CONESTOGA-ROVERS & ASSOCIATES

5900 Hollis Street, Suite A
Emeryville, California 94608
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TRANSMITTAL

DATE: February 12, 2014

REFERENCE NO.: 240894

PROJECT NAME: 1800½ Powell Street, Emeryville

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

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

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- ☐ Mail
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- ☒ Other GeoTracker and Alameda County FTP

QUANTITY	DESCRIPTION
1	Groundwater Monitoring Report – Fourth Quarter 2013

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

COMMENTS:
If you have any questions regarding the contents of this document, please call the CRA project manager Peter Schaefer at (510) 420-3319 or the Shell program manager Perry Pineda at (425) 413-1164.

Copy to: Perry Pineda, Shell Oil Products US (electronic copy)
Au Energy LLC (property owner), c/o Nick Goyle, Vintners Distributors, Inc., 41805 Albrae Street, 2nd Floor, Fremont, CA 94538

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: **Correspondence File**

Shell Oil Products US
Soil and Groundwater Focus Delivery Group
20945 S. Wilmington Avenue
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Tel (425) 413 1164
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Email perry.pineda@shell.com
Internet http://www.shell.com

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

Re: 1800½ Powell Street
Emeryville, California
SAP Code 135266
Incident No. 98995349
ACEH Case No. RO0000254

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 (425) 413-1164 with any questions or concerns.

Sincerely,
Shell Oil Products US

Perry Pineda
Senior Environmental Program Manager

GROUNDWATER MONITORING REPORT - FOURTH QUARTER 2013

SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET
EMERYVILLE, CALIFORNIA

SAP CODE	135266
INCIDENT NO.	98995349
AGENCY NO.	RO0000254

Prepared by:
Conestoga-Rovers & Associates

5900 Hollis Street, Suite A
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FEBRUARY 12, 2014
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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell).

1.1 SITE INFORMATION

Site Address	1800½ Powell Street, Emeryville
Site Use	Shell-branded Service Station
Shell Project Manager	Perry Pineda
CRA Project Manager	Peter Schaefer
Lead Agency and Contact	ACEH, Jerry Wickham
Agency Case No.	RO0000254
Shell SAP Code	135266
Shell Incident No.	98995349

Date of most recent agency correspondence was November 25, 2013.

2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION

2.1 CURRENT ACTIVITIES

Blaine Tech Services, Inc. (Blaine) gauged and sampled the wells according to the established monitoring program for this site. CRA prepared a vicinity map (Figure 1), a groundwater contour and chemical concentration map (Figure 2), and a groundwater data table (Table 1). Blaine's field notes are presented in Appendix A, and the laboratory report is presented in Appendix B.

On September 30, 2014, a diesel product line was ruptured during an investigation conducted by the property owner, AU Energy, LLC (AU), releasing 500 gallons of diesel fuel. On October 31, 2013, AU submitted a subsurface investigation work plan to investigate the diesel spill.

2.2 CURRENT FINDINGS

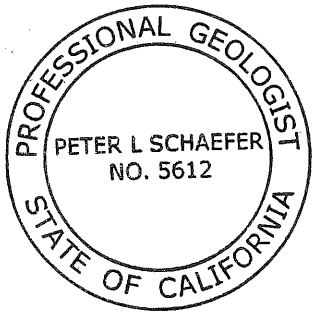
Groundwater Flow Direction	Variable
Hydraulic Gradient	Variable
Depth to Water	5.85 to 9.08 feet below top of well casing

2.3 PROPOSED ACTIVITIES

Blaine will gauge and sample wells according to the established monitoring program for this site. This site is monitored annually during the fourth quarter, and CRA will issue a groundwater monitoring report annually following the sampling event.

AU has notified Shell that they are tentatively scheduled to replace the underground storage tanks at this site in August 2014.

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



Peter Schaefer, CHG, CEG

for

Aubrey K. Cool, PG

FIGURES

01/13/09

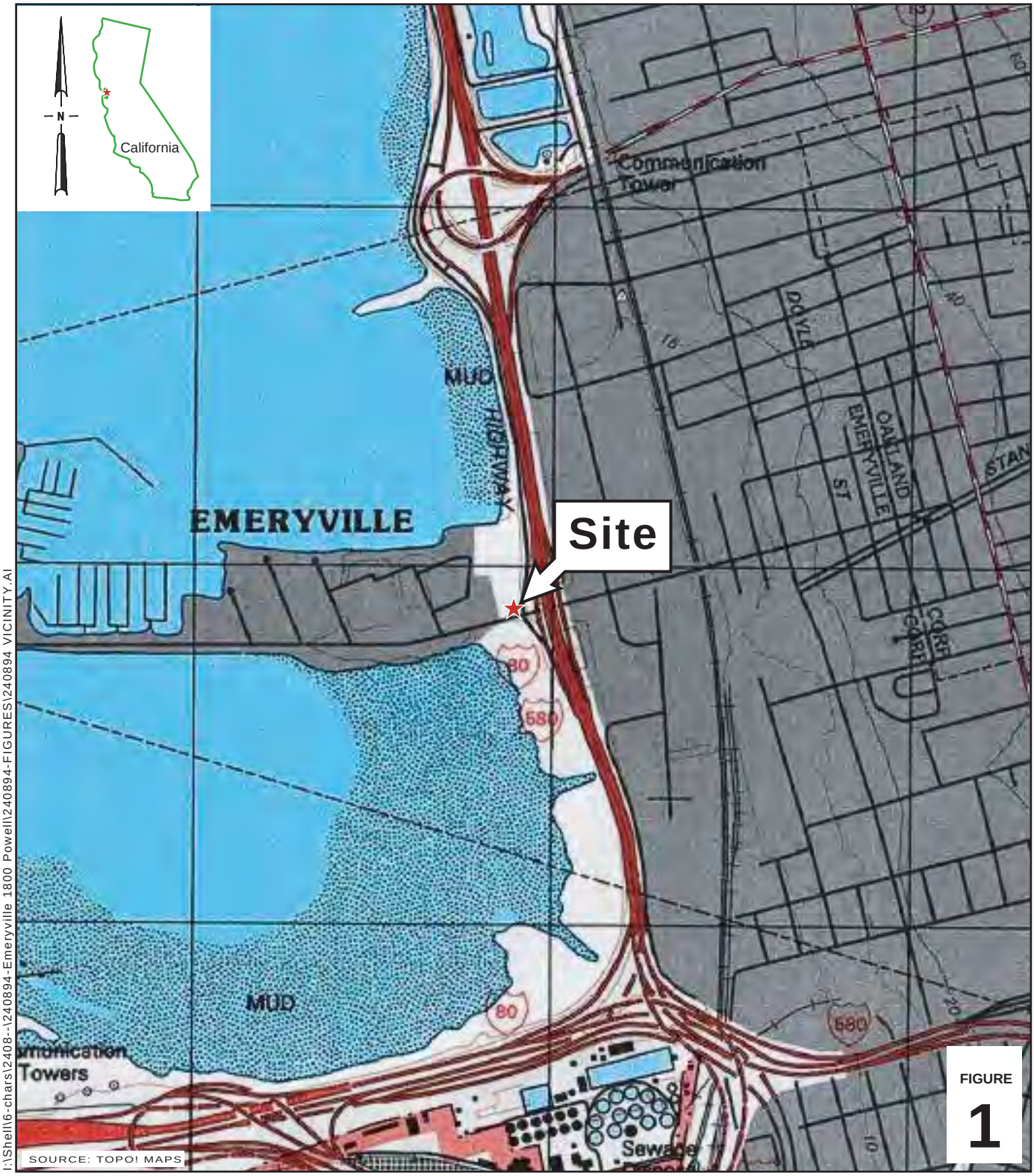


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FIGURE
1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Shell-branded Service Station

1800 1/2 Powell Street

Emeryville, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

01/21/2014

Groundwater Contour and Chemical Concentration Map

December 9, 2013

EXPLANATION

- S-5 — Monitoring well location
- S-6 — Destroyed monitoring well location
- S-1/A — Tank backfill well location
- xx.xx — Groundwater elevation contour, in feet above mean sea level (ft MSL); dashed where inferred

Notes:
<X = Not detected at reporting limit X
NM = Not monitored; well inaccessible
NS = Not sampled

Well
ELEV
Benzene
MTBE

- Well designation
- Groundwater elevation, in ft MSL
- Benzene and MTBE concentrations are in micrograms per liter

Notes:
<X = Not detected at reporting limit X
NM = Not monitored; well inaccessible
NS = Not sampled

N

0 15 30 60

Scale (ft)

Holiday Inn
Hotel Building
1800 Powell

Hotel
Parking Lot

Hotel
Parking Lot

Shell Station
1800 1/2 Powell St.

FRONTAGE ROAD

POWELL STREET

Sidewalk
Planter
Driveway
Car Wash
Dispenser Islands
Trash
Marketeer Building
USTs
Canopy
Traffic Island

S-1/A
S-2/E
S-3/B
S-4/C
S-6
S-7
S-11/D

S-5	S-8	S-9	S-10	S-12	S-13	S-14
5.92	9.15	Dry	6.79	6,35	5.39	NM
7.4	**6.3**	NS	**2.0**	<0.50	**14**	NS
<0.50	**1.3**		**7.4**	**33**	**27**	

6.25 — 6.25
7.25
8.25
8.25
7.25
7.25
6.25
6.25

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CONESTOGA-ROVERS & ASSOCIATES

Shell-branded Service Station
1800 1/2 Powell Street
Emeryville, California

FIGURE
2

TABLE

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-5	10/27/1988	---	---	3,000	660	20	20	70	---	---	---	---	---	---	11.72	---	---	---
S-5	02/10/1989	---	---	2,800	740	20	20	140	---	---	---	---	---	---	11.72	---	---	---
S-5	04/28/1989	---	---	4,300	750	10	20	<30	---	---	---	---	---	---	11.72	---	---	---
S-5	07/07/1989	---	---	1,500	300	8.0	7.0	9.0	---	---	---	---	---	---	11.72	---	---	---
S-5	10/25/1989	---	---	2,100	760	10	40	50	---	---	---	---	---	---	11.72	---	---	---
S-5	01/04/1990	---	---	1,300	520	9.0	8.0	10	---	---	---	---	---	---	11.72	---	---	---
S-5	07/06/1990	---	---	1,400	500	10	4.0	<10	---	---	---	---	---	---	11.72	8.36	---	3.36
S-5	10/19/1990	---	---	4,200	1,100	9.0	14	7.0	---	---	---	---	---	---	11.72	---	---	---
S-5	01/14/1991	---	6,100	4,500	1,100	15	30	25	---	---	---	---	---	---	11.72	---	---	---
S-5	04/23/1991	---	---	2,800	500	8.0	14	10	---	---	---	---	---	---	11.72	---	---	---
S-5	07/08/1991	---	---	3,200	1,000	16	9.0	12	---	---	---	---	---	---	11.72	9.15	---	2.57
S-5	10/11/1991	---	---	1,700	16	5.7	5.2	8.9	---	---	---	---	---	---	11.72	9.67	---	2.05
S-5	02/12/1992	---	---	1,300	300	5.0	<5	<5	---	---	---	---	---	---	11.72	9.00	---	2.72
S-5	05/11/1992	---	---	1,900	490	<0.5	<5	<5	---	---	---	---	---	---	11.72	8.61	---	3.11
S-5	09/01/1992	---	---	6,700	760	26	<25	<25	---	---	---	---	---	---	11.72	9.61	---	2.11
S-5	12/04/1992	---	---	2,900	890	5.3	7.3	13	---	---	---	---	---	---	11.72	9.47	---	2.25
S-5	02/17/1993	---	---	1,300	280	3.0	3.4	9.4	---	---	---	---	---	---	11.72	8.29	---	3.43
S-5	05/29/1993	---	---	460	130	<0.5	<0.5	2.9	---	---	---	---	---	---	11.72	9.16	---	2.56
S-5	08/11/1993	---	---	1,700	530	5.5	<5	5.8	---	---	---	---	---	---	11.72	9.30	---	2.42
S-5	11/12/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	11.72	9.42	---	2.30
S-5	02/21/1994	---	---	1,000	250	<5	<5	<5	---	---	---	---	---	---	11.72	7.95	---	3.77
S-5 (D)	02/21/1994	---	---	1,300	220	<5	<5	11	---	---	---	---	---	---	11.72	7.95	---	3.77
S-5	05/16/1994	---	---	1,200	230	<5	<5	<5	---	---	---	---	---	---	11.72	8.00	---	3.72
S-5	08/09/1994	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	11/09/1994	---	---	1,600	220	3.2	1.8	5.0	---	---	---	---	---	---	11.72	8.32	---	3.40
S-5 (D)	11/09/1994	---	---	1,600	250	3.3	1.9	5.9	---	---	---	---	---	---	11.72	8.32	---	---
S-5	02/22/1995	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	05/02/1995	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	05/10/1995	---	---	910	170	1.5	1.3	5.2	---	---	---	---	---	---	11.72	---	---	---
S-5	08/24/1995	---	---	620	210	<0.5	1.2	5.3	---	---	---	---	---	---	11.72	8.78	---	2.94
S-5	12/08/1995	---	---	1,600	510	3.3	1.5	6.6	---	---	---	---	---	---	11.72	9.78	---	1.94
S-5 (D)	12/08/1995	---	---	1,600	530	1.8	1.1	5.4	---	---	---	---	---	---	11.72	9.78	---	1.94
S-5	02/29/1996	---	---	1,900	470	5.8	<5.0	<5.0	46	---	---	---	---	---	11.72	7.64	---	4.08
S-5 (D)	02/29/1996	---	---	1,700	440	5.4	<5.0	<5.0	40	---	---	---	---	---	11.72	7.64	---	4.08
S-5	05/22/1996	---	---	1,200	490	<10	<10	<10	<50	---	---	---	---	---	11.72	8.60	---	3.12

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	*Date*	*TPHmo (µg/L)*	*TPHd (µg/L)*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*
S-5	07/30/1996	---	---	1,100	400	<5.0	<5.0	6.9	<25	---	---	---	---	---	11.72	9.40	---	2.32
S-5	11/11/1996	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	11/03/1997	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	11/06/1998	---	---	620	91	<0.50	0.64	4.0	<2.5	---	---	---	---	---	11.72	8.25	---	3.47
S-5	12/07/1999	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	11.72	---	---	---
S-5	11/02/2000	---	---	1,120	191	2.78	<2.50	3.56	<12.5	---	---	---	---	---	11.72	8.55	---	3.17
S-5	12/27/2001	---	---	760	110	2.4	<0.50	5.8	---	<5.0	---	---	---	---	11.72	7.64	---	4.08
S-5	11/26/2002	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	14.07	---	---	---
S-5	12/06/2002	---	---	860	130	2.3	<0.50	6.0	---	<5.0	---	---	---	---	14.07	8.62	---	5.45
S-5	11/25/2003	---	---	920	180	3.0	<1.0	6.2	---	<1.0	---	---	---	---	14.07	9.32	---	4.75
S-5	11/10/2004	---	---	530	2.4	0.68	<0.50	6.3	---	<0.50	---	---	---	---	14.07	9.35	---	4.72
S-5	11/23/2005	---	---	1,630	102	2.42	0.540	5.71	---	<0.500	<10.0	<0.500	<0.500	<0.500	14.07	9.62	---	4.45
S-5	11/21/2006	---	---	1,100	91	2.4	<0.50	5.3	---	<0.50	<5.0	<2.0	<2.0	<2.0	14.07	9.60	---	4.47
S-5	11/14/2007	---	---	1,700 m	92	2.9	0.33 n	6.2	---	<1.0	<10	<2.0	<2.0	<2.0	14.07	8.60	---	5.47
S-5	11/17/2008	---	---	810	30	1.6	<1.0	4.4	---	<1.0	<10	<2.0	<2.0	<2.0	14.07	8.10	---	5.97
S-5	11/12/2009	---	---	1,000	24	1.5	<1.0	3.8	---	<1.0	<10	<2.0	<2.0	<2.0	14.07	8.52	---	5.55
S-5	12/03/2010	---	---	790	16	<1.0	<1.0	4.2	---	<1.0	<10	<2.0	<2.0	<2.0	14.07	8.04	---	6.03
S-5	12/01/2011	---	---	280	<0.500	<0.500	<0.500	2.23	---	<0.500	<10.0	<0.500	<0.500	<0.500	14.07	8.80	---	5.27
S-5	01/16/2012	---	7,300 l	---	---	---	---	---	---	---	---	---	---	---	14.07	8.87	---	5.20
S-5	10/05/2012	---	---	550	14	<0.50	<0.50	4.4	---	<0.50	<10	<0.50	<0.50	<0.50	14.07	9.60	---	4.47
S-5	**12/09/2013**	**---**	**---**	**690**	**7.4**	**<0.50**	**<0.50**	**2.8**	**---**	**<0.50**	**<10**	**<0.50**	**<0.50**	**<0.50**	**14.07**	**8.15**	**---**	**5.92**
S-6	10/27/1988	---	---	6,000	1,700	50	80	420	---	---	---	---	---	---	---	---	---	---
S-6	02/10/1989	---	---	2,800	740	20	20	140	---	---	---	---	---	---	---	---	---	---
S-6	04/28/1989	---	---	6,500	2,400	30	50	210	---	---	---	---	---	---	---	---	---	---
S-6	07/07/1989	---	---	3,700	1,700	34	55	200	---	---	---	---	---	---	---	---	---	---
S-6	10/25/1989	---	---	<50	23	<5.0	<5.0	10	---	---	---	---	---	---	---	---	---	---
S-6	11/10/1989	Well abandoned		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	10/27/1988	---	---	50	1.1	<1	<1	4.0	---	---	---	---	---	---	---	---	---	---
S-7	02/10/1989	---	---	---	0.90	<1	<1	<3	---	---	---	---	---	---	---	---	---	---
S-7	04/28/1989	---	---	<50	<1	<1	<1	<3	---	---	---	---	---	---	---	---	---	---
S-7	07/07/1989	---	---	70	2.2	<1	<1	<3	---	---	---	---	---	---	---	---	---	---
S-7	10/25/1989	---	---	6,200	2,200	130	190	660	---	---	---	---	---	---	---	---	---	---
S-7	11/10/1989	Well abandoned		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-8	10/27/1988	---	---	1,000	610	9.0	1.0	42	---	---	---	---	---	---	12.76	---	---	---
S-8	02/10/1989	---	---	500	160	5.0	<2	17	---	---	---	---	---	---	12.76	---	---	---
S-8	04/28/1989	---	---	2,700	1,500	20	10	40	---	---	---	---	---	---	12.76	---	---	---
S-8	07/07/1989	---	---	440	180	5.0	2.0	12	---	---	---	---	---	---	12.76	---	---	---
S-8	10/25/1989	---	---	2,000	1,100	17	5.0	70	---	---	---	---	---	---	12.76	---	---	---
S-8	01/04/1990	---	---	1,900	1,300	20	<10	70	---	---	---	---	---	---	12.76	---	---	---
S-8	07/06/1990	---	---	1,600	920	30	<10	60	---	---	---	---	---	---	12.76	9.50	---	3.26
S-8	10/19/1990	---	---	1,400	640	<10	<10	30	---	---	---	---	---	---	12.76	---	---	---
S-8	01/14/1991	600	760	670	190	5.8	<0.5	19	---	---	---	---	---	---	12.76	---	---	---
S-8	04/23/1991	---	---	2,400	740	54	5.7	59	---	---	---	---	---	---	12.76	---	---	---
S-8	07/08/1991	---	---	1,100	450	15	<2.5	42	---	---	---	---	---	---	12.76	10.45	---	2.31
S-8	10/11/1991	---	---	340	4.0	0.60	<0.5	17	---	---	---	---	---	---	12.76	10.83	---	1.93
S-8	02/12/1992	---	---	<1,000	260	<10	<10	11	---	---	---	---	---	---	12.76	10.44	---	2.32
S-8	05/11/1992	---	---	1,800	700	14	<5	46	---	---	---	---	---	---	12.76	10.17	---	2.59
S-8	09/01/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	12.76	10.81	a	1.95
S-8	12/04/1992	---	---	960	250	4.3	<2.5	14	---	---	---	---	---	---	12.76	10.81	---	1.95
S-8	02/17/1993	---	---	2,700	800	35	10	83	---	---	---	---	---	---	12.76	9.65	---	3.11
S-8	05/29/1993	---	---	960	710	25	84	80	---	---	---	---	---	---	12.76	10.46	---	2.30
S-8	08/11/1993	---	---	1,300	630	17	<5	46	---	---	---	---	---	---	12.76	10.59	---	2.17
S-8	11/12/1993	---	---	910	180	8.0	<2.5	15	---	---	---	---	---	---	12.76	10.29	---	2.47
S-8	02/21/1994	---	---	3,200	480	52	<5	130	---	---	---	---	---	---	12.76	9.52	---	3.24
S-8	05/16/1994	---	---	1,000	220	7.3	<5	28	---	---	---	---	---	---	12.76	9.49	---	3.27
S-8 (D)	05/16/1994	---	---	1,000	280	10	<5	29	---	---	---	---	---	---	12.76	9.49	---	3.27
S-8	08/09/1994	---	---	400	27	6.6	<0.5	18	---	---	---	---	---	---	12.76	10.37	---	2.39
S-8	11/09/1994	---	---	650	170	5.3	<0.5	17	---	---	---	---	---	---	12.76	9.58	---	3.18
S-8	02/22/1995	---	---	650	210	10	1.2	22	---	---	---	---	---	---	12.76	9.02	---	3.74
S-8	05/02/1995	---	---	1,000	280	17	1.4	32	---	---	---	---	---	---	12.76	8.45	---	4.31
S-8	08/24/1995	---	---	480	180	11	1.0	19	---	---	---	---	---	---	12.76	10.02	---	2.74
S-8 (D)	08/24/1995	---	---	700	180	6.5	<0.5	17	---	---	---	---	---	---	12.76	10.02	---	2.74
S-8	12/08/1995	---	---	740	230	6.9	0.70	15	---	---	---	---	---	---	12.76	10.65	---	2.11
S-8	02/29/1996	---	---	740	260	8.1	<5.0	19	58	---	---	---	---	---	12.76	9.10	---	3.66
S-8	05/22/1996	---	---	1,200	350	10	<5.0	23	74	---	---	---	---	---	12.76	10.14	---	2.62
S-8	07/30/1996	---	---	530	220	20	6.3	36	69	---	---	---	---	---	12.76	10.51	---	2.25
S-8	11/11/1996	---	---	540	140	3.7	<2.0	17	42	---	---	---	---	---	12.76	10.23	---	2.53

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-8	11/03/1997	---	---	480	54	3.5	<0.50	12	40	---	---	---	---	---	12.76	9.40	---	3.36
S-8	11/06/1998	---	---	740	110	10	2.8	26	31	---	---	---	---	---	12.76	9.78	---	2.98
S-8	12/07/1999	---	---	770	270	16	<2.0	33	75	---	---	---	---	---	12.76	10.14	---	2.62
S-8	11/02/2000	---	---	436	75.8	6.18	0.549	14.9	81.5	---	---	---	---	---	12.76	9.45	---	3.31
S-8	12/27/2001	---	---	1,300	62	11	1.8	31	---	86	---	---	---	---	12.76	9.19	---	3.57
S-8	11/26/2002	---	---	970	58	3.8	0.51	15	---	35	---	---	---	---	15.00	10.10	---	4.90
S-8	11/25/2003	---	---	400	19	4.4	<0.50	15	---	34	---	---	---	---	15.00	10.49	---	4.51
S-8	11/10/2004	---	---	430	28	3.4	<0.50	11	---	25	---	---	---	---	15.00	10.45	---	4.55
S-8	11/23/2005	---	---	476	8.72	3.15	1.03	12.6	---	35.2	20.1	<0.500	<0.500	<0.500	15.00	10.46	---	4.54
S-8	11/21/2006	---	---	280	5.9	1.9	4.9	7.9	---	27	47	<2.0	<2.0	<2.0	15.00	10.61	---	4.39
S-8	11/14/2007	---	---	520 m	2.2	0.66 n	<1.0	4.9	---	29	38	<2.0	<2.0	<2.0	15.00	10.01	---	4.99
S-8	11/17/2008	---	---	550	6.9	1.8	<1.0	8.0	---	36	23	<2.0	<2.0	<2.0	15.00	9.64	---	5.36
S-8	11/12/2009	---	---	640	8.1	3.5	<1.0	9.8	---	72	23	<2.0	<2.0	<2.0	15.00	10.00	---	5.00
S-8	12/03/2010	---	---	810	5.3	4.2	<1.0	14	---	37	23	<2.0	<2.0	<2.0	15.00	9.32	---	5.68
S-8	12/01/2011	---	---	150	1.05	<0.500	<0.500	3.94	---	24.7	<10.0	<0.500	<0.500	<0.500	15.00	9.90	---	5.10
S-8	01/16/2012	---	1,400 l	---	---	---	---	---	---	---	---	---	---	---	15.00	8.34	---	6.66
S-8	10/05/2012	---	---	610	4.8	1.9	<0.50	6.5	---	4.5	<10	<0.50	<0.50	<0.50	15.00	10.39	---	4.61
S-8	**12/09/2013**	**---**	**---**	**600**	**6.3**	**0.97**	**<0.50**	**2.5**	**---**	**1.3**	**<10**	**<0.50**	**<0.50**	**<0.50**	**15.00**	**5.85**	**---**	**9.15**
S-9	10/27/1988	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	02/10/1989	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	1.30	---
S-9	04/28/1989	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	1.25	---
S-9	07/07/1989	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	1.20	---
S-9	10/25/1989	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	01/04/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	04/12/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	07/06/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	9.67	a	3.08
S-9	10/19/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	01/14/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	04/23/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	07/08/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	10/11/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	22.30	a	-9.55
S-9	02/24/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	05/16/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	1.50	---
S-9	08/09/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	11.80	2.00	---

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-9	11/09/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	02/22/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	11.40	2.38	---
S-9	05/02/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	11.83	2.12	---
S-9	12/08/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	11.92	1.06	---
S-9	02/29/1996	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	12.10	2.79	2.88
S-9	05/22/1996	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	11.71	1.75	2.44
S-9	07/30/1996	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	a	---
S-9	11/11/1996	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	9.00	---
S-9	11/03/1997	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	a	---
S-9	11/06/1998	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	a	---
S-9	12/07/1999	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	---	---
S-9	11/02/2000	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	---	---
S-9	12/27/2001	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	12.75	---	---	---
S-9	11/26/2002	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.83	---	---	---
S-9	11/25/2003	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.83	---	---	---
S-9	11/25/2003	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.98 i	---	---	---
S-9	11/23/2005	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.98	---	---	---
S-9	11/21/2006	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.98	---	---	---
S-9	11/14/2007	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.98	---	---	---
S-9	11/17/2008	Tar-like substance in well, probably from previous landfill activities; not gasoline.									---	---	---	---	14.98	---	---	---
S-9	11/12/2009	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	14.98	---	---	---
S-9	12/03/2010	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	14.98	---	---	---
S-9	12/01/2011	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	14.98	---	---	---
S-9	10/05/2012	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	14.98	---	---	---
S-9	**12/09/2013**	**Well dry**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**14.98**	**---**	**---**	**---**
S-10	10/27/1988	---	---	700,000	37,000	100,000	20,000	110,000	---	---	---	---	---	---	12.58	---	---	---
S-10	02/10/1989	---	---	6,500	480	700	100	1,800	---	---	---	---	---	---	12.58	---	---	---
S-10	04/28/1989	---	---	13,000	1,300	500	600	3,700	---	---	---	---	---	---	12.58	---	---	---
S-10	07/07/1989	---	---	14,000	1,300	310	270	2,400	---	---	---	---	---	---	12.58	---	---	---
S-10	10/25/1989	---	---	4,200	580	34	4.0	440	---	---	---	---	---	---	12.58	---	---	---
S-10	01/04/1990	---	---	1,700	360	10	7.8	170	---	---	---	---	---	---	12.58	---	---	---
S-10	04/12/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	---	0.01	---
S-10	07/06/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	9.16	0.01	3.42
S-10	10/19/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	---	0.03	---

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-10	01/14/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	---	0.03	---
S-10	04/23/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	---	0.01	---
S-10	07/08/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	9.41	0.03	3.17
S-10	10/11/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	7.77	a	4.81
S-10	02/12/1992	---	---	1,200	470	16	<5	14	---	---	---	---	---	---	12.58	6.41	---	6.17
S-10	05/11/1992	---	---	1,100	100	6.0	4.0	19	---	---	---	---	---	---	12.58	9.04	---	3.54
S-10	09/01/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	9.38	0.01	3.20
S-10	12/04/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	6.89	a	5.69
S-10	02/17/1993	---	---	530	89	8.5	1.6	4.5	---	---	---	---	---	---	12.58	7.34	---	5.24
S-10	05/29/1993	---	---	240	65	3.8	2.2	8.6	---	---	---	---	---	---	12.58	6.60	---	5.98
S-10	08/11/1993	---	---	250	23	4.1	<1	6.4	---	---	---	---	---	---	12.58	9.09	---	3.49
S-10	11/12/1993	---	---	320	1.6	1.3	1.4	6.2	---	---	---	---	---	---	12.58	6.58	---	6.00
S-10	02/21/1994	---	---	1,400	190	9.9	<2.5	19	---	---	---	---	---	---	12.58	8.32	---	4.26
S-10	05/16/1994	---	---	300	45	8.6	6.2	19	---	---	---	---	---	---	12.58	8.35	---	4.23
S-10	08/08/1994	---	---	700	57	14	<0.5	9.3	---	---	---	---	---	---	12.58	8.66	---	3.92
S-10	11/09/1994	---	---	640	130	2.0	1.6	4.1	---	---	---	---	---	---	12.58	6.68	---	5.90
S-10	02/22/1995	---	---	500	65	5.9	1.0	8.2	---	---	---	---	---	---	12.58	9.12	---	3.46
S-10	05/02/1995	---	---	530	59	2.3	0.80	8.2	---	---	---	---	---	---	12.58	9.50	---	3.08
S-10	08/24/1995	---	---	350	35	4.6	<0.5	6.7	---	---	---	---	---	---	12.58	10.06	---	2.52
S-10	12/08/1995	---	---	690	28	4.6	0.90	8.6	---	---	---	---	---	---	12.58	10.08	---	2.50
S-10	02/29/1996	---	---	430	32	1.8	0.50	5.8	16	---	---	---	---	---	12.58	5.32	---	7.26
S-10	05/22/1996	---	1,200	100	19	0.63	<0.5	1.4	5.3	---	---	---	---	---	12.58	6.04	---	6.54
S-10	07/30/1996	---	13,000	240	17	<1.2	<1.2	7.8	11	---	---	---	---	---	12.58	10.48	---	2.10
S-10	11/11/1996	---	4,800	370	16	1.1	<0.5	7.0	94	---	---	---	---	---	12.58	10.31	---	2.27
S-10	11/03/1997	---	1,100	340	6.7	2.1	<0.50	3.3	19	---	---	---	---	---	12.58	9.53	---	3.05
S-10 (D)	11/03/1997	---	1,100	310	7.8	1.3	<0.50	3.1	19	---	---	---	---	---	12.58	9.53	---	3.05
S-10	11/06/1998	---	2,000	<250	<2.5	<2.5	<2.5	6.5	900	---	---	---	---	---	12.58	5.12	---	7.46
S-10	12/07/1999	---	2,230	400	47	33	10	29	90	---	---	---	---	---	12.58	7.95	---	4.63
S-10	11/02/2000	---	14,500	536	32.0	3.08	<0.500	2.98	42.3	---	---	---	---	---	12.58	7.05	---	5.53
S-10	12/27/2001	---	6,600	870	61	4.9	2.5	15	---	26	---	---	---	---	12.58	7.43	---	5.15
S-10	11/26/2002	---	9,800	720	56	3.5	<0.50	8.4	---	52	---	---	---	---	15.11	9.75	---	5.36
S-10	11/25/2003	---	530 k	550	29	2.7	<0.50	8.4	---	49	---	---	---	---	15.11	9.00	---	6.11
S-10	11/10/2004	---	1,500 k	660	64	5.0	0.61	14	---	54	---	---	---	---	14.93 i	9.50	---	5.43
S-10	11/23/2005	---	---	866	47.0	3.44	0.600	12.6	---	61.9	<10.0	<0.500	<0.500	<0.500	14.93	10.23	---	4.70
S-10	11/21/2006	---	12,000	490	21	2.3	5.8	9.6	---	48	34	<2.0	<2.0	<2.0	14.93	10.04	---	4.89

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-10	11/14/2007	---	1,300 k,l	740 m	19	2.1	<1.0	8.0	---	44	20	<2.0	<2.0	<2.0	14.93	9.49	---	5.44
S-10	11/17/2008	---	2,000 l	630	7.3	1.0	<1.0	7.0	---	32	11	<2.0	<2.0	<2.0	14.93	10.03	---	4.90
S-10	11/12/2009	---	2,100 l	600	7.9	1.1	<1.0	5.7	---	23	12	<2.0	<2.0	<2.0	14.93	10.31	---	4.62
S-10	12/03/2010	---	900 l	740	6.0	1.3	<1.0	9.3	---	19	12	<2.0	<2.0	<2.0	14.93	9.60	---	5.33
S-10	12/01/2011	---	10,100 h,l	430	2.87	0.680	<0.500	6.85	---	22.0	<10.0	<0.500	<0.500	<0.500	14.93	10.60	---	4.33
S-10	01/16/2012	---	5,700 l	---	---	---	---	---	---	---	---	---	---	---	14.93	9.96	---	4.97
S-10	10/05/2012	---	510 l	890	10	2.9	<0.50	19	---	31	13	<0.50	<0.50	1.6	14.93	10.19	---	4.74
S-10	**12/09/2013**	**---**	**2,100 l**	**550**	**2.0**	**0.61**	**<0.50**	**6.0**	**---**	**7.4**	**<10**	**<0.50**	**<0.50**	**<0.50**	**14.93**	**8.14**	**---**	**6.79**
S-12	07/07/1989	---	2,200	<250	0.71	<0.5	<0.5	<3.6	---	---	---	---	---	---	12.84	8.22	---	---
S-12	11/17/1989	---	1,400	<250	18	<2	<2	<5	---	---	---	---	---	---	12.84	---	---	---
S-12	01/04/1990	---	---	<250	24	2.0	<2	<5	---	---	---	---	---	---	12.84	---	---	---
S-12	07/06/1990	---	---	80	15	0.70	<0.5	2.0	---	---	---	---	---	---	12.84	8.27	---	4.57
S-12	10/19/1990	---	---	150	12	9.0	<0.5	3.6	---	---	---	---	---	---	12.84	---	---	---
S-12	01/14/1991	600	1,000	120	3.6	0.80	<0.5	2.9	---	---	---	---	---	---	12.84	---	---	---
S-12	04/23/1991	800	820	100	3.7	3.8	0.80	11	---	---	---	---	---	---	12.84	---	---	---
S-12	07/08/1991	---	---	70	2.5	0.80	<0.5	2.4	---	---	---	---	---	---	12.84	9.50	---	3.34
S-12	10/11/1991	5,100	2,500	220	2.1	0.70	<0.5	1.2	---	---	---	---	---	---	12.84	9.90	---	2.94
S-12	02/12/1992	1,400	2,500	110	0.80	<0.5	<0.5	1.3	---	---	---	---	---	---	12.84	9.43	---	3.41
S-12	05/11/1992	---	3,800 b	140	0.80	0.80	<0.5	2.5	---	---	---	---	---	---	12.84	8.65	---	4.19
S-12	09/01/1992	---	2,600 b	190	3.0	15	0.50	4.5	---	---	---	---	---	---	12.84	9.86	---	2.98
S-12	12/04/1992	---	3,900 b	180	1.2	1.0	1.0	7.7	---	---	---	---	---	---	12.84	9.93	---	2.91
S-12	02/17/1993	---	2,100 b	350 k	0.60	<0.5	0.50	5.5	---	---	---	---	---	---	12.84	8.08	---	4.76
S-12	05/29/1993	---	2,200	290	2.0	1.6	4.4	6.0	---	---	---	---	---	---	12.84	9.08	---	3.76
S-12	08/11/1993	---	720	240	0.70	<0.5	<0.5	1.1	---	---	---	---	---	---	12.84	9.35	---	3.49
S-12	11/12/1993	---	4,100	210 k	0.70	0.50	<0.5	3.4	---	---	---	---	---	---	12.84	9.28	---	3.56
S-12	02/21/1994	---	2,200 c	240 o	0.70	<0.5	<0.5	3.6	---	---	---	---	---	---	12.84	8.22	---	4.62
S-12	05/16/1994	---	2,200	96	1.5	<0.5	<0.5	2.0	---	---	---	---	---	---	12.84	8.92	---	3.92
S-12	08/08/1994	---	3,500 e	110 d	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	12.84	---	---	0.00
S-12	11/09/1994	---	5,400 e	80	80	<0.5	<0.5	0.60	---	---	---	---	---	---	12.84	7.56	---	5.28
S-12	02/22/1995	---	2,900 e,f	110	0.70	<0.5	<0.5	3.7	---	---	---	---	---	---	12.84	7.98	---	4.86
S-12 (D)	02/22/1995	---	3,400 e,f	110	4.8	7.1	<0.5	2.1	---	---	---	---	---	---	12.84	7.98	---	4.86
S-12	05/02/1995	---	2,800	140	2.4	1.1	0.80	4.3	---	---	---	---	---	---	12.84	8.44	---	4.40
S-12	08/24/1995	---	1,600	200	19	12	5.6	24	---	---	---	---	---	---	12.84	9.00	---	3.84
S-12	12/08/1995	---	2,700	170	2.2	0.70	0.90	3.6	---	---	---	---	---	---	12.84	9.62	---	3.22

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-12	02/29/1996	---	2,200	1,700	<5.0	<5.0	<5.0	<5.0	5,600	---	---	---	---	---	12.84	7.64	---	5.20
S-12	05/22/1996	---	5,700	<1,000	<10	<10	<10	<10	2,400	---	---	---	---	---	12.84	8.94	---	3.90
S-12	07/30/1996	---	3,200	<500	<5.0	<5.0	<5.0	<5.0	1,500	---	---	---	---	---	12.84	9.71	---	3.13
S-12 (D)	07/30/1996	---	2,900	<500	<5.0	<5.0	<5.0	<5.0	---	2,000	---	---	---	---	12.84	9.71	---	3.13
S-12	11/11/1996	---	6,900	<500	<5.0	<5.0	<5.0	<5.0	1,400	---	---	---	---	---	12.84	9.65	---	3.19
S-12	11/03/1997	---	2,800	110	2.1	<0.50	<0.50	1.3	---	---	---	---	---	---	12.84	8.73	---	4.11
S-12	11/06/1998	---	2,900	<500	<5.0	<5.0	<5.0	<5.0	2,700	---	---	---	---	---	12.84	8.85	---	3.99
S-12	12/07/1999	---	2,800	<500	<5.0	<5.0	<5.0	<5.0	1,900	---	---	---	---	---	12.84	8.32	---	4.52
S-12	11/02/2000	---	4,000	132	0.642	<0.500	<0.500	1.07	1,900	2,230 h	---	---	---	---	12.84	7.50	---	5.34
S-12	12/27/2001	---	2,700	230	<2.0	<2.0	<2.0	<2.0	---	760	---	---	---	---	12.84	7.00	---	5.84
S-12	11/26/2002	---	540	180	<1.0	<1.0	<1.0	1.7	---	390	---	---	---	---	14.87	8.35	---	6.52
S-12	11/25/2003	---	2,600 k	<250	<2.5	<2.5	<2.5	<5.0	---	310	---	---	---	---	14.87	6.04	---	8.83
S-12	11/10/2004	---	1,000 k	290	<1.0	1.2	<1.0	5.0	---	140	---	---	---	---	14.87	7.80	---	7.07
S-12	11/23/2005	---	---	<50.0	<0.500	<0.500	<0.500	2.63	---	93.3	398	<0.500	<0.500	<0.500	14.87	7.22	---	7.65
S-12	11/21/2006	---	220	280	<1.0	<1.0	<1.0	<2.0	---	110	600	<4.0	<4.0	<4.0	14.87	8.53	---	6.34
S-12	11/14/2007	---	660 k,l	360 m	0.23 n	<1.0	<1.0	0.51 n	---	83	830	<2.0	<2.0	<2.0	14.87	7.40	---	7.47
S-12	11/17/2008	---	2,600 l	390	<0.50	<1.0	<1.0	<1.0	---	44	350	<2.0	<2.0	<2.0	14.87	6.80	---	8.07
S-12	11/12/2009	---	690 l	200	<0.50	<1.0	<1.0	<1.0	---	61	370	<2.0	<2.0	<2.0	14.87	8.00	---	6.87
S-12	12/03/2010	---	480 k,l	330	<0.50	<1.0	<1.0	<1.0	---	31	280	<2.0	<2.0	<2.0	14.87	7.47	---	7.40
S-12	12/01/2011	---	15,600 h,l	200	<0.500	<0.500	<0.500	0.970	---	54.3	<10.0	<0.500	<0.500	<0.500	14.87	8.60	---	6.27
S-12	01/16/2012	---	1,800 l,o	---	---	---	---	---	---	---	---	---	---	---	14.87	8.56	---	6.31
S-12	10/05/2012	---	280 l	250	<0.50	<0.50	<0.50	<1.0	---	37	290	<0.50	<0.50	<0.50	14.87	8.58	---	6.29
S-12	**12/09/2013**	**---**	**250 l**	**410**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**33**	**240**	**<0.50**	**<0.50**	**<0.50**	**14.87**	**8.52**	**---**	**6.35**
S-13	07/07/1989	---	3,600	700	200	<5	<5	45	---	---	---	---	---	---	12.59	9.26	---	---
S-13	11/17/1989	5,000	2,000	1,900	700	160	70	340	---	---	---	---	---	---	12.59	---	---	---
S-13	01/04/1990	---	---	2,800	1,400	130	10	500	---	---	---	---	---	---	12.59	---	---	---
S-13	07/06/1990	---	---	3,100	1,800	60	40	270	---	---	---	---	---	---	12.59	9.47	---	3.12
S-13	10/24/1990	---	---	3,400	1,500	28	28	250	---	---	---	---	---	---	12.59	---	---	---
S-13	01/14/1991	1,600	900	1,900	830	15	<10	99	---	---	---	---	---	---	12.59	---	---	---
S-13	04/23/1991	640	770 f	2,900 k	1,100	20	30	140	---	---	---	---	---	---	12.59	---	---	---
S-13	07/08/1991	---	---	1,500	880	10	6.0	160	---	---	---	---	---	---	12.59	10.38	---	2.21
S-13	10/11/1991	4,900	2,400	480	830	15	<0.5	120	---	---	---	---	---	---	12.59	10.78	---	1.81
S-13	02/12/1992	1,300	1,300	1,300	510	<10	<10	86	---	---	---	---	---	---	12.59	10.48	---	2.11
S-13	05/11/1992	---	1,300 b	1,000	470	<0.5	<5	50	---	---	---	---	---	---	12.59	9.48	---	3.11

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-13	09/01/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	12.59	10.74	a	1.85
S-13	12/04/1992	---	2,400 b	900	290	4.6	<2.5	20	---	---	---	---	---	---	12.59	10.30	---	2.29
S-13	02/17/1993	---	1,200 b	840 k	310	3.5	<2.5	27	---	---	---	---	---	---	12.59	7.60	---	4.99
S-13	05/29/1993	---	4,600	2,100	1,100	19	50	350	---	---	---	---	---	---	12.59	10.60	---	1.99
S-13	08/11/1993	---	2,300	900	230	16	6.9	65	---	---	---	---	---	---	12.59	10.58	---	2.01
S-13	11/12/1993	---	2,800	2,800	200	15	8.6	58	---	---	---	---	---	---	12.59	9.84	---	2.75
S-13	02/21/1994	---	1,800 o	700	200	<5	<5	45	---	---	---	---	---	---	12.59	9.26	---	3.33
S-13	05/16/1994	---	1,700	650	180	2.5	<2.5	21	---	---	---	---	---	---	12.59	9.62	---	2.97
S-13	08/08/1994	---	2,600 e	470	12	1.5	0.50	14	---	---	---	---	---	---	12.59	10.32	---	2.27
S-13	11/09/1994	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	12.59	---	---	---
S-13	02/22/1995	---	2,400 e,f	550	190	4.0	<0.5	17	---	---	---	---	---	---	12.59	8.92	---	3.67
S-13	05/02/1995	---	2,100	790	250	6.9	1.2	22	---	---	---	---	---	---	12.59	9.52	---	3.07
S-13	08/24/1995	---	1,500	330	93	<0.5	<0.5	2.0	---	---	---	---	---	---	12.59	10.02	---	2.57
S-13	12/08/1995	---	2,400	440	110	2.2	0.80	23	---	---	---	---	---	---	12.59	10.75	---	1.84
S-13	02/29/1996	---	2,500	560	130	<5.0	<5.0	30	30	---	---	---	---	---	12.59	9.02	---	3.57
S-13	05/22/1996	---	3,700	430	55	1.6	310	27	<5.0	---	---	---	---	---	12.59	10.20	---	2.39
S-13	07/30/1996	---	1,600	230	30	2.0	1.4	17	15	---	---	---	---	---	12.59	10.42	---	2.17
S-13	11/11/1996	---	2,700	320	19	1.1	<0.5	14	3.5	---	---	---	---	---	12.59	10.28	---	2.31
S-13 (D)	11/11/1996	---	2,400	360	24	1.3	<0.5	15	4.5	---	---	---	---	---	12.59	10.28	---	2.31
S-13	11/03/1997	---	1,900	300	25	1.4	0.63	12	5.0	---	---	---	---	---	12.59	9.36	---	3.23
S-13	11/06/1998	---	1,300	390	53	2.9	1.1	13	17	---	---	---	---	---	12.59	9.85	---	2.74
S-13	12/07/1999	---	1,430	420	15	6.2	2.6	15	42	---	---	---	---	---	12.59	9.72	---	2.87
S-13	11/02/2000	---	4,240	257	4.89	1.92	<0.500	5.17	45.1	---	---	---	---	---	12.59	7.15	---	5.44
S-13	12/27/2001	---	6,400	300	7.2	0.84	<0.50	6.0	---	34	---	---	---	---	12.59	9.35	---	3.24
S-13	11/26/2002	---	850	160	<0.50	<0.50	<0.50	2.6	---	23	---	---	---	---	14.47	9.80	---	4.67
S-13	11/25/2003	---	5,100 k	180	0.57	0.55	<0.50	3.0	---	26	---	---	---	---	14.47	9.94	---	4.53
S-13	11/10/2004	---	1,900 k	220	<0.50	0.71	<0.50	2.8	---	26	---	---	---	---	14.47	10.05	---	4.42
S-13	11/23/2005	---	---	<50.0	4.33	1.24	0.700	5.40	---	27.2	30.3	<0.500	<0.500	<0.500	14.47	10.02	---	4.45
S-13	11/21/2006	---	840	370	19	2.3	0.60	4.9	---	77	73	<2.0	<2.0	5.1	14.47	10.30	---	4.17
S-13	11/14/2007	---	590 k,l	650 m	8.0	1.8	<1.0	4.7	---	32	13	<2.0	<2.0	1.8 n	14.47	9.60	---	4.87
S-13	11/17/2008	---	1,500 l	510	3.0	1.1	<1.0	4.2	---	25	13	<2.0	<2.0	<2.0	14.47	9.24	---	5.23
S-13	11/12/2009	---	1,000 l	410	2.6	1.0	<1.0	2.1	---	32	17	<2.0	<2.0	<2.0	14.47	9.82	---	4.65
S-13	12/03/2010	---	650 k,l	690	3.8	1.6	<1.0	6.3	---	44	22	<2.0	<2.0	3.8	14.47	9.30	---	5.17
S-13	12/01/2011	---	9,100 h,l	580	4.20	1.02	<0.500	5.80	---	67.0	<10.0	<0.500	<0.500	<0.500	14.47	10.02	---	4.45
S-13	01/16/2012	---	1,200 l	---	---	---	---	---	---	---	---	---	---	---	14.47	9.80	---	4.67

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-13	10/05/2012	---	990 l	950	23	6.4	0.91	16	---	120	36	<0.50	<0.50	11	14.47	10.02	---	4.45
S-13	**12/09/2013**	**---**	**640 l**	**690**	**14**	**1.4**	**<0.50**	**5.2**	**---**	**27**	**27**	**<0.50**	**<0.50**	**1.8**	**14.47**	**9.08**	**---**	**5.39**
S-14	11/17/1989	3,000	<400	<250	3.0	<2	<2	<5	---	---	---	---	---	---	12.69	---	---	---
S-14	01/04/1990	---	---	<250	3.0	2.0	<2	<5	---	---	---	---	---	---	12.69	---	---	---
S-14	04/23/1991	<5,000	18,000	1,200	7.4	2.7	15	110	---	---	---	---	---	---	12.69	---	---	---
S-14	07/08/1991	---	---	190	6.5	0.60	1.9	26	---	---	---	---	---	---	12.69	10.32	---	2.37
S-14	10/11/1991	<500	21,000	4,900	7.0	1.2	<0.5	25	---	---	---	---	---	---	12.69	10.77	---	1.92
S-14	02/12/1992	2,500	12,000 k	370	4.6	<2.5	<2.5	26	---	---	---	---	---	---	12.69	10.40	---	2.29
S-14	05/11/1992	---	2,200 b	660	2.9	<2.5	<2.5	24	---	---	---	---	---	---	12.69	9.66	---	3.03
S-14	09/01/1992	---	7,900	700	3.2	<2.5	<2.5	15	---	---	---	---	---	---	12.69	10.74	---	1.95
S-14	12/04/1992	---	11,000 b	210	<0.5	<0.5	0.80	6.8	---	---	---	---	---	---	12.69	10.69	---	2.00
S-14	02/17/1993	---	5,700 b	130 k	<0.5	<0.5	<0.5	4.4	---	---	---	---	---	---	12.69	9.69	---	3.00
S-14	05/29/1993	---	5,200	770	<0.5	<0.5	<0.5	4.5	---	---	---	---	---	---	12.69	10.42	---	2.27
S-14	08/11/1993	---	8,800	920	<1	<1	1.6	17	---	---	---	---	---	---	12.69	10.54	---	2.15
S-14	11/12/1993	---	28,000	710	20	57	25	69	---	---	---	---	---	---	12.69	9.91	---	2.78
S-14	02/21/1994	---	3,600	2,800	<5	<5	<5	14	---	---	---	---	---	---	12.69	9.30	---	3.09
S-14	02/21/1994	---	3,600 c	2,300 o	<5.0	<5	<5	14	---	---	---	---	---	---	12.69	9.30	---	3.39
S-14	05/16/1994	---	6,700	310	<2.5	<2.5	<2.5	3.1	---	---	---	---	---	---	12.69	9.54	---	3.15
S-14	08/08/1994	---	2,900	480 g	<0.5	0.60	<0.5	0.8	---	---	---	---	---	---	12.69	10.29	---	2.40
S-14 (D)	08/08/1994	---	2,900	590 g	<0.5	0.60	<0.5	1.5	---	---	---	---	---	---	12.69	10.29	---	2.40
S-14	11/09/1994	---	6,400 e	170 g	0.70	<0.5	<0.5	2.7	---	---	---	---	---	---	12.69	9.52	---	3.07
S-14	02/22/1995	---	7,000 e,f	550	<0.5	<0.5	<0.5	1.6	---	---	---	---	---	---	12.69	9.18	---	3.51
S-14	05/02/1995	---	2,300	210	1.0	0.90	1.1	6.3	---	---	---	---	---	---	12.69	9.49	---	3.20
S-14 (D)	05/02/1995	---	2,600	160	0.60	0.60	0.70	3.8	---	---	---	---	---	---	12.69	9.49	---	3.20
S-14	08/24/1995	---	3,700	180	0.50	<0.5	<0.5	1.3	---	---	---	---	---	---	12.69	9.94	---	2.75
S-14	12/08/1995	---	4,900	190	1.0	<0.5	0.60	4.6	---	---	---	---	---	---	12.69	10.65	---	2.04
S-14	02/29/1996	---	11,000	200	<0.5	<0.5	<0.5	2.0	3.0	---	---	---	---	---	12.69	8.90	---	3.79
S-14	05/22/1996	---	3,800	93	<0.5	<0.5	<0.5	1.6	<2.5	---	---	---	---	---	12.69	10.10	---	2.59
S-14 (D)	05/22/1996	---	3,900	150	<0.5	<0.5	<0.5	1.8	<2.5	---	---	---	---	---	12.69	10.10	---	2.59
S-14	07/30/1996	---	2,500	<50	<0.5	<0.5	<0.5	0.89	<2.5	---	---	---	---	---	12.69	10.37	---	2.32
S-14	11/11/1996	---	27,000	2,600	<2.5	<2.5	<2.5	3.9	<12	---	---	---	---	---	12.69	10.29	---	2.40
S-14	11/03/1997	---	1,800	430	<0.50	<0.50	<0.50	1.7	<2.5	---	---	---	---	---	12.69	9.52	---	3.17
S-14	11/06/1998	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	12.69	---	---	---
S-14	12/07/1999	---	5,920	970	1.0	1.1	0.59	3.5	2.6	---	---	---	---	---	12.69	9.73	---	2.96

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)
S-14	11/02/2000	---	535,000	273	<0.500	<0.500	<0.500	1.59	<2.50	---	---	---	---	---	12.69	9.98	---	2.71
S-14	12/27/2001	---	20,000	68	<0.50	<0.50	<0.50	1.3	---	<5.0	---	---	---	---	12.69	9.33	---	3.36
S-14	11/26/2002	---	2,400	<50	<0.50	<0.50	<0.50	0.91	---	<5.0	---	---	---	---	14.51	9.70	---	4.81
S-14	11/25/2003	---	4,400 k	78 k	<0.50	<0.50	<0.50	1.2	---	1.6	---	---	---	---	14.51	9.99	---	4.52
S-14	11/10/2004	---	2,500 k	74 k	<0.50	<0.50	<0.50	<1.0	---	1.9	---	---	---	---	14.51	10.05	---	4.46
S-14	11/23/2005	---	---	<50.0	<0.500	<0.500	<0.500	<0.500	---	1.02	<10.0	<0.500	<0.500	<0.500	14.51	9.92	---	4.59
S-14	11/21/2006	---	5,000	62 j	<0.50 j	<0.50 j	<0.50 j	<1.0 j	---	1.9 j	<5.0 j	<2.0 j	<2.0 j	<2.0 j	14.51	10.26	---	4.25
S-14	11/14/2007	---	550 k,l	120 m	0.98	<1.0	<1.0	0.23 n	---	2.2	<10	<2.0	<2.0	<2.0	14.51	9.63	---	4.88
S-14	11/17/2008	---	1,700 l	<50	<0.50	<1.0	<1.0	<1.0	---	1.4	<10	<2.0	<2.0	<2.0	14.51	9.25	---	5.26
S-14	11/12/2009	---	1,200 l	<50	<0.50	<1.0	<1.0	<1.0	---	1.2	<10	<2.0	<2.0	<2.0	14.51	9.67	---	4.84
S-14	12/03/2010	---	540 l	58	<0.50	<1.0	<1.0	<1.0	---	1.1	<10	<2.0	<2.0	<2.0	14.51	9.12	---	5.39
S-14	12/01/2011	---	7,610 h,l	120	<0.500	<0.500	<0.500	<0.500	---	1.46	<10.0	<0.500	<0.500	<0.500	14.51	9.88	---	4.63
S-14	01/16/2012	---	1,400 l	---	---	---	---	---	---	---	---	---	---	---	14.51	9.69	---	4.82
S-14	10/05/2012	---	1,300 l	82	<0.50	<0.50	<0.50	<1.0	---	1.7	<10	<0.50	<0.50	<0.50	14.51	9.92	---	4.59
S-14	**12/09/2013**	**Well inaccessible**		**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**14.51**	**---**	**---**	**---**

Notes:
TPHmo = Total petroleum hydrocarbons as motor oil analyzed by modified EPA Method 8015
TPHd = Total petroleum hydrocarbons as diesel analyzed by modified EPA Method 8015
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to December 27, 2001, analyzed by EPA Method 8015 unless otherwise noted.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to December 27, 2001, analyzed by EPA Method 8020.
MTBE = Methyl tertiary-butyl ether analyzed by method noted
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
TOC = Top of casing elevation, in feet relative to mean sea level
SPH = Separate-phase hydrocarbon
GW = Groundwater
µg/L = Micrograms per liter
ft = Feet
MSL = Mean sea level
<x = Not detected at reporting limit x
--- = Not analyzed or available
(D) = Duplicate sample

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1800½ POWELL STREET, EMERYVILLE, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)

a = SPH present but not measured
b = Compounds detected within the chromatographic range appear to be weathered diesel.
c = The concentration reported as diesel is due to the presence of a combination of diesel and a heavier petroleum product of hydrocarbon range C18 - C36, possibly motor oil.
d = The result for gasoline is an unknown hydrocarbon which consists of several peaks.
e = The positive result appears to be a heavier hydrocarbon than diesel.
f = Compounds detected within the chromatographic range of diesel appear to include gasoline compounds.
g = The positive result appears to be a heavier hydrocarbon than gasoline.
h = Sample analyzed outside of EPA recommended holding time.
i = TOC altered due to wellhead maintenance.
j = The sample, as received, was not preserved in accordance to the referenced analytical method.
k = Sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
l = The sample extract was subjected to silica gel treatment prior to analysis.
m = Analyzed by EPA Method 8015B (M).
n = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
o = Hydrocarbon result partly due to individual peak(s) in quantitation range

Beginning November 26, 2002, depth to water referenced to TOC instead of top of well box.
Active wells surveyed on February 12, 2002 by Virgil Chavez Land Surveying

APPENDIX A

BLAINE TECH SERVICES, INC. - FIELD NOTES

WELL GAUGING DATA

Project # 131209-C1 Date 12/9/09 Client SHell

Site 1800 Powell St, Emeryville

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
S-5	0842	8					8.15	12.05		
S-8	0825	3					5.85	17.86		
S-9	0902	3	ODOR	CHECKED W/ DISP. BAILER.	WELL DRY		DRY	—		
S-10	0851	6					8.14	19.23		
S-12	0832	3					8.52	23.42		
S-13	0856	3					9.08	18.52		
S-14	NO	ACCESS.		UNDER	DIRT	PILE				

SHELL WELL MONITORING DATA SHEET

BTS #: 131209-CM1	Site: 1800 Powell St., Emeryville
Sampler: CW	Date: 12/9/13
Well I.D.: S-5	Well Diameter: 2 3 4 6 (8)
Total Well Depth (TD): 12.05	Depth to Water (DTW): 8.15
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.93	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (Electric Submersible); Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other:_____

10.2 (Gals.) X	3	=	30.6 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	(Other) 2.61	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1025	63.5	6.62	2016	73	10.2	
1029	65.0	6.65	2010	58	20.4	
1033	66.0	6.67	2007	55	30.6	

Did well dewater? Yes (No) Gallons actually evacuated: 30.6

Sampling Date: 12/9/13 Sampling Time: 1045 Depth to Water: 8.89

Sample I.D.: S-5 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) (Other): 5Et CoC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 131209-CK1	Site: 1800 Powell St, Emeryville
Sampler: CK	Date: 12/9/13
Well I.D.: S-9	Well Diameter: 2 (3) 4 6 8 ____
Total Well Depth (TD): 17.80	Depth to Water (DTW): 5.05
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.25	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (Electric Submersible); Waterra; Peristaltic; Extraction Pump; Other ____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

4.4 (Gals.) X	3	=	13.2 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0923	65.6	6.51	323	28	4.5	
0925	66.9	6.49	312	25	9.0	
0927	67.0	6.52	312	21	13.5	

Did well dewater? Yes (No) Gallons actually evacuated: 13.5

Sampling Date: 12/9/13 Sampling Time: 0930 Depth to Water: 6.43

Sample I.D.: S-9 Laboratory: (Test America) Other ____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 131209-CK1	Site: 1800 Powell St, Emeryville
Sampler: CK	Date: 12/9/13
Well I.D.: S-10	Well Diameter: 2 3 4 (6) 8 ___
Total Well Depth (TD): 19.23	Depth to Water (DTW): 8.14
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.36	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (Electric Submersible); Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

16.3 (Gals.) X 3 = 48.9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1110	66.1	6.65	3999	37	16.5	
1115	65.2	6.35	950	49	33.0	
1120	65.0	6.32	941	55	49.5	
				not @ 80%		

Did well dewater? Yes (No) Gallons actually evacuated: 49.5

Sampling Date: 12/9/13 Sampling Time: ~~1320~~ 1320 Depth to Water: 18.95 (2HR)

Sample I.D.: S-10 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) (Other): SLT COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 131209-CK1	Site: 1800 Powell St. Emeryville
Sampler: CK	Date: 12/9/13
Well I.D.: S-12	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth (TD): 23.42	Depth to Water (DTW): 8.52
Depth to Free Product: ___	Thickness of Free Product (feet): ___
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.50	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (Electric Submersible); Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

5.5 (Gals.) X 3 = 16.5 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0941	66.1	6.47	1458	30	5.5	
0944	65.1	6.24	2300	28	11.0	
0947	68.2	6.26	2360	25	16.5	

Did well dewater? Yes (No) Gallons actually evacuated: 16.5

Sampling Date: 12/9/13 Sampling Time: 1000 Depth to Water: 10.23

Sample I.D.: S-12 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) (Other):

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 131209-CK1	Site: 1800 Powell St. Emeryville
Sampler: CK	Date: 12/9/13
Well I.D.: S-13	Well Diameter: 2 (3) 4 6 8 ____
Total Well Depth (TD): 18.52	Depth to Water (DTW): 9.08
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.97	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, (Electric Submersible), Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: (Bailer), Disposable Bailer, Extraction Port, Dedicated Tubing, Other:_____

3.5 (Gals.) X	3	=	10.5 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1135	67.2	6.60	4468	78	3.5	
1137	69.2	6.68	5102	77	7.0	
1139	68.7	6.69	5189	84	10.5	

Did well dewater? Yes (No) Gallons actually evacuated: 10.5

Sampling Date: 12/9/13 Sampling Time: 1150 Depth to Water:

Sample I.D.: S-13 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: (Stl Coc)

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 131209-CK1	Site: 1800 Powell ST, Emeryville
Sampler: CK	Date: 12/9/13
Well I.D.: S-14	Well Diameter: 2 3 4 6 8 ____
Total Well Depth (TD):	Depth to Water (DTW):
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

____ (Gals.) X ____ = ____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
X	NO ACCESS.		UNDER DIRT PILE			
—	NO	SAMPLE	TAKEN	—	—	

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Test America Other____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

...WELL, REMEDIATION COMPOUND, AND SITE INSPECTION FORM

INCIDENT # 95995349

DATE: 12/9/13

ADDRESS 1800 Powell St

CITY & STATE Emeryville, CA

Well ID	Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition		Note Repairs Made / Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials
S-5	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
S-8	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
S-9	Standpipe	Flush	G	P	Size (inch) 8	Y	N	G	R	G	R	NL	G	P		Y	N	
S-10	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
S-12	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
S-13	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
S-14	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P	NO ACCESS. UNDER DIRT PILE	Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	

TOTAL # CAPS REPLACED = 0 | 0 = TOTAL # OF LOCKS REPLACED

Condition of Soil Boring Patches or Abandoned Monitoring Wells:	G	P	N/A	If POOR, Borings/Well IDs or Location Description:		Y	N	

Remediation Compound Type (Check boxes that apply)		Condition of Enclosure			Condition of Area Inside Enclosure			Compound Security			Emergency Contact Info Visible			Cleaning / Repairs Recommended and Conducted	Photos of Condition		Repair Date and PM Initials
NA	X	G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A		Y	N	
Building																	
Building w/ Fence Comp.																	
Fenced Compound																	
Trailer																	

Number of Drums On-site	Does the Label Reveal the Source of the Contents			Labeled Correctly and Writing Legible			Drum Condition			Confirm Drums Related to Environmental		Drums Located to Min Business Interference			Detailed Explanation of Any Issues Resolved	Photos of Drum Condition		Date Drums Removed from Site and PM Initials
0	Y	N	N/A	Y	N	N/A	G	P	N/A	Y	N	Y	N	N/A		Y	N	

G = Good (Acceptable) R = Replaced

P = Poor (needs attention) NL = No Lock Required

Note: All repairs other than locks and grippers require Shell PM approval prior to repair.

* = Groundwater monitoring well covers must be painted and labeled in accordance with applicable regulations.

Version 2.4, March 2008

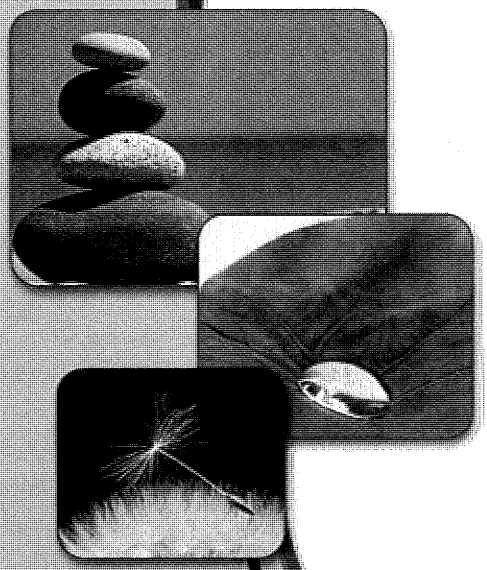
All environmental wells and the remediation compound were in good condition, locked, and secured upon my departure (unless otherwise noted above).

Corey Kwa-Tern BTS

Print or type Name of Field Personnel & Consultant Company

APPENDIX B

TESTAMERICA LABORATORIES, INC. – ANALYTICAL REPORT



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-64947-1
Client Project/Site: 1800 1/2 Powell St., Emeryville

For:
Conestoga-Rovers & Associates, Inc.
5900 Hollis Street
Suite A
Emeryville, California 94608

Attn: Peter Schaefer

Philip Sanelle

Authorized for release by:
12/20/2013 4:57:40 PM

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Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-64947-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-64947-1	S-5	Water	12/09/13 10:45	12/11/13 10:20
440-64947-2	S-8	Water	12/09/13 09:30	12/11/13 10:20
440-64947-3	S-10	Water	12/09/13 13:20	12/11/13 10:20
440-64947-4	S-12	Water	12/09/13 10:00	12/11/13 10:20
440-64947-5	S-13	Water	12/09/13 11:50	12/11/13 10:20

Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-64947-1

Job ID: 440-64947-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-64947-1

Comments
No additional comments.

Receipt
The samples were received on 12/11/2013 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

GC/MS VOA
No analytical or quality issues were noted.

GC Semi VOA
Method(s) 8015B: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 150842. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch. (LCS 440-150842/2-A)

Method(s) 8015B: Surrogate recovery for the following sample was outside control limits: S-10 (440-64947-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

Organic Prep
Method(s) 3510C SGC: Elevated reporting limits are provided for the following sample(s) due to insufficient sample provided for preparation: S-10 (440-64947-3). Batch #150842 Method 3510SGC

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample ID: S-5

Lab Sample ID: 440-64947-1

Date Collected: 12/09/13 10:45
Date Received: 12/11/13 10:20

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**690**		50		ug/L			12/19/13 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*76 - 132*		*12/19/13 11:23*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*12/19/13 11:23*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*12/19/13 11:23*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**7.4**		0.50		ug/L			12/19/13 11:23	1
Toluene	ND		0.50		ug/L			12/19/13 11:23	1
Ethylbenzene	ND		0.50		ug/L			12/19/13 11:23	1
Xylenes, Total	**2.8**		1.0		ug/L			12/19/13 11:23	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			12/19/13 11:23	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			12/19/13 11:23	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			12/19/13 11:23	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			12/19/13 11:23	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			12/19/13 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*12/19/13 11:23*	*1*
Dibromofluoromethane (Surr)	*97*		*76 - 132*		*12/19/13 11:23*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*12/19/13 11:23*	*1*

Client Sample ID: S-8

Lab Sample ID: 440-64947-2

Date Collected: 12/09/13 09:30
Date Received: 12/11/13 10:20

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**600**		50		ug/L			12/19/13 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*87*		*76 - 132*		*12/19/13 12:53*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*12/19/13 12:53*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*12/19/13 12:53*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**6.3**		0.50		ug/L			12/19/13 12:53	1
Toluene	**0.97**		0.50		ug/L			12/19/13 12:53	1
Ethylbenzene	ND		0.50		ug/L			12/19/13 12:53	1
Xylenes, Total	**2.5**		1.0		ug/L			12/19/13 12:53	1
Methyl-t-Butyl Ether (MTBE)	**1.3**		0.50		ug/L			12/19/13 12:53	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			12/19/13 12:53	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			12/19/13 12:53	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			12/19/13 12:53	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			12/19/13 12:53	1

Client Sample ID: S-8

Lab Sample ID: 440-64947-2

Date Collected: 12/09/13 09:30
Matrix: Water
Date Received: 12/11/13 10:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*12/19/13 12:53*	*1*
Dibromofluoromethane (Surr)	*87*		*76 - 132*		*12/19/13 12:53*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*12/19/13 12:53*	*1*

Client Sample ID: S-10

Lab Sample ID: 440-64947-3

Date Collected: 12/09/13 13:20
Matrix: Water
Date Received: 12/11/13 10:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**550**		50		ug/L			12/19/13 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*92*		*76 - 132*		*12/19/13 13:23*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*12/19/13 13:23*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*12/19/13 13:23*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.0**		0.50		ug/L			12/19/13 13:23	1
Toluene	**0.61**		0.50		ug/L			12/19/13 13:23	1
Ethylbenzene	ND		0.50		ug/L			12/19/13 13:23	1
Xylenes, Total	**6.0**		1.0		ug/L			12/19/13 13:23	1
Methyl-t-Butyl Ether (MTBE)	**7.4**		0.50		ug/L			12/19/13 13:23	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			12/19/13 13:23	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			12/19/13 13:23	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			12/19/13 13:23	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			12/19/13 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*12/19/13 13:23*	*1*
Dibromofluoromethane (Surr)	*92*		*76 - 132*		*12/19/13 13:23*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*12/19/13 13:23*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	**2100**		59		ug/L		12/16/13 13:09	12/17/13 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*40*	*X*	*45 - 120*	*12/16/13 13:09*	*12/17/13 15:11*	*1*

Client Sample ID: S-12

Lab Sample ID: 440-64947-4

Date Collected: 12/09/13 10:00
Matrix: Water
Date Received: 12/11/13 10:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**410**		50		ug/L			12/19/13 13:54	1

Client Sample ID: S-12

Lab Sample ID: 440-64947-4

Date Collected: 12/09/13 10:00
Matrix: Water
Date Received: 12/11/13 10:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*88*		*76 - 132*		*12/19/13 13:54*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*12/19/13 13:54*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*12/19/13 13:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			12/19/13 13:54	1
Toluene	ND		0.50		ug/L			12/19/13 13:54	1
Ethylbenzene	ND		0.50		ug/L			12/19/13 13:54	1
Xylenes, Total	ND		1.0		ug/L			12/19/13 13:54	1
Methyl-t-Butyl Ether (MTBE)	**33**		0.50		ug/L			12/19/13 13:54	1
tert-Butyl alcohol (TBA)	**240**		10		ug/L			12/19/13 13:54	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			12/19/13 13:54	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			12/19/13 13:54	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			12/19/13 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*12/19/13 13:54*	*1*
Dibromofluoromethane (Surr)	*88*		*76 - 132*		*12/19/13 13:54*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*12/19/13 13:54*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	**250**		49		ug/L		12/16/13 13:09	12/17/13 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*64*		*45 - 120*	*12/16/13 13:09*	*12/17/13 14:31*	*1*

Client Sample ID: S-13

Lab Sample ID: 440-64947-5

Date Collected: 12/09/13 11:50
Matrix: Water
Date Received: 12/11/13 10:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**690**		50		ug/L			12/19/13 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*92*		*76 - 132*		*12/19/13 14:23*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*12/19/13 14:23*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*12/19/13 14:23*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**14**		0.50		ug/L			12/19/13 14:23	1
Toluene	**1.4**		0.50		ug/L			12/19/13 14:23	1
Ethylbenzene	ND		0.50		ug/L			12/19/13 14:23	1
Xylenes, Total	**5.2**		1.0		ug/L			12/19/13 14:23	1
Methyl-t-Butyl Ether (MTBE)	**27**		0.50		ug/L			12/19/13 14:23	1
tert-Butyl alcohol (TBA)	**27**		10		ug/L			12/19/13 14:23	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			12/19/13 14:23	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			12/19/13 14:23	1

Client Sample ID: S-13
Date Collected: 12/09/13 11:50
Date Received: 12/11/13 10:20

Lab Sample ID: 440-64947-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	**1.8**		0.50		ug/L			12/19/13 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*12/19/13 14:23*	*1*
Dibromofluoromethane (Surr)	*92*		*76 - 132*		*12/19/13 14:23*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*12/19/13 14:23*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	**640**		50		ug/L		12/16/13 13:09	12/17/13 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*73*		*45 - 120*	*12/16/13 13:09*	*12/17/13 15:11*	*1*

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-64947-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC) Low Level	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-64947-1

Client Sample ID: S-5

Lab Sample ID: 440-64947-1

Date Collected: 12/09/13 10:45
Matrix: Water
Date Received: 12/11/13 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	151538	12/19/13 11:23	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	151539	12/19/13 11:23	YK	TAL IRV

Client Sample ID: S-8

Lab Sample ID: 440-64947-2

Date Collected: 12/09/13 09:30
Matrix: Water
Date Received: 12/11/13 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	151538	12/19/13 12:53	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	151539	12/19/13 12:53	YK	TAL IRV

Client Sample ID: S-10

Lab Sample ID: 440-64947-3

Date Collected: 12/09/13 13:20
Matrix: Water
Date Received: 12/11/13 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	151538	12/19/13 13:23	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	151539	12/19/13 13:23	YK	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			845 mL	1 mL	150842	12/16/13 13:09	LBP	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1	845 mL	1 mL	151121	12/17/13 15:11	KW	TAL IRV

Client Sample ID: S-12

Lab Sample ID: 440-64947-4

Date Collected: 12/09/13 10:00
Matrix: Water
Date Received: 12/11/13 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	151538	12/19/13 13:54	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	151539	12/19/13 13:54	YK	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1025 mL	1 mL	150842	12/16/13 13:09	LBP	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1	1025 mL	1 mL	151121	12/17/13 14:31	KW	TAL IRV

Client Sample ID: S-13

Lab Sample ID: 440-64947-5

Date Collected: 12/09/13 11:50
Matrix: Water
Date Received: 12/11/13 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	151538	12/19/13 14:23	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	151539	12/19/13 14:23	YK	TAL IRV

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-64947-1

Client Sample ID: S-13
Date Collected: 12/09/13 11:50
Date Received: 12/11/13 10:20

Lab Sample ID: 440-64947-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			1005 mL	1 mL	150842	12/16/13 13:09	LBP	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1	1005 mL	1 mL	151123	12/17/13 15:11	KW	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-151538/4
Matrix: Water
Analysis Batch: 151538

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			12/19/13 08:54	1
Toluene	ND		0.50		ug/L			12/19/13 08:54	1
Ethylbenzene	ND		0.50		ug/L			12/19/13 08:54	1
Xylenes, Total	ND		1.0		ug/L			12/19/13 08:54	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			12/19/13 08:54	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			12/19/13 08:54	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			12/19/13 08:54	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			12/19/13 08:54	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			12/19/13 08:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/19/13 08:54*	*1*
Dibromofluoromethane (Surr)	*94*		*76 - 132*		*12/19/13 08:54*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*12/19/13 08:54*	*1*

Lab Sample ID: LCS 440-151538/5
Matrix: Water
Analysis Batch: 151538

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	23.7		ug/L		95	68 - 130
Toluene	25.0	25.4		ug/L		101	70 - 130
Ethylbenzene	25.0	25.9		ug/L		104	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	23.0		ug/L		92	63 - 131
tert-Butyl alcohol (TBA)	125	129		ug/L		103	70 - 130
Isopropyl Ether (DIPE)	25.0	25.2		ug/L		101	58 - 139
Ethyl-t-butyl ether (ETBE)	25.0	24.6		ug/L		99	60 - 136
Tert-amyl-methyl ether (TAME)	25.0	23.6		ug/L		94	57 - 139
m,p-Xylene	50.0	52.1		ug/L		104	70 - 130
o-Xylene	25.0	25.7		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: 440-64947-1 MS
Matrix: Water
Analysis Batch: 151538

Client Sample ID: S-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	7.4		25.0	32.2		ug/L		99	66 - 130
Toluene	ND		25.0	26.2		ug/L		104	70 - 130
Ethylbenzene	ND		25.0	26.8		ug/L		107	70 - 130
Methyl-t-Butyl Ether (MTBE)	ND		25.0	22.5		ug/L		90	70 - 130
tert-Butyl alcohol (TBA)	ND		125	128		ug/L		102	70 - 130
Isopropyl Ether (DIPE)	ND		25.0	23.3		ug/L		93	64 - 138

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-64947-1 MS
Matrix: Water
Analysis Batch: 151538

Client Sample ID: S-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.0		ug/L		92	70 - 130
Tert-amyl-methyl ether (TAME)	ND		25.0	22.7		ug/L		91	68 - 133
m,p-Xylene	1.6		50.0	54.7		ug/L		106	70 - 133
o-Xylene	1.2		25.0	27.0		ug/L		103	70 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*91*		*76 - 132*
Toluene-d8 (Surr)	*106*		*80 - 128*

Lab Sample ID: 440-64947-1 MSD
Matrix: Water
Analysis Batch: 151538

Client Sample ID: S-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	7.4		25.0	35.3		ug/L		112	66 - 130	9	20
Toluene	ND		25.0	28.6		ug/L		113	70 - 130	9	20
Ethylbenzene	ND		25.0	28.8		ug/L		115	70 - 130	7	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.7		ug/L		95	70 - 130	5	25
tert-Butyl alcohol (TBA)	ND		125	131		ug/L		105	70 - 130	2	25
Isopropyl Ether (DIPE)	ND		25.0	25.4		ug/L		102	64 - 138	8	25
Ethyl-t-butyl ether (ETBE)	ND		25.0	24.2		ug/L		97	70 - 130	5	25
Tert-amyl-methyl ether (TAME)	ND		25.0	24.7		ug/L		99	68 - 133	8	30
m,p-Xylene	1.6		50.0	57.6		ug/L		112	70 - 133	5	25
o-Xylene	1.2		25.0	28.7		ug/L		110	70 - 133	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*91*		*76 - 132*
Toluene-d8 (Surr)	*108*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-151539/4
Matrix: Water
Analysis Batch: 151539

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			12/19/13 08:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*76 - 132*		*12/19/13 08:54*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/19/13 08:54*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*12/19/13 08:54*	*1*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 440-151539/6
Matrix: Water
Analysis Batch: 151539

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			500	480		ug/L		96	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*76 - 132*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 128*

Lab Sample ID: 440-64947-1 MS
Matrix: Water
Analysis Batch: 151539

Client Sample ID: S-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)	690		1730	2020		ug/L		77	50 - 145		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*91*		*76 - 132*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 128*

Lab Sample ID: 440-64947-1 MSD
Matrix: Water
Analysis Batch: 151539

Client Sample ID: S-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	690		1730	2160		ug/L		85	50 - 145	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*91*		*76 - 132*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*108*		*80 - 128*

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Lab Sample ID: MB 440-150842/1-A
Matrix: Water
Analysis Batch: 151121

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 150842

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		50		ug/L		12/16/13 13:09	12/17/13 12:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*74*		*45 - 120*	*12/16/13 13:09*	*12/17/13 12:51*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level (Continued)

Lab Sample ID: LCS 440-150842/2-A
Matrix: Water
Analysis Batch: 151121

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 150842

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
DRO (C10-C28)			1000	755		ug/L		76	40 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*84*		*45 - 120*

Lab Sample ID: LCSD 440-150842/3-A
Matrix: Water
Analysis Batch: 151121

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 150842

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C28)			1000	696		ug/L		70	40 - 115	8	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*78*		*45 - 120*

GC/MS VOA

Analysis Batch: 151538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-64947-1	S-5	Total/NA	Water	8260B	
440-64947-1 MS	S-5	Total/NA	Water	8260B	
440-64947-1 MSD	S-5	Total/NA	Water	8260B	
440-64947-2	S-8	Total/NA	Water	8260B	
440-64947-3	S-10	Total/NA	Water	8260B	
440-64947-4	S-12	Total/NA	Water	8260B	
440-64947-5	S-13	Total/NA	Water	8260B	
LCS 440-151538/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-151538/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 151539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-64947-1	S-5	Total/NA	Water	8260B/CA_LUFT MS	
440-64947-1 MS	S-5	Total/NA	Water	8260B/CA_LUFT MS	
440-64947-1 MSD	S-5	Total/NA	Water	8260B/CA_LUFT MS	
440-64947-2	S-8	Total/NA	Water	8260B/CA_LUFT MS	
440-64947-3	S-10	Total/NA	Water	8260B/CA_LUFT MS	
440-64947-4	S-12	Total/NA	Water	8260B/CA_LUFT MS	
440-64947-5	S-13	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-151539/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-151539/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 150842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-64947-3	S-10	Silica Gel Cleanup	Water	3510C SGC	
440-64947-4	S-12	Silica Gel Cleanup	Water	3510C SGC	
440-64947-5	S-13	Silica Gel Cleanup	Water	3510C SGC	
LCS 440-150842/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 440-150842/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 440-150842/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 151121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-64947-3	S-10	Silica Gel Cleanup	Water	8015B	150842
440-64947-4	S-12	Silica Gel Cleanup	Water	8015B	150842
LCS 440-150842/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	150842
LCSD 440-150842/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	150842
MB 440-150842/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	150842

Analysis Batch: 151123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-64947-5	S-13	Silica Gel Cleanup	Water	8015B	150842

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1800 1/2 Powell St., Emeryville

TestAmerica Job ID: 440-64947-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-14
Arizona	State Program	9	AZ0671	10-13-14
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-14 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-14
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-14
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

Shell Oil Products Chain Of Custody Record

L8 12-12-13

LAB (LOCATION)

- ☐ CALSCIENCE ( )
- ☐ SPL Houston ( )
- ☐ XENCO ( )
- ☑ TEST AMERICA (IRVINE)
- ☐ OTHER ( )

Please Check Appropriate Box:

☐ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL ☐ MOTIVA SD&CM ☑ CONSULTANT ☐ LUBES ☐ SHELL PIPELINE ☐ OTHER

Print Bill To Contact Name: 240894 Peter Schaefer

INCIDENT # (ENV SERVICES): 9 8 9 9 5 3 4 9 ☐ CHECK IF NO INCIDENT # APPLIES

PO #:

SAP #: 1 3 5 2 6 6

DATE: 12/9/13 PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services LOG CODE: BTSS

ADDRESS: 1680 Rogers Avenue, San Jose, CA

PROJECT CONTACT (Hardcopy or PDF Report to): Lorin King

TELEPHONE: (310) 885-4455 x 108 FAX: (310) 637-5802 E-MAIL: lking@blainetech.com

SITE ADDRESS: Street and City: 1800 1/2 Powell St., Emeryville State: CA GLOBAL ID NO.: T0600101231

EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter, CRA, Emeryville, CA PHONE NO: 510-420-3343 E-MAIL: ShellEDF@CRAWorld.com Shell-US-LabDataManagement@CRAworld.com CONSULTANT PROJECT NO.: 240894-95-12.01

SAMPLER NAME(S) (Print): Colby Kilpatrick

LAB USE ONLY

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY

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

SPECIAL INSTRUCTIONS OR NOTES:
1) Please upload the "CRA EQuIS 4-file EDD" to the CRA Website (http://cralabeddupload.craworld.com/equis/default.aspx) and/or send it to the Shell-US-LabDataManagement@CRAworld.com email folder. 2) Please indicate that you have uploaded the EDD by including "EDD Uploaded to CRA website" in the body of the email used to deliver the final PDF report to the Shell-US-LabDataManagement@CRAworld.com email folder.

Copy final report to Shell.Lab.Billing@craworld.com, ShellEDF@craworld.com, Shell-US-LabDataManagement@CRAworld.com, and pschaefer@CRAWorld.com

Email invoice to Shell.Lab.Billing@craworld.com

Run TPH-D with Silica Gel Clean Up

Matrix Codes - WG (groundwater), WS (surface water), WP (drinking water source), W (Trip or Temp Blank)

REQUESTED ANALYSIS

TEMPERATURE ON RECEIPT, °C

LAB USE ONLY		PROJECT NUMBER	DATE (MMDDYY)	SAMPLER INITIALS	WELL ID	TIME	MATRIX	HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH-GRO, Purgeable (8260B)	TPH-DRO, Extractable (8015M)	BTEX (8260B)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA (8260B)	BTEX + 5 OXYs (MTBE, TBA, DIPE, TAME, ETBE) 8260B	VOCs Full list (8260B)	Single Compound: (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015B)	Container PID Readings or Laboratory Notes
	WG	131209-CK1	120913	CK	S-5	1045	WG	X					3	X					X							
	↓	↓	↓	CK	S-8	0930	WG	X					3	X					X							
	↓	↓	↓	CK	S-10	1320	WG	X			X		5	X	X				X							
	↓	↓	↓	CK	S-12	1000	WG	X			X		5	X	X				X							
	↓	↓	↓	CK	S-13	1150	WG	X			X		5	X	X				X							

440-64947 Chain of Custody

Relinquished by: (Signature)	Time	Received by: (Signature)	Date	Time
[signature]	1500	[signature] BTS (S.C.)	12/9/13	1500
[signature] Sample Custodian BTS	1220	[signature]	12/10/13	1220
[signature]	1345	[signature]	12-10-13	13:45

2.1°C [signature] 12/10/13 1400

[signature] 12-11-13 10:20

IR-54 -3.6°C/2.1°C C/S

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-64947-1

Login Number: 64947
List Number: 1
Creator: Sung, Hubert

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Headspace larger than 1/4" in one or more vials, one vial with accpt. headspace
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	