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 12, 2009

REFERENCE NO.: 060119

PROJECT NAME: 2350 (2368) Harrison Street, Oakland

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

RECEIVED
10:06 am, Aug 17, 2009
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	Soil Vapor Probe 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, 20945 S. Wilmington Avenue, Carson, CA 90810
Richard Burge, 490 Grand Avenue, Suite 100, 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

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

Subject: Former Shell Service Station
2350 (2368) Harrison Street
Oakland, California
SAP No. 173318
Incident No. 97743969
Fuel Leak Case No. RO0000505

Dear Mr. Wickham:

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

As always, please feel free to contact me directly at (707) 865-0251 with any questions or concerns.

Sincerely,

Denis L. Brown
Project Manager

SOIL VAPOR PROBE SAMPLING REPORT

FORMER SHELL SERVICE STATION
2350 (2368) HARRISON STREET
OAKLAND, CALIFORNIA

SAP CODE 173318
INCIDENT NO. 97743969
AGENCY NO. RO0000505

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

AUGUST 12, 2009
REF. NO. 060119 (9)
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 present the recent soil vapor probe sampling results. CRA followed the scope of work presented in our November 12, 2008 work plan, which was approved by Alameda County Health Care Services Agency (ACHCSA) in their December 5, 2008 letter.

CRA sampled soil vapor probes SVP-1 through SVP-3 on May 28, 2009, and these results were not available for inclusion in CRA's June 11, 2009 *Subsurface Investigation Report* (*SIR*). The *SIR* includes details of the soil vapor probe installations and a boring log for each probe.

The subject property is a former Shell service station located on the southern corner of the Harrison Street and Bay Place intersection in Oakland, California (Figure 1). The former station, whose address was 2368 Harrison Street, layout included underground fuel storage tanks (USTs), a waste oil tank, three dispenser islands, and a station building (Figure 2). The site is currently occupied by a 7-Eleven Store, whose address is 2350 Harrison Street, and the area surrounding the station is predominantly a mix of commercial and residential use.

A summary of previous work performed at the site and additional background information is contained in CRA's June 11, 2009 *SIR* and is not repeated herein.

2.0 SOIL VAPOR PROBE SAMPLING AND ANALYSIS

2.1 SOIL VAPOR SAMPLING

Soil vapor sampling and leak testing were performed following Department of Toxic Substances Control's January 28, 2003 *Advisory-Active Soil Gas Investigation* guidelines.

During sampling, the Teflon tubing for each vapor probe was connected to a control valve, and then to a flow regulator attached to a lab-supplied sampling manifold connecting two 1-liter summa canisters (one purge canister and one sampling canister) with flow regulators and pressure gauges. Prior to sampling, a vacuum test was conducted between the summa canisters, the sampling manifold, and the valves by closing the valves and opening the purge summa canister for approximately 10 minutes. At least three tubing volumes of air were purged into the purge canister prior to sampling. Immediately after purging, soil vapor samples were collected using the second 1-liter Summa canister. Each sample was labeled, documented on a chain-of-custody, and submitted to Calscience Environmental Laboratories, Inc. of Garden Grove, California for analysis.

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 3.1. All samples were analyzed by the laboratory for helium, and CRA presents the results in Section 3.1 and on Table 1.

CRA sampled soil vapor probes SVP-1 through SVP-3 on May 28, 2009.

2.2 SOIL VAPOR SAMPLING ANALYSIS

Soil vapor samples were analyzed for volatile organic compounds (VOCs) by modified EPA Method TO-15 and for helium by ASTM D Method 1946 (M).

3.0 SOIL VAPOR PROBE SAMPLING RESULTS

Soil vapor samples collected on May 28, 2009 contained up to 44,000 micrograms per cubic meter ($\mu g/m^3$) acetone (SVP-2, 48,000 $\mu g/m^3$ in the field duplicate sample), 530,000 $\mu g/m^3$ benzene (SVP-2), 1,000 $\mu g/m^3$ carbon disulfide (SVP-3), 14,000 $\mu g/m^3$ ethylbenzene (SVP-2), 10,000 $\mu g/m^3$ toluene (SVP-2 [detected in the duplicate sample]) and 11,000 $\mu g/m^3$ xylenes (SVP-2).

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

3.1 LEAK TESTING

Leak testing was performed, and helium was detected in five of the samples. As seen in the following table, the concentration of helium (0.165 to 0.266 percent by volume [$\%v$]) detected in the samples is below 10 percent of the concentration detected in the shroud. A concentration of greater than 10 percent of the concentration in the shroud would invalidate a sample.

Probe ID	*Helium detected in sample (%v)*	*Helium detected in shroud (%v)*	*Maximum acceptable helium concentration in sample (%v)*
SVP-1	0.195	79.6	7.96
SVP-2	0.165	80.5	8.05
SVP-3	0.266	85.9	85.9

The laboratory analytical reports for helium are presented in Appendix A.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Benzene concentrations in soil vapor samples from probes SVP-1 through SVP-3 collected during the May 28, 2009 sampling event exceeded San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for commercial land use. Ethylbenzene detections in probes SVP-1 and SVP-2 also exceeded the RWQCB ESLs.

All soil vapor sample concentrations for toluene, xylenes, and other VOCs are below the commercial land use RWQCB ESLs.

Soil vapor probes SVP-1 through SVP-3 are screened from 4.4 to 4.5 feet below grade (fbg). Based on the results from SVP-2, CRA recommends installing and sampling additional soil vapor probes at depths of 1 and 2.5 fbg adjacent to SVP-2 to evaluate vertical attenuation of benzene and ethylbenzene in soil vapor. In addition, CRA proposes to resample the three existing soil vapor probes. Soil vapor samples will be collected in Tedlar® bags and analyzed for benzene, toluene, ethylbenzene, and xylenes by EPA Method 8260B and for helium by ASTM D Method 1946 (M).

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

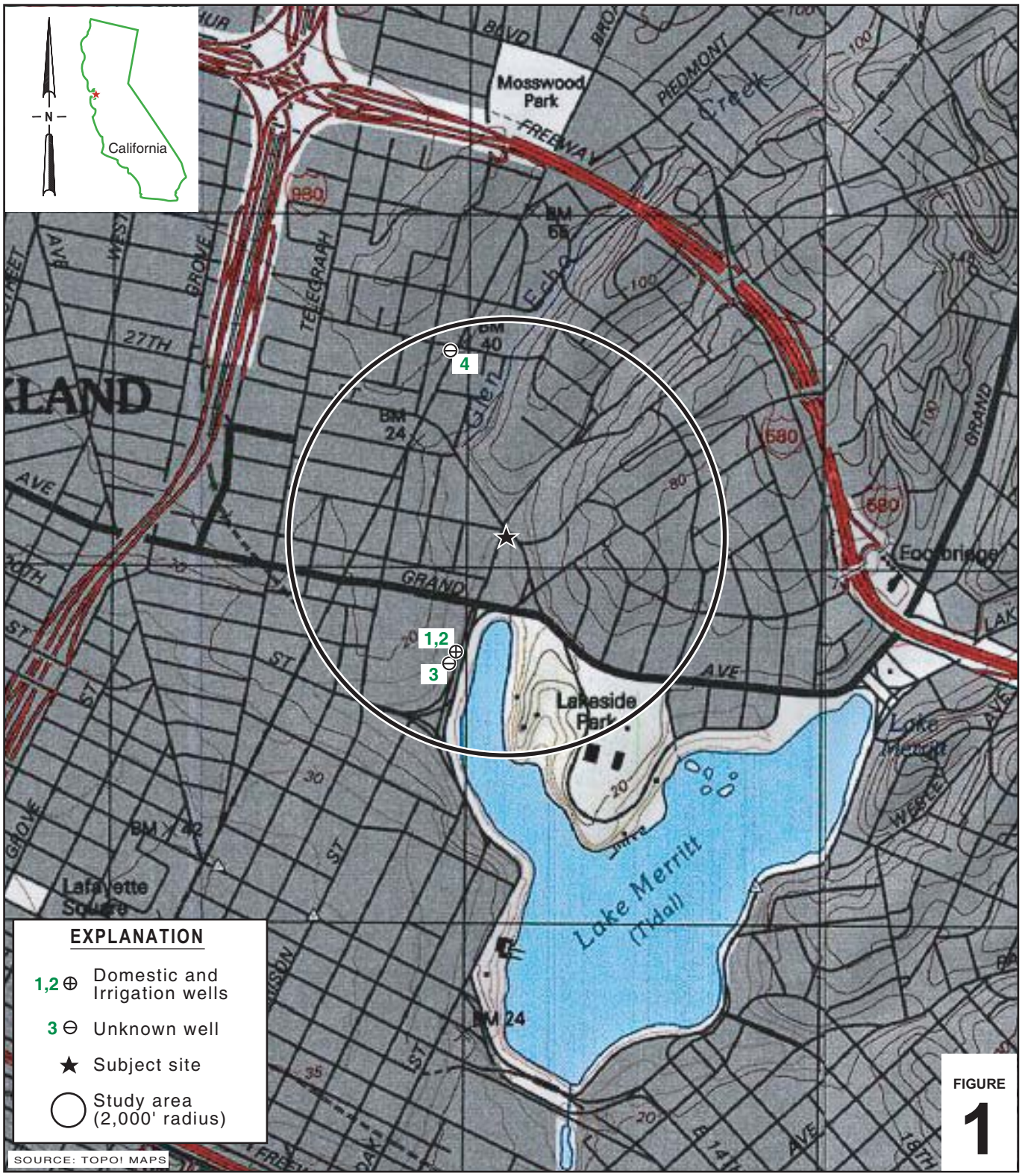
Peter Schaefer, CEG, CHG

for

Aubrey K. Cool, PG

FIGURES

10/31/08



I:\Shell\6-chars\0601-\060119-Oakland 2350 Harrison St\060119-FIGURES\060119 VICINITY.AI

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

FIGURE
1

Former Shell Service Station

2350 (2368) Harrison Street

Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

08/11/09

Soil Vapor Data Map

May 28, 2009

Former Shell Service Station
2350 (2368) Harrison Street
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

FIGURE
2

I:\Shell\6-chars\0601--l\060119-Oakland 2350 Harrison St\060119-FIGURES\060119 SOIL VAPOR SAMPLES 2009-05-28.DWG

EXPLANATION

- HP-1 — Hydropunch boring location
- B-1 — Soil boring location
- B-5 — Soil boring location, abandoned after 2' due to utility conflict
- SVP-1 — Soil vapor probe location
- S-1 — Monitoring well location
- Storm drain (STM)
- Sanitary sewer line (SAN)
- Water line (W)
- Electrical line (E)
- Gas line (G)
- Telecommunications line (T)
- Unknown utility line, indicated by private utility locator

SVP-1
Benz.
Toluene
Ethylb.
Xylenes

Soil Vapor Sample ID

Soil vapor benzene, toluene, ethylbenzene, and total xylene concentrations, in micrograms per cubic meter

Former Shell Station
2368 Harrison St.

SVP-1	SVP-2	SVP-3
52,000	530,000	2,400
5,000	<42,000	550
5,200	14,000	370
6,500	11,000	1,400

7-11 Store Building
2350 Harrison St.

HARRISON STREET

Underground Culvert & Storm Drain (Approx.)

Beck BMW

Rouse Tire

Rouse Tire

Offices

Former Hotel (Apt. Bldg.)

Parking Lot

Parking Lot

Former Tire/Wheel Hoist

Former Drive-on Hoist

Former Station Building

Former Waste Oil UST

Former USTs

Former Dispenser Island

Fenced Enclosure

Lamp Post

Light Pole

Light Pole

Islands

Planter

Sidewalk

Driveway

S-1 S-2 S-4 S-5 S-6 B-1 B-2 B-3 B-4 B-5 HP-1 HP-2

N

0 10 20 40

Scale (ft)

TABLES

TABLE 1

SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
2350 (2368) HARRISON STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Screened Interval (feet)*	*Acetone*	*Benzene*	*Carbon Disulfide*	*Ethyl-benzene*	*Toluene*	*Total Xylenes*	*Helium %v*
SVP-1	5/28/2009	4.4-4.5	<3,000	**52,000**	<3,900	**5,200**	5,000	6,500	0.195
SVP-2	5/28/2009	4.4-4.5	44,000	**530,000**	<30,000	**14,000**	<42,000	11,000	<0.0177
SVP-2-DUP	5/28/2009	4.4-4.5	48,000	**520,000**	<31,000	**12,000**	10,000	<43,000	0.165
SVP-3	5/28/2009	4.4-4.5	<670	**2,400**	1,000	370	550	1,400	0.266
Trip Blank	5/28/2009		<4.8	<1.6	<6.2	<2.2	<1.9	<8.7	<0.0100
Shallow Soil Gas (≤10 fbg) ESL [a] :			***1,800,000***	***280***	***--***	***3,300***	***180,000***	***58,000***	***--***

Notes:

All results in micrograms per cubic meter ($\mu g/m^3$) unless otherwise indicated.
%v = Percentage by volume
Volatile organic compounds analyzed by EPA TO-15. All detected analytes tabulated; see lab report for a complete list of specific constituents and results.
Helium analyzed by ASTM D-1946 (M)
<x = Not detected at reporting limit x
--- = No applicable environmental screening level

a = San Francisco Bay Regional Water Quality Control Board commercial land use Environmental Screening Level for soil gas for evaluation of potential vapor intrusion concerns (Table E-2 of *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater* , California Regional Water Quality Control Board, Interim Final - November 2007 [Revised May 2008]).

Results in **bold** exceed environmental screening level

APPENDIX A

CERTIFIED ANAYLTICAL REPORTS

Calscience Environmental Laboratories, Inc.

June 11, 2009

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

Subject: **Calscience Work Order No.: 09-05-2443**
Client Reference: 2350 (2368) Harrison St., Oakland, CA

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 5/29/2009 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.
Jessie Lee
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	05/29/09
5900 Hollis Street, Suite A	Work Order No:	09-05-2443
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3

Project: 2350 (2368) Harrison St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1	**09-05-2443-1-A**	**05/28/09 11:03**	**Air**	**GC/MS K**	**N/A**	**05/30/09 21:26**	**090530L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	3000	628		t-1,2-Dichloroethene	ND	1200	628	
Benzene	52000	1000	628		t-1,3-Dichloropropene	ND	2900	628	
Benzyl Chloride	ND	3300	628		Ethyl-t-Butyl Ether (ETBE)	ND	5200	628	
Bromodichloromethane	ND	2100	628		Ethylbenzene	5200	1400	628	
Bromoform	ND	3200	628		4-Ethyltoluene	ND	1500	628	
Bromomethane	ND	1200	628		Hexachloro-1,3-Butadiene	ND	6700	628	
2-Butanone	ND	1900	628		2-Hexanone	ND	2600	628	
Carbon Disulfide	ND	3900	628		Methyl-t-Butyl Ether (MTBE)	ND	4500	628	
Carbon Tetrachloride	ND	2000	628		Methylene Chloride	ND	11000	628	
Chlorobenzene	ND	1400	628		4-Methyl-2-Pentanone	ND	2600	628	
Chloroethane	ND	830	628		Xylenes (total)	6500	5500	628	
Chloroform	ND	1500	628		Styrene	ND	2700	628	
Chloromethane	ND	650	628		Tert-Amyl-Methyl Ether (TAME)	ND	5200	628	
Dibromochloromethane	ND	2700	628		Tert-Butyl Alcohol (TBA)	ND	3800	628	
Dichlorodifluoromethane	ND	1600	628		Tetrachloroethene	ND	2100	628	
Diisopropyl Ether (DIPE)	ND	5200	628		Toluene	5000	1200	628	
1,1-Dichloroethane	ND	1300	628		Trichloroethene	ND	1700	628	
1,1-Dichloroethene	ND	1200	628		Trichlorofluoromethane	ND	3500	628	
1,2-Dibromoethane	ND	2400	628		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	4800	628	
Dichlorotetrafluoroethane	ND	8800	628		1,1,1-Trichloroethane	ND	1700	628	
1,2-Dichlorobenzene	ND	1900	628		1,1,2-Trichloroethane	ND	1700	628	
1,2-Dichloroethane	ND	1300	628		1,3,5-Trimethylbenzene	ND	1500	628	
1,2-Dichloropropane	ND	1500	628		1,1,2,2-Tetrachloroethane	ND	4300	628	
1,3-Dichlorobenzene	ND	1900	628		1,2,4-Trimethylbenzene	ND	3100	628	
1,4-Dichlorobenzene	ND	1900	628		1,2,4-Trichlorobenzene	ND	9300	628	
c-1,3-Dichloropropene	ND	1400	628		Vinyl Acetate	ND	4400	628	
c-1,2-Dichloroethene	ND	1200	628		Vinyl Chloride	ND	800	628	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	127	57-129			1,2-Dichloroethane-d4	86	47-137		
Toluene-d8	88	78-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	05/29/09
5900 Hollis Street, Suite A	Work Order No:	09-05-2443
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3

Project: 2350 (2368) Harrison St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2	**09-05-2443-2-A**	**05/28/09 11:32**	**Air**	**GC/MS K**	**N/A**	**05/30/09 04:08**	**090529L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	44000	23000	4860		t-1,2-Dichloroethene	ND	9600	4860	
Benzene	530000	7800	4860		t-1,3-Dichloropropene	ND	22000	4860	
Benzyl Chloride	ND	25000	4860		Ethyl-t-Butyl Ether (ETBE)	ND	41000	4860	
Bromodichloromethane	ND	16000	4860		Ethylbenzene	14000	11000	4860	
Bromoform	ND	25000	4860		4-Ethyltoluene	ND	12000	4860	
Bromomethane	ND	9400	4860		Hexachloro-1,3-Butadiene	ND	52000	4860	
2-Butanone	ND	14000	4860		2-Hexanone	ND	20000	4860	
Carbon Disulfide	ND	30000	4860		Methyl-t-Butyl Ether (MTBE)	ND	35000	4860	
Carbon Tetrachloride	ND	15000	4860		Methylene Chloride	ND	84000	4860	
Chlorobenzene	ND	11000	4860		4-Methyl-2-Pentanone	ND	20000	4860	
Chloroethane	ND	6400	4860		Xylenes (total)	ND	42000	4860	
Chloroform	ND	12000	4860		Styrene	ND	21000	4860	
Chloromethane	ND	5000	4860		Tert-Amyl-Methyl Ether (TAME)	ND	41000	4860	
Dibromochloromethane	ND	21000	4860		Tert-Butyl Alcohol (TBA)	ND	29000	4860	
Dichlorodifluoromethane	ND	12000	4860		Tetrachloroethene	ND	16000	4860	
Diisopropyl Ether (DIPE)	ND	41000	4860		Toluene	11000	9200	4860	
1,1-Dichloroethane	ND	9800	4860		Trichloroethene	ND	13000	4860	
1,1-Dichloroethene	ND	9600	4860		Trichlorofluoromethane	ND	27000	4860	
1,2-Dibromoethane	ND	19000	4860		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	37000	4860	
Dichlorotetrafluoroethane	ND	68000	4860		1,1,1-Trichloroethane	ND	13000	4860	
1,2-Dichlorobenzene	ND	15000	4860		1,1,2-Trichloroethane	ND	13000	4860	
1,2-Dichloroethane	ND	9800	4860		1,3,5-Trimethylbenzene	ND	12000	4860	
1,2-Dichloropropane	ND	11000	4860		1,1,2,2-Tetrachloroethane	ND	33000	4860	
1,3-Dichlorobenzene	ND	15000	4860		1,2,4-Trimethylbenzene	ND	24000	4860	
1,4-Dichlorobenzene	ND	15000	4860		1,2,4-Trichlorobenzene	ND	72000	4860	
c-1,3-Dichloropropene	ND	11000	4860		Vinyl Acetate	ND	34000	4860	
c-1,2-Dichloroethene	ND	9600	4860		Vinyl Chloride	ND	6200	4860	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	102	57-129			1,2-Dichloroethane-d4	92	47-137		
Toluene-d8	101	78-156							

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: 05/29/09
Work Order No: 09-05-2443
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Project: 2350 (2368) Harrison St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2-DUP	**09-05-2443-3-A**	**05/28/09 11:32**	**Air**	**GC/MS K**	**N/A**	**05/30/09 04:56**	**090529L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	48000	24000	4950		t-1,2-Dichloroethene	ND	9800	4950	
Benzene	520000	7900	4950		t-1,3-Dichloropropene	ND	22000	4950	
Benzyl Chloride	ND	26000	4950		Ethyl-t-Butyl Ether (ETBE)	ND	41000	4950	
Bromodichloromethane	ND	17000	4950		Ethylbenzene	12000	11000	4950	
Bromoform	ND	26000	4950		4-Ethyltoluene	ND	12000	4950	
Bromomethane	ND	9600	4950		Hexachloro-1,3-Butadiene	ND	53000	4950	
2-Butanone	ND	15000	4950		2-Hexanone	ND	20000	4950	
Carbon Disulfide	ND	31000	4950		Methyl-t-Butyl Ether (MTBE)	ND	36000	4950	
Carbon Tetrachloride	ND	16000	4950		Methylene Chloride	ND	86000	4950	
Chlorobenzene	ND	11000	4950		4-Methyl-2-Pentanone	ND	20000	4950	
Chloroethane	ND	6500	4950		Xylenes (total)	ND	43000	4950	
Chloroform	ND	12000	4950		Styrene	ND	21000	4950	
Chloromethane	ND	5100	4950		Tert-Amyl-Methyl Ether (TAME)	ND	41000	4950	
Dibromochloromethane	ND	21000	4950		Tert-Butyl Alcohol (TBA)	ND	30000	4950	
Dichlorodifluoromethane	ND	12000	4950		Tetrachloroethene	ND	17000	4950	
Diisopropyl Ether (DIPE)	ND	41000	4950		Toluene	10000	9300	4950	
1,1-Dichloroethane	ND	10000	4950		Trichloroethene	ND	13000	4950	
1,1-Dichloroethene	ND	9800	4950		Trichlorofluoromethane	ND	28000	4950	
1,2-Dibromoethane	ND	19000	4950		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	38000	4950	
Dichlorotetrafluoroethane	ND	69000	4950		1,1,1-Trichloroethane	ND	14000	4950	
1,2-Dichlorobenzene	ND	15000	4950		1,1,2-Trichloroethane	ND	14000	4950	
1,2-Dichloroethane	ND	10000	4950		1,3,5-Trimethylbenzene	ND	12000	4950	
1,2-Dichloropropane	ND	11000	4950		1,1,2,2-Tetrachloroethane	ND	34000	4950	
1,3-Dichlorobenzene	ND	15000	4950		1,2,4-Trimethylbenzene	ND	24000	4950	
1,4-Dichlorobenzene	ND	15000	4950		1,2,4-Trichlorobenzene	ND	73000	4950	
c-1,3-Dichloropropene	ND	11000	4950		Vinyl Acetate	ND	35000	4950	
c-1,2-Dichloroethene	ND	9800	4950		Vinyl Chloride	ND	6300	4950	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	102	57-129			1,2-Dichloroethane-d4	92	47-137		
Toluene-d8	99	78-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	05/29/09
5900 Hollis Street, Suite A	Work Order No:	09-05-2443
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3

Project: 2350 (2368) Harrison St., Oakland, CA

Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-3	**09-05-2443-4-A**	**05/28/09 11:58**	**Air**	**GC/MS K**	**N/A**	**05/30/09 22:15**	**090530L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	670	141		t-1,2-Dichloroethene	ND	280	141	
Benzene	2400	230	141		t-1,3-Dichloropropene	ND	640	141	
Benzyl Chloride	ND	730	141		Ethyl-t-Butyl Ether (ETBE)	ND	1200	141	
Bromodichloromethane	ND	470	141		Ethylbenzene	370	310	141	
Bromoform	ND	730	141		4-Ethyltoluene	ND	350	141	
Bromomethane	ND	270	141		Hexachloro-1,3-Butadiene	ND	1500	141	
2-Butanone	ND	420	141		2-Hexanone	ND	580	141	
Carbon Disulfide	1000	880	141		Methyl-t-Butyl Ether (MTBE)	ND	1000	141	
Carbon Tetrachloride	ND	440	141		Methylene Chloride	ND	2400	141	
Chlorobenzene	ND	320	141		4-Methyl-2-Pentanone	ND	580	141	
Chloroethane	ND	190	141		Xylenes (total)	1400	1200	141	
Chloroform	ND	340	141		Styrene	ND	600	141	
Chloromethane	ND	150	141		Tert-Amyl-Methyl Ether (TAME)	ND	1200	141	
Dibromochloromethane	ND	600	141		Tert-Butyl Alcohol (TBA)	ND	850	141	
Dichlorodifluoromethane	ND	350	141		Tetrachloroethene	ND	480	141	
Diisopropyl Ether (DIPE)	ND	1200	141		Toluene	550	270	141	
1,1-Dichloroethane	ND	290	141		Trichloroethene	ND	380	141	
1,1-Dichloroethene	ND	280	141		Trichlorofluoromethane	ND	790	141	
1,2-Dibromoethane	ND	540	141		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1100	141	
Dichlorotetrafluoroethane	ND	2000	141		1,1,1-Trichloroethane	ND	380	141	
1,2-Dichlorobenzene	ND	420	141		1,1,2-Trichloroethane	ND	380	141	
1,2-Dichloroethane	ND	290	141		1,3,5-Trimethylbenzene	ND	350	141	
1,2-Dichloropropane	ND	330	141		1,1,2,2-Tetrachloroethane	ND	970	141	
1,3-Dichlorobenzene	ND	420	141		1,2,4-Trimethylbenzene	ND	690	141	
1,4-Dichlorobenzene	ND	420	141		1,2,4-Trichlorobenzene	ND	2100	141	
c-1,3-Dichloropropene	ND	320	141		Vinyl Acetate	ND	990	141	
c-1,2-Dichloroethene	ND	280	141		Vinyl Chloride	ND	180	141	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	107	57-129			1,2-Dichloroethane-d4	85	47-137		
Toluene-d8	53	78-156		2					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	05/29/09
5900 Hollis Street, Suite A	Work Order No:	09-05-2443
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3

Project: 2350 (2368) Harrison St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TRIP BLANK	**09-05-2443-5-A**	**05/28/09 12:10**	**Air**	**GC/MS K**	**N/A**	**05/30/09 02:33**	**090529L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	4.8	1		t-1,2-Dichloroethene	ND	2.0	1	
Benzene	ND	1.6	1		t-1,3-Dichloropropene	ND	4.5	1	
Benzyl Chloride	ND	5.2	1		Ethyl-t-Butyl Ether (ETBE)	ND	8.4	1	
Bromodichloromethane	ND	3.4	1		Ethylbenzene	ND	2.2	1	
Bromoform	ND	5.2	1		4-Ethyltoluene	ND	2.5	1	
Bromomethane	ND	1.9	1		Hexachloro-1,3-Butadiene	ND	11	1	
2-Butanone	ND	2.9	1		2-Hexanone	ND	4.1	1	
Carbon Disulfide	ND	6.2	1		Methyl-t-Butyl Ether (MTBE)	ND	7.2	1	
Carbon Tetrachloride	ND	3.1	1		Methylene Chloride	ND	17	1	
Chlorobenzene	ND	2.3	1		4-Methyl-2-Pentanone	ND	4.1	1	
Chloroethane	ND	1.3	1		Xylenes (total)	ND	8.7	1	
Chloroform	ND	2.4	1		Styrene	ND	4.3	1	
Chloromethane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1	
Dibromochloromethane	ND	4.3	1		Tert-Butyl Alcohol (TBA)	ND	6.1	1	
Dichlorodifluoromethane	ND	2.5	1		Tetrachloroethene	ND	3.4	1	
Diisopropyl Ether (DIPE)	ND	8.4	1		Toluene	ND	1.9	1	
1,1-Dichloroethane	ND	2.0	1		Trichloroethene	ND	2.7	1	
1,1-Dichloroethene	ND	2.0	1		Trichlorofluoromethane	ND	5.6	1	
1,2-Dibromoethane	ND	3.8	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	7.7	1	
Dichlorotetrafluoroethane	ND	14	1		1,1,1-Trichloroethane	ND	2.7	1	
1,2-Dichlorobenzene	ND	3.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,2-Dichloroethane	ND	2.0	1		1,3,5-Trimethylbenzene	ND	2.5	1	
1,2-Dichloropropane	ND	2.3	1		1,1,2,2-Tetrachloroethane	ND	6.9	1	
1,3-Dichlorobenzene	ND	3.0	1		1,2,4-Trimethylbenzene	ND	4.9	1	
1,4-Dichlorobenzene	ND	3.0	1		1,2,4-Trichlorobenzene	ND	15	1	
c-1,3-Dichloropropene	ND	2.3	1		Vinyl Acetate	ND	7.0	1	
c-1,2-Dichloroethene	ND	2.0	1		Vinyl Chloride	ND	1.3	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	93	47-137		
Toluene-d8	99	78-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	05/29/09
5900 Hollis Street, Suite A	Work Order No:	09-05-2443
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3

Project: 2350 (2368) Harrison St., Oakland, CA

Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-7,712**	**N/A**	**Air**	**GC/MS K**	**N/A**	**05/29/09 13:35**	**090529L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	4.8	1		t-1,2-Dichloroethene	ND	2.0	1	
Benzene	ND	1.6	1		t-1,3-Dichloropropene	ND	4.5	1	
Benzyl Chloride	ND	5.2	1		Ethyl-t-Butyl Ether (ETBE)	ND	8.4	1	
Bromodichloromethane	ND	3.4	1		Ethylbenzene	ND	2.2	1	
Bromoform	ND	5.2	1		4-Ethyltoluene	ND	2.5	1	
Bromomethane	ND	1.9	1		Hexachloro-1,3-Butadiene	ND	11	1	
2-Butanone	ND	2.9	1		2-Hexanone	ND	4.1	1	
Carbon Disulfide	ND	6.2	1		Methyl-t-Butyl Ether (MTBE)	ND	7.2	1	
Carbon Tetrachloride	ND	3.1	1		Methylene Chloride	ND	17	1	
Chlorobenzene	ND	2.3	1		4-Methyl-2-Pentanone	ND	4.1	1	
Chloroethane	ND	1.3	1		Xylenes (total)	ND	8.7	1	
Chloroform	ND	2.4	1		Styrene	ND	4.3	1	
Chloromethane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1	
Dibromochloromethane	ND	4.3	1		Tert-Butyl Alcohol (TBA)	ND	6.1	1	
Dichlorodifluoromethane	ND	2.5	1		Tetrachloroethene	ND	3.4	1	
Diisopropyl Ether (DIPE)	ND	8.4	1		Toluene	ND	1.9	1	
1,1-Dichloroethane	ND	2.0	1		Trichloroethene	ND	2.7	1	
1,1-Dichloroethene	ND	2.0	1		Trichlorofluoromethane	ND	5.6	1	
1,2-Dibromoethane	ND	3.8	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	7.7	1	
Dichlorotetrafluoroethane	ND	14	1		1,1,1-Trichloroethane	ND	2.7	1	
1,2-Dichlorobenzene	ND	3.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,2-Dichloroethane	ND	2.0	1		1,3,5-Trimethylbenzene	ND	2.5	1	
1,2-Dichloropropane	ND	2.3	1		1,1,2,2-Tetrachloroethane	ND	6.9	1	
1,3-Dichlorobenzene	ND	3.0	1		1,2,4-Trimethylbenzene	ND	4.9	1	
1,4-Dichlorobenzene	ND	3.0	1		1,2,4-Trichlorobenzene	ND	15	1	
c-1,3-Dichloropropene	ND	2.3	1		Vinyl Acetate	ND	7.0	1	
c-1,2-Dichloroethene	ND	2.0	1		Vinyl Chloride	ND	1.3	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	92	57-129		1,2-Dichloroethane-d4	108	47-137	
Toluene-d8	107	78-156					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	05/29/09
5900 Hollis Street, Suite A	Work Order No:	09-05-2443
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3

Project: 2350 (2368) Harrison St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-7,713**	**N/A**	**Air**	**GC/MS K**	**N/A**	**05/30/09 12:01**	**090530L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	4.8	1		t-1,2-Dichloroethene	ND	2.0	1	
Benzene	ND	1.6	1		t-1,3-Dichloropropene	ND	4.5	1	
Benzyl Chloride	ND	5.2	1		Ethyl-t-Butyl Ether (ETBE)	ND	8.4	1	
Bromodichloromethane	ND	3.4	1		Ethylbenzene	ND	2.2	1	
Bromoform	ND	5.2	1		4-Ethyltoluene	ND	2.5	1	
Bromomethane	ND	1.9	1		Hexachloro-1,3-Butadiene	ND	11	1	
2-Butanone	ND	2.9	1		2-Hexanone	ND	4.1	1	
Carbon Disulfide	ND	6.2	1		Methyl-t-Butyl Ether (MTBE)	ND	7.2	1	
Carbon Tetrachloride	ND	3.1	1		Methylene Chloride	ND	17	1	
Chlorobenzene	ND	2.3	1		4-Methyl-2-Pentanone	ND	4.1	1	
Chloroethane	ND	1.3	1		Xylenes (total)	ND	8.7	1	
Chloroform	ND	2.4	1		Styrene	ND	4.3	1	
Chloromethane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1	
Dibromochloromethane	ND	4.3	1		Tert-Butyl Alcohol (TBA)	ND	6.1	1	
Dichlorodifluoromethane	ND	2.5	1		Tetrachloroethene	ND	3.4	1	
Diisopropyl Ether (DIPE)	ND	8.4	1		Toluene	ND	1.9	1	
1,1-Dichloroethane	ND	2.0	1		Trichloroethene	ND	2.7	1	
1,1-Dichloroethene	ND	2.0	1		Trichlorofluoromethane	ND	5.6	1	
1,2-Dibromoethane	ND	3.8	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	7.7	1	
Dichlorotetrafluoroethane	ND	14	1		1,1,1-Trichloroethane	ND	2.7	1	
1,2-Dichlorobenzene	ND	3.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,2-Dichloroethane	ND	2.0	1		1,3,5-Trimethylbenzene	ND	2.5	1	
1,2-Dichloropropane	ND	2.3	1		1,1,2,2-Tetrachloroethane	ND	6.9	1	
1,3-Dichlorobenzene	ND	3.0	1		1,2,4-Trimethylbenzene	ND	4.9	1	
1,4-Dichlorobenzene	ND	3.0	1		1,2,4-Trichlorobenzene	ND	15	1	
c-1,3-Dichloropropene	ND	2.3	1		Vinyl Acetate	ND	7.0	1	
c-1,2-Dichloroethene	ND	2.0	1		Vinyl Chloride	ND	1.3	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	97	47-137		
Toluene-d8	99	78-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates		Date Received:	05/29/09
5900 Hollis Street, Suite A		Work Order No:	09-05-2443
Emeryville, CA 94608-2008		Preparation:	N/A
		Method:	ASTM D-1946 (M)

Project: 2350 (2368) Harrison St., Oakland, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1	**09-05-2443-1-A**	**05/28/09 11:03**	**Air**	**GC 55**	**N/A**	**06/01/09 00:00**	**090601L01**

Parameter	Result	RL	DF	Qual	Units
Helium	0.195	0.0157	1.57		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2	**09-05-2443-2-A**	**05/28/09 11:32**	**Air**	**GC 55**	**N/A**	**06/01/09 00:00**	**090601L01**

Parameter	Result	RL	DF	Qual	Units
Helium	ND	0.0177	1.77		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2-DUP	**09-05-2443-3-A**	**05/28/09 11:32**	**Air**	**GC 55**	**N/A**	**06/01/09 00:00**	**090601L01**

Parameter	Result	RL	DF	Qual	Units
Helium	0.165	0.0180	1.8		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-3	**09-05-2443-4-A**	**05/28/09 11:58**	**Air**	**GC 55**	**N/A**	**06/01/09 00:00**	**090601L01**

Parameter	Result	RL	DF	Qual	Units
Helium	0.266	0.0141	1.41		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-9-A**	**N/A**	**Air**	**GC 55**	**N/A**	**06/01/09 00:00**	**090601L01**

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

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

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: 09-05-2443
Preparation: N/A
Method: EPA TO-15

Project: 2350 (2368) Harrison St., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-7,712	**Air**	**GC/MS K**	**N/A**	**05/29/09**	**090529L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	106	108	60-156	44-172	2	0-40	
Carbon Tetrachloride	108	106	64-154	49-169	1	0-32	
1,2-Dibromoethane	106	131	54-144	39-159	21	0-36	
1,2-Dichlorobenzene	110	134	34-160	13-181	20	0-47	
1,2-Dichloroethane	105	107	69-153	55-167	1	0-30	
1,2-Dichloropropane	108	110	67-157	52-172	1	0-35	
1,4-Dichlorobenzene	111	135	36-156	16-176	20	0-47	
c-1,3-Dichloropropene	125	128	61-157	45-173	2	0-35	
Ethylbenzene	113	138	52-154	35-171	20	0-38	
o-Xylene	111	125	52-148	36-164	12	0-38	
p/m-Xylene	109	132	42-156	23-175	20	0-41	
Tetrachloroethene	108	131	56-152	40-168	20	0-40	
Toluene	107	131	56-146	41-161	21	0-43	
Trichloroethene	105	106	63-159	47-175	1	0-34	
1,1,2-Trichloroethane	109	111	65-149	51-163	2	0-37	
Vinyl Chloride	108	110	45-177	23-199	2	0-36	

Total number of LCS compounds : 16
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.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 09-05-2443
Preparation: N/A
Method: EPA TO-15

Project: 2350 (2368) Harrison St., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-7,713	**Air**	**GC/MS K**	**N/A**	**05/30/09**	**090530L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	103	105	60-156	44-172	2	0-40	
Carbon Tetrachloride	95	98	64-154	49-169	3	0-32	
1,2-Dibromoethane	102	104	54-144	39-159	2	0-36	
1,2-Dichlorobenzene	106	107	34-160	13-181	1	0-47	
1,2-Dichloroethane	97	99	69-153	55-167	2	0-30	
1,2-Dichloropropane	105	107	67-157	52-172	2	0-35	
1,4-Dichlorobenzene	106	108	36-156	16-176	1	0-47	
c-1,3-Dichloropropene	120	124	61-157	45-173	3	0-35	
Ethylbenzene	110	112	52-154	35-171	1	0-38	
o-Xylene	107	108	52-148	36-164	2	0-38	
p/m-Xylene	105	106	42-156	23-175	1	0-41	
Tetrachloroethene	104	105	56-152	40-168	1	0-40	
Toluene	106	107	56-146	41-161	1	0-43	
Trichloroethene	98	101	63-159	47-175	3	0-34	
1,1,2-Trichloroethane	106	108	65-149	51-163	2	0-37	
Vinyl Chloride	93	99	45-177	23-199	6	0-36	

Total number of LCS compounds : 16
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.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 09-05-2443
Preparation: N/A
Method: ASTM D-1946 (M)

Project: 2350 (2368) Harrison St., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-9	**Air**	**GC 55**	**N/A**	**06/01/09**	**090601L01**

Parameter	LCS Conc	LCSD Conc	RPD	RPD CL	Qualifiers
Helium	0.9653	0.9269	4	0-30	
Hydrogen	0.9332	0.8906	5	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-05-2443

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

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

Print Bill To Contact Name: Denis Brown

PO #:

INCIDENT # (ENV SERVICES): 97743969

SAP #: 17331 8

- [ ] CHECK IF NO INCIDENT # APPLIES

DATE: 5/28/09

PAGE: 1 of 1

SAMPLING COMPANY: Conestoga-Rovers & Associates

LOG CODE: CRAW

SITE ADDRESS: Street and City: 2350 (2368) Harrison St., Oakland

State: CA

GLOBAL ID NO.: TO600102237

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.: 060119

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): Lauren Goldfinch

LAB USE ONLY: 09-05-2443

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

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

SPECIAL INSTRUCTIONS OR NOTES :

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	Ice OTHER	NO. OF CONT.	Full Scan VOCs (TO-15)	He ATSM d 1946 (M)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
	SVP-1	5/28/09	11:03	air						1	X	X	Summa ID: LC 482
	SVP-2		11:32							1	X	X	Summa ID: LC 014
	SVP-2-DUP		11:32							1	X	X	Summa ID: LC 032
	SVP-3		11:58							1	X	X	Summa ID: LC 166
	TRIP BLANK		12:10							1	X	X	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	Secure location	5/28/09	13:30
Lauren Goldfinch CEC 5-28-09	CEC	5-28-09	1350
GSO 1730	CA	052909	1000

GSO # 511951587

05/2/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-05-2424-3

SAMPLE RECEIPT FORM

Cooler 0 of 0 (Box)

CLIENT: CRA

DATE: 05/29/09

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:** NC

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ 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.			
☐ 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** ☐100PB ☐100PB**na_2** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☑Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** NC

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar (Wide-mouth) **B:** Bottle (Narrow-mouth) **Reviewed by:** _____

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:** _____