CONESTOGA-ROVERS & ASSOCIATES

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

TRANSMITTAL

DATE: August 16, 2010

REFERENCE NO.: 240897

PROJECT NAME: 4411 Foothill Boulevard, Oakland

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

RECEIVED
10:02 am, Aug 19, 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

QUANTITY	DESCRIPTION
1	Soil Vapor Sampling Report

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

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

Copy to: Denis Brown, Shell Oil Products US *(electronic copy)*
Bill Phua, Foothill Blvd. LLC, P.O. Box 10664, Oakland, CA 94610

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: Former Shell Service Station
4411 Foothill Boulevard
Oakland, California
SAP Code 135686
Incident No. 98995746
ACEH Case No. RO0000415

Dear Mr. Wickham:

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

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

Sincerely,

Denis L. Brown
Project Manager

SOIL VAPOR SAMPLING REPORT

FORMER SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD
OAKLAND, CALIFORNIA

SAP CODE 135686
INCIDENT NO. 98995746
AGENCY NO. RO0000415

Prepared by:
Conestoga-Rovers & Associates

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

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AUGUST 16, 2010
REF. NO. 240897 (14)
This report is printed on recycled paper.

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EXECUTIVE SUMMARY

On July 29, 2010, CRA sampled soil vapor probe V-12 for TPHg, BTEX, MTBE, and TBA.

- No constituents of concern were detected in the soil vapor sample collected from soil vapor probe V-12.
- Based on these results and previous sub-slab soil vapor sample results, there is no risk of soil vapor intrusion to on- or off-site buildings, therefore no further soil vapor monitoring is warranted.

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 monitoring event, as recommended in CRA's January 5, 2010 *Subsurface Investigation Report* and approved in Alameda County Environmental Health's (ACEH's) February 16, 2010 letter.

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

A summary of previous work performed at the site and additional background information was submitted in the January 5, 2010 *Subsurface Investigation Report* and is not repeated herein.

2.0 SAMPLING ACTIVITIES

2.1 PERSONNEL PRESENT

CRA Staff Geologist Erin Swan sampled soil vapor probe V-12 under the supervision of California Professional Geologist Peter Schaefer.

2.2 SAMPLING DATE

July 29, 2010.

2.3 SOIL VAPOR SAMPLING

CRA sampled soil vapor probe V-12 using a lung box and Tedlar® bag.

Prior to sampling, CRA purged at least three tubing volumes of air from the 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 the 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. The 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 reading is presented in Section 3.2. The sample was analyzed by the laboratory for helium, and CRA presents the results in Section 3.2 and on Table 1.

3.0 FINDINGS

3.1 SOIL VAPOR

Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tertiary-butyl ether (MTBE), and tertiary-butyl alcohol (TBA) were not detected in the soil vapor sample collected from soil vapor probe V-12 on July 29, 2010. Table 1 summarizes historical soil vapor analytical data. TPHg, BTEX, and MTBE results are shown on Figure 2, and the laboratory analytical report is presented in Appendix A.

3.2 LEAK TESTING

Leak testing was performed as described above, and helium was not detected in the sample. 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 sample is considered valid.

Probe ID	*Helium concentration in sample (%v)*	*Helium detected in shroud (%v)*	*Maximum acceptable helium concentration in sample (%v)*
V-12	<0.0100	65	6.5

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

4.0 CONCLUSIONS AND RECOMMENDATIONS

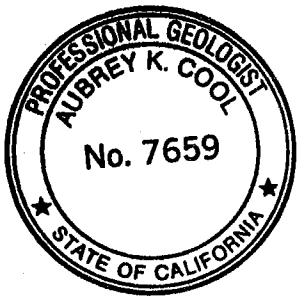
No constituents of concern were detected in V-12 during the July 2010 sampling event. Sub-slab soil vapor concentrations in samples collected from SSV-1 and SSV-2 located in the on-site laundromat during May 2009 were below San Francisco Bay Regional Water Quality Control Board commercial and residential environmental screening levels for shallow soil gas (Table E).[1] Since these results indicate no risk of soil vapor intrusion to on- or off-site buildings, no further soil vapor monitoring is warranted.

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

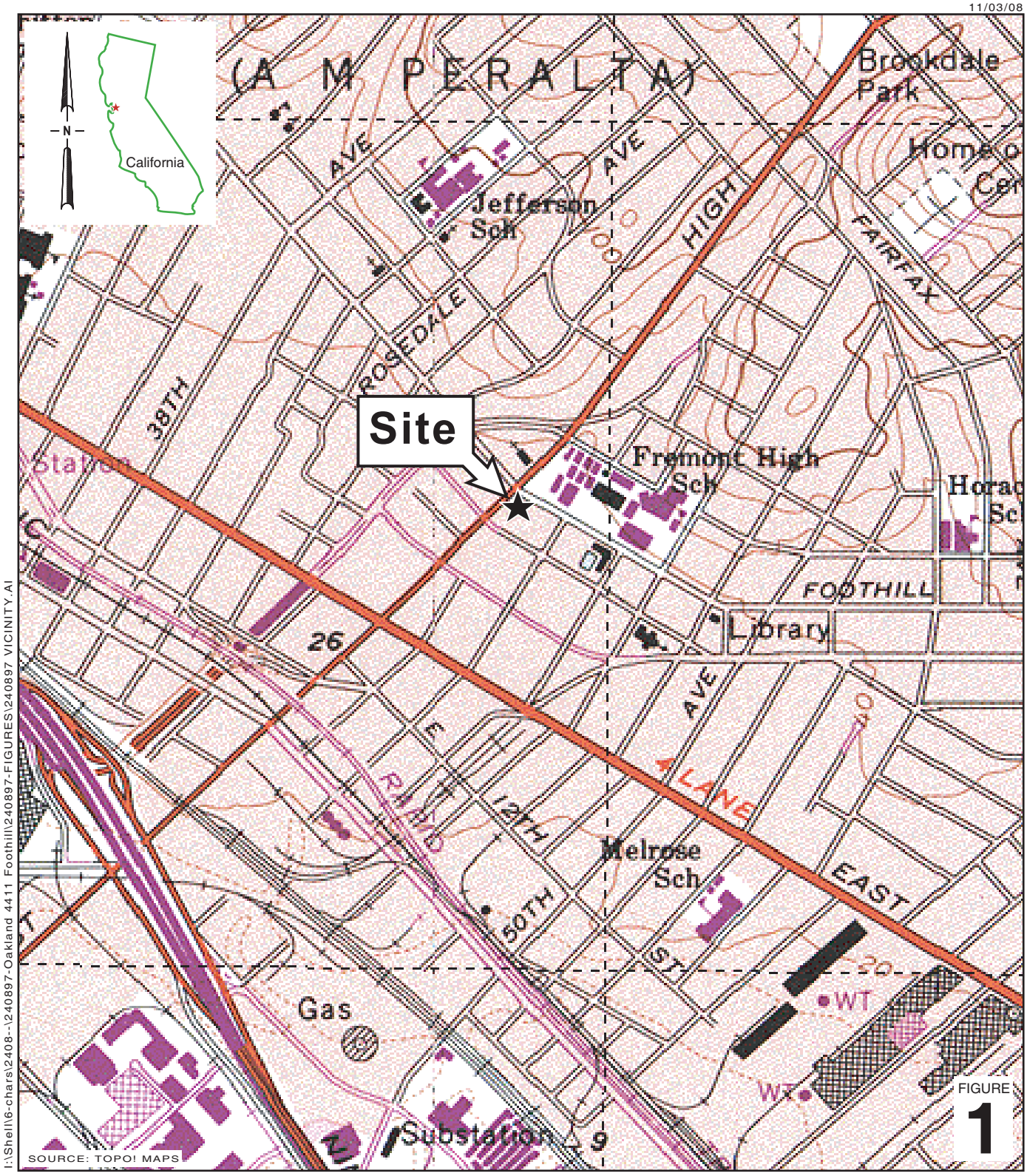


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FIGURE 1

0 1/6 1/3 1/2 1

SCALE : 1" = 1/6 MILE

Former Shell Service Station
4411 Foothill Boulevard
Oakland, California

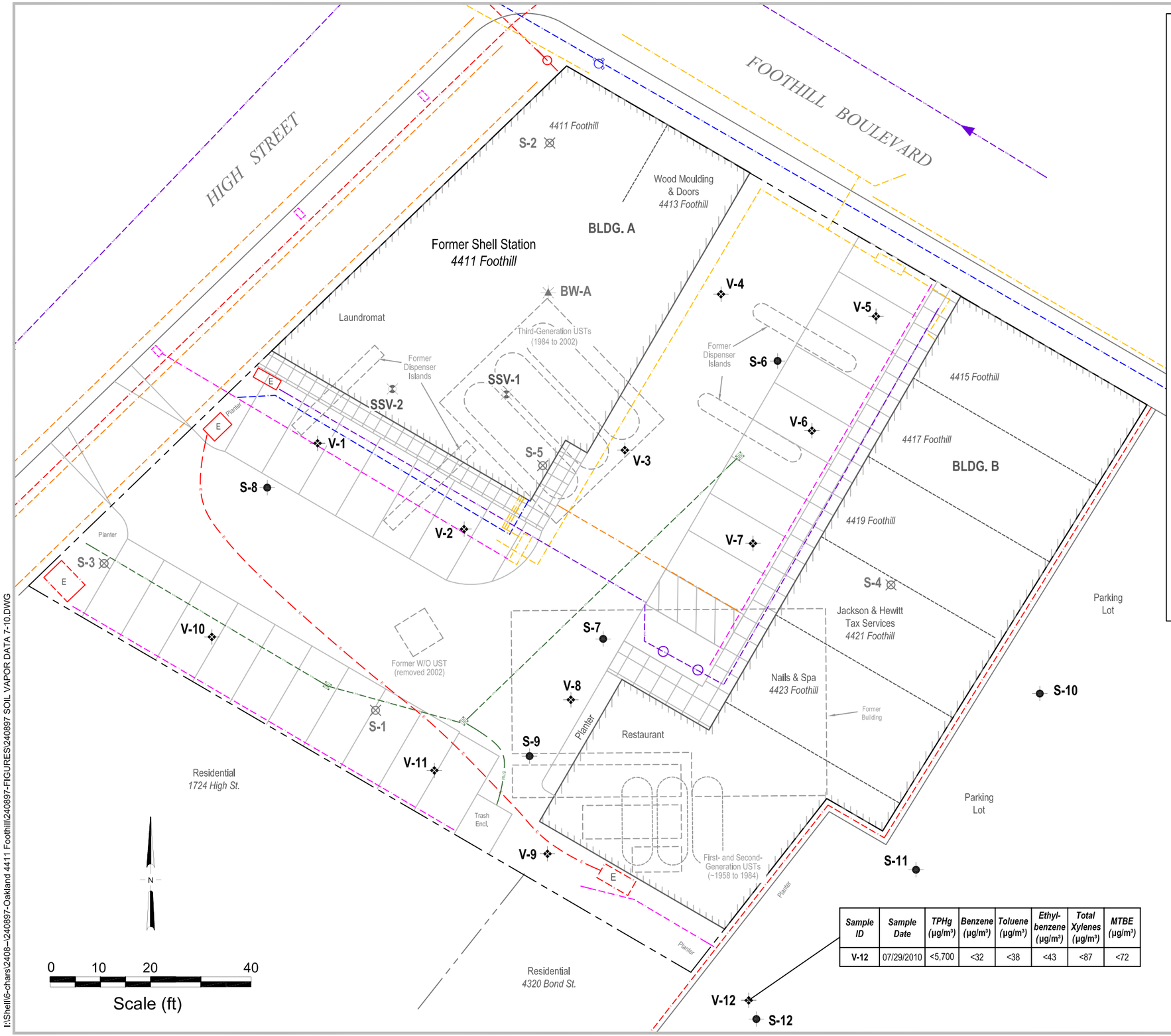
CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

08/17/10

Soil Vapor Data Map

July 29, 2010



EXPLANATION

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

Sample ID	Sample Date	TPHg (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethyl-benzene (µg/m³)	Total Xylenes (µg/m³)	MTBE (µg/m³)
V-12	07/29/2010	<5,700	<32	<38	<43	<87	<72

Notes:
Soil vapor sample ID, date, and concentrations in micrograms per cubic meter (µg/m³)
TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl-tertiary butyl ether
<X = Not detected at reporting limit X

Sample ID	Sample Date	TPHg (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethyl-benzene (µg/m³)	Total Xylenes (µg/m³)	MTBE (µg/m³)
V-12	07/29/2010	<5,700	<32	<38	<43	<87	<72

CONESTOGA-ROVERS & ASSOCIATES

Former Shell Service Station
4411 Foothill Boulevard
Oakland, California

FIGURE
2

I:\Shell\6-chars\2408-\240897-Oakland 4411 Foothill\240897-FIGURES\240897 SOIL VAPOR DATA 7-10.DWG

TABLE

TABLE 1

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

Sample ID	Depth (fbg)	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TBA	Helium (%v)
V-1	4.5-4.8	1/14/2008	**16,000,000**	<1,200	<1,400	<1,700	<5,000	<5,500	<4,600	---
V-1	4.5-4.8	6/26/2008	**1,000,000**	<160	<190	<220	<220	<180	<610	---
V-1	4.5-4.8	10/22/2008	**340,000**	<45	<53	<61	<120	<51	<170	---
V-1	4.5-4.8	4/21/2009[c]	---	58	<38	49	<170	---	---	<0.0100
V-2	4.5-4.8	1/14/2008	**15,000,000**	**9,000**	<1,100	**20,000**	7,700	<4,100	<3,500	---
V-2	4.5-4.8	5/22/2008	**8,300,000**	**7,000**	2,400	**5,600**	<1,400	<1,200	<4,000	---
V-2	4.5-4.8	10/22/2008	**5,000,000[b]**	**8,300**	<380	**9,800**	7,700	<360	<1,200	---
V-2	4.5-4.8	4/21/2009[c]	---	**7,100**	2,900	3,100	<6,100	---	---	<0.0100
V-3	4.5-4.8	1/14/2008	**20,000,000**	**3,800**	<2,800	<3,300	<9,800	<11,000	<9,100	---
V-3	4.5-4.8	5/22/2008	**22,000,000**	**1,600**	1,700	<1,300	<1,300	<1,100	<3,700	---
V-3	4.5-4.8	10/22/2008	**51,000,000[b]**	**4,200**	<4,600	<5,200	<10,000	<4,400	<15,000	---
V-3	4.5-4.8	4/21/2009[c]	---	**25,000**	17,000	<8,700	<35,000	---	---	0.0205
V-4	4.5-4.8	1/14/2008	**1,300,000**	<150	<180	<210	<620	<680	<570	---
V-4	4.5-4.8	6/26/2008	**980,000**	<160	<190	<220	<220	<180	<620	---
V-4	4.5-4.8	10/22/2008	**4,300,000**	**270**	<240	<280	<560	<230	<780	---
V-4	4.5-4.8	4/21/2009[c]	---	65	<75	360	520	---	---	0.0171
V-5	4.5-4.8	1/14/2008	**2,500,000**	<290	<340	<400	<1,190	<1,300	<1,100	---
V-5	4.5-4.8	5/22/2008	**3,300,000**	<1,600	3,100	<2,200	<2,200	<1,800	<6,100	---
V-5	4.5-4.8	10/22/2008	**2,400,000**	<340	<400	<460	<920	<380	<1,300	---
V-5	4.5-4.8	4/21/2009[c]	---	<64	110	350	510	---	---	1.24
V-6	4.5-4.8	1/14/2008	**15,000,000**	**9,100**	<270	<310	<930	<1,000	<860	---
V-6	4.5-4.8	5/22/2008	**2,300,000**	<130	<150	<180	<180	<140	<490	---
V-6	4.5-4.8	10/22/2008	**5,400,000**	<970	<1,100	<1,300	<2,600	<1,100	<3,700	---
V-6	4.5-4.8	4/21/2009[c]	---	<20	34	55	<110	---	---	<0.0100
V-7	4.5-4.8	1/14/2008	**170,000**	<19	<22	<25	<76	<84	<71	---
V-7	4.5-4.8	5/22/2008	790	<4.2	<5.0	<5.7	<5.7	<4.8	<16	---
V-7	4.5-4.8	10/22/2008	3,700	<2.6	<3.0	26	120	<2.9	<9.8	---
V-8	5.0-5.2	10/23/2008	7,000	<3.8	<4.5	<5.2	<10	<4.3	<14	---
V-9	5.0-5.2	10/23/2008	870	<3.7	<4.4	<5.0	<10	<4.2	>14	---
V-10	4.5-4.8	1/14/2008	Unable to sample due to water in sample tube							
V-10	4.5-4.8	5/22/2008	750	<4.1	<4.9	<5.6	<5.6	<4.6	<16	---
V-10	4.5-4.8	10/23/2008	280	<4.2	<5.0	<5.7	<11	<4.8	<16	---
V-11	4.5-4.8	1/14/2008	**18,000**	<2.2	5	<3.0	<8.9	<9.8	<8.2	---
V-11	4.5-4.8	6/26/2008	<260	<4.0	<4.8	<5.5	<5.5	<4.6	<15	---
V-11	4.5-4.8	10/23/2008	<220	<3.5	<4.1	<4.8	<9.6	<4.0	<13	---
V-12	4.2-4.3	10/1/2009	Unable to sample due to water in sample tube							

TABLE 1

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

Sample ID	*Depth (fbg)*	*Date*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*Total Xylenes*	*MTBE*	*TBA*	*Helium (%v)*
V-12	4.2-4.3	11/19/2009	Unable to sample due to water in sample tube							
V-12	4.2-4.3	7/29/2010[d]	<5,700	<32[e]	<38[e]	<43[e]	<87[e]	<72[e]	<61[e]	<0.0100
SSV-1	0.58	5/19/2009	---	8.8	11	4.4	<12	---	---	0.251
SSV-2	1	5/15/2009	---	<2.1	<2.4	<2.8	<11	---	---	0.261
Ambient Air	NA	1/14/2008	<17,000	<2.4	4	<3.2	<9.7	<11	<9.0	---
SFBRWQCB ESLs for Shallow Soil Gas[a]	**Commercial Land Use**		**29,000**	**280**	**180,000**	**3,300**	**58,000**	**31,000**	**NA**	**NA**
	Residential Land Use		**10,000**	**84**	**63,000**	**980**	**21,000**	**9,400**	**NA**	**NA**

Notes:

All results in micrograms per cubic meter ($\mu g/m^3$) unless otherwise indicated.
All samples were collected in Summa canisters unless otherwise noted.
TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method TO-3 GC/FID
Benzene, toluene, ethylbenzene and total xylenes (BTEX) by modified EPA Method TO-15, unless otherwise noted
MTBE = Methyl-tertiary butyl ether by modified EPA Method TO-15, unless otherwise noted
TBA = Tertiary-butyl alcohol (TBA) by Modified EPA Method TO-15, unless otherwise noted
Helium analyzed by ASTM D-1946 (M)
fbg = Feet below grade
%v = Percentage by volume
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
SFBRWQCB = San Francisco Bay Regional Water Quality Control Board
NA = Not applicable or not available
Results in **bold** exceed Environmental Screening Level for commercial land use

a = From Table E of SFBRWQCB ESLs. Ref: Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - Interim Final - November 2007 (Revised May 2008).
b = Exceeds quality control limits, possibly due to matrix effects.
c = Samples collected in Tedlar bags.
d = Sample received by laboratory with very low volume.
e = Analyzed by EPA Method 8260B (M)

APPENDIX A

LABORATORY ANALYTICAL REPORT

Calscience
Environmental
Laboratories, Inc.

Supplemental Report 1

August 13, 2010

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

Subject: **Calscience Work Order No.: 10-07-2274**
Client Reference: 4411 Foothill Blvd., Oakland, CA

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/30/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted 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,

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

Case Narrative

Work Order # 10-07-2274

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

ACCREDITED IN ACCORDANCE WITH nelac

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 07/30/10
Work Order No: 10-07-2274
Preparation: N/A
Method: EPA TO-3M

Project: 4411 Foothill Blvd., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-12	10-07-2274-1-A	07/29/10 11:57	Air	GC 13	N/A	07/30/10 13:17	100730L01

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	5700	1		ug/m3

Method Blank	098-01-005-2,479	N/A	Air	GC 13	N/A	07/30/10 08:41	100730L01

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	5700	1		ug/m3

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: 07/30/10
Work Order No: 10-07-2274
Preparation: N/A
Method: ASTM D-1946 (M)

Project: 4411 Foothill Blvd., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-12	10-07-2274-1-A	07/29/10 11:57	Air	GC 55	N/A	07/30/10 00:00	100730L01

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

Method Blank	099-12-872-36	N/A	Air	GC 55	N/A	07/30/10 00:00	100730L01

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: 07/30/10
Work Order No: 10-07-2274
Preparation: N/A
Method: EPA 8260B (M)
Units: ug/m3

Project: 4411 Foothill Blvd., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-12	10-07-2274-1-A	07/29/10 11:57	Air	GC/MS YY	N/A	07/30/10 16:19	100730L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	32	2		Xylenes (total)	ND	87	2	
Toluene	ND	38	2		Methyl-t-Butyl Ether (MTBE)	ND	72	2	
Ethylbenzene	ND	43	2		Tert-Butyl Alcohol (TBA)	ND	61	2	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	93	47-156			1,2-Dichloroethane-d4	109	47-156		
Toluene-d8	100	47-156							

Method Blank	099-13-041-105	N/A	Air	GC/MS YY	N/A	07/30/10 15:25	100730L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	1		Xylenes (total)	ND	43	1	
Toluene	ND	19	1		Methyl-t-Butyl Ether (MTBE)	ND	36	1	
Ethylbenzene	ND	22	1		Tert-Butyl Alcohol (TBA)	ND	30	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	87	47-156			1,2-Dichloroethane-d4	79	47-156		
Toluene-d8	98	47-156							

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

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

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

Date Received: 07/30/10
Work Order No: 10-07-2274
Preparation: N/A
Method: EPA TO-3M

Project: 4411 Foothill Blvd., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
10-07-2276-1	Air	GC 13	N/A	07/30/10	100730D01

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
TPH as Gasoline	8400000	9300000	10	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-07-2274
Preparation: N/A
Method: ASTM D-1946 (M)

Project: 4411 Foothill Blvd., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-36	Air	GC 55	N/A	07/30/10	100730L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Helium	112	108	80-120	4	0-30	
Hydrogen	116	112	80-120	4	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: 10-07-2274
Emeryville, CA 94608-2008	Preparation: N/A
	Method: EPA 8260B (M)

Project: 4411 Foothill Blvd., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-041-105	Air	GC/MS YY	N/A	07/30/10	100730L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	95	106	60-156	11	0-40	
Toluene	91	109	56-146	18	0-43	
Ethylbenzene	92	107	52-154	15	0-38	
p/m-Xylene	86	101	42-156	15	0-41	
o-Xylene	86	100	52-148	16	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 10-07-2274

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.
B	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
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.
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.
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)
- [x] CALSCIENCE (_____)
- [ ] SPL (_____)
- [ ] XENCO (_____)
- [ ] TEST AMERICA (_____)
- [ ] OTHER (_____)

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

Print Bill To Contact Name: Peter Schaefer

INCIDENT # (ENV SERVICES): 98995746 [ ] CHECK IF NO INCIDENT # APPLIES

PO #:

SAP #:

DATE: 7/29/10

PAGE: 1 of 1

SAMPLING COMPANY: Conestoga-Rovers & Associates	LOG CODE: CRAW	SITE ADDRESS: Street and City: 4411 Foothill Blvd, Oakland	State: CA
ADDRESS: 5900 Hollis Street, Suite A, Emeryville, CA 94608		EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter, CRA, Emeryville	PHONE NO.: 510-420-3343
PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer		E-MAIL: shell.em.edf@craworld.com	CONSULTANT PROJECT NO: 240897
TELEPHONE: 510-420-3319	FAX: 510-420-9170	E-MAIL: pschaefer@craworld.com	GLOBAL ID NO: T0600101065
SAMPLER NAME(S) (Print): Erin Swan			LAB USE ONLY: 10-07-2274

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

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

SPECIAL INSTRUCTIONS OR NOTES :

please report results in µg/m³

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

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPHg, BTEX, MTBE, & TBA by EPA Method (8260)	He by ATSM d 1946 (M)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
1	V-12	7/29/10	11:57	air				X		1	X	X	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Erin Swan	CEL	7/29/10	2:45 pm
GSO 7-29-10 1730		7/30/10	10:30

05/2/06 Revision

GSO

2274

GSO

WebShip > > > > >

800-322-5555 www.gso.com

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

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

COD:
$0.00

Reference:
CRA, STANTEC

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 514646204

NPS

ORC **D**

GARDEN GROVE

D92843A

83517691

Print Date : 07/29/10 15:04 PM

Package 1 of 1

Send Label To Printer ☑ Print All Edit Shipment Finish

LABEL INSTRUCTIONS:

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

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

ADDITIONAL OPTIONS:

Send Label Via Email Create Return Label

TERMS AND CONDITIONS:

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

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-07-2274

SAMPLE RECEIPT FORM

Box 1 of 1

CLIENT: CRA DATE: 07/30/10

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

Temperature ____.____ °C + 0.5 °C (CF) = ____.____ °C ☐ Blank ☐ Sample

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

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

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

Ambient Temperature: ☑ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: PJ

CUSTODY SEALS INTACT:

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

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

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	☑ WSC 7/30/10	☑	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Residual Chlorine / Dissolved Sulfide 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 ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

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

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

Preservative: h: HCL n: HNO_3 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:** WSC

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-07-2724

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS: **Comments:**

- ☐ **Sample(s)/Container(s) NOT RECEIVED but listed on COC**
- ☐ **Sample(s)/Container(s) received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample label(s) do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Container(s)**
  - ☐ **Analysis**
- ☐ **Sample container(s) compromised** – Note in comments
  - ☐ **Water present in sample container**
  - ☐ **Broken**
  - ☐ **Without Label(s)**
- ☑ **Air sample container(s) compromised** – Note in comments (-1)
  - ☐ **Flat**
  - ☑ **Very low in volume**
  - ☐ **Leaking (Not transferred - duplicate bag submitted)**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: WSL 07/30/10