Denis L. Brown
Shell Oil Products US

HSE - Environmental Services
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Carson, CA 90810-1039
Tel (707) 865 0251
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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: Soil Vapor Probe Sampling Report
Shell-branded Service Station
1784 150th Avenue
San Leandro, California
SAP Code 136019
Incident No. 98996068
ACEH File No. RO0000367

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Soil Vapor Probe Sampling Report* for the above referenced site. 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

CONESTOGA-ROVERS
& ASSOCIATES

5900 Hollis Street, Suite A, Emeryville, Calfornia 94608
Telephone: 510-420-0700 Facsimile: 510-420-9170
www.CRAworld.com

March 25, 2008

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

Re: **Soil Vapor Probe Sampling Report**
Shell-branded Service Station
1784 150th Avenue
San Leandro, California
SAP Code 136019
Incident No. 98996068
ACEH File No. RO0000367
CRA Project No. 240612-2008.6

Dear Mr. Wickham:

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's December 19, 2008 *Supplemental Subsurface Investigation Report* recommended resampling the five soil vapor probes at the site, and Alameda County Health Care Services Agency's (ACHCSA's) January 18, 2008 letter concurred.

Site Location and Description

The site is an operating Shell-branded service station located at the southern corner of the 150th Avenue and Freedom Avenue intersection in San Leandro, California (Figure 1). The area surrounding the site is mixed commercial and residential. The site layout (Figure 2) includes a station building, two dispenser islands, and three fuel underground storage tanks (USTs). One waste oil UST was removed from the site on May 25, 2006.

A summary of previous work performed at the site and additional background information was submitted in CRA's December 19, 2007 *Supplemental Subsurface Investigation Report*, and is not repeated herein.

Soil Vapor Probe Sampling Procedures

Personnel Present: CRA Staff Geologist Carmen Rodriguez sampled the soil vapor probes, under the supervision of California Professional Geologist Peter Schaefer.

Soil Vapor Sampling: On March 5, 2008 CRA sampled soil vapor probes SVP-1 through SVP-3 and SVP-5 according to CRA's soil vapor probe sampling protocol, included as Attachment A.

sampling and leak testing were performed following Department of Toxic Substances Control's January 28, 2003 *Advisory-Active Soil Gas Investigation* guidelines. Paper towels with shaving cream were placed at sample system connections for the leak test.

Purging and sampling were conducted at a rate of approximately 200 milliliters per minute. Vapor samples were collected in 1-liter Summa™ canisters after removing approximately three purge volumes from the screen interval. Each sample was labeled, documented on a chain-of-custody, and submitted to Calcience Environmental Laboratories, Inc. of Garden Grove, California for analysis.

Soil Vapor Sample Analysis: Soil vapor samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method TO-3 (modified) and benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tertiary-butyl ether (MTBE), and tracer compounds isobutane, butane, and propane (as tentatively identified compounds) by modified EPA Method TO-15. These tracer compounds were identified by EPA Method TO-15 as the most abundant compounds of the specific shaving cream analyzed and indicated by distinctive peaks on the petroleum hydrocarbon chromatograph, separate from TPH in the gasoline range. The laboratory analytical report is provided in Attachment B.

Soil Vapor Probe Sampling Results

Soil vapor samples collected on March 5, 2008 contained up to 4,900 micrograms per cubic meter ($\mu g/m^3$) TPHg, 8.2 $\mu g/m^3$ benzene, 1,300 $\mu g/m^3$ toluene, 41 $\mu g/m^3$ ethylbenzene, and 95 $\mu g/m^3$ xylenes. MTBE was not detected. Leak testing was performed during sampling using shaving cream to determine if ambient air was entering the Summa™ canisters during sampling by recognizing if the specific leak test compounds were identified in the chemical analysis. Isobutane is the standard compound of the leak test (approximately 350,000 $\mu g/m^3$ in shaving cream) and was detected in samples from SVP-1 and SVP-5. The maximum concentration reported was 70.12 $\mu g/m^3$ in SVP-1, an amount considered negligible when compared with the amount in the tracer gas compound.

Table 1 summarizes the soil vapor analytical data, TPHg, benzene, and MTBE results are shown on Figure 2, and the laboratory analytical report is presented in Attachment B.

Conclusions and Recommendations

All soil vapor sample concentrations are below San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residential and commercial land use, although some reporting limits were elevated. The TPHg concentrations in SVP-1 and SVP-5 have decreased since the September 25, 2007 sampling event. The RWQCB notes that "TPH ESLs must be used in conjunction with ESLs for related chemicals (e.g., BTEX)." All BTEX and MTBE concentrations have been below ESLs for residential land use during both soil vapor sampling events. CRA recommends a final round of sampling the soil vapor probes to verify the lower TPHg concentrations and to confirm that BTEX and MTBE vapor concentrations remain below ESLs.

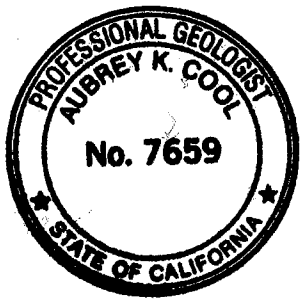
Closing

If you have any questions regarding this submittal, please call Peter Schaefer at (510) 420-3319 or Ana Friel at (707) 268-3812.

Sincerely,
Conestoga-Rovers & Associates

for:
Peter Schaefer, CEG, CHG
Acting Project Manager

Aubrey K Cool
Aubrey Cool, PG
Professional Geologist



Figures: 1 - Vicinity Map
2 - Soil Vapor Data Map

Table: 1 - Soil Vapor Analytical Data

Attachments: A - Standard Operating Procedures
B - Laboratory Analytical Report

cc: Denis Brown, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810

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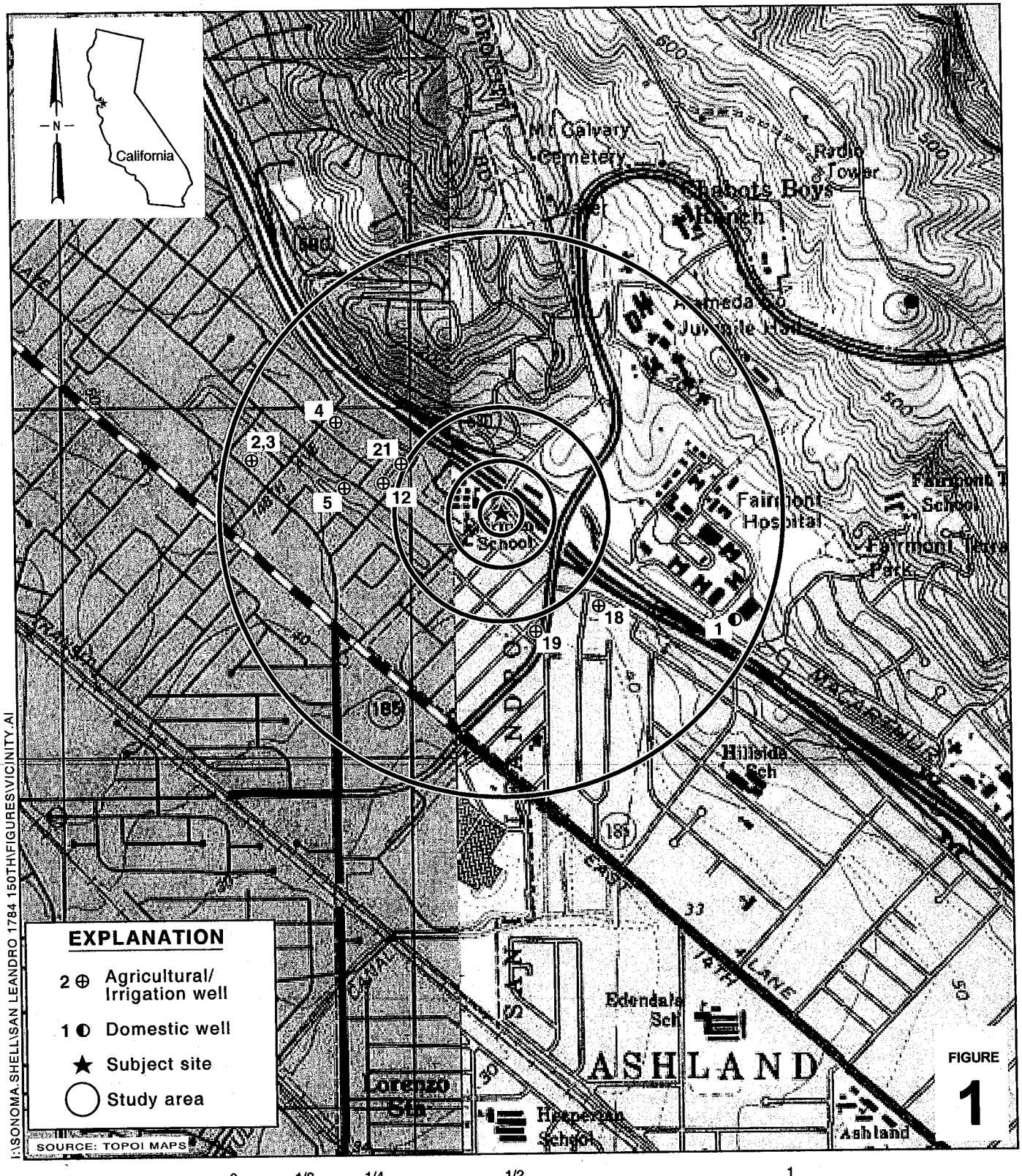
05/17/07



I:\SONOMA.SHELL\SAN LEANDRO 1784 150TH\FIGURES\VICINITY.AI

FIGURE 1

Shell-branded Service Station
1784 150th Avenue
San Leandro, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

03/13/08

EXPLANATION

- CPT-1 — CPT location (CRA, 8/29-30/07)
- B-1 — Soil boring location (CRA, 9/14/07)
- SVP-1 — Soil vapor probe location (CRA, 8/28/07)
- WO-1-6.5 — Soil sample location (Cambria, 5/25/06)
- S-19 — Soil boring location (Cambria, 5/23-25/06)
- MW-4 — Monitoring well location
- MW-6 — Monitoring well location
- D-1-5.0 — Soil sample location (Cambria, 04/05/05)
- D-1-3.5 — Soil sample location (Cambria, 03/22/05)
- SB-17 — Soil boring location (Cambria, 9/04)
- SB-10 — Soil boring location (Cambria, 6/03)
- SB-9 — Soil boring location (Cambria, 10/02)
- SVS-11 — Soil boring location (Cambria, 11/98)
- SVS-1 — Soil boring location (Cambria, 7/96)
- BH-7 — Soil boring location (Weiss, 3/95)
- A — Dispenser soil sample location (Weiss, 3/95)
- BH-1 — Soil boring location (Weiss, 6/94)
- Dispenser number
- Product piping
- SVP-1 / TPHg / Benz. / MTBE — Soil Vapor Sample ID; Soil vapor TPHg, benzene, and MTBE concentrations in µg/m^3

Notes:
NS = Not sampled
<X = Not detected at reporting limit X

I-580

I-580 OFF-RAMP

BH-4

brick sound wall

PORTOFINO CIRCLE

SB-12

BH-5

SB-13

SB-14

SVS-9

SB-11

MW-7

SVS-8

SB-24/ MW-12

SVP-5

SB-9

SVS-7

MW-8

MW-9

SB-25/ MW-13

Residential

SB-10

MH

MW-4

BH-9

SB-16

PORTOFINO DRIVE

SVS-6

BH-7

Residential

150TH AVENUE

BH-1 located 215' SE

BH-6 located 360' SE

FREEDOM AVENUE

BH-2

Shell Station
1784 150th Ave.

Former Dispenser Island

MW-3

MW-10

parking lot

CPT-3

SB-15

P-2-3.5, P-2-5.0

D-2-3.5

D-2-5.0

P-1-2.5, P-1-5.0

D-4-3.5

D-4-5.0

Station Building

SB-18

SB-21

D-3-3.5

SVP-4
NS

B-1

SVP-4

W

P-3-3.0

D-1-3.5

D-1-5.0

P-4-2.5, P-4-5.0

SB-23

air comp.

Former W/O UST

CPT-5

SB-20

USTs

SVS-1

WO-1-6.5

SVP-3
<20,000
3.9
<13

MW-2

SB-19

SVS-10

SVP-3

CPT-1

SB-22

SB-17

SVS-5

MW-1

CPT-2

MW-11

SVS-3

SVS-12

SVS-13

SVS-2

SVP-1

SVP-2

SVS-11

SVP-1
4,900
8.2
<10

SVP-2
<19,000
<2.7
<12

SVS-4

SVP-2
<19,000
<2.7
<12

Residential (Townhouses)

Residential (Townhouses)

BH-3

MH

SVS-14

SVS-15

CPT-6

MW-6

SVS-16

Private (Gated Driveway)

MW-5

Residential (Townhouses)

BH-8

0 20 40 80

Scale (ft)

Denny's Restaurant
15015 Freedom Ave.

Soil Vapor Data Map

March 5, 2008

CONESTOGA-ROVERS & ASSOCIATES

Shell-branded Service Station

1784 150th Avenue
San Leandro, California

FIGURE
2

L:\SONOMA\SHELL\SAN LEANDRO\1784 150TH\FIGURES\SOIL VAPOR DATA 3-08.DWG

Table 1. Soil Vapor Analytical Data - Shell-branded Service Station, 1784 150th Avenue, San Leandro, California

Sample ID	Sample Date	TPHg µg/m³	Benzene µg/m³	Toluene µg/m³	Ethylbenzene µg/m³	Total Xylenes µg/m³	MTBE µg/m³	Butane [a] µg/m³	Isobutane [a] µg/m³	Propane [a] µg/m³
SVP-1	9/25/2007	**12,000**	<17	7,000	120	296	<19	66.56	ND	ND
SVP-1	3/5/2008	4,900[d]	8.2	1,300	41	95	<10	ND	70.12	ND
SVP-1 DUP	3/5/2008	3,900[d]	7.9	400	32	65	<11	ND	62.99	ND
SVP-2	9/25/2007	760	11	90	14	56	24	ND	ND	ND
SVP-2	3/5/2008	<19,000	<2.7	<3.1	<3.6	<7.3	<12	ND	ND	ND
SVP-3	9/25/2007	300	<4.4	<5.2	<6.0	<6.0	<5.0	ND	ND	ND
SVP-3	3/5/2008	<20,000	3.9	32	7.8	38	<13	ND	ND	ND
SVP-3 DUP	9/25/2007	<260	<4.1	<4.9	<5.6	<5.6	<4.6	ND	ND	ND
SVP-4	9/25/2007	**12,000**	<3.9	13	6.3	31	<4.4	713.13	ND	ND
SVP-5	9/25/2007	**70,000**	<56	<66	<76	<76	<63	ND	ND	ND
SVP-5	3/5/2008	<17,000	<2.3	2.7	<3.1	<6.3	<10	ND	22.11	ND
Residential Land Use ESLs [b]:		**10,000**	**84**	**63,000**	**210,000**	**21,000**	**9,400**	**Concentration in the tracer gas [c]**		
Commercial/Industrial Land Use ESLs [b]:		**29,000**	**280**	**180,000**	**580,000**	**58,000**	**31,000**	**11,410**	**356,000**	**72,130**

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method TO-3 GC/FID
Benzene, toluene, ethylbenzene and total xylenes by modified EPA Method TO-15 GC/FID Full Scan
MTBE = Methyl tertiary-butyl ether by modified EPA Method TO-15 GC/FID Full Scan
Butane, isobutane, and propane by modified EPA Method TO-15 GC/FID Full Scan, tentatively identified compounds (TIC)
µg/m³ = Micrograms per cubic meter
<x = Not detected at reporting limit x
ND = Not detected; since TIC, no reporting limit provided
ESL = Environmental screening level from SFBRWQCB November 2007 edition

a = Tentatively identified compounds (TICs); detected quantities estimated by laboratory.
b = San Francisco Bay RWQCB ESLs for shallow soil gas (November 2007 edition, Table E)
c = Tracer gas compound (shaving cream) previously sampled for trace compounds.
d= Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.

Attachment A
Standard Operating Procedures

Conestoga-Rovers & Associates

STANDARD FIELD PROCEDURES FOR SOIL VAPOR SAMPLING
SOIL VAPOR PROBE

This document describes Conestoga-Rovers & Associates' standard field methods for soil vapor sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

Soil vapor samples are collected and analyzed to assess whether vapor-phase subsurface contaminants pose a threat to human health or the environment.

Soil Vapor Probe Installation

Soil vapor probes are installed in the vadose zone to check for hydrocarbon vapor migration. The wells are typically constructed with short screens to target horizons through which hydrocarbon vapor migration could occur. These wells can be constructed in borings drilled with hand auger equipment or using push technologies such as the Geoprobe and using non-collapsible polyethylene tubing set in small sand packed regions overlain by grout.

Soil Vapor Sampling

The required volume of soil vapor is purged through the polyethylene tubing using a standard vacuum pump. The soil vapor can then be sampled by attaching a vacuum sealed summa canister to the tubing. The summa canister should be attached to an air flow regulator and sediment filter which will regulate the rate that air can fill the summa canister. Once the canister is appropriately connected and a pressure test has been performed the canister can be opened and air allowed to flow in under vacuum pressure. Once the pressure valve reads -5 pounds per square inch the vacuum canister can be closed and sampling ended. Once collected, the vapor sample is transported under chain-of-custody to a state-certified laboratory. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. Drilling and sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Storage, Handling and Transport

Samples are stored and transported under chain-of-custody to a state-certified analytic laboratory. Samples should never be cooled due to the possibility of condensation within the canister.

Field Screening

After collecting a vapor sample for laboratory analysis, Cambria often collects an additional vapor sample for field screening using a portable photo-ionization detector (PID), flame-ionization detector (FID), or GasTech® combustible gas detector to measure volatile hydrocarbon vapor concentrations. These measurements are used along with the field observations, odors, stratigraphy and ground water depth to help select the best location for additional borings to be advanced during the field mobilization.

Grouting

The borings are filled to the ground surface with neat cement.

Attachment B
Laboratory Analytical Report

Calscience
Environmental
Laboratories, Inc.

Supplemental Report 1

March 13, 2008

The original report has been revised/corrected.

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

Subject: **Calscience Work Order No.:** **08-03-0583**
Client Reference: **1784 150th Ave, San Leandro, CA**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 3/7/2008 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,

Calscience Environmental
Laboratories, Inc.
Jessie Kim
Project Manager

Calscience Environmental Laboratories, Inc.

EPA TO-15 Tentatively Identified Compound (TIC)

	Isobutane (CAS Number 75-28-5)		Butane (CAS Number 106-97-8)		Propane (CAS Number 74-98-6)	
Client Sample ID:	Estimated Conc. (ug/m3)	RT (min)	Estimated Conc. (ug/m3)	RT (min)	Estimated Conc. (ug/m3)	RT (min)
SVP-3	ND	NA	ND	NA	ND	NA
SVP-2	ND	NA	ND	NA	ND	NA
SVP-1	70.12	4.3	ND	NA	ND	NA
SVP-1 Duplicate	62.99	4.3	ND	NA	ND	NA
Trip Blank	ND	NA	ND	NA	8.48	3.98
SVP-5	22.11	4.31	ND	NA	ND	NA

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/07/08
Work Order No: 08-03-0583
Preparation: N/A
Method: EPA TO-3M

Project: 1784 150th Ave, San Leandro, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-3	08-03-0583-1-A	03/05/08 12:50	Air	GC 13	N/A	03/09/08 11:30	080309L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	20000	2600	1.77		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2	08-03-0583-2-A	03/05/08 13:24	Air	GC 13	N/A	03/09/08 11:45	080309L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	19000	2400	1.67		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1	08-03-0583-3-A	03/05/08 14:14	Air	GC 13	N/A	03/09/08 11:55	080309L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	4900	17000	2100	1.44	J	ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1 Duplicate	08-03-0583-4-A	03/05/08 14:14	Air	GC 13	N/A	03/09/08 11:18	080309L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	3900	18000	2200	1.54	J	ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Trip Blank	08-03-0583-5-A	03/05/08 15:30	Air	GC 13	N/A	03/09/08 12:06	080309L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	11000	1500	1		ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-5	08-03-0583-6-A	03/05/08 15:02	Air	GC 13	N/A	03/09/08 12:18	080309L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	17000	2100	1.44		ug/m3

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

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates	Date Received:	03/07/08
5900 Hollis Street, Suite A	Work Order No:	08-03-0583
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-3M

Project: 1784 150th Ave, San Leandro, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-1,213**	**N/A**	**Air**	**GC 13**	**N/A**	**03/09/08 07:58**	**080309L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	11000	1500	1		ug/m3

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	03/07/08
5900 Hollis Street, Suite A	Work Order No:	08-03-0583
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: 1784 150th Ave, San Leandro, CA		Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-3	08-03-0583-1-A	03/05/08 12:50	Air	GC/MS DD	N/A	03/10/08 13:08	080310L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	3.9	2.8	1.77		p/m-Xylene	28	7.7	1.77	
Toluene	32	3.3	1.77		o-Xylene	9.6	3.8	1.77	
Ethylbenzene	7.8	3.8	1.77		Methyl-t-Butyl Ether (MTBE)	ND	13	1.77	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	95	47-137		
Toluene-d8	96	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-2	08-03-0583-2-A	03/05/08 13:24	Air	GC/MS DD	N/A	03/10/08 13:55	080310L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	2.7	1.67		p/m-Xylene	ND	7.3	1.67	
Toluene	ND	3.1	1.67		o-Xylene	ND	3.6	1.67	
Ethylbenzene	ND	3.6	1.67		Methyl-t-Butyl Ether (MTBE)	ND	12	1.67	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	101	47-137		
Toluene-d8	99	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1	08-03-0583-3-A	03/05/08 14:14	Air	GC/MS DD	N/A	03/10/08 14:43	080310L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	8.2	2.3	1.44		p/m-Xylene	67	6.3	1.44	
Toluene	1300	27	14.4		o-Xylene	28	3.1	1.44	
Ethylbenzene	41	3.1	1.44		Methyl-t-Butyl Ether (MTBE)	ND	10	1.44	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	106	47-137		
Toluene-d8	101	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-1 Duplicate	08-03-0583-4-A	03/05/08 14:14	Air	GC/MS DD	N/A	03/10/08 15:30	080310L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	7.9	2.5	1.54		p/m-Xylene	42	6.7	1.54	
Toluene	400	29	15.4		o-Xylene	23	3.3	1.54	
Ethylbenzene	32	3.3	1.54		Methyl-t-Butyl Ether (MTBE)	ND	11	1.54	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	107	47-137		
Toluene-d8	102	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: 03/07/08
Work Order No: 08-03-0583
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Project: 1784 150th Ave, San Leandro, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Trip Blank	08-03-0583-5-A	03/05/08 15:30	Air	GC/MS DD	N/A	03/10/08 16:20	080310L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		p/m-Xylene	ND	4.3	1	
Toluene	6.4	1.9	1		o-Xylene	ND	2.2	1	
Ethylbenzene	ND	2.2	1		Methyl-t-Butyl Ether (MTBE)	ND	7.2	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	100	57-129			1,2-Dichloroethane-d4	107	47-137		
Toluene-d8	98	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-5	08-03-0583-6-A	03/05/08 15:02	Air	GC/MS DD	N/A	03/10/08 17:21	080310L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	2.3	1.44		p/m-Xylene	ND	6.3	1.44	
Toluene	2.7	2.7	1.44		o-Xylene	ND	3.1	1.44	
Ethylbenzene	ND	3.1	1.44		Methyl-t-Butyl Ether (MTBE)	ND	10	1.44	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	101	57-129			1,2-Dichloroethane-d4	114	47-137		
Toluene-d8	101	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-09-002-6,892	N/A	Air	GC/MS DD	N/A	03/10/08 09:15	080310L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		p/m-Xylene	ND	4.3	1	
Toluene	ND	1.9	1		o-Xylene	ND	2.2	1	
Ethylbenzene	ND	2.2	1		Methyl-t-Butyl Ether (MTBE)	ND	7.2	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	107	57-129			1,2-Dichloroethane-d4	114	47-137		
Toluene-d8	99	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-09-002-6,897	N/A	Air	GC/MS V	N/A	03/11/08 12:16	080311L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		p/m-Xylene	ND	4.3	1	
Toluene	ND	1.9	1		o-Xylene	ND	2.2	1	
Ethylbenzene	ND	2.2	1		Methyl-t-Butyl Ether (MTBE)	ND	7.2	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	69	57-129			1,2-Dichloroethane-d4	112	47-137		
Toluene-d8	101	78-156							

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: 03/07/08
Work Order No: 08-03-0583
Preparation: N/A
Method: EPA TO-3M

Project: 1784 150th Ave, San Leandro, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
SVP-5	Air	GC 13	N/A	03/09/08	080309D01

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	ND	NA	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates	Date Received:	N/A
5900 Hollis Street, Suite A	Work Order No:	08-03-0583
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-15

Project: 1784 150th Ave, San Leandro, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-6,892	Air	GC/MS DD	N/A	03/10/08	080310L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	127	125	60-156	1	0-40	
Toluene	123	121	56-146	2	0-43	
Ethylbenzene	139	136	52-154	2	0-38	
p/m-Xylene	131	130	42-156	1	0-41	
o-Xylene	131	129	52-148	1	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Conestoga-Rovers & Associates	Date Received:	N/A
5900 Hollis Street, Suite A	Work Order No:	08-03-0583
Emeryville, CA 94608-2008	Preparation:	N/A
	Method:	EPA TO-15

Project: 1784 150th Ave, San Leandro, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-6,897	Air	GC/MS V	N/A	03/11/08	080311L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	96	100	60-156	5	0-40	
Toluene	97	102	56-146	4	0-43	
Ethylbenzene	102	107	52-154	5	0-38	
p/m-Xylene	102	107	42-156	5	0-41	
o-Xylene	102	106	52-148	4	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-03-0583

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.
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.

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
- [ ] CONSULTANT
- [ ] LUBES
- [ ] SHELL PIPELINE
- [ ] OTHER _____

Print Bill To Contact Name: Denis Brown

PO #

INCIDENT # (ENV SERVICES): 9 8 9 9 6 0 6 8

SAP #

- [ ] CHECK IF NO INCIDENT # APPLIES

DATE: 3/5/08

PAGE: 1 of 1

SAMPLING COMPANY: Conestoga-Rovers & Associates	LOG CODE: CRAW	SITE ADDRESS: Street and City: 1784 150th Ave, San Leandro, CA	State	GLOBAL ID NO.: T0600101230
ADDRESS: 5900 Hollis Street, Suite A, Emeryville, CA 94608		EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter, CRA, Emeryville	PHONE NO: 510-420-3343	E-MAIL: shell.em.edf@craworld.com	CONSULTANT PROJECT NO.: 240612-010
PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer		SAMPLER NAME(S) (Print): Carmen Rodriguez		LAB USE ONLY: 03-0583
TELEPHONE: 510-420-3319	FAX: 510-420-9170	E-MAIL: pschaefer@craworld.com		

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 (TO-3)	BTEX by EPA Method (TO-3)	MTBE by EPA Method (TO-3)	isobutane, butane, & propane (TO-15, GC/MS)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
1	SVP-3	3/5/08	1250	G							X	X	X	X	LC 251
2	SVP-2		1324												LC 251
3	SVP-1		1414												LC 341
4	SVP-1 Duplicate		1414												LC 081
5	Trip Blank		1530												LC 244-112
6	SVP-5		1502												LC 244

Relinquished by: (Signature) Carmen Rodriguez	Received by: (Signature) Safe Place	Date: 3/5/08 Time: 1630
Relinquished by: (Signature)	Received by: (Signature)	Date: 3/6/08 Time: 1025
Relinquished by: (Signature)	Received by: (Signature)	Date: 3/7/08 Time: 1030

5090653945

05/2/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 03 - 0583

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: CRA **DATE:** 3/6/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
_____ °C IR thermometer.
✓ Ambient temperature.

Initial: [illegible]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: [illegible]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [illegible]

COMMENTS: