4	76	47-156	
Toluene-d8	96	47-156	

Method Blank	**099-13-041-1517**	**N/A**	**Air**	**GC/MS NN**	**N/A**	**09/27/13 16:37**	**130927L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1	
Toluene	ND	19	1	
Ethylbenzene	ND	22	1	
p/m-Xylene	ND	43	1	
o-Xylene	ND	22	1	
Xylenes (total)	ND	22	1	
Methyl-t-Butyl Ether (MTBE)	ND	36	1	
Tert-Butyl Alcohol (TBA)	ND	30	1	
Naphthalene	ND	52	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	47-156	
1,2-Dichloroethane-d4	88	47-156	
Toluene-d8	96	47-156	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 09/26/13
Work Order: 13-09-1695
Preparation: N/A
Method: EPA TO-3M
Units: ug/m3

Project: 5755 Broadway, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-1	**13-09-1695-1-A**	**09/25/13 10:23**	**Air**	**GC 43**	**N/A**	**09/26/13 17:12**	**130926L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	210000000	1500000	400	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-431-213**	**N/A**	**Air**	**GC 43**	**N/A**	**09/26/13 12:49**	**130926L01**

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

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

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

Conestoga-Rovers & Associates	Date Received:	09/26/13
5900 Hollis Street, Suite A	Work Order:	13-09-1695
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-3M
Project: 5755 Broadway, Oakland, CA		Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
VP-1	Air	GC 43	N/A	09/26/13 17:55	130926D01

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	215000000	225600000	5	0-20	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/26/13
Work Order: 13-09-1695
Preparation: N/A
Method: ASTM D-1946

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1903	**Air**	**GC 65**	**N/A**	**09/26/13 10:14**	**130926L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Methane	4.500	4.328	96	4.321	96	80-120	0	0-30	
Carbon Dioxide	15.00	14.48	97	14.75	98	80-120	2	0-30	
Carbon Monoxide	6.990	7.088	101	7.066	101	80-120	0	0-30	
Oxygen + Argon	4.010	4.078	102	4.006	100	80-120	2	0-30	
Nitrogen	69.50	67.77	98	67.41	97	80-120	1	0-30	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/26/13
Work Order: 13-09-1695
Preparation: N/A
Method: ASTM D-1946 (M)
Page 2 of 4

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-504	**Air**	**GC 55**	**N/A**	**09/26/13 20:04**	**130926L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Helium	1.000	0.9733	97	1.000	100	80-120	3	0-30	
Hydrogen	1.000	0.9221	92	0.9478	95	80-120	3	0-30	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/26/13
Work Order: 13-09-1695
Preparation: N/A
Method: EPA 8260B (M)
Page 3 of 4

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-041-1517	Air	GC/MS NN	N/A	09/27/13 14:10	130927L02

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	79.87	79.84	100	80.58	101	60-156	44-172	1	0-40	
Toluene	94.21	103.4	110	104.5	111	56-146	41-161	1	0-43	
Ethylbenzene	108.6	116.3	107	118.3	109	52-154	35-171	2	0-38	
p/m-Xylene	217.1	224.0	103	226.2	104	42-156	23-175	1	0-41	
o-Xylene	108.6	106.8	98	108.0	99	52-148	36-164	1	0-38	
Methyl-t-Butyl Ether (MTBE)	90.13	91.33	101	93.24	103	45-147	28-164	2	0-25	
Tert-Butyl Alcohol (TBA)	151.6	144.5	95	149.5	99	60-140	47-153	3	0-35	
Diisopropyl Ether (DIPE)	104.5	79.31	76	82.19	79	60-140	47-153	4	0-35	
Ethyl-t-Butyl Ether (ETBE)	104.5	92.14	88	95.75	92	60-140	47-153	4	0-35	
Tert-Amyl-Methyl Ether (TAME)	104.5	102.5	98	102.9	99	60-140	47-153	0	0-35	
Naphthalene	131.1	136.8	104	139.6	107	60-140	47-153	2	0-30	
Ethanol	188.4	106.9	57	103.3	55	47-137	32-152	3	0-35	
1,1-Difluoroethane	67.54	55.08	82	57.30	85	78-156	65-169	4	0-35	
Isopropanol	61.45	56.23	92	58.67	95	78-156	65-169	4	0-35	

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

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

Conestoga-Rovers & Associates	Date Received:	09/26/13
5900 Hollis Street, Suite A	Work Order:	13-09-1695
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-3M
Project: 5755 Broadway, Oakland, CA		Page 4 of 4

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-431-213	**Air**	**GC 43**	**09/26/13 10:20**	**130926L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Gasoline Range Organics (C6-C12)	382400	337900	88	80-120	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-09-1695

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

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

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

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

Shell Oil Products Chain Of Custody Record

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

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

Print Bill To Contact Name: Peter Schaefer 240483.

INCIDENT # (ENV SERVICES) [ ] CHECK IF NO INCIDENT # APPLIES

DATE: 9/9/2013

PAGE: 1 of 1

PO #

SAP #

SAMPLING COMPANY: Conestoga-Rovers & Associates	LOG CODE: CRAW
ADDRESS: 5900 Hollis Street, Suite A, Emeryville, CA 94608	
PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer	
TELEPHONE: 510-420-3319	FAX: 510-420-3394
E-MAIL: pschaefer@craworld.com	

SITE ADDRESS: Street and City: 5755 Broadway, Oakland	State: Ca	GLOBAL ID NO.: T0600101270		
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.: 240483-2013-04	
SAMPLER NAME(S) (Print): Katherine Ward			LAB USE ONLY: 13-09-1695	

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

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

SPECIAL INSTRUCTIONS OR NOTES :

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

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

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH -GRO, Purgeable (8260B)	TPH -DRO, Extractable (8015M)	TPHg (8015M)	BTEX (5260B)	BTEX + MTBE & TBA (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)	Helium (1946 M)	Oxygen, Argon, CO_2 (1946)	Napthalene (8260B)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
1	VP-1	9/25	1023	VAPOR						1	X				X									X	X	X	
	VP-2			VAPOR						1	X				X									X	X	X	

Relinquished by: (Signature) Katherine Ward	Received by: (Signature) CEL	Date: 9/25/13	Time: 1195
Relinquished by: (Signature) to GSO 9/25/13 1730	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 9/26/13	Time: 1100

05/2/06 Revision

GSO
GOLDEN STATE OVERNIGHT

< WebShip > > > >

800-322-5555 www.gso.com

1695

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 #: 522827311

NPS

ORC

A

GARDEN GROVE

D92841A

16400095

Print Date : 09/25/13 12:26 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 #: 13-09-1695

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: CRA DATE: 09/26/13

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

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

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

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

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

Ambient Temperature: ☑ Air ☐ Filter Initial: JF

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A Initial: JF

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

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☑	☐	☐

CONTAINER TYPE:

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

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

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

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

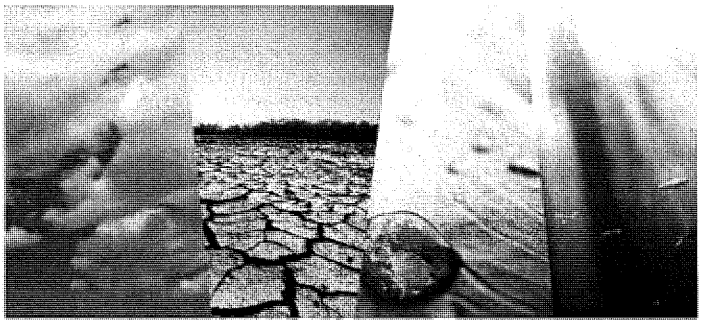
Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** C

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-09-1591

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Conestoga-Rovers & Associates

Client Project Name: 5755 Broadway, Oakland, CA

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

Approved for release on 10/08/2013 by:
Xuan Dang
Project Manager

ResultLink ▸

Email your PM ▸

ACCREDITED IN ACCORDANCE WITH nelac

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

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: 5755 Broadway, Oakland, CA
Work Order Number: 13-09-1591

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-09-1591 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 09/25/13. They were assigned to Work Order 13-09-1591.

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

Holding Times:

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

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

Quality Control:

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

Additional Comments:

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

Subcontractor Information:

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

Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	Conestoga-Rovers & Associates	Work Order:	13-09-1591
	5900 Hollis Street, Suite A	Project Name:	5755 Broadway, Oakland, CA
	Emeryville, CA 94608-2008	PO Number:	
		Date/Time Received:	09/25/13 11:20
		Number of Containers:	1
Attn:	Peter Schaefer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
VP-2	13-09-1591-1	09/24/13 14:15	1	Air

Calscience Environmental Laboratories, Inc.

Case Narrative

Work Order: 13-09-1591

Modified EPA 8260 in Air

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

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

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

Calscience Environmental Laboratories, Inc.

Detections Summary

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

Work Order: 13-09-1591
Project Name: 5755 Broadway, Oakland, CA
Received: 09/25/13

Attn: Peter Schaefer

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
VP-2 (13-09-1591-1)						
Carbon Dioxide	3.07		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	14.8		0.500	%v	ASTM D-1946	N/A
Helium	1.35		0.0100	%v	ASTM D-1946 (M)	N/A
Benzene	180		64	ug/m3	EPA 8260B (M)	N/A
Ethylbenzene	180		87	ug/m3	EPA 8260B (M)	N/A
Gasoline Range Organics (C6-C12)	100000		3800	ug/m3	EPA TO-3M	N/A

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

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/25/13
Work Order: 13-09-1591
Preparation: N/A
Method: ASTM D-1946
Units: %v

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-2	**13-09-1591-1-A**	**09/24/13 14:15**	**Air**	**GC 65**	**N/A**	**09/25/13 20:37**	**130925L01**

Parameter	Result	RL	DF	Qualifiers
Carbon Dioxide	3.07	0.500	1	
Oxygen + Argon	14.8	0.500	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-03-002-1902**	**N/A**	**Air**	**GC 65**	**N/A**	**09/25/13 11:36**	**130925L01**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/25/13
Work Order: 13-09-1591
Preparation: N/A
Method: ASTM D-1946 (M)
Units: %v

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-2	**13-09-1591-1-A**	**09/24/13 14:15**	**Air**	**GC 55**	**N/A**	**09/26/13 03:19**	**130925L01**

Parameter	Result	RL	DF	Qualifiers
Helium	1.35	0.0100	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-502**	**N/A**	**Air**	**GC 55**	**N/A**	**09/25/13 10:55**	**130925L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 09/25/13
Work Order: 13-09-1591
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 5755 Broadway, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-2	**13-09-1591-1-A**	**09/24/13 14:15**	**Air**	**GC/MS NN**	**N/A**	**09/27/13 00:01**	**130926L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	180	64	4	
Toluene	ND	75	4	
Ethylbenzene	180	87	4	
p/m-Xylene	ND	170	4	
o-Xylene	ND	87	4	
Xylenes (total)	ND	87	1	
Methyl-t-Butyl Ether (MTBE)	ND	140	4	
Tert-Butyl Alcohol (TBA)	ND	120	4	
Naphthalene	ND	210	4	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	47-156	
1,2-Dichloroethane-d4	68	47-156	
Toluene-d8	92	47-156	

Method Blank	**099-13-041-1507**	**N/A**	**Air**	**GC/MS NN**	**N/A**	**09/26/13 14:41**	**130926L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	16	1	
Toluene	ND	19	1	
Ethylbenzene	ND	22	1	
p/m-Xylene	ND	43	1	
o-Xylene	ND	22	1	
Xylenes (total)	ND	22	1	
Methyl-t-Butyl Ether (MTBE)	ND	36	1	
Tert-Butyl Alcohol (TBA)	ND	30	1	
Naphthalene	ND	52	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	110	47-156	
1,2-Dichloroethane-d4	97	47-156	
Toluene-d8	100	47-156	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 09/25/13
Work Order: 13-09-1591
Preparation: N/A
Method: EPA TO-3M
Units: ug/m3

Project: 5755 Broadway, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VP-2	**13-09-1591-1-A**	**09/24/13 14:15**	**Air**	**GC 43**	**N/A**	**09/26/13 01:30**	**130925L01**

Parameter	Result	RL	DF	Qualifiers
Gasoline Range Organics (C6-C12)	100000	3800	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-431-214**	**N/A**	**Air**	**GC 43**	**N/A**	**09/25/13 13:01**	**130925L01**

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

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

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/25/13
Work Order: 13-09-1591
Preparation: N/A
Method: EPA TO-3M
Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
13-09-1590-1	**Air**	**GC 43**	**N/A**	**09/25/13 16:49**	**130925D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	16440000	16310000	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/25/13
Work Order: 13-09-1591
Preparation: N/A
Method: ASTM D-1946

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1902	**Air**	**GC 65**	**N/A**	**09/25/13 10:53**	**130925L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Methane	4.500	4.347	97	4.326	96	80-120	0	0-30	
Carbon Dioxide	15.00	15.07	100	15.06	100	80-120	0	0-30	
Carbon Monoxide	6.990	7.094	101	7.057	101	80-120	1	0-30	
Oxygen + Argon	4.010	3.967	99	3.968	99	80-120	0	0-30	
Nitrogen	69.50	67.48	97	67.23	97	80-120	0	0-30	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/25/13
Work Order: 13-09-1591
Preparation: N/A
Method: ASTM D-1946 (M)
Page 2 of 4

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-502	**Air**	**GC 55**	**N/A**	**09/25/13 09:45**	**130925L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Helium	1.000	1.059	106	1.014	101	80-120	4	0-30	
Hydrogen	1.000	1.001	100	0.9567	96	80-120	4	0-30	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

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

Project: 5755 Broadway, Oakland, CA

Date Received: 09/25/13
Work Order: 13-09-1591
Preparation: N/A
Method: EPA 8260B (M)
Page 3 of 4

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-041-1507	Air	GC/MS NN	N/A	09/26/13 12:16	130926L02

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	79.87	79.42	99	80.37	101	60-156	44-172	1	0-40	
Toluene	94.21	95.93	102	95.62	101	56-146	41-161	0	0-43	
Ethylbenzene	108.6	107.8	99	109.5	101	52-154	35-171	2	0-38	
p/m-Xylene	217.1	219.5	101	219.9	101	42-156	23-175	0	0-41	
o-Xylene	108.6	102.9	95	104.2	96	52-148	36-164	1	0-38	
Methyl-t-Butyl Ether (MTBE)	90.13	88.69	98	89.39	99	45-147	28-164	1	0-25	
Tert-Butyl Alcohol (TBA)	151.6	142.7	94	145.0	96	60-140	47-153	2	0-35	
Diisopropyl Ether (DIPE)	104.5	89.75	86	90.86	87	60-140	47-153	1	0-35	
Ethyl-t-Butyl Ether (ETBE)	104.5	93.23	89	94.35	90	60-140	47-153	1	0-35	
Tert-Amyl-Methyl Ether (TAME)	104.5	100.9	97	100.8	96	60-140	47-153	0	0-35	
Naphthalene	131.1	125.6	96	128.6	98	60-140	47-153	2	0-30	
Ethanol	188.4	121.2	64	125.3	66	47-137	32-152	3	0-35	
1,1-Difluoroethane	67.54	58.34	86	57.57	85	78-156	65-169	1	0-35	
Isopropanol	61.45	54.45	89	60.11	98	78-156	65-169	10	0-35	

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

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

Conestoga-Rovers & Associates	Date Received:	09/25/13
5900 Hollis Street, Suite A	Work Order:	13-09-1591
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-3M
Project: 5755 Broadway, Oakland, CA		Page 4 of 4

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-431-214	**Air**	**GC 43**	**09/25/13 11:46**	**130925L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Gasoline Range Organics (C6-C12)	382400	400500	105	80-120	

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-09-1591

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

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

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

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

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)

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

Please Check Appropriate Box:

[ ] ENV. SERVICES	[ ] MOTIVA RETAIL	[ ] SHELL RETAIL
[ ] MOTIVA SD&CM	[x] CONSULTANT	[ ] LUBES
[ ] SHELL PIPELINE	[ ] OTHER _____	

Print Bill To Contact Name: Peter Schaefer 240483.

PO #:

INCIDENT # (ENV SERVICES): [ ] CHECK IF NO INCIDENT # APPLIES

SAP #:

DATE: 9/9/2013

PAGE: 1 of 1

SAMPLING COMPANY: Conestoga-Rovers & Associates	LOG CODE: CRAW	SITE ADDRESS: Street and City: 5755 Broadway, Oakland	State: Ca
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
PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer		SAMPLER NAME(S) (Print): Katherine Ward	
TELEPHONE: 510-420-3319	FAX: 510-420-3394	E-MAIL: pschaefer@craworld.com	

GLOBAL ID NO.: T0600101270

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

CONSULTANT PROJECT NO.: 240483-2013-04

LAB USE ONLY: 13-09-1591

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

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

SPECIAL INSTRUCTIONS OR NOTES :

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

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

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH -GRO, Purgeable (8260B)	TPH -DRO, Extractable (8015M)	TPHg (8015M)	BTEX (5260B)	BTEX + MTBE & TBA (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)	Helium (1946 M)	Oxygen, Argon, CO_2 (1946)	Napthalene (8260B)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
	VP-1			VAPOR						1	X				X									X	X	X	
1	VP-2	9/24	1415	VAPOR						1	X				X									X	X	X	

Relinquished by: (Signature) Katherine Ward	Received by: (Signature) Tom O'Malley CEL	Date: 9/24/13	Time: 1535
Relinquished by: (Signature) Tom O'Malley 9/04/13 TO650 1730	Received by: (Signature) [illegible]	Date: 9/25/13	Time: 11:20
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

05/2/06 Revision

GSO

WebShip > > > > >

800-322-5555 www.gso.com

1591

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, PARSONS

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 522817438

NPS

ORC

A

GARDEN GROVE

D92841A

16355237

Print Date : 09/24/13 13:55 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 #: 13-09-1594

SAMPLE RECEIPT FORM

Box 1 of 1

CLIENT: CRA DATE: 09/25/13

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

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

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

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

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

Ambient Temperature: ☑ Air ☐ Filter Initial: JS

CUSTODY SEALS INTACT:

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

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

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☑	☐	☐

CONTAINER TYPE:

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

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

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

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

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:**_____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-56706-1
Client Project/Site: 5755 Broadway, Oakland, CA
Revision: 1

For:
Conestoga-Rovers & Associates, Inc.
5900 Hollis Street
Suite A
Emeryville, California 94608

Attn: Peter Schaefer

Philip Sanelle

Authorized for release by:
11/6/2013 2:31:52 PM

Philip Sanelle, Project Manager I
(949)261-1022
philip.sanelle@testamericainc.com

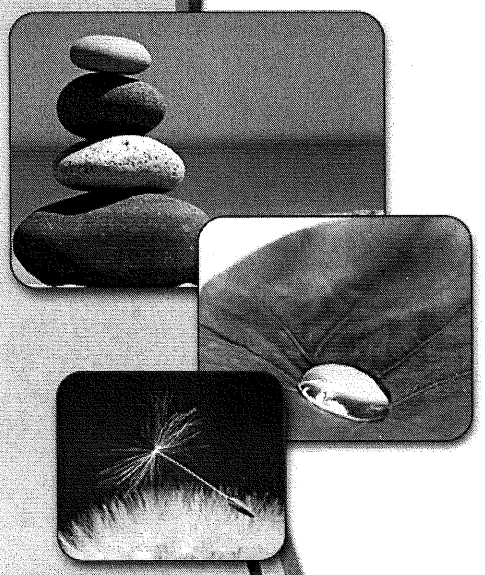


Table of Contents

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 5755 Broadway, Oakland, CA

TestAmerica Job ID: 440-56706-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-56706-1	VP-1-1.5'	Solid	09/09/13 14:37	09/11/13 09:30
440-56706-2	VP-1-3'	Solid	09/09/13 14:55	09/11/13 09:30
440-56706-3	VP-2-1.5'	Solid	09/09/13 13:55	09/11/13 09:30
440-56706-4	VP-2-3'	Solid	09/09/13 14:23	09/11/13 09:30

Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 5755 Broadway, Oakland, CA

TestAmerica Job ID: 440-56706-1

Job ID: 440-56706-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-56706-1

Comments
Revised report to change sample ID's.

Receipt
The samples were received on 9/11/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9° C.

GC/MS VOA
Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample(s): SVP-1-1.5' (440-56706-1). Only one vial was provided. Not possible to re-analyze.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: SVP-1-1.5' (440-56706-1). Only one vial was provided; therefore,re-analysis was not performed.

Method(s) 8260B: Ethylbenzene value reported is above linearity range flagged with "E" qualifier. Only one vial was provided; therefore re-analysis can not be performed.SVP-1-3' (440-56706-2)

Method(s) 8260B/CA_LUFTMS: Value reported for TPH is above linearity range qualified with"E"flag. Only one sample vial was provided ;therefore re-analysis can not be performed.SVP-1-3' (440-56706-2)

Method(s) 8260B/CA_LUFTMS: Internal standard responses were outside of acceptance limits for the following sample(s): SVP-1-1.5' (440-56706-1). Only one sample vial was provided ;therefore re-analysis can not be performed

Method(s) 8260B/CA_LUFTMS: Surrogate recovery for the following sample(s) was outside control limits: SVP-1-1.5' (440-56706-1). Only one sample vial was provided ;therefore re-analysis can not be performed

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample ID: VP-1-1.5'

Lab Sample ID: 440-56706-1
Matrix: Solid

Date Collected: 09/09/13 14:37
Date Received: 09/11/13 09:30

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.11		mg/Kg		09/11/13 11:11	09/13/13 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*2*	*X*	*80 - 125*	*09/11/13 11:11*	*09/13/13 16:36*	*1*
4-Bromofluorobenzene (Surr)	*69*	*X*	*80 - 120*	*09/11/13 11:11*	*09/13/13 16:36*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*	*09/11/13 11:11*	*09/13/13 16:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0022		mg/Kg		09/11/13 11:11	09/13/13 16:36	1
Ethylbenzene	ND		0.0022		mg/Kg		09/11/13 11:11	09/13/13 16:36	1
Methyl-t-Butyl Ether (MTBE)	0.0096		0.0054		mg/Kg		09/11/13 11:11	09/13/13 16:36	1
Toluene	ND		0.0022		mg/Kg		09/11/13 11:11	09/13/13 16:36	1
Xylenes, Total	ND		0.0022		mg/Kg		09/11/13 11:11	09/13/13 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*	*09/11/13 11:11*	*09/13/13 16:36*	*1*
4-Bromofluorobenzene (Surr)	*69*	*X*	*80 - 120*	*09/11/13 11:11*	*09/13/13 16:36*	*1*
Dibromofluoromethane (Surr)	*2*	*X*	*80 - 125*	*09/11/13 11:11*	*09/13/13 16:36*	*1*

Client Sample ID: VP-1-3'

Lab Sample ID: 440-56706-2
Matrix: Solid

Date Collected: 09/09/13 14:55
Date Received: 09/11/13 09:30

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	37	E	0.080		mg/Kg		09/11/13 11:11	09/13/13 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 125*	*09/11/13 11:11*	*09/13/13 18:03*	*1*
4-Bromofluorobenzene (Surr)	*114*		*80 - 120*	*09/11/13 11:11*	*09/13/13 18:03*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*	*09/11/13 11:11*	*09/13/13 18:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0072		0.0016		mg/Kg		09/11/13 11:11	09/13/13 18:03	1
Ethylbenzene	0.24	E	0.0016		mg/Kg		09/11/13 11:11	09/13/13 18:03	1
Methyl-t-Butyl Ether (MTBE)	0.32		0.0040		mg/Kg		09/11/13 11:11	09/13/13 18:03	1
Toluene	ND		0.0016		mg/Kg		09/11/13 11:11	09/13/13 18:03	1
Xylenes, Total	0.27		0.0016		mg/Kg		09/11/13 11:11	09/13/13 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*80 - 120*	*09/11/13 11:11*	*09/13/13 18:03*	*1*
4-Bromofluorobenzene (Surr)	*114*		*80 - 120*	*09/11/13 11:11*	*09/13/13 18:03*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 125*	*09/11/13 11:11*	*09/13/13 18:03*	*1*

Client Sample ID: VP-2-1.5'

Lab Sample ID: 440-56706-3

Date Collected: 09/09/13 13:55
Date Received: 09/11/13 09:30

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.11		mg/Kg		09/11/13 11:11	09/13/13 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 125*	*09/11/13 11:11*	*09/13/13 17:05*	*1*
4-Bromofluorobenzene (Surr)	*83*		*80 - 120*	*09/11/13 11:11*	*09/13/13 17:05*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*	*09/11/13 11:11*	*09/13/13 17:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0022		mg/Kg		09/11/13 11:11	09/13/13 17:05	1
Ethylbenzene	ND		0.0022		mg/Kg		09/11/13 11:11	09/13/13 17:05	1
Methyl-t-Butyl Ether (MTBE)	ND		0.0055		mg/Kg		09/11/13 11:11	09/13/13 17:05	1
Toluene	ND		0.0022		mg/Kg		09/11/13 11:11	09/13/13 17:05	1
Xylenes, Total	ND		0.0022		mg/Kg		09/11/13 11:11	09/13/13 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*	*09/11/13 11:11*	*09/13/13 17:05*	*1*
4-Bromofluorobenzene (Surr)	*83*		*80 - 120*	*09/11/13 11:11*	*09/13/13 17:05*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 125*	*09/11/13 11:11*	*09/13/13 17:05*	*1*

Client Sample ID: VP-2-3'

Lab Sample ID: 440-56706-4

Date Collected: 09/09/13 14:23
Date Received: 09/11/13 09:30

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	0.24		0.10		mg/Kg		09/11/13 11:11	09/13/13 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 125*	*09/11/13 11:11*	*09/13/13 17:34*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*	*09/11/13 11:11*	*09/13/13 17:34*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*	*09/11/13 11:11*	*09/13/13 17:34*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0021		mg/Kg		09/11/13 11:11	09/13/13 17:34	1
Ethylbenzene	ND		0.0021		mg/Kg		09/11/13 11:11	09/13/13 17:34	1
Methyl-t-Butyl Ether (MTBE)	ND		0.0052		mg/Kg		09/11/13 11:11	09/13/13 17:34	1
Toluene	ND		0.0021		mg/Kg		09/11/13 11:11	09/13/13 17:34	1
Xylenes, Total	ND		0.0021		mg/Kg		09/11/13 11:11	09/13/13 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 120*	*09/11/13 11:11*	*09/13/13 17:34*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*	*09/11/13 11:11*	*09/13/13 17:34*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 125*	*09/11/13 11:11*	*09/13/13 17:34*	*1*

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 5755 Broadway, Oakland, CA

TestAmerica Job ID: 440-56706-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 5755 Broadway, Oakland, CA

TestAmerica Job ID: 440-56706-1

Client Sample ID: VP-1-1.5'

Lab Sample ID: 440-56706-1

Date Collected: 09/09/13 14:37
Date Received: 09/11/13 09:30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	4.65 g	10 mL	130828	09/13/13 16:36	SS	TAL IRV
Total/NA	Prep	5035			4.65 g	10 mL	130375	09/11/13 11:11	PH	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	4.65 g	10 mL	130829	09/13/13 16:36	SS	TAL IRV

Client Sample ID: VP-1-3'

Lab Sample ID: 440-56706-2

Date Collected: 09/09/13 14:55
Date Received: 09/11/13 09:30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	6.26 g	10 mL	130828	09/13/13 18:03	SS	TAL IRV
Total/NA	Prep	5035			6.26 g	10 mL	130375	09/11/13 11:11	PH	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	6.26 g	10 mL	130829	09/13/13 18:03	SS	TAL IRV

Client Sample ID: VP-2-1.5'

Lab Sample ID: 440-56706-3

Date Collected: 09/09/13 13:55
Date Received: 09/11/13 09:30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	4.57 g	10 mL	130828	09/13/13 17:05	SS	TAL IRV
Total/NA	Prep	5035			4.57 g	10 mL	130375	09/11/13 11:11	PH	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	4.57 g	10 mL	130829	09/13/13 17:05	SS	TAL IRV

Client Sample ID: VP-2-3'

Lab Sample ID: 440-56706-4

Date Collected: 09/09/13 14:23
Date Received: 09/11/13 09:30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	4.8 g	10 mL	130828	09/13/13 17:34	SS	TAL IRV
Total/NA	Prep	5035			4.8 g	10 mL	130375	09/11/13 11:11	PH	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	4.8 g	10 mL	130829	09/13/13 17:34	SS	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-130828/4
Matrix: Solid
Analysis Batch: 130828

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020		mg/Kg			09/13/13 09:07	1
Ethylbenzene	ND		0.0020		mg/Kg			09/13/13 09:07	1
Methyl-t-Butyl Ether (MTBE)	ND		0.0050		mg/Kg			09/13/13 09:07	1
Toluene	ND		0.0020		mg/Kg			09/13/13 09:07	1
Xylenes, Total	ND		0.0020		mg/Kg			09/13/13 09:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*80 - 120*		*09/13/13 09:07*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*09/13/13 09:07*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 125*		*09/13/13 09:07*	*1*

Lab Sample ID: LCS 440-130828/5
Matrix: Solid
Analysis Batch: 130828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0528		mg/Kg		106	65 - 120
Ethylbenzene	0.0500	0.0566		mg/Kg		113	70 - 125
m,p-Xylene	0.100	0.108		mg/Kg		108	70 - 125
Methyl-t-Butyl Ether (MTBE)	0.0500	0.0529		mg/Kg		106	60 - 140
o-Xylene	0.0500	0.0551		mg/Kg		110	70 - 125
Toluene	0.0500	0.0551		mg/Kg		110	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 125*

Lab Sample ID: 440-56776-A-1 MS
Matrix: Solid
Analysis Batch: 130828

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		0.0499	0.0524		mg/Kg		105	65 - 130
Ethylbenzene	ND		0.0499	0.0596		mg/Kg		120	70 - 135
m,p-Xylene	ND		0.0998	0.113		mg/Kg		113	70 - 130
Methyl-t-Butyl Ether (MTBE)	ND		0.0499	0.0442		mg/Kg		89	55 - 155
o-Xylene	ND		0.0499	0.0559		mg/Kg		112	65 - 130
Toluene	ND		0.0499	0.0552		mg/Kg		111	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*80 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-56776-A-1 MSD
Matrix: Solid
Analysis Batch: 130828

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		0.0499	0.0520		mg/Kg		104	65 - 130	1	20
Ethylbenzene	ND		0.0499	0.0589		mg/Kg		118	70 - 135	1	25
m,p-Xylene	ND		0.0998	0.111		mg/Kg		111	70 - 130	2	25
Methyl-t-Butyl Ether (MTBE)	ND		0.0499	0.0486		mg/Kg		97	55 - 155	9	35
o-Xylene	ND		0.0499	0.0557		mg/Kg		112	65 - 130	0	25
Toluene	ND		0.0499	0.0532		mg/Kg		107	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*92*		*80 - 125*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-130829/4
Matrix: Solid
Analysis Batch: 130829

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.10		mg/Kg			09/13/13 09:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*80 - 125*		*09/13/13 09:07*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*09/13/13 09:07*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*09/13/13 09:07*	*1*

Lab Sample ID: LCS 440-130829/6
Matrix: Solid
Analysis Batch: 130829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	1.00	0.765		mg/Kg		77	60 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-56776-A-1 MS
Matrix: Solid
Analysis Batch: 130829

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	ND		3.44	2.39		mg/Kg		69	55 - 140

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 440-56776-A-1 MS
Matrix: Solid
Analysis Batch: 130829

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*90*		*80 - 125*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 440-56776-A-1 MSD
Matrix: Solid
Analysis Batch: 130829

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		3.44	2.38		mg/Kg		69	55 - 140	0	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*92*		*80 - 125*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 5755 Broadway, Oakland, CA

TestAmerica Job ID: 440-56706-1

GC/MS VOA

Prep Batch: 130375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56706-1	VP-1-1.5'	Total/NA	Solid	5035	
440-56706-2	VP-1-3'	Total/NA	Solid	5035	
440-56706-3	VP-2-1.5'	Total/NA	Solid	5035	
440-56706-4	VP-2-3'	Total/NA	Solid	5035	

Analysis Batch: 130828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56706-1	VP-1-1.5'	Total/NA	Solid	8260B	130375
440-56706-2	VP-1-3'	Total/NA	Solid	8260B	130375
440-56706-3	VP-2-1.5'	Total/NA	Solid	8260B	130375
440-56706-4	VP-2-3'	Total/NA	Solid	8260B	130375
440-56776-A-1 MS	Matrix Spike	Total/NA	Solid	8260B	
440-56776-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	
LCS 440-130828/5	Lab Control Sample	Total/NA	Solid	8260B	
MB 440-130828/4	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 130829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-56706-1	VP-1-1.5'	Total/NA	Solid	8260B/CA_LUFT MS	130375
440-56706-2	VP-1-3'	Total/NA	Solid	8260B/CA_LUFT MS	130375
440-56706-3	VP-2-1.5'	Total/NA	Solid	8260B/CA_LUFT MS	130375
440-56706-4	VP-2-3'	Total/NA	Solid	8260B/CA_LUFT MS	130375
440-56776-A-1 MS	Matrix Spike	Total/NA	Solid	8260B/CA_LUFT MS	
440-56776-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 440-130829/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
MB 440-130829/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 5755 Broadway, Oakland, CA

TestAmerica Job ID: 440-56706-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-14
Arizona	State Program	9	AZ0671	10-13-14
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-28-14 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-14
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-14
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

Sanelle, Philip

From: Schaefer, Peter [pschaefer@craworld.com]
Sent: Wednesday, November 06, 2013 7:01 AM
To: Sanelle, Philip
Subject: FW: Files from 440-56706-1 5755 Broadway, Oakland, CA
Attachments: 440-56706-1_17 Sep 13 1401_EDF.zip; 440567061-091713-TAIRV.240483-SH-5755Broad.EFWEDD.zip; J56706-1 UDS Level 2 Report Final Report.pdf

Philip,

Please reissue the attached report & EDF with the follow changes to the soil sample names:

Old Name	New Name
SVP-1-1.5'	VP-1-1.5
SVP-1-3'	VP-1-3
SVP-2-1.5'	VP-2-1.5
SVP-2-3'	VP-2-3

Thank you for your help.

Regards,

Peter Schaefer
(510) 420-3319

From: Sanelle, Philip [mailto:philip.sanelle@testamericainc.com]
Sent: Tuesday, September 17, 2013 1:06 PM
To: Schaefer, Peter; Shell-US-LabDataManagement; Shell Lab Billing; Shell - EDF
Subject: Files from 440-56706-1 5755 Broadway, Oakland, CA

Final Report and EDF

Equis file has been uploaded to the CRA website.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

PHILIP SANELLE

TestAmerica Irvine
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 949.261,1022

Reference: [101804]
Attachments: 3

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- ☐ CALSCIENCE (_____)
- ☐ GPL (_____)
- ☐ 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 240483

INCIDENT # (ENV SERVICES): ☐ CHECK IF NO INCIDENT # APPLIES

PO #:

SAP #:

DATE: 9/9/2013

PAGE: 1 of 2

SAMPLING COMPANY: Conestoga-Rovers & Associates

LOG CODE: CRAW

SITE ADDRESS: Street and City: 5755 Broadway, Oakland

State: CA

GLOBAL ID NO.: T0600101270

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.: 240483-2013-04

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

TELEPHONE: 510-420-3319

FAX: 510-420-3394

E-MAIL: pschaefer@craworld.com

SAMPLER NAME(S) (Print): Cristina Arganbright

LAB USE ONLY: UUD-56204

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:
Call composite sample ID and field point name CRA-A
Marked TAT except for those contingent tests needed for Aquatic Bioassay
cc: Derek Eisman, Deisman@craworld.com and Shell.Lab.Billing@craworld.com

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

REQUESTED ANALYSIS

TEMPERATURE ON RECEIPT: C° 21.9

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH - Purgeable (8260B)	TPH - Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TPH - MO (8015M)	CAM 17 Metals - Total (6010)	SVOCs (8270C)	VOCs (8260)	PCBs (8082)	Container PID Readings or Laboratory Notes
	SVP-1-15'	9/9	1437	SOIL						1	X	X	X											X	X				Please call
	SVP-1-3'	9/9	1455	SOIL						1	X	X	X											X	X				composite
	SVP-2-1.5'	9/9	1358	SOIL						1	X	X	X											X	X				sample
	SVP-2-3'	9/9	1423	SOIL						1	X	X	X											X	X				CRA-A

440-56706 Chain of Custody

Relinquished by: (Signature)	Received by: (Signature) EM office	Date: 9/9/13	Time: 1000
Relinquished by: (Signature)	Received by: (Signature)	Date: 9/10/13	Time: 1016
Relinquished by: (Signature)	Received by: (Signature)	Date: 9/10/13	Time: 1225

9/10/13 1610 — VnBaman 9/11/13 9:30 — 21.1/19 C° — 2.2°

05/2/06 Revision

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11/6/2013

California Contingent Analyses - Metals

Metal	Trigger level TTLC (mg/kg)	Requirement (based on CCR 66261.24) [Both Solids and Liquids]
Antimony	150	STLC required if TTLC ≥ 150 mg/kg
Arsenic	50/100	STLC required if TTLC ≥ 50 mg/kg; TCLP required if TTLC ≥ 100 mg/kg
Barium	1,000/2,000	STLC required if TTLC ≥ 1,000 mg/kg; TCLP required if TTLC ≥ 2,000 mg/kg
Beryllium	7.5	STLC required if TTLC ≥ 7.5 mg/kg
Cadmium	10/20	STLC required if TTLC ≥ 10 mg/kg; TCLP required if TTLC ≥ 20 mg/kg
Chromium	50/100	STLC required if TTLC ≥ 50 mg/kg; TCLP required if TTLC ≥ 100 mg/kg
Cobalt	800	STLC required if TTLC ≥ 800 mg/kg
Copper	250	STLC required if TTLC ≥ 250 mg/kg
Lead	13/50/100	Organic lead required if TTLC lead ≥ 13 mg/kg STLC required if TTLC ≥ 50 mg/kg; TCLP required if TTLC ≥ 100 mg/kg
Mercury	2/4	STLC required if TTLC ≥ 2 mg/kg; TCLP required if TTLC ≥ 4 mg/kg
Molybdenum	3,500	STLC required if TTLC ≥ 350 mg/kg
Nickel	200	STLC required if TTLC ≥ 200 mg/kg
Selenium	10/20	STLC required if TTLC ≥ 10 mg/kg; TCLP required if TTLC ≥ 20 mg/kg
Silver	50/100	STLC required if TTLC ≥ 50 mg/kg; TCLP required if TTLC ≥ 100 mg/kg
Thallium	70	STLC required if TTLC ≥ 70 mg/kg
Vanadium	240	STLC required if TTLC ≥ 240 mg/kg
Zinc	2,500	STLC required if TTLC ≥ 2,500 mg/kg

California Contingent Analyses - Organics

Organic Constituents	Trigger level TTLC (mg/kg)	Requirement (based on CCR 66261.24) [Both Solids and Liquids]
Pentachlorophenol	1.7	STLC required if TTLC ≥ 1.7
Trichloroethylene	10/204	STLC required if TTLC ≥ 10 mg/kg; TCLP required if TTLC ≥ 204 mg/kg

Organic Constituents	(mg/kg)	Requirements based on TSDF permits **[ONLY for Solids if they meet the below criteria]**
TPHd	20,000	Requires fish bioassay (Acute Aquatic 96 hr LC 50)
TPHg	5,900	Requires fish bioassay (Acute Aquatic 96 hr LC 50)
TPHmo	10,000	Requires fish bioassay (Acute Aquatic 96 hr LC 50)
TRPH (tot rec pet hc)	5,000	Requires fish bioassay (Acute Aquatic 96 hr LC 50)

Revised COC

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 240483.

INCIDENT # (ENV SERVICES)

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 9/9/2013

PAGE: 1 of 1

PO #

SAP #

SAMPLING COMPANY: Conestoga-Rovers & Associates	LOG CODE: CRAW	SITE ADDRESS: Street and City: 5755 Broadway, Oakland	State: Ca
GLOBAL ID NO.: T0600101270			
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: 240483-2013-04		
PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer		SAMPLER NAME(S) (Print): Cristina Arganbright	LAB USE ONLY
TELEPHONE: 510-420-3319	FAX: 510-420-3394	E-MAIL: pschaefer@craworld.com	

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

- ☑ 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 (8260B)	TPH -DRO, Extractable (8015M)	TPHg (8015M)	BTEX (5260B)	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)	TEMPERATURE ON RECEIPT C°	Container PID Readings or Laboratory Notes
	SVP-1-1.5'	9/9	1437	SOIL						1	X				X										
	SVP-1-3'	9/9	1448	SOIL						1	X				X										
	SVP-2-1.5'	9/9	1355	SOIL						1	X				X										
	SVP-2-3'	9/9	1423	SOIL						1	X				X										

Relinquished by: (Signature)	Received by: (Signature)	Date: 9/11/13	Time: 1100
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

05/2/05 Revision

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-56706-1

Login Number: 56706
List Number: 1
Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Cristina Arganbright
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	