CONESTOGA-ROVERS & ASSOCIATES

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

TRANSMITTAL

DATE: January 23, 2012

REFERENCE NO.: 240472

PROJECT NAME: 105 Fifth Street, Oakland

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

RECEIVED
10:58 am, Jan 30, 2012
Alameda County
Environmental Health

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

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

QUANTITY	DESCRIPTION
1	Subsurface Investigation Report

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

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

Copy to: Denis Brown, Shell Oil Products US (electronic copy)
Arthur R. & Mary A. Hansen (property owner), Trustees et al, 820 Loyola Drive, Los Altos, CA 94024
Clint Mercer, SC Fuels (lessee), 1800 West Katella Avenue, Orange, CA 92867

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: **Correspondence File**

Denis L. Brown
Shell Oil Products US
HSE – Environmental Services
20945 S. Wilmington Ave.
Carson, CA 90810-1039
Tel (707) 865 0251
Fax (707) 865 2542
Email denis.l.brown@shell.com

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

Re: Shell-branded Service Station
105 Fifth Street
Oakland, California
SAP Code 135700
Incident No. 98995757
ACEH Case No. RO0000487

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.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

Denis L. Brown
Senior Program Manager

SUBSURFACE INVESTIGATION REPORT

SHELL-BRANDED SERVICE STATION
105 FIFTH STREET
OAKLAND, CALIFORNIA

SAP CODE	135700
INCIDENT NO.	98995757
AGENCY NO.	RO0000487

Prepared by:
Conestoga-Rovers & Associates

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

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web: http://www.CRAworld.com

JANUARY 23, 2012
REF. NO. 240472 (13)
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EXECUTIVE SUMMARY

- Three nested soil vapor probes (SVP-8 through SVP-10) were installed.
- No constituents of concern were detected at concentrations exceeding ESLs in any soil vapor samples.
- Based on these soil vapor results and current soil and groundwater conditions, CRA recommends closure of this environmental case.

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to document the recent soil vapor probe 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 August 16, 2011 work plan, which was approved by Alameda County Environmental Health's September 12, 2011 letter.

The site is an active Shell-branded Service Station located on the western corner of Fifth Street and Oak Street in Oakland, California (Figure 1). Currently, the site layout consists of a kiosk, four underground storage tanks, and two dispenser islands (Figure 2). The area surrounding the site is of mixed commercial and residential use.

A summary of previous work performed at the site and additional background information is presented in CRA's August 16, 2011 *Subsurface Investigation Work Plan* and is not repeated herein.

2.0 INVESTIGATION ACTIVITIES

2.1 PERMIT

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

2.2 FIELD DATES

November 16, 2011 (soil vapor probe installation) and December 21, 2011 (soil vapor probe sampling).

2.3 DRILLING COMPANY

Vapor Tech Services

2.4 CRA PERSONNEL

Geologist William Martinez 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 three nested soil vapor probes (SVP-8 through SVP-10). The probe specifications and soil types encountered are described on the boring logs contained in Appendix B. The probe locations are shown on Figure 2.

2.7 VAPOR PROBE MATERIALS

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

2.8 SCREENED INTERVALS

2.5 to 2.6 feet below grade (fbg) and 5.0 to 5.1 fbg.

2.9 SOIL VAPOR SAMPLING PROCEDURE

Prior to sampling, CRA purged at least three tubing volumes of air from each vapor probe using a vacuum pump. Immediately after purging, CRA collected a soil vapor sample using a laboratory-supplied Tedlar® bag. During sampling, CRA connected the Teflon® tubing for each vapor probe to a lung box containing the Tedlar® bag, and the lung box chamber was connected to the vacuum pump. CRA then drew the sample into the Tedlar® bag by reducing the pressure in the lung box with the vacuum pump. Each sample was labeled, documented on a chain-of-custody, and submitted to Calscience Environmental Laboratories, Inc. of Garden Grove, California for analysis within 72 hours.

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

2.10 SOIL VAPOR SAMPLING ANALYSES

Soil vapor samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method TO-03M, for benzene, toluene, ethylbenzene, and total xylenes (BTEX), and naphthalene by EPA Method 8260B(M), for oxygen and argon, carbon dioxide, and methane by ASTM D-1946, and for helium by ASTM D-1946 (M).

2.11 WASTE DISPOSAL

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

3.0 FINDINGS

3.1 SOIL VAPOR

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

3.2 LEAK TESTING

CRA performed leak testing as described above, and up to 0.242 percent by volume (%*v*) helium was detected in the samples. As shown in the following table, the detections are below 10% of the concentration detected in the shroud, and the samples are considered valid.

Probe ID	*Depth (fbg)*	*Helium concentration in sample (%v)*	*Minimum helium concentration detected in shroud (%v)*	*Maximum acceptable helium concentration in sample (%v)*
SVP-8	2.5	0.242	53	5.3
SVP-8	5	<0.0100	52	5.2
SVP-9	2.5	<0.0100	55	5.5
SVP-9	5	0.0104	50	5.0
SVP-10	2.5	0.0142	51	5.1
SVP-10	5	<0.0100	50	5.0

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

4.0 CONCLUSIONS

TPHg, benzene, toluene, and naphthalene were not detected in soil vapor samples from soil vapor probes SVP-8 through SVP-10. Detections of ethylbenzene and total xylenes were below San Francisco Bay Regional Water Quality Control Board environmental screening levels[1] for residential and commercial land use during the December 2011 sampling event.

5.0 RECOMMENDATIONS

No further soil vapor investigation is warranted. Based on soil vapor results and on current soil and groundwater conditions, CRA recommends closure of this environmental case.

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

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

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG

FIGURES

11/03/08

FIGURE
1

I:\Shell\6-chars\2404-\240472-Oakland 105 Fifth\240472-FIGURES\240472 VICINITY.AI

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Shell-branded Service Station
105 Fifth Street
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

01/20/2012

Soil Vapor Concentration Map

December 21, 2011

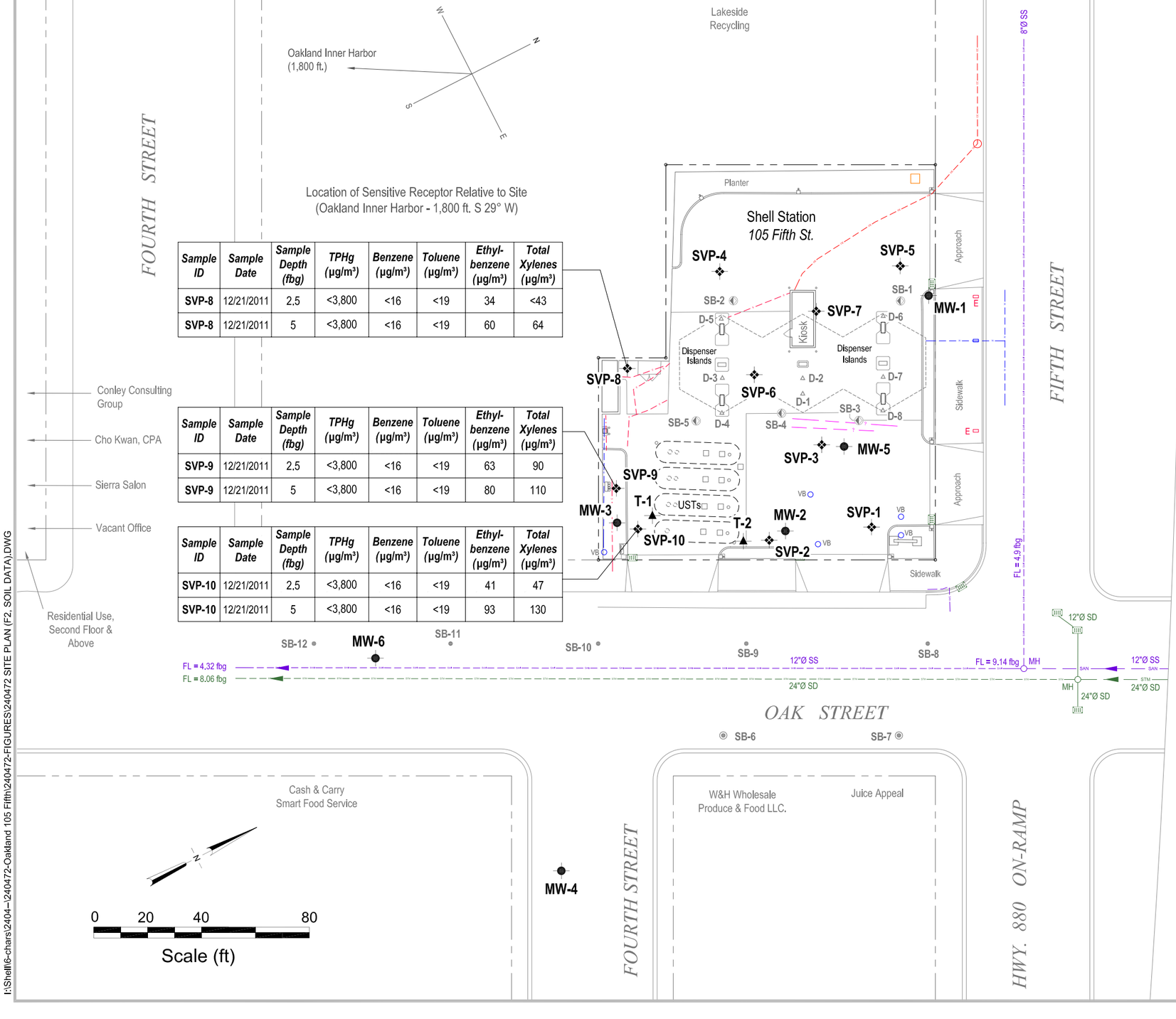
Oakland Inner Harbor
(1,800 ft.)

Location of Sensitive Receptor Relative to Site
(Oakland Inner Harbor - 1,800 ft. S 29° W)

Sample ID	Sample Date	Sample Depth (fbg)	TPHg (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethyl-benzene (µg/m³)	Total Xylenes (µg/m³)
SVP-8	12/21/2011	2.5	<3,800	<16	<19	34	<43
SVP-8	12/21/2011	5	<3,800	<16	<19	60	64

Sample ID	Sample Date	Sample Depth (fbg)	TPHg (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethyl-benzene (µg/m³)	Total Xylenes (µg/m³)
SVP-9	12/21/2011	2.5	<3,800	<16	<19	63	90
SVP-9	12/21/2011	5	<3,800	<16	<19	80	110

Sample ID	Sample Date	Sample Depth (fbg)	TPHg (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethyl-benzene (µg/m³)	Total Xylenes (µg/m³)
SVP-10	12/21/2011	2.5	<3,800	<16	<19	41	47
SVP-10	12/21/2011	5	<3,800	<16	<19	93	130



EXPLANATION

- SVP-7 — Soil vapor probe location (01/2011)
- SVP-6 — Soil vapor probe location (07/2010)
- SVP-1 — Soil vapor probe location (8/2009)
- MW-1 — Monitoring well location
- T-1 — Tank backfill well location
- SB-8 — Soil boring location (3/2002)
- SB-6 — Soil boring location (2/2001)
- SB-1 — Soil boring location (7/1998)
- D-1 — Soil sample location
- OE — Overhead electrical line (OE)
- E — Electrical line (E)
- T — Telecommunication line (T)
- ? — Unknown utility line
- W — Water line (W)
- STM — Storm drain line (STM)
- SAN — Sanitary sewer line (SAN)
- Flow direction
- MH — Manhole
- VB — Vault Box
- Storm drain inlet
- fbg — Feet below grade

Note: All utility locations are approximate

Sample ID	Sample Date	Sample Depth (fbg)	TPHg (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethyl-benzene (µg/m³)	Total Xylenes (µg/m³)
SVP-8	12/21/2011	2.5	<3,800	<16	<19	34	<43
SVP-8	12/21/2011	5	<3,800	<16	<19	60	64

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

CONESTOGA-ROVERS & ASSOCIATES

Shell-branded Service Station
105 Fifth Street
Oakland, California

FIGURE
2

I:\Shell\6-chars\2404--\240472-Oakland 105 Fifth\240472-FIGURES\240472 SITE PLAN (F2, SOIL DATA).DWG

TABLE

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
105 FIFTH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (µg/m3)*	*B (µg/m3)*	*T (µg/m3)*	*E (µg/m3)*	*X (µg/m3)*	*Naphthalene (µg/m3)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
SVP-1	8/25/2009	5	---	**7,200**	<1,500	**15,000**	<6,900	---	---	---	---	<0.0100
SVP-1	10/1/2009	5	---	**3,600**	<19,000	**7,800**	<8,700	---	---	---	---	<0.0100
SVP-1	8/9/2010	5	**49,000,000**	µg/m3	<19,000 a,b	<22,000 a,b	<43,000 a,b	<52,000 a	4.11	14.1	2.18	<0.0100
SVP-1	12/12/2010	5	**32,000,000**	<8,000 a,b	<9,400 a,b	<11,000 a,b	<22,000 a,b	<26,000 a	2.24	10.3	2.03	<0.0100
SVP-2	8/25/2009	5	---	<3.2	24	<4.3	<17	---	---	---	---	<0.0100
SVP-3	8/25/2009	5	---	**20,000**	1,200	**61,000**	<5,200	---	---	---	---	<0.0100
SVP-3	10/1/2009	5	---	**22,000**	<19,000	**66,000**	<8,700	---	---	---	---	<0.0100
SVP-3	8/9/2010	5	**13,000,000**	**13,000 b**	<9,400 b	**44,000 b**	<22,000 b	<26,000	0.528	15.9	2.22	<0.0100
SVP-3	12/12/2010	5	**11,000,000**	**7,600 b**	<7,500 b	**31,000 b**	<17,000 b	<21,000	0.572	13.0	1.98	<0.0100
SVP-4	8/25/2009	5	---	9.0	24	50	<17	---	---	---	---	<0.0100
SVP-5	8/25/2009	5	---	280	21	1,100	35	---	---	---	---	<0.0100
SVP-6	8/9/2010	3	**9,200,000**	**5,400 b**	<1,900 b	**8,200 b**	14,000 b	<5,200	0.548	15.8	2.13	<0.0100
SVP-6	12/12/2010	3	**7,500,000**	**2,200 b**	<1,900 b	**9,300 b**	9,700 b	<5,200	<0.500	15.7	1.93	<0.0100
SVP-6	8/9/2010	5	**8,400,000**	**3,900 b**	<1,900 b	**6,400 b**	4,500 b	<5,200	0.558	16.8	1.80	<0.0100
SVP-6	12/12/2010	5	**7,100,000**	**1,800 b**	<1,900 b	**4,100 b**	<4,300 b	<5,200	<0.500	15.6	2.18	<0.0100
SVP-7	3/1/2011	1	8,300	73 b	340 b	150 b	600 b	<52	<0.500	<0.500	21.4	1.81
SVP-8	12/21/2011	2.5	<3,800	<16 b	<19 b	34 b	<43 b	<52	<0.500	3.58	19.5	0.242
SVP-8	12/21/2011	5	<3,800	<16 b	<19 b	60 b	64 b	<52	<0.500	3.53	19.5	<0.0100
SVP-9	12/21/2011	2.5	<3,800	<16 b	<19 b	63 b	90 b	<52	<0.500	2.18	21.0	<0.0100
SVP-9	12/21/2011	5	<3,800	<16 b	<19 b	80 b	110 b	<52	<0.500	3.23	19.8	0.0104

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
105 FIFTH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (µg/m3)*	*B (µg/m3)*	*T (µg/m3)*	*E (µg/m3)*	*X (µg/m3)*	*Naphthalene (µg/m3)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
SVP-10	12/21/2011	2.5	<3,800	<16 b	<19 b	41 b	47 b	<52	<0.500	3.88	16.9	0.0142
SVP-10	12/21/2011	5	<3,800	<16 b	<19 b	93 b	130 b	<52	<0.500	3.72	17.0	<0.0100
ESLs [c]			*29,000*	*280*	*180,000*	*3,300*	*58,000*	*240*	*NA*	*NA*	*NA*	*NA*

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by modified EPA Method TO-3M
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by Modified EPA Method TO-15M unless otherwise noted
Naphthalene analyzed by Modified EPA Method 8260B
Methane, carbon dioxide, and oxygen + argon analyzed by ASTM D-1946
Helium analyzed by ASTM D-1946 (M)
fbg = Feet below grade
µg/m3 = Micrograms per cubic meter
%v = Percent by volume
<x = Not detected at reporting limit x
ESL = Environmental screening level
--- = Not analyzed
NA = No applicable ESL
Results in **bold** exceed ESL

a = Reporting limit is elevated due to high levels of non-target hydrocarbons
b = BTEX analyzed by Modified EPA Method 8260B(M)
c = San Francisco Bay Regional Water Quality Control Board (RWQCB) shallow soil gas screening level for evaluation of potential vapor intrusion concerns - commercial/industrial land use 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).

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: 10/14/2011 By jamesy

Permit Numbers: W2011-0644
Permits Valid from 11/16/2011 to 11/16/2011

Application Id: 1318528782060
City of Project Site: Oakland
Site Location: 105 5th St, Oakland, CA
Project Start Date: 11/16/2011
Completion Date: 11/16/2011
Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org

Applicant: Conestoga-Rovers - William Martinez
10969 Trade Center Dr #107, Rancho Cordova, CA 95670
Phone: 916-889-8900

Property Owner: Arthur R, Mary A Hansen Trs Et Al
820 Loyola Dr., Lo Altos, CA 94024
Phone: --

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

	Total Due:	$265.00
Receipt Number: WR2011-0302	**Total Amount Paid:**	$265.00
Payer Name : Conestoga Rovers	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 3 Wells
Driller: Vapor Tech - Lic #: 916085 - Method: other

Work Total: $265.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2011-0644	10/14/2011	02/14/2012	SV-10	3.00 in.	0.25 in.	2.50 ft	5.50 ft
W2011-0644	10/14/2011	02/14/2012	SVP-8	3.00 in.	0.25 in.	2.50 ft	5.50 ft
W2011-0644	10/14/2011	02/14/2012	SVP-9	3.00 in.	0.25 in.	2.50 ft	5.50 ft

Specific Work Permit Conditions

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

2. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days, including permit number and site map.

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

4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled,

properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

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

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

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

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

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

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

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

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

APPENDIX B

BORING LOGS

Boring/Well Log Legend

KEY TO SYMBOLS/ABBREVIATIONS

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

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

fbg = Feet below grade

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

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

msl = Mean sea level

Soils logged according to the USCS.

UNIFIED SOILS CLASSIFICATION SYSTEM (USCS) SUMMARY

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

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

CONESTOGA-ROVERS & ASSOCIATES

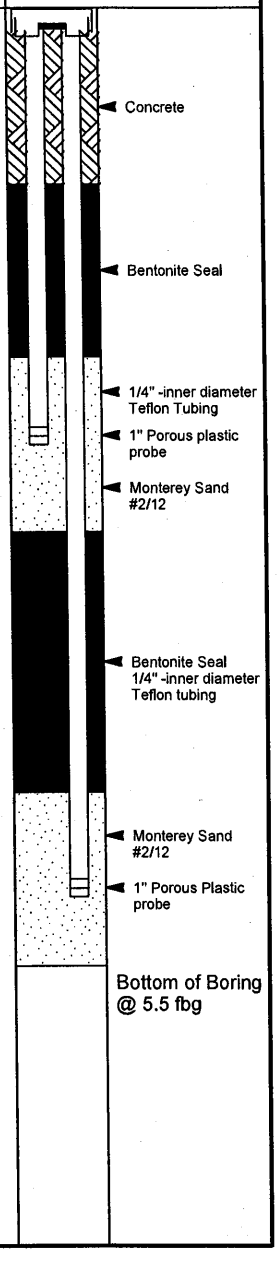
Conestoga - Rovers & Associates, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SVP-8
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	16-Nov-11
LOCATION	105 Fifth Street, Oakland, California	**DRILLING COMPLETED**	16-Nov-11
PROJECT NUMBER	240472	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	4"	**SCREENED INTERVALS**	NA
LOGGED BY	W. Martinez	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG#5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Airknifed to total depth.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT	0.5
					GW GM		**GRAVEL with silt and sand (GW-GM)**; very dark brown (10YR 2/2); moist; 10% silt, 20% fine sand, 70% fine gravel; fill.	
0.0							@ 1.5 fbg; cobble sized concrete, wood, and glass fragments present.	1.6
				5	SM		**Silty SAND (SM)** ; very dark brown (10YR 2/2) ; moist; 20% silt, 80% fine sand; wood and glass fragments present; fill.	3.5
5.0							@ 3.5 fbg; 6" layer of sea shells.	4.0
								5.5

WELL DIAGRAM



WELL LOG (PID) I:\SHELL\6-CHARS\2404--\240472-OAKLAND 105 FIFTH\240472-GINT\240472-2011 SV PROBES\240472~1.GPJ DEFAULT.GDT 1/20/12

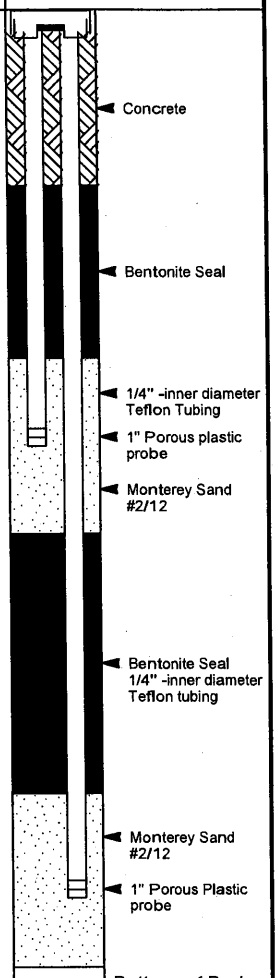
Conestoga - Rovers & Associates, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SVP-9
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	16-Nov-11
LOCATION	105 Fifth Street, Oakland, California	**DRILLING COMPLETED**	16-Nov-11
PROJECT NUMBER	240472	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	4"	**SCREENED INTERVALS**	NA
LOGGED BY	W. Martinez	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG#5612	**DEPTH TO WATER (Static)**	NA
REMARKS	Airknifed to total depth.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							Planter soil and roots	0.5
					CL		**CLAY with sand (CL)** ; weak red (2.5YR 4/2) ; moist; 50% clay, 30% silt, 20% fine sand; medium plasticity; fill.	1.5
7.1					SC		**Clayey SAND (SC)** ; very dark brown (10YR 2/2); moist; 20% clay, 80% fine sand; wood and shell fragments present; fill.	
67				5				5.5

WELL DIAGRAM



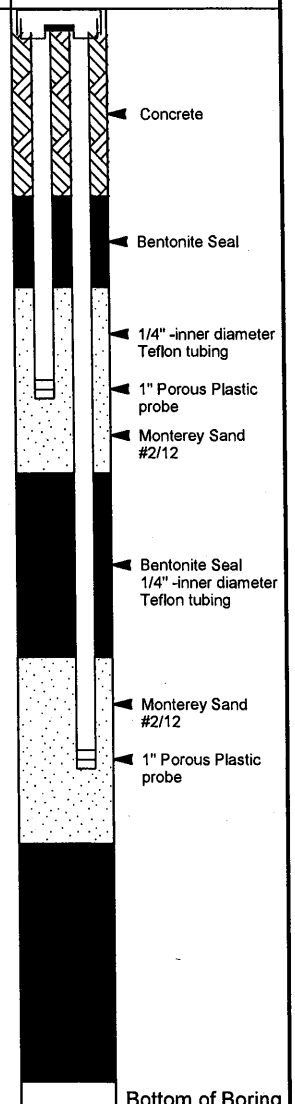
WELL LOG (PID) I:\SHELL\6-CHARS\2404--\240472-OAKLAND 105 FIFTH\240472-GINT\240472-2011 SV PROBES\240472-1.GPJ DEFAULT.GDT 1/20/12

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

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SVP-10
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	16-Nov-11
LOCATION	105 Fifth Street, Oakland, California	**DRILLING COMPLETED**	16-Nov-11
PROJECT NUMBER	240472	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	4"	**SCREENED INTERVALS**	NA
LOGGED BY	W. Martinez	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	P. Schaefer PG#5612	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Airknifed to total depth.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT	0.5
					GW GM		**GRAVEL with silt and sand (GW-GM)**; very dark brown (10YR 2/2); moist; 10% silt, 20% fine sand, 70% fine gravel; fill.	1.0
					ML		**Gravelly SILT (ML)** ; very dark brown (10YR 2/2); moist; 5% clay, 60% silt, 10% fine sand, 25% fine gravel; low plasticity; trace wood fragments present; fill.	3.0
1.4					SP SM		**SAND with silt (SP-SM)** ; very dark brown (10YR 2/2); moist; 10% silt, 80% fine sand, 10% fine gravel; fill.	5.0
1.6				5	SM		**Silty SAND (SM)** very dark brown (10YR 2/2); 15% silt, 85% fine sand; fill.	5.8



WELL LOG (PID) I:\SHELL\6-CHARS\2404--\240472-OAKLAND 105 FIFTH\240472-GINT\240472-2011 SV PROBES\240472~1.GPJ DEFAULT.GDT 1/20/12

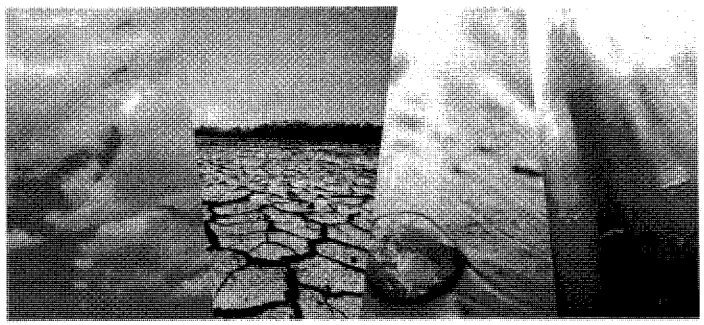
APPENDIX C

CERTIFIED ANALYTICAL REPORTS

Calscience
Environmental
Laboratories, Inc.

CALSCIENCE
WORK ORDER NUMBER: 11-12-1682

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Conestoga-Rovers & Associates

Client Project Name: 105 Fifth St., Oakland, CA

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

Approved for release on 12/30/2011 by:
Xuan Dang
Project Manager

ResultLink ▸

Email your PM ▸

Calscience Environmental Laboratories, Inc.

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Work Order Number: 11-12-1682

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Calscience Environmental Laboratories, Inc.

Case Narrative

Work Order # 11-12-1682

Modified EPA 8260 in Air

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

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

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

Calscience Environmental Laboratories, Inc.

Client:	Conestoga-Rovers & Associates	Work Order:	11-12-1682
	5900 Hollis Street, Suite A	Project name:	105 Fifth St., Oakland, CA
	Emeryville, CA 94608-2008	Received:	12/22/11 10:00
Attn:	Peter Schaefer		

DETECTIONS SUMMARY

Client Sample ID / Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
SVP-8-3'						
Carbon Dioxide	**3.58**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**19.5**		0.500	%v	ASTM D-1946	N/A
Helium	**0.242**		0.0100	%v	ASTM D-1946 (M)	N/A
Ethylbenzene	**34**		22	ug/m3	EPA 8260B (M)	N/A
SVP-8-5'						
Carbon Dioxide	**3.53**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**19.5**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**60**		22	ug/m3	EPA 8260B (M)	N/A
Xylenes (total)	**64**		43	ug/m3	EPA 8260B (M)	N/A
SVP-9-3'						
Carbon Dioxide	**2.18**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**21.0**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**63**		22	ug/m3	EPA 8260B (M)	N/A
Xylenes (total)	**90**		43	ug/m3	EPA 8260B (M)	N/A
SVP-9-5'						
Carbon Dioxide	**3.23**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**19.8**		0.500	%v	ASTM D-1946	N/A
Helium	**0.0104**		0.0100	%v	ASTM D-1946 (M)	N/A
Ethylbenzene	**80**		22	ug/m3	EPA 8260B (M)	N/A
Xylenes (total)	**110**		43	ug/m3	EPA 8260B (M)	N/A
SVP-10-3'						
Carbon Dioxide	**3.88**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**16.9**		0.500	%v	ASTM D-1946	N/A
Helium	**0.0142**		0.0100	%v	ASTM D-1946 (M)	N/A
Ethylbenzene	**41**		22	ug/m3	EPA 8260B (M)	N/A
Xylenes (total)	**47**		43	ug/m3	EPA 8260B (M)	N/A
SVP-10-5'						
Carbon Dioxide	**3.72**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**17.0**		0.500	%v	ASTM D-1946	N/A
Ethylbenzene	**93**		22	ug/m3	EPA 8260B (M)	N/A
Xylenes (total)	**130**		43	ug/m3	EPA 8260B (M)	N/A

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Client:	Conestoga-Rovers & Associates	Work Order:	11-12-1682
	5900 Hollis Street, Suite A	Project name:	105 Fifth St., Oakland, CA
	Emeryville, CA 94608-2008	Received:	12/22/11 10:00
Attn:	Peter Schaefer		

DETECTIONS SUMMARY

Client Sample ID

Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction

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

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 12/22/11
Work Order No: 11-12-1682
Preparation: N/A
Method: ASTM D-1946
Units: %v

Project: 105 Fifth St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-8-3'	11-12-1682-1-A	12/21/11 12:26	Air	GC 36	N/A	12/22/11 11:36	111222L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	19.5	0.500	1	
Carbon Dioxide	3.58	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-8-5'	11-12-1682-2-A	12/21/11 12:41	Air	GC 36	N/A	12/22/11 11:56	111222L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	19.5	0.500	1	
Carbon Dioxide	3.53	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-9-3'	11-12-1682-3-A	12/21/11 10:30	Air	GC 36	N/A	12/22/11 12:14	111222L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	21.0	0.500	1	
Carbon Dioxide	2.18	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-9-5'	11-12-1682-4-A	12/21/11 10:54	Air	GC 36	N/A	12/22/11 12:34	111222L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	19.8	0.500	1	
Carbon Dioxide	3.23	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-10-3'	11-12-1682-5-A	12/21/11 11:33	Air	GC 36	N/A	12/22/11 13:10	111222L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	16.9	0.500	1	
Carbon Dioxide	3.88	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-10-5'	11-12-1682-6-A	12/21/11 11:48	Air	GC 36	N/A	12/22/11 13:32	111222L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	17.0	0.500	1	
Carbon Dioxide	3.72	0.500	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-03-002-1,462	N/A	Air	GC 36	N/A	12/22/11 11:15	111222L01

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 12/22/11
Work Order No: 11-12-1682
Preparation: N/A
Method: ASTM D-1946 (M)

Project: 105 Fifth St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-8-3'	11-12-1682-1-A	12/21/11 12:26	Air	GC 55	N/A	12/22/11 13:59	111222L01

Parameter	Result	RL	DF	Qual	Units
Helium	0.242	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-8-5'	11-12-1682-2-A	12/21/11 12:41	Air	GC 55	N/A	12/22/11 14:21	111222L01

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-9-3'	11-12-1682-3-A	12/21/11 10:30	Air	GC 55	N/A	12/22/11 14:47	111222L01

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-9-5'	11-12-1682-4-A	12/21/11 10:54	Air	GC 55	N/A	12/22/11 15:16	111222L01

Parameter	Result	RL	DF	Qual	Units
Helium	0.0104	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-10-3'	11-12-1682-5-A	12/21/11 11:33	Air	GC 55	N/A	12/22/11 16:09	111222L01

Parameter	Result	RL	DF	Qual	Units
Helium	0.0142	0.0100	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-10-5'	11-12-1682-6-A	12/21/11 11:48	Air	GC 55	N/A	12/22/11 16:57	111222L01

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received: 12/22/11
5900 Hollis Street, Suite A	Work Order No: 11-12-1682
Emeryville, CA 94608-2008	Preparation: N/A
	Method: ASTM D-1946 (M)

Project: 105 Fifth St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-203**	**N/A**	**Air**	**GC 55**	**N/A**	**12/22/11 12:53**	**111222L01**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	12/22/11
5900 Hollis Street, Suite A	Work Order No:	11-12-1682
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA 8260B (M)
	Units:	ug/m3

Project: 105 Fifth St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-8-3'	11-12-1682-1-A	12/21/11 12:26	Air	GC/MS AA	N/A	12/23/11 00:08	111222L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Xylenes (total)	ND	43	1	
Toluene	ND	19	1		Naphthalene	ND	52	1	
Ethylbenzene	34	22	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	108	47-156			1,2-Dichloroethane-d4	111	47-156		
Toluene-d8	103	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-8-5'	11-12-1682-2-A	12/21/11 12:41	Air	GC/MS AA	N/A	12/23/11 00:55	111222L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Xylenes (total)	64	43	1	
Toluene	ND	19	1		Naphthalene	ND	52	1	
Ethylbenzene	60	22	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	107	47-156			1,2-Dichloroethane-d4	110	47-156		
Toluene-d8	102	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-9-3'	11-12-1682-3-A	12/21/11 10:30	Air	GC/MS AA	N/A	12/23/11 01:43	111222L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Xylenes (total)	90	43	1	
Toluene	ND	19	1		Naphthalene	ND	52	1	
Ethylbenzene	63	22	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	104	47-156			1,2-Dichloroethane-d4	110	47-156		
Toluene-d8	102	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-9-5'	11-12-1682-4-A	12/21/11 10:54	Air	GC/MS AA	N/A	12/23/11 02:30	111222L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Xylenes (total)	110	43	1	
Toluene	ND	19	1		Naphthalene	ND	52	1	
Ethylbenzene	80	22	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	107	47-156			1,2-Dichloroethane-d4	111	47-156		
Toluene-d8	104	47-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 12/22/11
Work Order No: 11-12-1682
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 105 Fifth St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-10-3'	**11-12-1682-5-A**	**12/21/11 11:33**	**Air**	**GC/MS AA**	**N/A**	**12/23/11 03:18**	**111222L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Xylenes (total)	47	43	1	
Toluene	ND	19	1		Naphthalene	ND	52	1	
Ethylbenzene	41	22	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	108	47-156			1,2-Dichloroethane-d4	113	47-156		
Toluene-d8	103	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-10-5'	**11-12-1682-6-A**	**12/21/11 11:48**	**Air**	**GC/MS AA**	**N/A**	**12/23/11 04:06**	**111222L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Xylenes (total)	130	43	1	
Toluene	ND	19	1		Naphthalene	ND	52	1	
Ethylbenzene	93	22	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	106	47-156			1,2-Dichloroethane-d4	111	47-156		
Toluene-d8	103	47-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-13-041-731**	**N/A**	**Air**	**GC/MS AA**	**N/A**	**12/22/11 13:02**	**111222L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Xylenes (total)	ND	43	1	
Toluene	ND	19	1		Naphthalene	ND	52	1	
Ethylbenzene	ND	22	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	107	47-156			1,2-Dichloroethane-d4	120	47-156		
Toluene-d8	103	47-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 12/22/11
Work Order No: 11-12-1682
Preparation: N/A
Method: EPA TO-3M

Project: 105 Fifth St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-8-3'	11-12-1682-1-A	12/21/11 12:26	Air	GC 19	N/A	12/22/11 19:19	111222L01

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-8-5'	11-12-1682-2-A	12/21/11 12:41	Air	GC 19	N/A	12/22/11 20:00	111222L01

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-9-3'	11-12-1682-3-A	12/21/11 10:30	Air	GC 19	N/A	12/22/11 20:45	111222L01

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-9-5'	11-12-1682-4-A	12/21/11 10:54	Air	GC 19	N/A	12/22/11 22:07	111222L01

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-10-3'	11-12-1682-5-A	12/21/11 11:33	Air	GC 19	N/A	12/22/11 22:44	111222L01

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-10-5'	11-12-1682-6-A	12/21/11 11:48	Air	GC 19	N/A	12/22/11 23:24	111222L01

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates	Date Received:	12/22/11
5900 Hollis Street, Suite A	Work Order No:	11-12-1682
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-3M

Project: 105 Fifth St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-431-31**	**N/A**	**Air**	**GC 19**	**N/A**	**12/22/11 11:09**	**111222L01**

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

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

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 12/22/11
Work Order No: 11-12-1682
Preparation: N/A
Method: EPA TO-3M

Project: 105 Fifth St., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
SVP-10-5'	**Air**	**GC 19**	**01/01/95**	**12/23/11**	**111222D01**

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

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: N/A
Work Order No: 11-12-1682
Preparation: N/A
Method: ASTM D-1946

Project: 105 Fifth St., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1,462	Air	GC 36	N/A	12/22/11	111222L01

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	10.12	102	102	80-120	0	0-30	
Carbon Dioxide	10.07	113	113	80-120	0	0-30	
Carbon Monoxide	9.930	108	108	80-120	0	0-30	
Oxygen + Argon	3.500	100	101	80-120	0	0-30	
Nitrogen	10.02	97	98	80-120	0	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: N/A
Work Order No: 11-12-1682
Preparation: N/A
Method: ASTM D-1946 (M)

Project: 105 Fifth St., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-203	Air	GC 55	N/A	12/22/11	111222L01

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Helium	1.000	91	93	80-120	3	0-30	
Hydrogen	1.000	86	89	80-120	3	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: N/A
Work Order No: 11-12-1682
Preparation: N/A
Method: EPA 8260B (M)

Project: 105 Fifth St., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-041-731	Air	GC/MS AA	N/A	12/22/11	111222L01

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	79.87	102	103	60-156	44-172	1	0-40	
Toluene	94.21	95	97	56-146	41-161	3	0-43	
Ethylbenzene	108.6	93	93	52-154	35-171	0	0-38	
Xylenes (total)	325.7	96	96	42-156	23-175	0	0-41	
Methyl-t-Butyl Ether (MTBE)	90.13	109	111	45-147	28-164	1	0-25	
Tert-Butyl Alcohol (TBA)	151.6	102	97	60-140	47-153	5	0-35	
Diisopropyl Ether (DIPE)	104.5	110	108	60-140	47-153	1	0-35	
Ethyl-t-Butyl Ether (ETBE)	104.5	107	109	60-140	47-153	1	0-35	
Tert-Amyl-Methyl Ether (TAME)	104.5	102	102	60-140	47-153	0	0-35	
Naphthalene	131.1	67	65	60-140	47-153	4	0-30	
Ethanol	188.4	79	77	47-137	32-152	3	0-35	
1,1-Difluoroethane	67.54	116	118	78-156	65-169	1	0-35	
Isopropanol	61.45	95	90	78-156	65-169	5	0-35	

Total number of LCS compounds : 13
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 11-12-1682

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

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

Shell Oil Products Chain Of Custody Record

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

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

Print Bill To Contact Name: Peter Schaefer 240472

INCIDENT # (ENV SERVICES)

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 12/19/2011

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: 510-420-331*9 | FAX: 707-935-6649 | E-MAIL: pschaefer@craworld.com

SITE ADDRESS: Street and City: 105 5TH Street, Oakland | State: Ca | GLOBAL ID NO.: T0600102116

EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter CRA, Sonoma | PHONE NO.: 510-420-3343 | E-MAIL: | CONSULTANT PROJECT NO.: 240472-95-11.03

SAMPLER NAME(S) (Print): Cristina Arganbright

LAB USE ONLY: 11-12-1682

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED

☐ 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.	TPHg (carbon range C6-C12)(TO-03)	TPH -DRO, Extractable (8015M)	TPHg (8015M)	BTEX and naphthalene 8260B	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)	Oxygen (ASTM D Method 1946)	Argon (ASTM D Method 1946)	Carbon Dioxide (ASTM D Method 1946)	Methane (ASTM D Method 1946)	Helium (ASTM D Method 1946 (M)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
1	SVP-8-3'	12/21/######	1226	Vapor						1	X			X											X	X	X	X	X	
2	SVP-8-5'	12/21/######	1241	Vapor						1	X			X											X	X	X	X	X	
3	SVP-9-3'	12/21/######	1030	Vapor						1	X			X											X	X	X	X	X	
4	SVP-9-5'	12/21/######	1054	Vapor						1	X			X											X	X	X	X	X	
5	SVP-10-3'	12/21/######	1135	Vapor						1	X			X											X	X	X	X	X	
6	SVP-10-5'	12/21/######	1148	Vapor						1	X			X											X	X	X	X	X	

Relinquished by: (Signature) — Received by: (Signature) CEL — Date: 12/21/11 — Time: 1455

Relinquished by: (Signature) to CSD 12/21/11 1730 — Received by: (Signature) CR — Date: 12/22/11 — Time: 1000

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

05/2/05 Revision

1682

Page 1 of 1

GSO

WebShip > > > > >

800-322-5555 www.gso.com

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

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

COD:
$0.00

Reference:
CARDNO ERI, CRA

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 518099141

NPS

ORC

A

GARDEN GROVE

D92841A

97139110

Print Date : 12/21/11 14:58 PM

Package 1 of 1

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-12-1682

SAMPLE RECEIPT FORM

Box 1 of 1

CLIENT: CRA DATE: 12/22/11

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

Temperature _____ °C - 0.3 °C (CF) = _____ °C ☐ Blank ☐ Sample

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

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

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

Ambient Temperature: ☑ Air ☐ Filter Initial: NC

CUSTODY SEALS INTACT:

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

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

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

CONTAINER TYPE:

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

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

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

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

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

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

LABORATORY REPORT

Prepared For: Conestoga-Rovers & Associates - Emeryville Shell
5900 Hollis St., Suite A
Emeryville, CA 94608
Attention: Peter Schaefer

Project: 105 5th St., Oakland, CA

Sampled: 11/16/11
Received: 11/21/11
Issued: 12/08/11 17:06

NELAP #01108CA California ELAP#2706 CSDLAC #10256 AZ #AZ0671 NV #CA01531

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.
This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

LABORATORY ID	CLIENT ID	MATRIX
IUK2553-01	CRA-1A	Soil

Reviewed By:

TestAmerica Irvine

Philip Sanelle
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Conestoga-Rovers & Associates - Emeryville Shell
5900 Hollis St., Suite A
Emeryville, CA 94608
Attention: Peter Schaefer

Project ID: 105 5th St., Oakland, CA
Report Number: IUK2553

Sampled: 11/16/11
Received: 11/21/11

EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IUK2553-01 (CRA-1A - Soil)								**RL1**
Reporting Units: mg/kg								
DRO (C10-C28)	EPA 8015B	11K3782	10	ND	2	11/28/2011	11/30/2011	
ORO (C29-C40)	EPA 8015B	11K3782	10	ND	2	11/28/2011	11/30/2011	
Surrogate: n-Octacosane (40-140%)				*83 %*				
Surrogate: n-Octacosane (40-140%)				*83 %*				

TestAmerica Irvine

Philip Sanelle
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Conestoga-Rovers & Associates - Emeryville Shell
5900 Hollis St., Suite A
Emeryville, CA 94608
Attention: Peter Schaefer

Project ID: 105 5th St., Oakland, CA
Report Number: IUK2553

Sampled: 11/16/11
Received: 11/21/11

VOLATILE FUEL HYDROCARBONS BY GC/MS (CA LUFT)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IUK2553-01 (CRA-1A - Soil)								
Reporting Units: mg/kg								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	11K3860	0.19	**0.21**	0.971	11/29/2011	11/30/2011	
Surrogate: Dibromofluoromethane (80-125%)				*96 %*				
Surrogate: Toluene-d8 (80-120%)				*97 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*93 %*				

TestAmerica Irvine

Philip Sanelle
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Conestoga-Rovers & Associates - Emeryville Shell
5900 Hollis St., Suite A
Emeryville, CA 94608
Attention: Peter Schaefer

Project ID: 105 5th St., Oakland, CA
Report Number: IUK2553

Sampled: 11/16/11
Received: 11/21/11

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IUK2553-01 (CRA-1A - Soil)								
Reporting Units: mg/kg								
Benzene	EPA 8260B	11K3860	0.00097	ND	0.971	11/29/2011	11/30/2011	
Ethylbenzene	EPA 8260B	11K3860	0.00097	ND	0.971	11/29/2011	11/30/2011	
Toluene	EPA 8260B	11K3860	0.00097	ND	0.971	11/29/2011	11/30/2011	
Xylenes, Total	EPA 8260B	11K3860	0.0019	ND	0.971	11/29/2011	11/30/2011	
Surrogate: 4-Bromofluorobenzene (80-120%)				*93 %*				
Surrogate: Dibromofluoromethane (80-125%)				*96 %*				
Surrogate: Toluene-d8 (80-120%)				*97 %*				

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Attention: Peter Schaefer

Project ID: 105 5th St., Oakland, CA
Report Number: IUK2553

Sampled: 11/16/11
Received: 11/21/11

METALS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IUK2553-01 (CRA-1A - Soil)								
Reporting Units: mg/kg								
Mercury	EPA 7471A	11K3951	0.020	**0.27**	1	11/29/2011	11/29/2011	
Antimony	EPA 6010B	11K3703	10	ND	0.995	11/28/2011	11/30/2011	
Arsenic	EPA 6010B	11K3703	2.0	**2.4**	0.995	11/28/2011	11/30/2011	
Barium	EPA 6010B	11K3703	1.0	**73**	0.995	11/28/2011	11/30/2011	
Beryllium	EPA 6010B	11K3703	0.50	ND	0.995	11/28/2011	11/30/2011	
Cadmium	EPA 6010B	11K3703	0.50	ND	0.995	11/28/2011	11/30/2011	
Chromium	EPA 6010B	11K3703	1.0	**28**	0.995	11/28/2011	11/30/2011	
Cobalt	EPA 6010B	11K3703	1.0	**3.4**	0.995	11/28/2011	11/30/2011	
Copper	EPA 6010B	11K3703	2.0	**25**	0.995	11/28/2011	11/30/2011	
Lead	EPA 6010B	11K3703	2.0	**80**	0.995	11/28/2011	11/30/2011	
Molybdenum	EPA 6010B	11K3703	2.0	ND	0.995	11/28/2011	11/30/2011	
Nickel	EPA 6010B	11K3703	2.0	**15**	0.995	11/28/2011	11/30/2011	
Selenium	EPA 6010B	11K3703	2.0	ND	0.995	11/28/2011	11/30/2011	
Silver	EPA 6010B	11K3703	1.0	ND	0.995	11/28/2011	11/30/2011	
Thallium	EPA 6010B	11K3703	10	ND	0.995	11/28/2011	11/30/2011	
Vanadium	EPA 6010B	11K3703	1.0	**19**	0.995	11/28/2011	11/30/2011	
Zinc	EPA 6010B	11K3703	5.0	**67**	0.995	11/28/2011	11/30/2011	

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ORGANIC LEAD BY GFAA (HML 939-M)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IUK2553-01 (CRA-1A - Soil)								**H**
Reporting Units: mg/kg								
Organic Lead	HML 939-M	11L0190	0.025	**0.043**	1	12/1/2011	12/1/2011	M1

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STLC METALS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	STLC Limit	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IUK2553-01 (CRA-1A - Soil)									
Reporting Units: mg/l									
Lead	EPA 6010B	11L0438	0.10	**16**	1	5.0	12/4/2011	12/4/2011	

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WASTE EXTRACTION TEST (STLC) - Metals

Analyte	Method	Batch	Extraction Start Date	Extraction End Date	Data Qualifiers
Sample ID: IUK2553-01 (CRA-1A - Soil)					
Extraction	STLC-Met	11L0145	12/1/2011	12/3/2011	

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Received: 11/21/11

METHOD BLANK/QC DATA

EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 11K3782 Extracted: 11/28/11										
Blank Analyzed: 11/29/2011 (11K3782-BLK1)										
DRO (C10-C28)	ND	5.0	mg/kg							
ORO (C29-C40)	ND	5.0	mg/kg							
EFH (C10 - C28)	ND	5.0	mg/kg							
EFH (C10 - C28)	ND	5.0	mg/kg							
Surrogate: n-Octacosane	*4.76*		*mg/kg*	*6.67*		*71*	*40-140*			
Surrogate: n-Octacosane	*4.76*		*mg/kg*	*6.67*		*71*	*40-140*			
LCS Analyzed: 11/29/2011 (11K3782-BS1)										
DRO (C10-C28)	24.8	5.0	mg/kg	33.3		74	45-115			
EFH (C10 - C28)	24.8	5.0	mg/kg	33.3		74	45-115			
EFH (C10 - C28)	24.8	5.0	mg/kg	33.3		74	45-115			
Surrogate: n-Octacosane	*4.96*		*mg/kg*	*6.67*		*74*	*40-140*			
Surrogate: n-Octacosane	*4.96*		*mg/kg*	*6.67*		*74*	*40-140*			
Matrix Spike Analyzed: 11/29/2011 (11K3782-MS1)					**Source: IUK2932-05**					
EFH (C10 - C28)	44.3	15	mg/kg	33.3	16.5	84	40-120			
EFH (C10 - C28)	44.3	15	mg/kg	33.3	16.5	84	40-120			
Surrogate: n-Octacosane	*8.39*		*mg/kg*	*6.67*		*126*	*40-140*			
Surrogate: n-Octacosane	*8.39*		*mg/kg*	*6.67*		*126*	*40-140*			
Matrix Spike Dup Analyzed: 11/29/2011 (11K3782-MSD1)					**Source: IUK2932-05**					
EFH (C10 - C28)	43.9	15	mg/kg	33.3	16.5	82	40-120	1	30	
EFH (C10 - C28)	43.9	15	mg/kg	33.3	16.5	82	40-120	1	30	
Surrogate: n-Octacosane	*8.02*		*mg/kg*	*6.67*		*120*	*40-140*			
Surrogate: n-Octacosane	*8.02*		*mg/kg*	*6.67*		*120*	*40-140*			

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METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS BY GC/MS (CA LUFT)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 11K3860 Extracted: 11/29/11										
Blank Analyzed: 11/29/2011 (11K3860-BLK1)										
Volatile Fuel Hydrocarbons (C4-C12)	ND	0.20	mg/kg							
Surrogate: Dibromofluoromethane	*0.0487*		*mg/kg*	*0.0500*		*97*	*80-125*			
Surrogate: Toluene-d8	*0.0503*		*mg/kg*	*0.0500*		*101*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0492*		*mg/kg*	*0.0500*		*98*	*80-120*			
LCS Analyzed: 11/29/2011 (11K3860-BS2)										
Volatile Fuel Hydrocarbons (C4-C12)	0.904	0.20	mg/kg	1.00		90	60-135			
Surrogate: Dibromofluoromethane	*0.0503*		*mg/kg*	*0.0500*		*101*	*80-125*			
Surrogate: Toluene-d8	*0.0503*		*mg/kg*	*0.0500*		*101*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0495*		*mg/kg*	*0.0500*		*99*	*80-120*			
Matrix Spike Analyzed: 11/29/2011 (11K3860-MS1)					**Source: IUK2458-01**					
Volatile Fuel Hydrocarbons (C4-C12)	2.85	0.19	mg/kg	3.34	ND	85	50-140			
Surrogate: Dibromofluoromethane	*0.0467*		*mg/kg*	*0.0484*		*97*	*80-125*			
Surrogate: Toluene-d8	*0.0483*		*mg/kg*	*0.0484*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0483*		*mg/kg*	*0.0484*		*100*	*80-120*			
Matrix Spike Dup Analyzed: 11/29/2011 (11K3860-MSD1)					**Source: IUK2458-01**					
Volatile Fuel Hydrocarbons (C4-C12)	2.93	0.20	mg/kg	3.51	ND	84	50-140	3	25	
Surrogate: Dibromofluoromethane	*0.0463*		*mg/kg*	*0.0508*		*91*	*80-125*			
Surrogate: Toluene-d8	*0.0509*		*mg/kg*	*0.0508*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0509*		*mg/kg*	*0.0508*		*100*	*80-120*			

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METHOD BLANK/QC DATA

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 11K3860 Extracted: 11/29/11										
Blank Analyzed: 11/29/2011 (11K3860-BLK1)										
Benzene	ND	0.0010	mg/kg							
Ethylbenzene	ND	0.0010	mg/kg							
Toluene	ND	0.0010	mg/kg							
m,p-Xylenes	ND	0.0020	mg/kg							
o-Xylene	ND	0.0010	mg/kg							
Xylenes, Total	ND	0.0020	mg/kg							
Surrogate: 4-Bromofluorobenzene	*0.0492*		*mg/kg*	*0.0500*		*98*	*80-120*			
Surrogate: Dibromofluoromethane	*0.0487*		*mg/kg*	*0.0500*		*97*	*80-125*			
Surrogate: Toluene-d8	*0.0503*		*mg/kg*	*0.0500*		*101*	*80-120*			
LCS Analyzed: 11/29/2011 (11K3860-BS1)										
Benzene	0.0516	0.0010	mg/kg	0.0500		103	65-120			
Ethylbenzene	0.0510	0.0010	mg/kg	0.0500		102	70-125			
Toluene	0.0525	0.0010	mg/kg	0.0500		105	70-125			
m,p-Xylenes	0.104	0.0020	mg/kg	0.100		104	70-125			
o-Xylene	0.0532	0.0010	mg/kg	0.0500		106	70-125			
Xylenes, Total	0.157	0.0020	mg/kg	0.150		105	70-125			
Surrogate: 4-Bromofluorobenzene	*0.0499*		*mg/kg*	*0.0500*		*100*	*80-120*			
Surrogate: Dibromofluoromethane	*0.0523*		*mg/kg*	*0.0500*		*105*	*80-125*			
Surrogate: Toluene-d8	*0.0504*		*mg/kg*	*0.0500*		*101*	*80-120*			
Matrix Spike Analyzed: 11/29/2011 (11K3860-MS1)					**Source: IUK2458-01**					
Benzene	0.0496	0.00097	mg/kg	0.0484	ND	103	65-130			
Ethylbenzene	0.0507	0.00097	mg/kg	0.0484	ND	105	70-135			
Toluene	0.0509	0.00097	mg/kg	0.0484	ND	105	70-130			
m,p-Xylenes	0.104	0.0019	mg/kg	0.0967	ND	107	70-130			
o-Xylene	0.0528	0.00097	mg/kg	0.0484	ND	109	65-130			
Xylenes, Total	0.157	0.0019	mg/kg	0.145	ND	108	70-125			
Surrogate: 4-Bromofluorobenzene	*0.0483*		*mg/kg*	*0.0484*		*100*	*80-120*			
Surrogate: Dibromofluoromethane	*0.0467*		*mg/kg*	*0.0484*		*97*	*80-125*			
Surrogate: Toluene-d8	*0.0483*		*mg/kg*	*0.0484*		*100*	*80-120*			

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VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 11K3860 Extracted: 11/29/11										
Matrix Spike Dup Analyzed: 11/29/2011 (11K3860-MSD1)					**Source: IUK2458-01**					
Benzene	0.0517	0.0010	mg/kg	0.0508	ND	102	65-130	4	20	
Ethylbenzene	0.0547	0.0010	mg/kg	0.0508	ND	108	70-135	8	25	
Toluene	0.0536	0.0010	mg/kg	0.0508	ND	105	70-130	5	20	
m,p-Xylenes	0.110	0.0020	mg/kg	0.102	ND	108	70-130	6	25	
o-Xylene	0.0559	0.0010	mg/kg	0.0508	ND	110	65-130	6	25	
Xylenes, Total	0.166	0.0020	mg/kg	0.152	ND	109	70-125	6	25	
Surrogate: 4-Bromofluorobenzene	*0.0509*		*mg/kg*	*0.0508*		*100*	*80-120*			
Surrogate: Dibromofluoromethane	*0.0463*		*mg/kg*	*0.0508*		*91*	*80-125*			
Surrogate: Toluene-d8	*0.0509*		*mg/kg*	*0.0508*		*100*	*80-120*			

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METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 11K3703 Extracted: 11/28/11										
Blank Analyzed: 11/29/2011 (11K3703-BLK1)										
Antimony	ND	10	mg/kg							
Arsenic	ND	2.0	mg/kg							
Barium	ND	1.0	mg/kg							
Beryllium	ND	0.50	mg/kg							
Cadmium	ND	0.50	mg/kg							
Chromium	ND	1.0	mg/kg							
Cobalt	ND	1.0	mg/kg							
Copper	ND	2.0	mg/kg							
Lead	ND	2.0	mg/kg							
Molybdenum	ND	2.0	mg/kg							
Nickel	ND	2.0	mg/kg							
Selenium	ND	2.0	mg/kg							
Silver	ND	1.0	mg/kg							
Thallium	ND	10	mg/kg							
Vanadium	ND	1.0	mg/kg							
Zinc	ND	5.0	mg/kg							
LCS Analyzed: 11/29/2011 (11K3703-BS1)										
Antimony	46.2	10	mg/kg	50.0		92	80-120			
Arsenic	45.8	2.0	mg/kg	50.0		92	80-120			
Barium	47.2	1.0	mg/kg	50.0		94	80-120			
Beryllium	44.0	0.50	mg/kg	50.0		88	80-120			
Cadmium	45.0	0.50	mg/kg	50.0		90	80-120			
Chromium	48.2	1.0	mg/kg	50.0		96	80-120			
Cobalt	44.8	1.0	mg/kg	50.0		90	80-120			
Copper	45.5	2.0	mg/kg	50.0		91	80-120			
Lead	46.3	2.0	mg/kg	50.0		93	80-120			
Molybdenum	45.1	2.0	mg/kg	50.0		90	80-120			
Nickel	45.7	2.0	mg/kg	50.0		91	80-120			
Selenium	42.1	2.0	mg/kg	50.0		84	80-120			
Silver	23.1	1.0	mg/kg	25.0		93	80-120			
Thallium	45.2	10	mg/kg	50.0		90	80-120			
Vanadium	45.8	1.0	mg/kg	50.0		92	80-120			
Zinc	43.4	5.0	mg/kg	50.0		87	80-120			

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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 11K3703 Extracted: 11/28/11										
Matrix Spike Analyzed: 11/29/2011 (11K3703-MS1)					**Source: IUK1892-01**					
Antimony	24.6	9.9	mg/kg	49.5	1.29	47	75-125			*M2*
Arsenic	44.8	2.0	mg/kg	49.5	4.53	81	75-125			
Barium	191	0.99	mg/kg	49.5	156	71	75-125			*M2*
Beryllium	42.9	0.50	mg/kg	49.5	0.488	86	75-125			
Cadmium	41.3	0.50	mg/kg	49.5	1.41	81	75-125			
Chromium	69.4	0.99	mg/kg	49.5	21.1	98	75-125			
Cobalt	45.9	0.99	mg/kg	49.5	10.1	72	75-125			*M2*
Copper	65.6	2.0	mg/kg	49.5	19.9	92	75-125			
Lead	50.0	2.0	mg/kg	49.5	4.31	92	75-125			
Molybdenum	42.5	2.0	mg/kg	49.5	3.57	79	75-125			
Nickel	61.5	2.0	mg/kg	49.5	23.5	77	75-125			
Selenium	36.4	2.0	mg/kg	49.5	ND	74	75-125			*M2*
Silver	21.3	0.99	mg/kg	24.8	ND	86	75-125			
Thallium	38.1	9.9	mg/kg	49.5	ND	77	75-125			
Vanadium	105	0.99	mg/kg	49.5	48.1	115	75-125			
Zinc	87.8	5.0	mg/kg	49.5	45.6	85	75-125			
Matrix Spike Dup Analyzed: 11/29/2011 (11K3703-MSD1)					**Source: IUK1892-01**					
Antimony	23.0	10	mg/kg	49.8	1.29	44	75-125	6	20	*M2*
Arsenic	45.7	2.0	mg/kg	49.8	4.53	83	75-125	2	20	
Barium	196	1.0	mg/kg	49.8	156	81	75-125	3	20	
Beryllium	42.7	0.50	mg/kg	49.8	0.488	85	75-125	0.4	20	
Cadmium	41.8	0.50	mg/kg	49.8	1.41	81	75-125	1	20	
Chromium	69.0	1.0	mg/kg	49.8	21.1	96	75-125	0.7	20	
Cobalt	46.5	1.0	mg/kg	49.8	10.1	73	75-125	1	20	*M2*
Copper	64.9	2.0	mg/kg	49.8	19.9	90	75-125	1	20	
Lead	51.0	2.0	mg/kg	49.8	4.31	94	75-125	2	20	
Molybdenum	43.0	2.0	mg/kg	49.8	3.57	79	75-125	1	20	
Nickel	61.0	2.0	mg/kg	49.8	23.5	75	75-125	0.8	20	
Selenium	35.5	2.0	mg/kg	49.8	ND	71	75-125	2	20	*M2*
Silver	21.3	1.0	mg/kg	24.9	ND	86	75-125	0.2	20	
Thallium	38.3	10	mg/kg	49.8	ND	77	75-125	0.6	20	
Vanadium	106	1.0	mg/kg	49.8	48.1	116	75-125	0.6	20	
Zinc	86.6	5.0	mg/kg	49.8	45.6	82	75-125	1	20	

TestAmerica Irvine

Philip Sanelle
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Conestoga-Rovers & Associates - Emeryville Shell
5900 Hollis St., Suite A
Emeryville, CA 94608
Attention: Peter Schaefer

Project ID: 105 5th St., Oakland, CA
Report Number: IUK2553

Sampled: 11/16/11
Received: 11/21/11

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 11K3951 Extracted: 11/29/11										
Blank Analyzed: 11/29/2011 (11K3951-BLK1)										
Mercury	ND	0.020	mg/kg							
LCS Analyzed: 11/29/2011 (11K3951-BS1)										
Mercury	0.803	0.020	mg/kg	0.800		100	80-120			
Matrix Spike Analyzed: 11/29/2011 (11K3951-MS1)					**Source: IUK2553-01**					
Mercury	1.19	0.020	mg/kg	0.800	0.265	115	70-130			
Matrix Spike Dup Analyzed: 11/29/2011 (11K3951-MSD1)					**Source: IUK2553-01**					
Mercury	1.13	0.020	mg/kg	0.800	0.265	108	70-130	5	20	

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METHOD BLANK/QC DATA

ORGANIC LEAD BY GFAA (HML 939-M)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 11L0190 Extracted: 12/01/11										
Blank Analyzed: 12/01/2011 (11L0190-BLK1)										
Organic Lead	ND	0.025	mg/kg							
LCS Analyzed: 12/01/2011 (11L0190-BS1)										
Organic Lead	0.113	0.025	mg/kg	0.100		113	80-120			
Matrix Spike Analyzed: 12/01/2011 (11L0190-MS1)					**Source: IUK2553-01**					
Organic Lead	0.158	0.10	mg/kg	0.100	0.0430	115	80-120			
Matrix Spike Dup Analyzed: 12/01/2011 (11L0190-MSD1)					**Source: IUK2553-01**					
Organic Lead	0.177	0.10	mg/kg	0.100	0.0430	134	80-120	11	20	*MI*

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METHOD BLANK/QC DATA

STLC METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 11L0438 Extracted: 12/04/11										
Blank Analyzed: 12/04/2011 (11L0438-BLK1)										
Lead	ND	0.10	mg/l							
LCS Analyzed: 12/04/2011 (11L0438-BS1)										
Lead	18.5	0.10	mg/l	20.0		92	80-120			
Matrix Spike Analyzed: 12/04/2011 (11L0438-MS1)					**Source: IUK3335-01**					
Lead	20.8	0.10	mg/l	20.0	1.64	96	75-125			
Matrix Spike Dup Analyzed: 12/04/2011 (11L0438-MSD1)					**Source: IUK3335-01**					
Lead	20.5	0.10	mg/l	20.0	1.64	94	75-125	1	20	

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DATA QUALIFIERS AND DEFINITIONS

H	Sample analysis performed past method-specified holding time.
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
M2	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
RL1	Reporting limit raised due to sample matrix effects.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

ADDITIONAL COMMENTS

For Volatile Fuel Hydrocarbons (C4-C12):

Volatile Fuel Hydrocarbons (C4-C12) are quantitated against a gasoline standard. Quantitation begins immediately before TBA-d9.

For Extractable Fuel Hydrocarbons (EFH, DRO, ORO) :

Unless otherwise noted, Extractable Fuel Hydrocarbons (EFH, DRO, ORO) are quantitated against a Diesel Fuel Standard.

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Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EPA 6010B	Soil	X	X
EPA 7471A	Soil	X	X
EPA 8015B	Soil	X	X
EPA 8260B	Soil	X	X
HML 939-M	Soil	N/A	X
STLC-Met	Soil	X	X
TPH by GC/MS	Soil	X	X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Irvine

Philip Sanelle
Project Manager

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
☐ CALSCIENCE (_____)
☐ SPL (_____)
☐ XENCO (_____)
☑ TEST AMERICA (Irvine)
☐ 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 Proj# 240472
PO #:
INCIDENT # (ENV SERVICES): 9 8 9 9 5 7 5 7
SAP #: 1 3 5 7 0 0
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 11/17/2011
PAGE: 1 of 1

SAMPLING COMPANY: Conestoga-Rovers & Associates
LOG CODE: CRAW
SITE ADDRESS: Street and City: 105 5th Street, Oakland
State: CA
GLOBAL ID NO.: T-0600102116
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: shelledf@craworld.com
CONSULTANT PROJECT NO.: proj-phase-task
PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer
TELEPHONE: 510-420-3319
FAX: 510-420-9170
E-MAIL: pschaefer@craworld.com
SAMPLER NAME(S) (Print): William Martinez
LAB USE ONLY: ITK2353

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 :
cc: Derek Eisman, DEisman@craworld.com and Shell.Lab.Billing@craworld.com
Marked TAT except for those contingent tests needed for Aquatic Bioassay determination (5 day TAT or better may apply)
Call composite sample ID and field point name: CRA-A

☑ 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)	CAM17 Metals - Total (6010)	SVOCs (8270C)	VOCs (8260)	PCBs (8082)	
	CRA-1A	11/16/2011	1220	SO				X		2	X	X	X											X	X				

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

If you have any questions please call Peter Schaefer at (510) 420-3319 Thanks.

GSA 11/21 11:00

Relinquished by: (Signature) William Martinez	Received by: (Signature)	Date: 11/18/11	Time: 705
Relinquished by: (Signature) 11-18-11 16:35	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) Olga Omelchenko	Date: 11/21/11	Time: 9:00

2.3°C

05/2/06 Revision