CONESTOGA-ROVERS & ASSOCIATES

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

TRANSMITTAL

DATE: February 11, 2010

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
8:51 am, Feb 16, 2010
Alameda County
Environmental Health

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

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

QUANTITY	DESCRIPTION
1	Soil Vapor Sampling Report

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

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

Copy to: Denis Brown, Shell Oil Products US, 20945 S. Wilmington Avenue, Carson, CA 90810
Arthur R. and Mary A. Hansen, 820 Loyola Drive, Los Altos, CA 94024

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
Project Manager

SOIL VAPOR SAMPLING 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

Office: (510) 420-0700
Fax: (510) 420-9170

web: http://www.CRAworld.com

FEBRUARY 11, 2010
REF. NO. 240472 (7)
This report is printed on recycled paper.

TABLE OF CONTENTS

LIST OF FIGURES
(Following Text)

LIST OF TABLES
(Following Text)

LIST OF APPENDICES

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 re-sampling results. CRA recommend re-sampling soil vapor probes SVP-1 and SVP-3 based on initial sampling results (from August 25, 2009) presented in our September 29, 2009 *Soil Vapor Probe Installation and Sampling Report*. CRA followed the sampling and analysis protocols presented in our September 2009 report.

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 (USTs), 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 contained in CRA's March 25, 2009 *Soil Vapor Probe Installation and Soil Vapor Sampling Work Plan* and is not repeated herein.

2.0 EXECUTIVE SUMMARY

CRA re-sampled soil vapor probes SVP-1 and SVP-3 based on initial sampling results from August 2009.

- Soil vapor samples collected on October 1, 2009 contained up to 22,000 µg/m^3 benzene (SVP-3) and 66,000 µg/m^3 ethylbenzene (SVP-3).
- Toluene and xylenes were not detected.
- CRA recommends installing and sampling a soil vapor probe (SVP-6) between SVP-3 and the kiosk to evaluate the potential for benzene and ethylbenzene in soil vapor to impact indoor air. In addition, CRA recommends re-sampling soil vapor probe SVP-3 when SVP-6 is sampled to assess horizontal attenuation.

3.0 SAMPLING ACTIVITIES

3.1 PERSONNEL PRESENT

CRA staff geologist Erin Reinhart-Koylu sampled soil vapor probes SVP-1 and SVP-3 working under the supervision of California Professional Geologist Peter Schaefer.

3.2 SAMPLING DATE

October 1, 2009.

3.3 SOIL VAPOR SAMPLING

Prior to sampling, CRA purged at least three tubing volumes of air from each vapor probe using a vacuum pump. Immediately after purging, a soil vapor sample was collected using a laboratory-supplied Tedlar® bag. During sampling, the Teflon® tubing for each vapor probe was connected to a lung box containing the Tedlar® bag, and the lung box chamber was connected to the vacuum pump. The sample was then drawn into the Tedlar® bag by reducing the pressure in the lung box with the vacuum pump. 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, a containment unit (or shroud) was placed to cover the soil gas probe surface casing and sampling manifold. Prior to soil gas probe purging, helium was introduced into the containment unit to obtain a minimum 50 percent helium content level. The helium content within the containment unit was confirmed using a helium meter. The helium meter readings are presented in Section 4.2. All samples were analyzed by the laboratory for helium, and CRA presents the results in Section 4.2 and on Table 1.

4.0 FINDINGS

4.1 SOIL VAPOR

Soil vapor samples collected on October 1, 2009 contained up to 22,000 micrograms per cubic meter ($\mu g/m^3$) benzene (SVP-3) and 66,000 $\mu g/m^3$ ethylbenzene (SVP-3). Toluene and xylenes were not detected.

Table 1 summarizes the soil vapor analytical data. Benzene, toluene, ethylbenzene, and xylenes (BTEX) results are shown on Figure 2, and the laboratory analytical report is presented in Appendix A.

4.2 LEAK TESTING

Leak testing was performed as described above, and helium was not detected in either of the samples. As seen in the following table, the reporting limit for helium (0.0100 percent by volume [%*v*]) is below 10 percent of the concentration detected in the shroud, and the samples are considered valid.

Probe ID	*Helium detected in sample (%v)*	*Helium detected in shroud (%v)*	*Maximum acceptable helium concentration in sample (%v)*
SVP-1	<0.0100	88	8.8
SVP-3	<0.0100	80	8.0

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

5.0 CONCLUSIONS AND RECOMMENDATIONS

Benzene and ethylbenzene concentrations in the soil vapor samples from probes SVP-1 and SVP-3 exceeded Tier 1 ESLs. Toluene and xylenes were not detected in either sample.

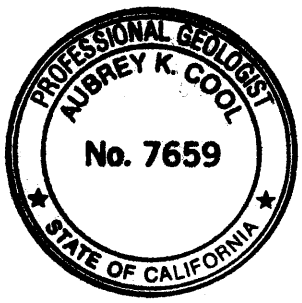
Based on the benzene and ethylbenzene results from SVP-1 and SVP-3, CRA recommends installing and sampling a soil vapor probe (SVP-6) between SVP-3 and the kiosk to evaluate the potential for benzene in soil vapor to impact indoor air. In addition, CRA recommends re-sampling soil vapor probe SVP-3 when SVP-6 is sampled to assess horizontal attenuation.

The proposed probe (SVP-6) will be screened at 3 and 5 feet below grade and the proposed location is shown on Figure 2. Soil vapor samples from proposed soil vapor probe SVP-6 and existing probe SVP-3 will be collected in Tedlar® bags and analyzed for BTEX by EPA Method 8260B and for oxygen, carbon dioxide, methane, and helium by ASTM D Method 1946 (M).

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

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG



FIGURES

11/03/08

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

FIGURE 1

Shell-branded Service Station
105 Fifth Street
Oakland, California

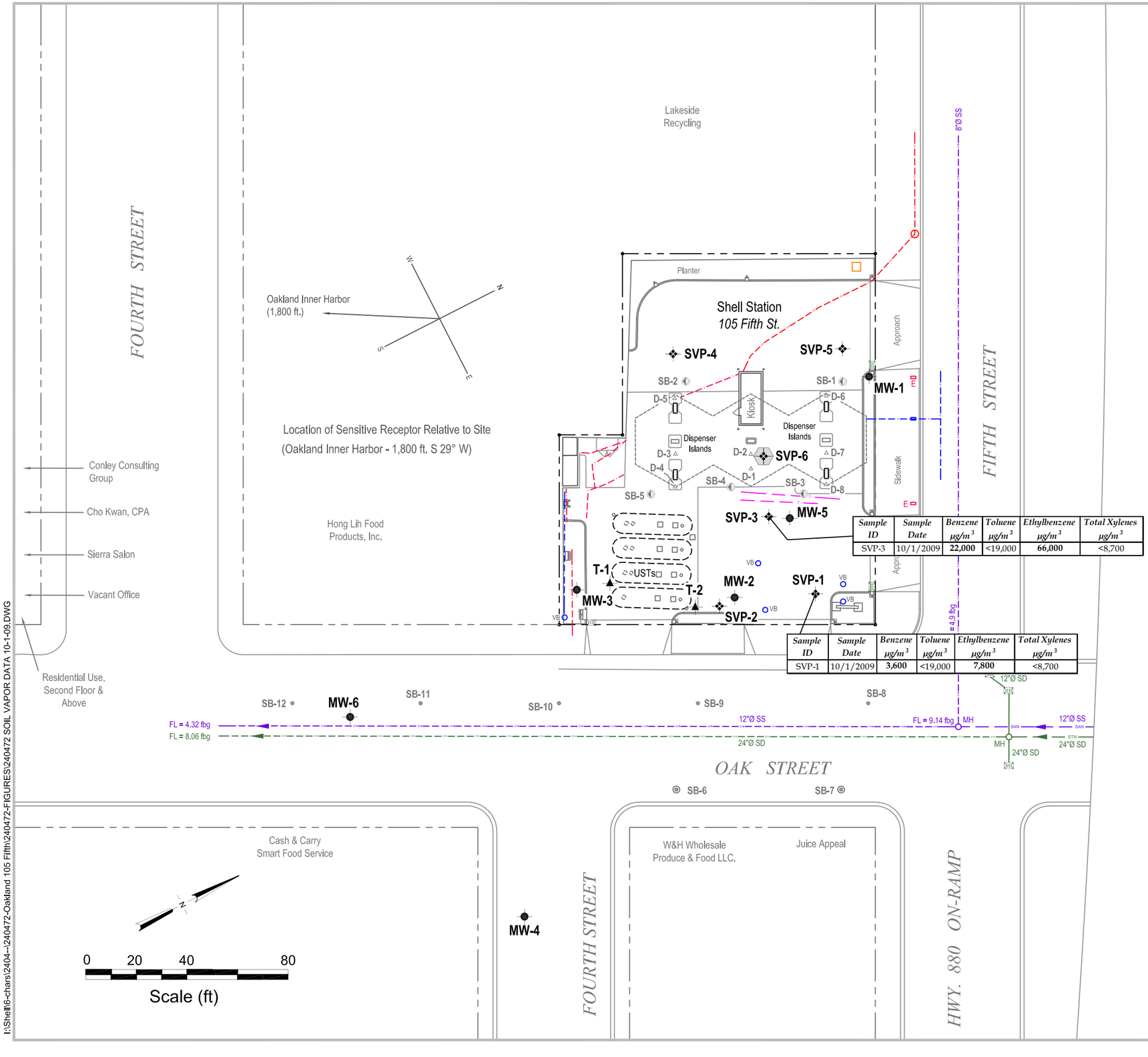
CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

01/19/10

Soil Vapor Data Map

October 1, 2009



Sample ID	Sample Date	Benzene µg/m³	Toluene µg/m³	Ethylbenzene µg/m³	Total Xylenes µg/m³
SVP-3	10/1/2009	**22,000**	<19,000	**66,000**	<8,700

Sample ID	Sample Date	Benzene µg/m³	Toluene µg/m³	Ethylbenzene µg/m³	Total Xylenes µg/m³
SVP-1	10/1/2009	**3,600**	<19,000	**7,800**	<8,700

EXPLANATION

- SVP-6 — Proposed soil vapor probe location
- SVP-1 — Soil vapor probe location (8/09)
- MW-1 — Monitoring well location
- T-1 — Tank backfill well location
- SB-8 — Soil boring location (3/02)
- SB-6 — Soil boring location (2/01)
- SB-1 — Soil boring location (7/98)
- 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	Benzene µg/m³	Toluene µg/m³	Ethylbenzene µg/m³	Total Xylenes µg/m³
SVP-1	10/1/2009	**3,600**	<19,000	**7,800**	<8,700

Soil vapor sample ID and date and concentrations, in micrograms per cubic meter (µg/m³)

Note:
<X = Not detected at laboratory reporting limit X

FIGURE

2

CONESTOGA-ROVERS & ASSOCIATES

Shell-branded Service Station

105 Fifth Street
Oakland, California

I:\Shell\6-chars\2404--\240472-Oakland 105 Fifth\240472-FIGURES\240472 SOIL VAPOR DATA 10-1-09.DWG

TABLE

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
105 5TH STREET
OAKLAND, CALIFORNIA

Sample ID	*Date*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*Helium (%v)*
SVP-1	8/25/2009	**7,200**	<1,500	**15,000**	<6,900	<0.0100
SVP-1	10/1/2009	**3,600**	<19,000	**7,800**	<8,700	<0.0100
SVP-2	8/25/2009	<3.2	24	<4.3	<17	<0.0100
SVP-3	8/25/2009	**20,000**	1,200	**61,000**	<5,200	<0.0100
SVP-3	10/1/2009	**22,000**	<19,000	**66,000**	<8,700	<0.0100
SVP-4	8/25/2009	9.0	24	50	<17	<0.0100
SVP-5	8/25/2009	280	21	1,100	35	<0.0100
ESLs [a]		***280***	***180,000***	***3,300***	***58,000***	**---**

Notes:

All results in micrograms per cubic meter ($\mu g/m^3$) unless otherwise indicated.
Benzene, toluene, ethylbenzene, and xylenes by Modified EPA Method TO-15M
Helium analyzed by ASTM D-1946 (M)
%v = Percentage by volume
<x = Not detected at reporting limit x
ESL = Environmental screening level
--- = No applicable ESL
Results in **bold** exceed environmental screening level

a = 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

LABORATORY ANAYLTICAL REPORT

Calscience
Environmental
Laboratories, Inc.

October 13, 2009

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

Subject: **Calscience Work Order No.: 09-10-0123**
Client Reference: 105 Fifth Street, Oakland, CA

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 10/2/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Philip Hamelle for

Calscience Environmental
Laboratories, Inc.
Xuan H. Dang
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates		Date Received:	10/02/09
5900 Hollis Street, Suite A		Work Order No:	09-10-0123
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	ASTM D-1946 (M)

Project: 105 Fifth Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1	**09-10-0123-1-A**	**10/01/09 12:45**	**Air**	**GC 55**	**N/A**	**10/02/09 00:00**	**091002L01**

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-3	**09-10-0123-2-A**	**10/01/09 13:07**	**Air**	**GC 55**	**N/A**	**10/02/09 00:00**	**091002L01**

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-14**	**N/A**	**Air**	**GC 55**	**N/A**	**10/02/09 00:00**	**091002L01**

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
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: 10/02/09
Work Order No: 09-10-0123
Preparation: N/A
Method: EPA TO-15M
Units: ug/m3

Project: 105 Fifth Street, Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1	**09-10-0123-1-A**	**10/01/09 12:45**	**Air**	**GC/MS II**	**N/A**	**10/02/09 21:34**	**091002L01**

Comment(s): -The method has been modified to use Tedlar bags instead of Summa Canisters.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	3600	1600	1000		Ethylbenzene	7800	2200	1000	
Toluene	ND	19000	1000		Xylenes (total)	ND	8700	1000	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	105	57-129			1,2-Dichloroethane-d4	81	47-137		
Toluene-d8	78	78-156							

SVP-3	**09-10-0123-2-A**	**10/01/09 13:07**	**Air**	**GC/MS II**	**N/A**	**10/02/09 17:00**	**091002L01**

Comment(s): -The method has been modified to use Tedlar bags instead of Summa Canisters.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	22000	1600	1000		Ethylbenzene	66000	2200	1000	
Toluene	ND	19000	1000		Xylenes (total)	ND	8700	1000	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	91	57-129			1,2-Dichloroethane-d4	71	47-137		
Toluene-d8	76	78-156		2					

Method Blank	**099-12-983-56**	**N/A**	**Air**	**GC/MS II**	**N/A**	**10/02/09 12:30**	**091002L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		Ethylbenzene	ND	2.2	1	
Toluene	ND	19	1		Xylenes (total)	ND	8.7	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	94	57-129			1,2-Dichloroethane-d4	81	47-137		
Toluene-d8	89	78-156							

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

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Conestoga-Rovers & Associates	Date Received:	N/A
5900 Hollis Street, Suite A	Work Order No:	09-10-0123
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	ASTM D-1946 (M)

Project: 105 Fifth Street, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-14	Air	GC 55	N/A	10/02/09	091002L01

Parameter	LCS Conc	LCSD Conc	RPD	RPD CL	Qualifiers
Helium	0.9850	0.9756	1	0-30	
Hydrogen	0.9965	0.9905	1	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Conestoga-Rovers & Associates	Date Received: N/A
5900 Hollis Street, Suite A	Work Order No: 09-10-0123
Emeryville, CA 94608-2008	Preparation: N/A
	Method: EPA TO-15M

Project: 105 Fifth Street, Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-983-56	Air	GC/MS II	N/A	10/02/09	091002L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	116	122	60-156	5	0-40	
Toluene	126	128	56-146	2	0-43	
Ethylbenzene	122	123	52-154	0	0-38	
p/m-Xylene	105	106	42-156	1	0-41	
o-Xylene	119	120	52-148	1	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-10-0123

Qualifier	Definition
*	See applicable analysis comment.
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 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 with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
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.
U	Undetected at the laboratory method detection limit.
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.

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

PO #:

INCIDENT # (ENV SERVICES): 9 8 9 9 5 7 5 7

☐ CHECK IF NO INCIDENT # APPLIES

SAP #: 1 3 5 7 0 0

DATE: 10/1/2009

PAGE: 1 of 1

SAMPLING COMPANY: Conestoga-Rovers & Associates

LOG CODE: CRAW

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

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

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

SITE ADDRESS: Street and City: 105 Fifth St., Oakland State: CA GLOBAL ID NO.: TO600102116

EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter, CRA, Emeryville PHONE NO.: 510-420-3343 E-MAIL: shelledf@craworld.com CONSULTANT PROJECT NO.: 240472

SAMPLER NAME(S) (Print): Erin Reinhart-Koylu

LAB USE ONLY: 09-10-0123 (10/2/09)

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:

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

SPECIAL INSTRUCTIONS OR NOTES :

Must be analysis within 72 hours.

please report results in µg/m3

REQUESTED ANALYSIS

TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH - Purgeable (8260B)	TPHg (8260B)	BTEX (8260B)	Helium (ASTM D 1946 M)	Container PID Readings or Laboratory Notes
1	SVP-1	10/1/09	12:45	Vapor					X	1			X	X	
2	SVP-3	10/1/09	13:03	Vapor					X	1			X	X	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	[signature] CEL	10-1-09	1640
[signature] GSO 10-1-09 1730			
GSO #512748716	[signature]	10/02/09	10:00

05/2/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-10-0123

SAMPLE RECEIPT FORM

Box ~~Cooler~~ 1 of 1

CLIENT: CRA DATE: 10 / 02 / 09

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

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 ☐ Metals Only ☐ PCBs Only **Initial:** PS

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** PS

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

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
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 ☐500PB ☐500PB**na** ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na_2** ☐_____ ☐_____ ☐_____

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

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

Preservative: h: HCL n: HNO3 **na_2**:$Na_2S_2O_3$ Na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:** PS