



**CONESTOGA-ROVERS  
& ASSOCIATES**

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

## TRANSMITTAL

DATE: April 27, 2015 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

**RECEIVED**

By Alameda County Environmental Health 11:45 am, Apr 29, 2015

Please find enclosed:  Draft  Final  
 Originals  Other  
 Prints

Sent via:  Mail  Same Day Courier  
 Overnight Courier  Other GeoTracker and Alameda County FTP

QUANTITY	DESCRIPTION
1	Groundwater Monitoring Report - First Quarter 2015

As Requested  For Review and Comment  
 For Your Use

**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, electronic copy)

Completed by: Peter Schaefer

Signed: 

Filing: Correspondence File



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

**Shell Oil Products US**  
Soil and Groundwater Focus Delivery Group  
20945 S. Wilmington Avenue  
Carson, CA 90810  
**Tel** (425) 413 1164  
**Fax** (425) 413 0988  
**Email** perry.pineda@shell.com  
**Internet** <http://www.shell.com>

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

A handwritten signature in black ink, appearing to read "Perry Pineda", is located below the typed name.

Perry Pineda  
Senior Environmental Program Manager



# GROUNDWATER MONITORING REPORT - FIRST QUARTER 2015

**SHELL-BRANDED SERVICE STATION  
1800½ POWELL STREET  
EMERYVILLE, CALIFORNIA**

**SAP CODE            135266  
INCIDENT NO.    98995349  
AGENCY NO.      RO0000254**

**APRIL 27, 2015  
REF. NO. 240894 (10)**

This report is printed on recycled paper.

**Prepared by:  
Conestoga-Rovers  
& Associates**

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

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

web: <http://www.CRAworld.com>

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION .....	1
1.1 SITE INFORMATION.....	1
2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION .....	1
2.1 CURRENT ACTIVITIES .....	1
2.2 CURRENT FINDINGS.....	2
2.3 DISCUSSION .....	2
2.4 PROPOSED ACTIVITIES .....	3

LIST OF FIGURES  
(Following Text)

FIGURE 1	VICINITY MAP
FIGURE 2	GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP

LIST OF TABLES  
(Following Text)

TABLE 1	GROUNDWATER DATA
---------	------------------

LIST OF APPENDICES

APPENDIX A	BLAINE TECH SERVICES, INC. - FIELD NOTES
APPENDIX B	TESTAMERICA LABORATORIES, INC. - ANALYTICAL REPORT

## 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 April 6, 2015.

## 2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION

### 2.1 CURRENT ACTIVITIES

During station remodeling, on May 20, 2014, AU Energy, LLC (AU Energy) removed four underground storage tanks. During a November 13, 2014 meeting with CRA and Shell, Alameda County Environmental Health (ACEH) reported that AU Energy subsequently excavated the area of their September 2013 diesel release. Also during this meeting with ACEH, ACEH confirmed that AU Energy is now the primary responsible party for the site. We agreed that Shell would discontinue annual groundwater monitoring following this event and transfer wells to AU Energy that they need to monitor their diesel release.

Due to service station remodeling, Blaine Tech Services, Inc. (Blaine) could not gauge and sample the wells during fourth quarter 2014 according to the established monitoring program for this site. Available wells were gauged and sampled during the first quarter 2015. Well S-13 could not be located during the sampling event. As it was likely

covered during the station remodel, we recommend that AU Energy locate the well and repair it, if needed.

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.

## 2.2 CURRENT FINDINGS

Groundwater Flow Direction	Variable
Hydraulic Gradient	Variable
Depth to Water	6.81 to 9.91 feet below top of well casing

## 2.3 DISCUSSION

Historical groundwater data indicate that total petroleum hydrocarbons as gasoline and fuel oxygenate concentrations in site wells are stable to declining. Following AU Energy's September 2013 diesel release, there has been no appreciable change in total petroleum hydrocarbons as diesel concentrations in groundwater samples; however, well S-13, located directly down gradient from the area of the diesel release, appears to have been paved over during station remodeling and could not be accessed for the first quarter 2015 sampling event.

Historically, well S-9 has contained up to 2.8 feet of separate-phase hydrocarbons, which consisted of 18 percent gasoline-range hydrocarbons with the remaining fraction of petroleum hydrocarbons in heavier fractions, which can include tar and other heavy residues. Since 1996, the screened interval in well S-9 has apparently been coated with a tar-like substance, which prevented the well from being used for monitoring. CRA attempted to reinstall the well in 2011, but was unable to due to underground utility conflicts. Additional delineation south of the subject site cannot be completed because the State of California Department of Parks and Recreation will not issue an encroachment permit for the area south of Powell Street.

A land use survey detailed in Geostrategies Inc.'s April 29, 1991 *Site Update* states that the site is built on fill. Filling began in 1884 on waterfront property owned by the Paraffine Company (Paraffine) and was terminated in 1969. Based on available log data,

the fill material at the subject site extends to an approximate depth of at least 12 to 15 feet below grade and appears to be continuous across the site. The fill materials reportedly include industrial refuse, rip-rap, concrete blocks, and imported clayey and sandy soil. Products manufactured by Paraffine included linoleum and other hard floor coverings, roofing and building materials, paints, varnishes, lacquers, and enamels. Paraffine's facilities included aboveground storage tanks that were removed when they closed the facility in the 1960s. These previous site uses are likely the source of the heavier hydrocarbons observed in groundwater.

## **2.4            PROPOSED ACTIVITIES**

As discussed above, CRA will suspend the groundwater monitoring program on behalf of Shell. No further groundwater monitoring events are scheduled and no further reports will be submitted by CRA on behalf of Shell.

CRA requests that ACEH confirm no further action is required by Shell to address the previous release at the subject property. In their April 6, 2015 letter, ACEH notes that AU Energy is the sole responsible party for the September 2013 diesel fuel release, that Shell is not a responsible party for that release, and that AU Energy is responsible for implementing the investigation and cleanup associated with that release.

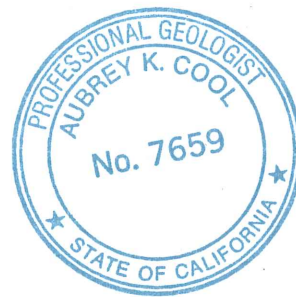
Shell offers to transfer the wells to AU to monitor groundwater conditions following the 2013 diesel release.



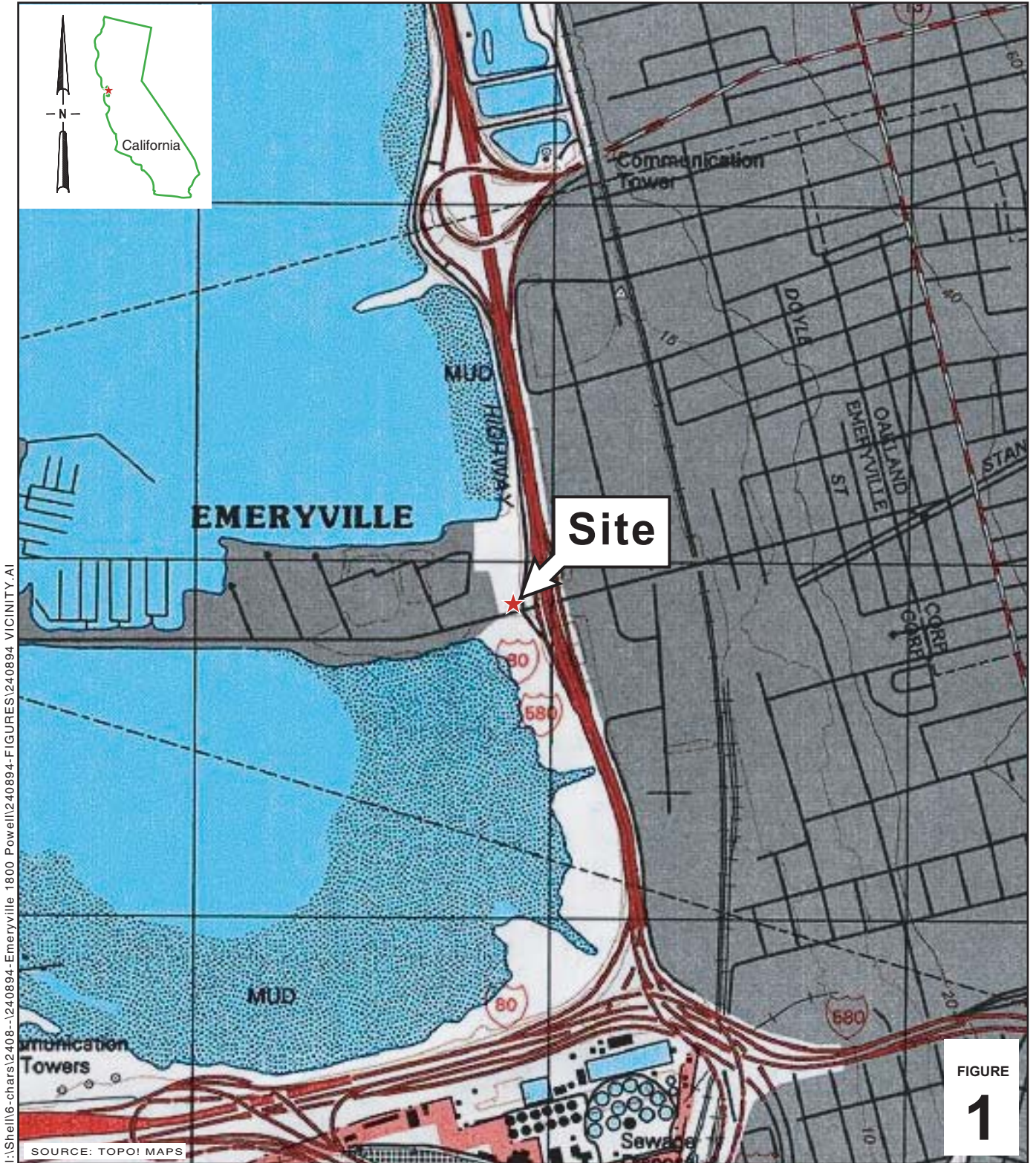
All of Which is Respectfully Submitted,  
CONESTOGA-ROVERS & ASSOCIATES

*Peter Schaefer*  
Peter Schaefer, CHG, CEG

*Aubrey K. Cool*  
Aubrey K. Cool, PG



## FIGURES



I:\Shell\6-chars\2408--1240894-Emeryville\_1800\_Powell\240894-FIGURES\240894 VICINITY.AI

FIGURE  
**1**

0 1/8 1/4 1/2 1  
SCALE : 1" = 1/4 MILE

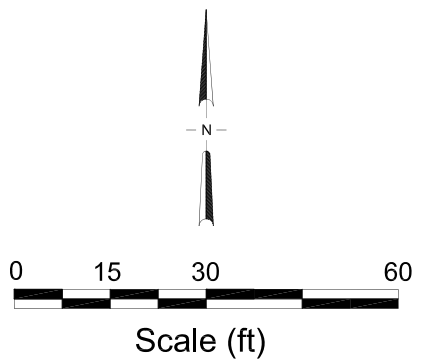
### Shell-branded Service Station

1800 1/2 Powell Street  
Emeryville, California



**CONESTOGA-ROVERS  
& ASSOCIATES**

### Vicinity Map



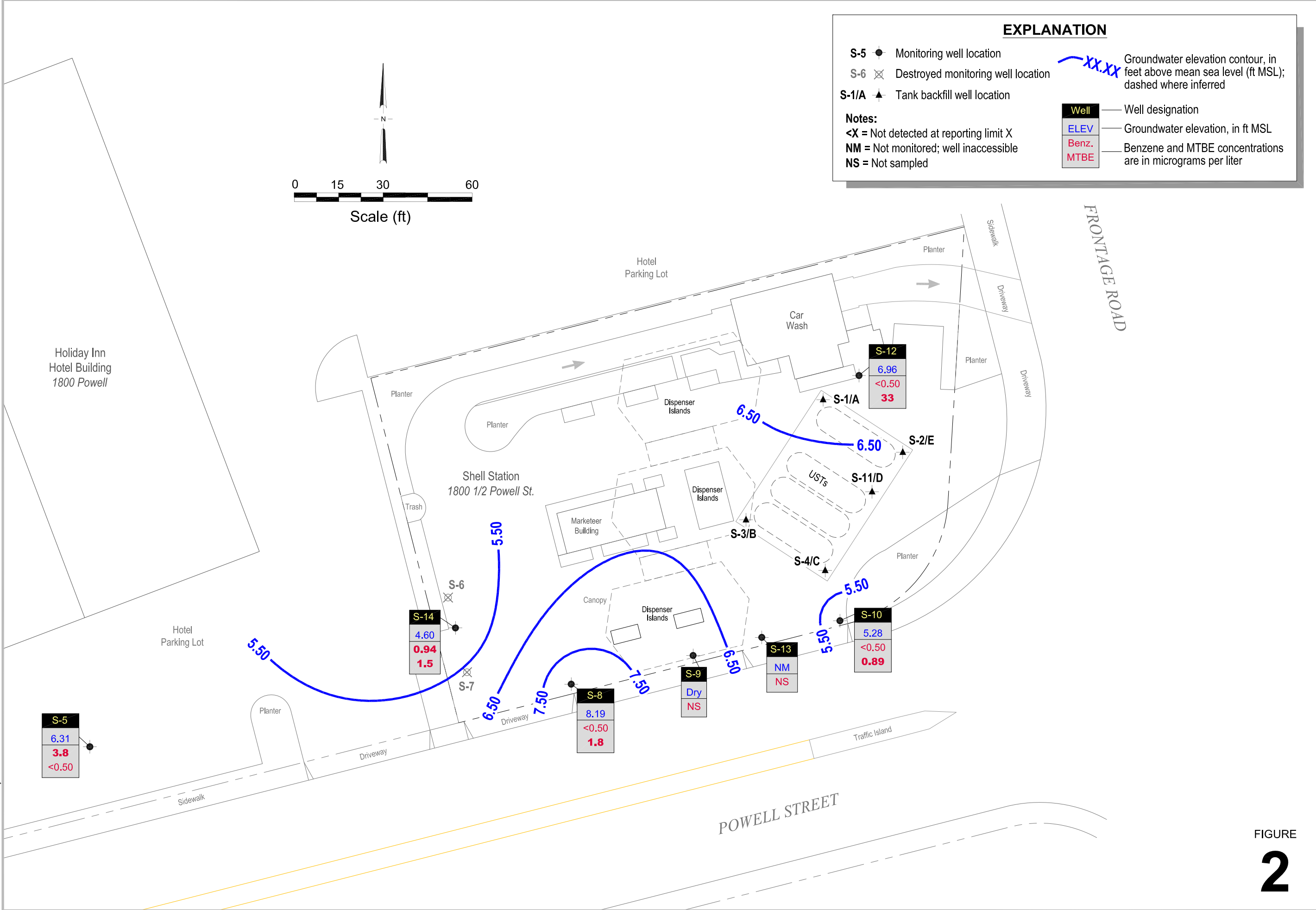
### EXPLANATION

- S-5 ● Monitoring well location
- S-6 ☒ Destroyed monitoring well location
- S-1/A ▲ Tank backfill well location

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

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

Groundwater elevation contour, in feet above mean sea level (ft MSL); dashed where inferred



I:\Shell16-chars\2408--240894-Emeryville 1800 Powell\240894-REPORTS\240894-RPT10-1Q15\240894 1QM15-GW.DWG



FIGURE 2

## TABLE

TABLE 1

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

Well ID	Date	TPH <sub>mo</sub> (µg/L)	TPH <sub>d</sub> (µg/L)	TPH <sub>g</sub> (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
S-5	07/30/1996	---	---	1,100	400	<5.0	<5.0	6.9	<25	---	---	---	---	---	11.72	9.40	---	2.32

TABLE 1

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

Well ID	Date	TPH <sub>mo</sub> (µg/L)	TPH <sub>d</sub> (µg/L)	TPH <sub>g</sub> (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	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
<b>S-5</b>	<b>02/27/2015</b>	---	---	<b>510</b>	<b>3.8</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>2.2</b>	---	<b>&lt;0.50</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>14.07</b>	<b>7.76</b>	---	<b>6.31</b>
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	TPH <sub>mo</sub> (µg/L)	TPH <sub>d</sub> (µg/L)	TPH <sub>g</sub> (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE	MTBE	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)
									8020 (µg/L)	8260 (µg/L)								
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
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



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	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
<b>S-8</b>	<b>02/27/2015</b>	---	---	<b>250</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>1.3</b>	---	<b>1.8</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>15.00</b>	<b>6.81</b>	---	<b>8.19</b>
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	---
S-9	11/09/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	---	a	---
S-9	02/22/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	12.75	11.40	2.38	---

TABLE 1

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

Well ID	Date	TPH <sub>mo</sub> (µg/L)	TPH <sub>d</sub> (µg/L)	TPH <sub>g</sub> (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	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	---	---	---
<b>S-9</b>	<b>02/27/2015</b>	<b>Well dry</b>	---	---	---	---	---	---	---	---	---	---	---	---	<b>14.98</b>	---	---	---
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	---
S-10	01/14/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	---	0.03	---
S-10	04/23/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	12.58	---	0.01	---

TABLE 1

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

Well ID	Date	TPH <sub>mo</sub> (µg/L)	TPH <sub>d</sub> (µg/L)	TPH <sub>g</sub> (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	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
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

TABLE 1

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

Well ID	Date	TPH <sub>mo</sub> (µg/L)	TPH <sub>d</sub> (µg/L)	TPH <sub>g</sub> (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE	MTBE	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)
									8020 (µg/L)	8260 (µg/L)								
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
<b>S-10</b>	<b>02/27/2015</b>	---	<b>2,100</b>	<b>140</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	---	<b>0.89</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>14.93</b>	<b>9.65</b>	---	<b>5.28</b>
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
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

TABLE 1

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

Well ID	Date	TPH <sub>mo</sub> (µg/L)	TPH <sub>d</sub> (µg/L)	TPH <sub>g</sub> (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 (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
<b>S-12</b>	<b>02/27/2015</b>	---	<b>630</b>	<b>250</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	---	<b>33</b>	<b>260</b>	<b>0.59</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>14.87</b>	<b>7.91</b>	---	<b>6.96</b>
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
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

TABLE 1

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

Well ID	Date	TPH <sub>mo</sub> (µg/L)	TPH <sub>d</sub> (µg/L)	TPH <sub>g</sub> (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE	MTBE	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)
									8020 (µg/L)	8260 (µg/L)								
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
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
<b>S-13</b>	<b>02/27/2015</b>	<b>Unable to locate</b>		---	---	---	---	---	---	---	---	---	---	---	<b>14.47</b>	---	---	---

TABLE 1

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

Well ID	Date	TPH <sub>mo</sub> (µg/L)	TPH <sub>d</sub> (µg/L)	TPH <sub>g</sub> (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	11/17/1989	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
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

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	MTBE	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)
									8020 (µg/L)	8260 (µg/L)								
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	---	---	---
<b>S-14</b>	<b>02/27/2015</b>	---	<b>770</b>	<b>97</b>	<b>0.94</b>	<b>0.55</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	---	<b>1.5</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>14.51</b>	<b>9.91</b>	---	<b>4.60</b>

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

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.



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

<i>Well ID</i>	<i>Date</i>	<i>TPH<sub>mo</sub></i> ( <i>µg/L</i> )	<i>TPH<sub>d</sub></i> ( <i>µg/L</i> )	<i>TPH<sub>g</sub></i> ( <i>µg/L</i> )	<i>B</i> ( <i>µg/L</i> )	<i>T</i> ( <i>µg/L</i> )	<i>E</i> ( <i>µg/L</i> )	<i>X</i> ( <i>µg/L</i> )	<i>MTBE</i> <i>8020</i> ( <i>µg/L</i> )	<i>MTBE</i> <i>8260</i> ( <i>µg/L</i> )	<i>TBA</i> ( <i>µg/L</i> )	<i>DIPE</i> ( <i>µg/L</i> )	<i>ETBE</i> ( <i>µg/L</i> )	<i>TAME</i> ( <i>µg/L</i> )	<i>TOC</i> ( <i>ft MSL</i> )	<i>Depth to</i> <i>Water</i> ( <i>ft TOC</i> )	<i>SPH</i> <i>Thickness</i> ( <i>ft</i> )	<i>GW</i> <i>Elevation</i> ( <i>ft MSL</i> )
----------------	-------------	--	---	---	-----------------------------	-----------------------------	-----------------------------	-----------------------------	---	---	-------------------------------	--------------------------------	--------------------------------	--------------------------------	---------------------------------	--	---	--

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 # 150227-BWI Date 2/27/15 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	0959	8					7.76	12.09	↓	
S-8	0938	3					6.81	17.68		
S-9	1015	3	ODOR	Check Well	w/ Disp Barter Dry		DRY	—		
S-10	1005	6					9.65	19.23		
S-12	0952	3					7.91	23.72		
S-13	*	Unable to locate								
S-14	0931	3					9.91	21.65		

## SHELL WELL MONITORING DATA SHEET

BTS #: 150227-BW1	Site: 9899 5349
Sampler: BW	Date: 2/27/15
Well I.D.: 5-5	Well Diameter: 2 3 4 6 <u>8</u>
Total Well Depth (TD): 12.09	Depth to Water (DTW): 7.76
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.63	

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: _____
--	--	---

$11.3 \text{ (Gals.)} \times 3 = 33.9 \text{ Gals.}$ 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table> <p style="text-align: right; margin-right: 20px;"><math>8'' = 2.60</math></p>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1209	63.4	6.95	1337	52	11.3	
1217	63.9	6.82	1308	30	22.6	
1225	64.0	6.75	1325	21	33.9	

Did well dewater?    Yes    No      Gallons actually evacuated: 33.9

Sampling Date: 2/27/15      Sampling Time: 1230      Depth to Water: 7.78

Sample I.D.: 5-5      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 #: 150227-BW1	Site: 98995349
Sampler: BW	Date: 2/27/15
Well I.D.: 5-9	Well Diameter: 2 (3) 4 6 8
Total Well Depth (TD):	Depth to Water (DTW): DRY
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: <del>Bailer</del> <del>Disposable Bailer</del> <del>Positive Air Displacement</del> <del>Electric Submersible</del>	Waterra <del>Peristaltic</del> Extraction Pump Other:	Sampling Method: <del>Bailer</del> <del>Disposable Bailer</del> <del>Extraction Port</del> <del>Dedicated Tubing</del> Other:
--	--	---

(Gals.) X _____ = _____ Gals. 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* Check	well	w/	Disp	Bailer.	Well	DRY. Tar on bailer
* No	Sample	Collected.				

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

## SHELL WELL MONITORING DATA SHEET

BTS #: 150227-BW1	Site: 98995349
Sampler: BLO	Date: 2/27/15
Well I.D.: S-10	Well Diameter: 2 3 4 <b>6</b> 8
Total Well Depth (TD): 19.23	Depth to Water (DTW): 9.65
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <b>PVC</b> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.57	

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: \_\_\_\_\_

$14.1 \text{ (Gals.)} \times 3 = 42.3 \text{ Gals.}$ I Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1248	63.5	6.95	1410	>1000	14.1	Debris in water
* Dewatered @			14.5 gallons			DTW-18.74
1450	64.1	6.88	1381	>1000	—	Very muddy
* Well Dewatered: during sampling. Filled 3 UOA w/HCL + 1x 1L Amber UOA						

Did well dewater? **Yes** No      Gallons actually evacuated: 14.5

Sampling Date: 2/27/15      Sampling Time: 1450      Depth to Water: 18.56

Sample I.D.: S-10      Laboratory: Test America      Other: \_\_\_\_\_

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

EB I.D. (if applicable): @ \_\_\_\_\_      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 #: 150227-BW1	Site: 98995349
Sampler: BW	Date: 2/27/15
Well I.D.: 5-12	Well Diameter: 2 (3) 4 6 8
Total Well Depth (TD): 23.72	Depth to Water (DTW): 7.91
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]: 11.07	

Purge Method:  Bailer  Waterra  Sampling Method:  Bailer  
 Disposable Bailer  Peristaltic  Disposable Bailer  
 Positive Air Displacement  Extraction Pump  Extraction Port  
 Electric Submersible  Other \_\_\_\_\_  Dedicated Tubing

$5.9 \text{ (Gals.)} \times 3 = 17.7 \text{ Gals.}$ <p>1 Case Volume      Specified Volumes      Calculated Volume</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
1135	65.3	6.70	2952	104	5.9	
1140	65.5	6.51	4095	61	11.8	
1145	65.5	6.56	4021	50	17.7	

Did well dewater? Yes  No  Gallons actually evacuated: 17.7

Sampling Date: 2/27/15      Sampling Time: 1150      Depth to Water: 9.25

Sample I.D.: 5-12      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 #: 150227-BW1	Site: 98995349
Sampler: BW	Date: 2/27/15
Well I.D.: S-13	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: <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">PVC</span> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: <del>Bailer</del> Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <del>Bailer</del> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
---	--	--

_____ (Gals.) X _____ = _____ Gals. 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* Unable to locate well. Paved over?						
* No Sample Collected						

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: _____
Sampling Date: _____	Sampling Time: _____
Sample I.D.: _____	Depth to Water: _____
	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



INCIDENT # 98995349  
 DATE: 2/27/15

ADDRESS 1800 Powell St.  
 CITY & STATE Emeryville, CA

Well ID	Observations Upon Arrival														Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials
	Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition					
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	No Tag	Y	N	
S-9	Standpipe	Flush	G	P	Size (inch) 8	Y	N	G	R	G	R	NL	G	P	2 1/2 Tabs Broken, In concrete Rim Broken	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	Replace Cap + Lock. Well very low in box	Y	N	
S-13	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P	* Unable to locate	Y	N	
S-14	Standpipe	Flush	G	P	Size (inch) 8	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	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	

TOTAL # CAPS REPLACED =      = 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															
Building																
Building w/ Fence Comp.	G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A		Y	N	
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		

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.

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

Brian Weeks Blane Tek Services  
 Print or type Name of Field Personnel & Consultant Company

\* = Groundwater monitoring well covers must be painted and labeled in accordance with applicable regulations.  
 Version 2.4, March 2008

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: 440-103494-1

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



Authorized for release by:

3/10/2015 10:47:10 AM

Heather Clark, Project Manager I

(949)261-1022

[heather.clark@testamericainc.com](mailto:heather.clark@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

1

2

3

4

5

6

7

8

9

10

11

12

13



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Sample Summary . . . . .	3
Case Narrative . . . . .	4
Client Sample Results . . . . .	5
Method Summary . . . . .	9
Lab Chronicle . . . . .	10
QC Sample Results . . . . .	12
QC Association Summary . . . . .	19
Definitions/Glossary . . . . .	21
Certification Summary . . . . .	22
Chain of Custody . . . . .	23
Receipt Checklists . . . . .	25

# Sample Summary

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

TestAmerica Job ID: 440-103494-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-103494-1	S-5	Ground Water	02/27/15 12:30	03/03/15 09:35
440-103494-2	S-8	Ground Water	02/27/15 11:05	03/03/15 09:35
440-103494-3	S-10	Ground Water	02/27/15 14:50	03/03/15 09:35
440-103494-4	S-12	Ground Water	02/27/15 11:50	03/03/15 09:35
440-103494-5	S-14	Ground Water	02/27/15 10:40	03/03/15 09:35

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Case Narrative

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

TestAmerica Job ID: 440-103494-1

---

**Job ID: 440-103494-1**

---

**Laboratory: TestAmerica Irvine**

---

**Narrative**

**Job Narrative**  
**440-103494-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 3/3/2015 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

**GC/MS VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC Semi VOA**

Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 240636. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch. (LCS 440-240636/2-A)

Method(s) 8015B: Surrogate recovery for the following sample(s) was outside control limits: S-10 (440-103494-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**VOA Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.





# Client Sample Results

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

TestAmerica Job ID: 440-103494-1

**Client Sample ID: S-5**  
**Date Collected: 02/27/15 12:30**  
**Date Received: 03/03/15 09:35**

**Lab Sample ID: 440-103494-1**  
**Matrix: Ground Water**

**Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Volatile Fuel Hydrocarbons (C4-C12)</b>	<b>510</b>		50		ug/L			03/06/15 16:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Dibromofluoromethane (Surr)</i>	91		76 - 132					03/06/15 16:55	1
<i>4-Bromofluorobenzene (Surr)</i>	102		80 - 120					03/06/15 16:55	1
<i>Toluene-d8 (Surr)</i>	118		80 - 128					03/06/15 16:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>3.8</b>		0.50		ug/L			03/06/15 16:55	1
Toluene	ND		0.50		ug/L			03/06/15 16:55	1
Ethylbenzene	ND		0.50		ug/L			03/06/15 16:55	1
<b>Xylenes, Total</b>	<b>2.2</b>		1.0		ug/L			03/06/15 16:55	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			03/06/15 16:55	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/06/15 16:55	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/06/15 16:55	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/06/15 16:55	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/06/15 16:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>4-Bromofluorobenzene (Surr)</i>	102		80 - 120					03/06/15 16:55	1
<i>Dibromofluoromethane (Surr)</i>	91		76 - 132					03/06/15 16:55	1
<i>Toluene-d8 (Surr)</i>	118		80 - 128					03/06/15 16:55	1

**Client Sample ID: S-8**  
**Date Collected: 02/27/15 11:05**  
**Date Received: 03/03/15 09:35**

**Lab Sample ID: 440-103494-2**  
**Matrix: Ground Water**

**Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Volatile Fuel Hydrocarbons (C4-C12)</b>	<b>250</b>		50		ug/L			03/06/15 17:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Dibromofluoromethane (Surr)</i>	95		76 - 132					03/06/15 17:25	1
<i>4-Bromofluorobenzene (Surr)</i>	109		80 - 120					03/06/15 17:25	1
<i>Toluene-d8 (Surr)</i>	118		80 - 128					03/06/15 17:25	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			03/06/15 17:25	1
Toluene	ND		0.50		ug/L			03/06/15 17:25	1
Ethylbenzene	ND		0.50		ug/L			03/06/15 17:25	1
<b>Xylenes, Total</b>	<b>1.3</b>		1.0		ug/L			03/06/15 17:25	1
<b>Methyl-t-Butyl Ether (MTBE)</b>	<b>1.8</b>		0.50		ug/L			03/06/15 17:25	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/06/15 17:25	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/06/15 17:25	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/06/15 17:25	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/06/15 17:25	1

TestAmerica Irvine

# Client Sample Results

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

TestAmerica Job ID: 440-103494-1

## Client Sample ID: S-8

Date Collected: 02/27/15 11:05

Date Received: 03/03/15 09:35

## Lab Sample ID: 440-103494-2

Matrix: Ground Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		80 - 120		03/06/15 17:25	1
Dibromofluoromethane (Surr)	95		76 - 132		03/06/15 17:25	1
Toluene-d8 (Surr)	118		80 - 128		03/06/15 17:25	1

## Client Sample ID: S-10

Date Collected: 02/27/15 14:50

Date Received: 03/03/15 09:35

## Lab Sample ID: 440-103494-3

Matrix: Ground Water

### Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Volatile Fuel Hydrocarbons (C4-C12)</b>	<b>140</b>		50		ug/L			03/06/15 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	92		76 - 132		03/06/15 18:04	1
4-Bromofluorobenzene (Surr)	105		80 - 120		03/06/15 18:04	1
Toluene-d8 (Surr)	118		80 - 128		03/06/15 18:04	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			03/06/15 18:04	1
Toluene	ND		0.50		ug/L			03/06/15 18:04	1
Ethylbenzene	ND		0.50		ug/L			03/06/15 18:04	1
Xylenes, Total	ND		1.0		ug/L			03/06/15 18:04	1
<b>Methyl-t-Butyl Ether (MTBE)</b>	<b>0.89</b>		0.50		ug/L			03/06/15 18:04	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/06/15 18:04	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/06/15 18:04	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/06/15 18:04	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/06/15 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120		03/06/15 18:04	1
Dibromofluoromethane (Surr)	92		76 - 132		03/06/15 18:04	1
Toluene-d8 (Surr)	118		80 - 128		03/06/15 18:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (C10-C28)</b>	<b>2100</b>		47		ug/L		03/05/15 09:57	03/06/15 00:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	16	X	45 - 120		03/05/15 09:57	03/06/15 00:30

## Client Sample ID: S-12

Date Collected: 02/27/15 11:50

Date Received: 03/03/15 09:35

## Lab Sample ID: 440-103494-4

Matrix: Ground Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Volatile Fuel Hydrocarbons (C4-C12)</b>	<b>250</b>		50		ug/L			03/06/15 18:33	1

# Client Sample Results

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

TestAmerica Job ID: 440-103494-1

## Client Sample ID: S-12

Date Collected: 02/27/15 11:50

Date Received: 03/03/15 09:35

## Lab Sample ID: 440-103494-4

Matrix: Ground Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	90		76 - 132		03/06/15 18:33	1
4-Bromofluorobenzene (Surr)	108		80 - 120		03/06/15 18:33	1
Toluene-d8 (Surr)	122		80 - 128		03/06/15 18:33	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			03/06/15 18:33	1
Toluene	ND		0.50		ug/L			03/06/15 18:33	1
Ethylbenzene	ND		0.50		ug/L			03/06/15 18:33	1
Xylenes, Total	ND		1.0		ug/L			03/06/15 18:33	1
Methyl-t-Butyl Ether (MTBE)	33		0.50		ug/L			03/06/15 18:33	1
tert-Butyl alcohol (TBA)	260		10		ug/L			03/06/15 18:33	1
Isopropyl Ether (DIPE)	0.59		0.50		ug/L			03/06/15 18:33	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/06/15 18:33	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/06/15 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		03/06/15 18:33	1
Dibromofluoromethane (Surr)	90		76 - 132		03/06/15 18:33	1
Toluene-d8 (Surr)	122		80 - 128		03/06/15 18:33	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)	630		49		ug/L		03/05/15 09:57	03/05/15 23:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	60		45 - 120	03/05/15 09:57	03/05/15 23:26	1

## Client Sample ID: S-14

Date Collected: 02/27/15 10:40

Date Received: 03/03/15 09:35

## Lab Sample ID: 440-103494-5

Matrix: Ground 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)	97		50		ug/L			03/08/15 20:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	92		76 - 132		03/08/15 20:35	1
4-Bromofluorobenzene (Surr)	108		80 - 120		03/08/15 20:35	1
Toluene-d8 (Surr)	120		80 - 128		03/08/15 20:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.94		0.50		ug/L			03/08/15 20:35	1
Toluene	0.55		0.50		ug/L			03/08/15 20:35	1
Ethylbenzene	ND		0.50		ug/L			03/08/15 20:35	1
Xylenes, Total	ND		1.0		ug/L			03/08/15 20:35	1
Methyl-t-Butyl Ether (MTBE)	1.5		0.50		ug/L			03/08/15 20:35	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/08/15 20:35	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/08/15 20:35	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/08/15 20:35	1

TestAmerica Irvine

# Client Sample Results

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

TestAmerica Job ID: 440-103494-1

**Client Sample ID: S-14**

**Lab Sample ID: 440-103494-5**

**Date Collected: 02/27/15 10:40**

**Matrix: Ground Water**

**Date Received: 03/03/15 09:35**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/08/15 20:35	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	108		80 - 120					03/08/15 20:35	1
Dibromofluoromethane (Surr)	92		76 - 132					03/08/15 20:35	1
Toluene-d8 (Surr)	120		80 - 128					03/08/15 20:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (C10-C28)</b>	<b>770</b>		48		ug/L		03/05/15 09:57	03/06/15 01:33	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane	60		45 - 120				03/05/15 09:57	03/06/15 01:33	1



# Method Summary

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

TestAmerica Job ID: 440-103494-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTM S	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: 440-103494-1

## Client Sample ID: S-5

Date Collected: 02/27/15 12:30

Date Received: 03/03/15 09:35

## Lab Sample ID: 440-103494-1

Matrix: Ground Water

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	240885	03/06/15 16:55	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	240886	03/06/15 16:55	HR	TAL IRV

## Client Sample ID: S-8

Date Collected: 02/27/15 11:05

Date Received: 03/03/15 09:35

## Lab Sample ID: 440-103494-2

Matrix: Ground Water

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	240885	03/06/15 17:25	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	240886	03/06/15 17:25	HR	TAL IRV

## Client Sample ID: S-10

Date Collected: 02/27/15 14:50

Date Received: 03/03/15 09:35

## Lab Sample ID: 440-103494-3

Matrix: Ground Water

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	240885	03/06/15 18:04	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	240886	03/06/15 18:04	HR	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1060 mL	1 mL	240636	03/05/15 09:57	AP	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1	1060 mL	1 mL	240670	03/06/15 00:30	CN	TAL IRV

## Client Sample ID: S-12

Date Collected: 02/27/15 11:50

Date Received: 03/03/15 09:35

## Lab Sample ID: 440-103494-4

Matrix: Ground Water

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	240885	03/06/15 18:33	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	240886	03/06/15 18:33	HR	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1015 mL	1 mL	240636	03/05/15 09:57	AP	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1	1015 mL	1 mL	240670	03/05/15 23:26	CN	TAL IRV

## Client Sample ID: S-14

Date Collected: 02/27/15 10:40

Date Received: 03/03/15 09:35

## Lab Sample ID: 440-103494-5

Matrix: Ground Water

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	241193	03/08/15 20:35	MM1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	241194	03/08/15 20:35	MM1	TAL IRV

TestAmerica Irvine

# Lab Chronicle

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

TestAmerica Job ID: 440-103494-1

**Client Sample ID: S-14**

**Lab Sample ID: 440-103494-5**

**Date Collected: 02/27/15 10:40**

**Matrix: Ground Water**

**Date Received: 03/03/15 09:35**

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			1035 mL	1 mL	240636	03/05/15 09:57	AP	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1	1035 mL	1 mL	240670	03/06/15 01:33	CN	TAL IRV

**Laboratory References:**

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



# QC Sample Results

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

TestAmerica Job ID: 440-103494-1

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

**Lab Sample ID: MB 440-240885/4**

**Matrix: Water**

**Analysis Batch: 240885**

**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			03/06/15 08:45	1
Toluene	ND		0.50		ug/L			03/06/15 08:45	1
Ethylbenzene	ND		0.50		ug/L			03/06/15 08:45	1
Xylenes, Total	ND		1.0		ug/L			03/06/15 08:45	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			03/06/15 08:45	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/06/15 08:45	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/06/15 08:45	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/06/15 08:45	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/06/15 08:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		80 - 120		03/06/15 08:45	1
Dibromofluoromethane (Surr)	93		76 - 132		03/06/15 08:45	1
Toluene-d8 (Surr)	121		80 - 128		03/06/15 08:45	1

**Lab Sample ID: LCS 440-240885/5**

**Matrix: Water**

**Analysis Batch: 240885**

**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	25.7		ug/L		103	68 - 130
Toluene	25.0	25.5		ug/L		102	70 - 130
Ethylbenzene	25.0	23.7		ug/L		95	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	22.7		ug/L		91	63 - 131
tert-Butyl alcohol (TBA)	250	259		ug/L		103	70 - 130
Isopropyl Ether (DIPE)	25.0	27.0		ug/L		108	58 - 139
Ethyl-t-butyl ether (ETBE)	25.0	23.2		ug/L		93	60 - 136
Tert-amyl-methyl ether (TAME)	25.0	23.1		ug/L		93	57 - 139
m,p-Xylene	25.0	25.9		ug/L		104	70 - 130
o-Xylene	25.0	24.7		ug/L		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	92		76 - 132
Toluene-d8 (Surr)	114		80 - 128

**Lab Sample ID: 440-103467-B-14 MS**

**Matrix: Water**

**Analysis Batch: 240885**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	33		250	291		ug/L		103	66 - 130
Toluene	ND		250	258		ug/L		102	70 - 130
Ethylbenzene	31		250	261		ug/L		92	70 - 130
Methyl-t-Butyl Ether (MTBE)	450		250	654		ug/L		83	70 - 130
tert-Butyl alcohol (TBA)	ND		2500	2750		ug/L		106	70 - 130
Isopropyl Ether (DIPE)	ND		250	286		ug/L		114	64 - 138

TestAmerica Irvine



# QC Sample Results

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

TestAmerica Job ID: 440-103494-1

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

**Lab Sample ID: 440-103467-B-14 MS**

**Client Sample ID: Matrix Spike**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 240885**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Ethyl-t-butyl ether (ETBE)	ND		250	239		ug/L		96	70 - 130
Tert-amyl-methyl ether (TAME)	ND		250	245		ug/L		98	68 - 133
m,p-Xylene	40		250	287		ug/L		99	70 - 133
o-Xylene	12		250	261		ug/L		100	70 - 133

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		80 - 120
Dibromofluoromethane (Surr)	94		76 - 132
Toluene-d8 (Surr)	114		80 - 128

**Lab Sample ID: 440-103467-B-14 MSD**

**Client Sample ID: Matrix Spike Duplicate**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 240885**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier					Limit	
Benzene	33		250	293		ug/L		104	66 - 130	1	20
Toluene	ND		250	258		ug/L		102	70 - 130	0	20
Ethylbenzene	31		250	258		ug/L		91	70 - 130	1	20
Methyl-t-Butyl Ether (MTBE)	450		250	637		ug/L		75	70 - 130	3	25
tert-Butyl alcohol (TBA)	ND		2500	2710		ug/L		104	70 - 130	2	25
Isopropyl Ether (DIPE)	ND		250	285		ug/L		114	64 - 138	0	25
Ethyl-t-butyl ether (ETBE)	ND		250	245		ug/L		98	70 - 130	2	25
Tert-amyl-methyl ether (TAME)	ND		250	240		ug/L		96	68 - 133	2	30
m,p-Xylene	40		250	287		ug/L		99	70 - 133	0	25
o-Xylene	12		250	259		ug/L		99	70 - 133	1	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		80 - 120
Dibromofluoromethane (Surr)	96		76 - 132
Toluene-d8 (Surr)	114		80 - 128

**Lab Sample ID: MB 440-241193/4**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 241193**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.50		ug/L			03/08/15 10:42	1
Toluene	ND		0.50		ug/L			03/08/15 10:42	1
Ethylbenzene	ND		0.50		ug/L			03/08/15 10:42	1
Xylenes, Total	ND		1.0		ug/L			03/08/15 10:42	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			03/08/15 10:42	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			03/08/15 10:42	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			03/08/15 10:42	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			03/08/15 10:42	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			03/08/15 10:42	1

TestAmerica Irvine

# QC Sample Results

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

TestAmerica Job ID: 440-103494-1

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

**Lab Sample ID: MB 440-241193/4**

**Matrix: Water**

**Analysis Batch: 241193**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	108		80 - 120		03/08/15 10:42	1
Dibromofluoromethane (Surr)	93		76 - 132		03/08/15 10:42	1
Toluene-d8 (Surr)	121		80 - 128		03/08/15 10:42	1

**Lab Sample ID: LCS 440-241193/5**

**Matrix: Water**

**Analysis Batch: 241193**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	25.0	23.9		ug/L		96	70 - 130
Ethylbenzene	25.0	22.0		ug/L		88	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	20.7		ug/L		83	63 - 131
tert-Butyl alcohol (TBA)	250	230		ug/L		92	70 - 130
Isopropyl Ether (DIPE)	25.0	25.0		ug/L		100	58 - 139
Ethyl-t-butyl ether (ETBE)	25.0	20.2		ug/L		81	60 - 136
Tert-amyl-methyl ether (TAME)	25.0	20.1		ug/L		81	57 - 139
m,p-Xylene	25.0	23.5		ug/L		94	70 - 130
o-Xylene	25.0	22.8		ug/L		91	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		80 - 120
Dibromofluoromethane (Surr)	93		76 - 132
Toluene-d8 (Surr)	116		80 - 128

**Lab Sample ID: 440-103621-E-10 MS**

**Matrix: Water**

**Analysis Batch: 241193**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	ND		25.0	26.2		ug/L		105	70 - 130
Ethylbenzene	ND		25.0	24.1		ug/L		96	70 - 130
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.2		ug/L		97	70 - 130
tert-Butyl alcohol (TBA)	ND		250	269		ug/L		108	70 - 130
Isopropyl Ether (DIPE)	ND		25.0	28.8		ug/L		115	64 - 138
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.2		ug/L		93	70 - 130
Tert-amyl-methyl ether (TAME)	ND		25.0	23.2		ug/L		93	68 - 133
m,p-Xylene	ND		25.0	26.0		ug/L		104	70 - 133
o-Xylene	ND		25.0	25.6		ug/L		102	70 - 133

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	94		76 - 132
Toluene-d8 (Surr)	112		80 - 128

# QC Sample Results

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

TestAmerica Job ID: 440-103494-1

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

**Lab Sample ID: 440-103621-E-10 MSD**

**Matrix: Water**

**Analysis Batch: 241193**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	26.5		ug/L		106	66 - 130	1	20
Toluene	ND		25.0	25.9		ug/L		104	70 - 130	1	20
Ethylbenzene	ND		25.0	23.5		ug/L		94	70 - 130	2	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.0		ug/L		96	70 - 130	1	25
tert-Butyl alcohol (TBA)	ND		250	256		ug/L		102	70 - 130	5	25
Isopropyl Ether (DIPE)	ND		25.0	28.7		ug/L		115	64 - 138	0	25
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.1		ug/L		92	70 - 130	1	25
Tert-amyl-methyl ether (TAME)	ND		25.0	23.3		ug/L		93	68 - 133	0	30
m,p-Xylene	ND		25.0	25.3		ug/L		101	70 - 133	3	25
o-Xylene	ND		25.0	24.7		ug/L		99	70 - 133	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	95		76 - 132
Toluene-d8 (Surr)	113		80 - 128

## Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 440-240886/4**

**Matrix: Water**

**Analysis Batch: 240886**

**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			03/06/15 08:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	93		76 - 132		03/06/15 08:45	1
4-Bromofluorobenzene (Surr)	109		80 - 120		03/06/15 08:45	1
Toluene-d8 (Surr)	121		80 - 128		03/06/15 08:45	1

**Lab Sample ID: LCS 440-240886/6**

**Matrix: Water**

**Analysis Batch: 240886**

**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	459		ug/L		92	55 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	93		76 - 132
4-Bromofluorobenzene (Surr)	108		80 - 120
Toluene-d8 (Surr)	117		80 - 128

TestAmerica Irvine

# QC Sample Results

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

TestAmerica Job ID: 440-103494-1

## Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 440-103467-B-14 MS**

**Matrix: Water**

**Analysis Batch: 240886**

**Client Sample ID: Matrix Spike**

**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)	1200		17300	17700		ug/L		95	50 - 145
<b>Surrogate</b>	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
Dibromofluoromethane (Surr)	94		76 - 132						
4-Bromofluorobenzene (Surr)	107		80 - 120						
Toluene-d8 (Surr)	114		80 - 128						

**Lab Sample ID: 440-103467-B-14 MSD**

**Matrix: Water**

**Analysis Batch: 240886**

**Client Sample ID: Matrix Spike Duplicate**

**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)	1200		17300	17700		ug/L		95	50 - 145	0	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
Dibromofluoromethane (Surr)	96		76 - 132								
4-Bromofluorobenzene (Surr)	108		80 - 120								
Toluene-d8 (Surr)	114		80 - 128								

**Lab Sample ID: MB 440-241194/4**

**Matrix: Water**

**Analysis Batch: 241194**

**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			03/08/15 10:42	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	93		76 - 132					03/08/15 10:42	1
4-Bromofluorobenzene (Surr)	108		80 - 120					03/08/15 10:42	1
Toluene-d8 (Surr)	121		80 - 128					03/08/15 10:42	1

**Lab Sample ID: LCS 440-241194/6**

**Matrix: Water**

**Analysis Batch: 241194**

**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	431		ug/L		86	55 - 130
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Dibromofluoromethane (Surr)	92		76 - 132				
4-Bromofluorobenzene (Surr)	107		80 - 120				
Toluene-d8 (Surr)	118		80 - 128				

TestAmerica Irvine

# QC Sample Results

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

TestAmerica Job ID: 440-103494-1

## Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 440-103621-E-10 MS**

**Matrix: Water**

**Analysis Batch: 241194**

**Client Sample ID: Matrix Spike**

**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)	ND		1730	1740		ug/L		101	50 - 145
<b>Surrogate</b>	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
Dibromofluoromethane (Surr)	94		76 - 132						
4-Bromofluorobenzene (Surr)	105		80 - 120						
Toluene-d8 (Surr)	112		80 - 128						

**Lab Sample ID: 440-103621-E-10 MSD**

**Matrix: Water**

**Analysis Batch: 241194**

**Client Sample ID: Matrix Spike Duplicate**

**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)	ND		1730	1700		ug/L		99	50 - 145	2	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
Dibromofluoromethane (Surr)	95		76 - 132								
4-Bromofluorobenzene (Surr)	106		80 - 120								
Toluene-d8 (Surr)	113		80 - 128								

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

**Lab Sample ID: MB 440-240636/1-A**

**Matrix: Water**

**Analysis Batch: 240670**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 240636**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		50		ug/L		03/05/15 09:57	03/05/15 18:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane	69		45 - 120				03/05/15 09:57	03/05/15 18:48	1

**Lab Sample ID: LCS 440-240636/2-A**

**Matrix: Water**

**Analysis Batch: 240670**

**Client Sample ID: Lab Control Sample**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 240636**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (C10-C28)	1000	525		ug/L		52	40 - 115
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
n-Octacosane	64		45 - 120				

TestAmerica Irvine

# QC Sample Results

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

TestAmerica Job ID: 440-103494-1

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

Lab Sample ID: LCSD 440-240636/3-A  
 Matrix: Water  
 Analysis Batch: 240670

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Silica Gel Cleanup  
 Prep Batch: 240636

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C28)	1000	545		ug/L		55	40 - 115	4	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
n-Octacosane	66		45 - 120

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# QC Association Summary

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

TestAmerica Job ID: 440-103494-1

## GC/MS VOA

### Analysis Batch: 240885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103467-B-14 MS	Matrix Spike	Total/NA	Water	8260B	
440-103467-B-14 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-103494-1	S-5	Total/NA	Ground Water	8260B	
440-103494-2	S-8	Total/NA	Ground Water	8260B	
440-103494-3	S-10	Total/NA	Ground Water	8260B	
440-103494-4	S-12	Total/NA	Ground Water	8260B	
LCS 440-240885/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-240885/4	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 240886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103467-B-14 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-103467-B-14 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
440-103494-1	S-5	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-103494-2	S-8	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-103494-3	S-10	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-103494-4	S-12	Total/NA	Ground Water	8260B/CA_LUFT MS	
LCS 440-240886/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-240886/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 241193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103494-5	S-14	Total/NA	Ground Water	8260B	
440-103621-E-10 MS	Matrix Spike	Total/NA	Water	8260B	
440-103621-E-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-241193/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-241193/4	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 241194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103494-5	S-14	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-103621-E-10 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-103621-E-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-241194/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-241194/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

## GC Semi VOA

### Prep Batch: 240636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103494-3	S-10	Silica Gel Cleanup	Ground Water	3510C SGC	

TestAmerica Irvine

# QC Association Summary

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

TestAmerica Job ID: 440-103494-1

## GC Semi VOA (Continued)

### Prep Batch: 240636 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103494-4	S-12	Silica Gel Cleanup	Ground Water	3510C SGC	
440-103494-5	S-14	Silica Gel Cleanup	Ground Water	3510C SGC	
LCS 440-240636/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 440-240636/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 440-240636/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 240670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-103494-3	S-10	Silica Gel Cleanup	Ground Water	8015B	240636
440-103494-4	S-12	Silica Gel Cleanup	Ground Water	8015B	240636
440-103494-5	S-14	Silica Gel Cleanup	Ground Water	8015B	240636
LCS 440-240636/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	240636
LCSD 440-240636/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	240636
MB 440-240636/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	240636



## Definitions/Glossary

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

TestAmerica Job ID: 440-103494-1

### 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
CFL	Contains Free Liquid
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: 440-103494-1

## 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	06-30-15
Arizona	State Program	9	AZ0671	10-13-15
California	LA Cty Sanitation Districts	9	10256	01-31-16 *
California	State Program	9	2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-16
Hawaii	State Program	9	N/A	01-29-16
Nevada	State Program	9	CA015312007A	07-31-15
New Mexico	State Program	6	N/A	01-29-15 *
Northern Mariana Islands	State Program	9	MP0002	01-29-15 *
Oregon	NELAP	10	4005	01-29-16
USDA	Federal		P330-09-00080	06-06-15

\* Certification renewal pending - certification considered valid.

TestAmerica Irvine





## Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-103494-1

**Login Number: 103494**

**List Number: 1**

**Creator: Skinner, Alma**

**List Source: TestAmerica Irvine**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

