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By Alameda County Environmental Health 11:48 am, Jul 14, 2017

Ms. Kit Soo  
Alameda County Environmental Health  
1131 Harbor Parkway, Suite 250  
Alameda, CA 94502-6577

**Shell Oil Products US**

DS Soil & Groundwater Focus Delivery Group  
20945 S. Wilmington Avenue  
Carson, CA 90810  
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Email [Andrea.Wing@shell.com](mailto:Andrea.Wing@shell.com)  
Internet <http://www.shell.com>

**RE: 2703 Martin Luther King Jr. Way, Oakland, California**  
**PlaNet Site ID USF04645**  
**PlaNet Project ID 27482**  
**ACEH Case No. RO0000145**

Dear Ms. Soo:

I am informed and believe that, based on a reasonably diligent inquiry undertaken by AECOM on behalf of Equilon Enterprises LLC dba Shell Oil Products US, the information and/or recommendations contained in the attached document is true, and on that ground I declare under penalty of perjury in accordance with Water Code section 13267 that this statement is true and correct.

As always, please feel free to contact me directly at (714) 731-1050 with any questions or concerns.

Sincerely,  
Shell Oil Products US

Andrea A. Wing  
Principal Program Manager

July 13, 2017

Kit Soo  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

Re: First Semiannual 2017 Groundwater Monitoring Report  
Former Shell Service Station  
2703 Martin Luther King Jr. Way, Oakland, California  
Shell PlaNet Site ID: USF04645  
Shell PlaNet Project ID: 27482  
Agency No. RO0000145

Dear Ms. Soo:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US, AECOM Technical Services, Inc. is pleased to submit this first semiannual groundwater monitoring report performed during the second quarter of 2017 at the Former Shell Service Station located at 2703 Martin Luther King Jr. Way in Oakland, California.

If you have questions regarding this submittal, please contact Shane Olton at (916) 414-5849 or [Shane.Olton@aecom.com](mailto:Shane.Olton@aecom.com).

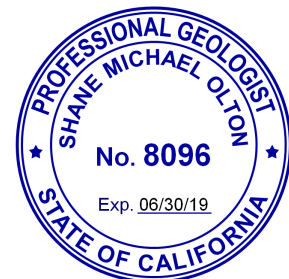
Sincerely,



Azeemuddin Ahmed  
Civil Engineer I



Shane Olton, P.G.  
Project Manager



Enclosures: Groundwater Monitoring Report

cc: Andrea Wing, Equilon Enterprises LLC dba Shell Oil Products US  
Rodney & Janet Kwan, Auto Tech West (site owner),  
2703 Martin Luther King Jr. Way, Oakland, CA 94612  
Monique Oatis, 670 27th Street, Oakland CA (off-site property owner)

# First Semiannual 2017 Groundwater Monitoring Report

Former Shell Service Station  
2703 Martin Luther King Jr. Way  
Oakland, California

July 2017

# First Semiannual 2017 Groundwater Monitoring Report

Former Shell Service Station  
2703 Martin Luther King Jr. Way  
Oakland California

PlaNNet Site ID	USF04645
PlaNNet Project ID	27482
Agency No.	RO0000145

*Submitted to:*

Kit Soo  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

*Submitted by:*

AECOM Technical Services, Inc.  
300 Lakeside Drive, Suite 400  
Oakland, California 94612

*On Behalf of*

Equilon Enterprises LLC dba Shell Oil Products US

July 13, 2017

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# 1 Introduction

AECOM Technical Services, Inc. (AECOM) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Equilon).

## 1.1 Site Information

Site Name:	<u>Former Shell Service Station</u>
Site Address:	<u>2703 Martin Luther King Jr. Way, Oakland, California</u>
Equilon Environmental Services Program Manager:	<u>Andrea Wing</u>
Consulting Company / Contact Person:	<u>AECOM / Shane Olton</u>
Primary Agency:	<u>Alameda County Department of Environmental Health (ACDEH)</u>

## 1.2 Site Summary

Frequency of Groundwater Monitoring:	<u>Semiannual</u>
Wells Water Level Gauged:	<u>14</u>
Wells Sampled:	<u>11</u>
Is there any Free Product Present in On-Site Monitoring Wells:	<u>No</u>
Current Remediation Activity:	<u>None, pending approval of Pilot Test Work Plan</u>

## 2 Site Activities

### 2.1 Current Activities

On January 19, 2016, ACDEH issued a letter concurring with recommendations in AECOM's December 16, 2015, *Human Health Risk Assessment* and requested a Revised CAP (RCAP) be submitted by April 26, 2016. AECOM submitted a *Revised Corrective Action Plan* recommending a one month pulsed oxygen injection pilot study on May 27, 2016. The RCAP was approved in a letter from the ACDEH dated March 17, 2017, which requested a Pilot Test Design and Work Plan by June 19, 2017. The Pilot Test Work Plan was submitted on June 19, 2017. The March 17, 2017, ACDEH letter also requested resampling results from vapor probes VP-01 and VP-13 and a Data Gap Investigation Work Plan, and Focused Site Conceptual Model (WP/SCM) both due May 17, 2017. Extensions were granted for the vapor resampling results and WP/SCM until August 15, 2017, so that a combined report could be submitted and required additional time to conduct the vapor sampling.

On May 30, 2017, Blaine Tech Services, Inc. (Blaine Tech) of San Jose, California gauged and sampled the wells according to the established monitoring program for this site. Two wells (MW-9 and MW-12) were unable to be accessed during this sampling event. TestAmerica Laboratories, Inc. of Irvine, California, a certified California laboratory, completed the analyses of the groundwater samples.

AECOM prepared a site vicinity map (Figure 1), a groundwater contour and chemical concentration map (Figure 2), and a groundwater data table (Table 1). Blaine Tech's field notes are presented in Appendix A, and the laboratory report is presented in Appendix B.

### 2.2 Current Findings

Groundwater Elevation:	<u>19.41 to 22.62 feet above mean sea level</u>
Groundwater Gradient (direction):	<u>west-northwest, southeast</u>
Groundwater Gradient (magnitude):	<u>0.01 feet per foot</u>

### 2.3 Proposed Activities

Blaine Tech will continue to gauge and sample wells according to the established groundwater monitoring program. The site is monitored semiannually during the second and fourth quarters. AECOM will issue groundwater monitoring reports semiannually following the sampling events.

### 3 Conclusions and Recommendations

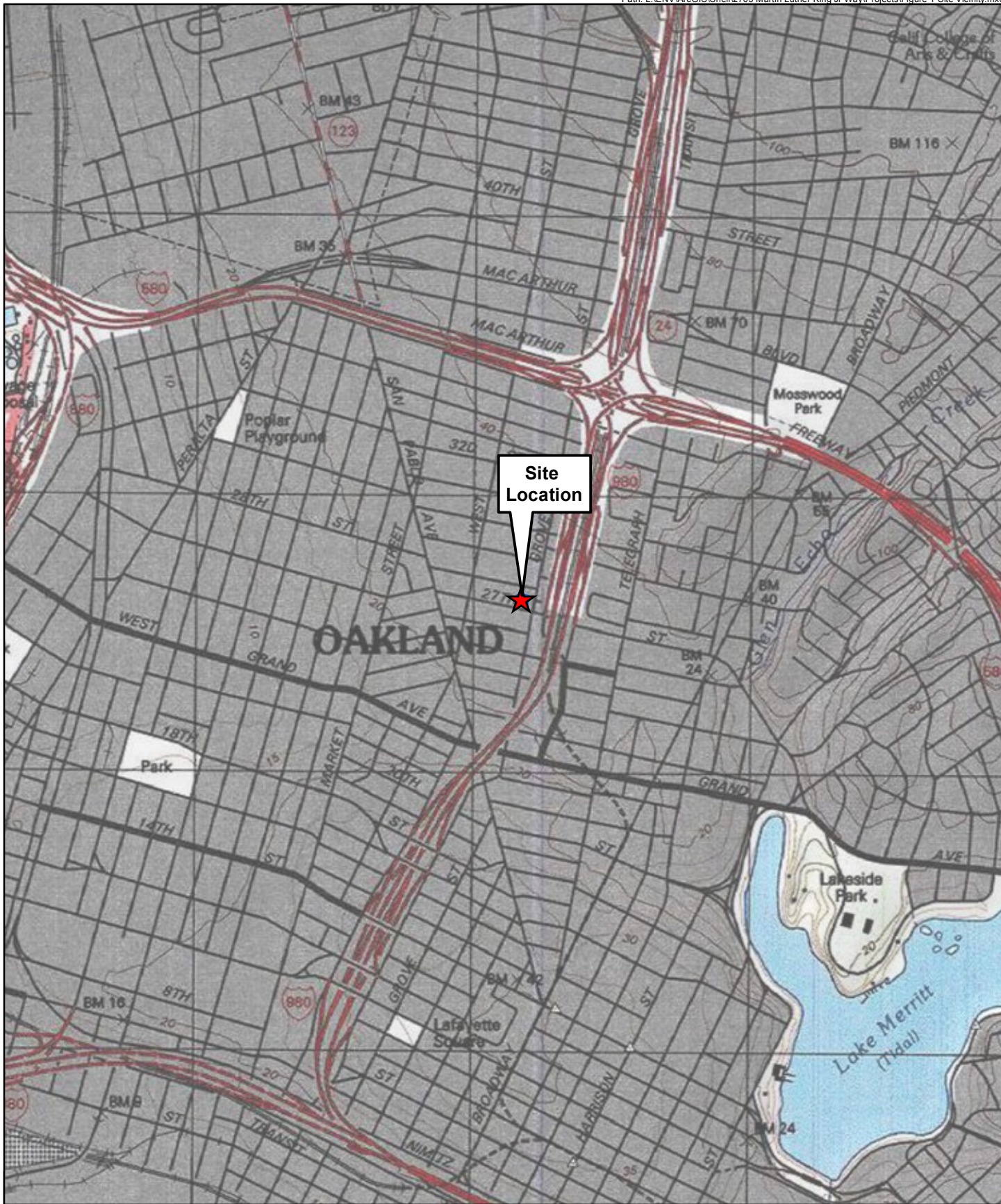
Fourteen monitoring wells were gauged, and eleven were sampled and analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes.

- TPHg was detected in eight wells at concentrations ranging from 55 micrograms per liter ( $\mu\text{g/L}$ ) (MW-7) to 71,000  $\mu\text{g/L}$  (MW-5).
- Benzene was detected in six wells at concentrations ranging from 1.9  $\mu\text{g/L}$  (MW-14) to 2,800  $\mu\text{g/L}$  (MW-4).
- Toluene was detected in four wells at concentrations ranging from 0.74  $\mu\text{g/L}$  (MW-8) to 2,500  $\mu\text{g/L}$  (MW-5).
- Ethylbenzene was detected in five wells at concentrations ranging from 1.1  $\mu\text{g/L}$  (MW-14) to 5,500  $\mu\text{g/L}$  (MW-5).
- Total xylenes were detected in four wells at concentrations ranging from 13  $\mu\text{g/L}$  (MW-8) to 24,000  $\mu\text{g/L}$  (MW-5).

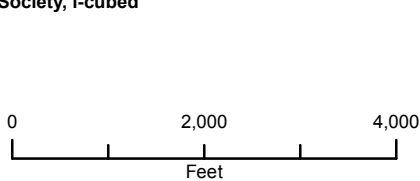
AECOM will continue with the established groundwater monitoring program and recommends implementing the Pilot Study Work Plan, pending ACDEH review and approval.



## Figures

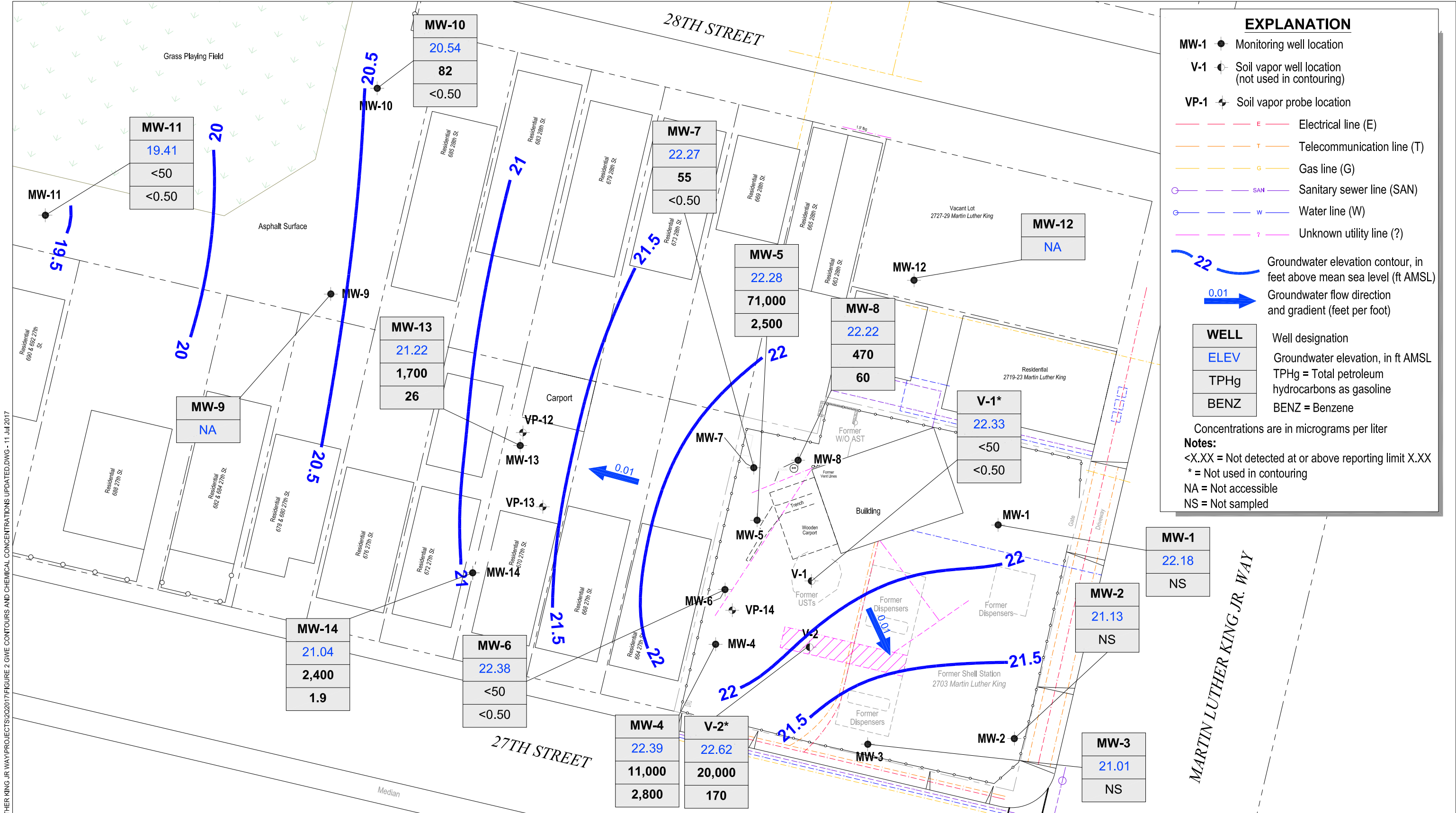


Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

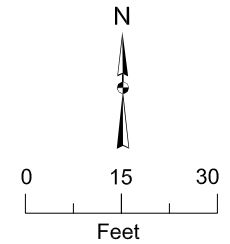


**Figure 1**  
Site Vicinity Map

**AECOM** Former Shell Service Station  
2703 Martin Luther King Jr. Way, Oakland, California



L:\ENVARC\SHELL\2703 MARTIN LUTHER KING JR WAY\PROJECTS\2020\2017\FIGURE 2 GWIE CONTOURS AND CHEMICAL CONCENTRATIONS UPDATED.DWG - 11 JUL 2017



SOURCE: BASE MAP GHD

**Figure 2**  
Groundwater Contour and Chemical Concentration Map  
May 30, 2017

**AECOM** 2703 Martin Luther King Jr. Way, Oakland, California

## Table

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-1	08/05/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	8.76	14.77	---
MW-1 (D)	08/05/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	---	---	---
MW-1	10/17/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	9.88	13.65	---
MW-1	01/08/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	6.82	16.71	---
MW-1	04/07/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	7.89	15.64	---
MW-1	07/02/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	8.71	14.82	---
MW-1	10/24/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	9.26	14.27	---
MW-1	01/09/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	7.94	15.59	---
MW-1	04/02/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	7.21	16.32	---
MW-1	07/14/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	7.78	15.75	---
MW-1	10/01/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	8.39	15.14	---
MW-1	01/18/1999	<50.0	<0.500	0.785	<0.500	<0.500	2.36	---	---	---	---	---	23.53	8.28	15.25	---
MW-1	04/29/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.53	8.41	15.12	---
MW-1	08/23/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	23.53	8.17	15.36	---
MW-1	10/06/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	---	---	---	---	---	23.53	9.37	14.16	---
MW-1	01/27/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	23.53	7.52	16.01	---
MW-1	04/18/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	23.53	7.66	15.87	---
MW-1	07/19/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	23.53	7.81	15.72	---
MW-1	10/24/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	23.53	8.33	15.20	---
MW-1	01/04/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	23.53	8.33	15.20	---
MW-1	05/03/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	23.53	7.83	15.70	---
MW-1	07/09/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	23.53	8.60	14.93	---
MW-1	10/18/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	23.53	9.01	14.52	0.2
MW-1	01/24/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	23.53	7.68	15.85	2.1
MW-1	04/04/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	23.53	7.38	16.15	1.1
MW-1	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	23.53	7.75	15.78	2.2
MW-1	10/21/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	29.53	8.10	21.43	1.6
MW-1	01/21/2003	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	29.53	7.82	21.71	0.6
MW-1	04/17/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<5.0	---	---	---	---	29.53	7.76	21.77	1.7

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-1	07/22/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	29.53	7.87	21.66	1.5
MW-1	10/20/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	29.53	8.67	20.86	0.8
MW-1	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	29.53	8.28	21.25	---
MW-1	01/22/2004	---	---	---	---	---	---	---	---	---	---	---	29.53	8.50	21.03	1.1
MW-1	04/01/2004	---	---	---	---	---	---	---	---	---	---	---	29.53	7.98	21.55	---
MW-1	07/13/2004	---	---	---	---	---	---	---	---	---	---	---	29.53	8.30	21.23	---
MW-1	10/26/2004	---	---	---	---	---	---	---	---	---	---	---	29.53	8.27	21.26	---
MW-1	01/13/2005	---	---	---	---	---	---	---	---	---	---	---	29.53	6.92	22.61	---
MW-1	04/28/2005	---	---	---	---	---	---	---	---	---	---	---	29.53	7.18	22.35	---
MW-1	08/01/2005	---	---	---	---	---	---	---	---	---	---	---	29.53	7.43	22.10	---
MW-1	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	29.53	7.55	21.98	---
MW-1	01/11/2006	---	---	---	---	---	---	---	---	---	---	---	29.54	5.35	24.19	---
MW-1	05/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	<10.0	<0.500	<0.500	<0.500	29.54	6.81	22.73	0.78
MW-1	08/30/2006	---	---	---	---	---	---	---	---	---	---	---	29.54	7.77	21.77	---
MW-1	11/08/2006	---	---	---	---	---	---	---	---	---	---	---	29.54	8.39	21.15	---
MW-1	02/22/2007	---	---	---	---	---	---	---	---	---	---	---	29.54	7.11	22.43	---
MW-1	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	29.54	7.20	22.34	---
MW-1	08/27/2007	---	---	---	---	---	---	---	---	---	---	---	29.54	7.86	21.68	---
MW-1	11/08/2007	---	---	---	---	---	---	---	---	---	---	---	29.54	7.89	21.65	---
MW-1	02/20/2008	---	---	---	---	---	---	---	---	---	---	---	29.54	7.38	22.16	---
MW-1	05/01/2008	---	---	---	---	---	---	---	---	---	---	---	29.54	7.58	21.96	---
MW-1	08/12/2008	---	---	---	---	---	---	---	---	---	---	---	29.54	8.85	20.69	---
MW-1	11/26/2008	---	---	---	---	---	---	---	---	---	---	---	29.54	8.90	20.64	---
MW-1	02/03/2009	---	---	---	---	---	---	---	---	---	---	---	29.54	8.51	21.03	---
MW-1	06/02/2009	---	---	---	---	---	---	---	---	---	---	---	29.54	8.45	21.09	---
MW-1	11/10/2009	---	---	---	---	---	---	---	---	---	---	---	29.54	8.89	20.65	---
MW-1	05/10/2010	---	---	---	---	---	---	---	---	---	---	---	29.54	7.22	22.32	---
MW-1	09/09/2010	---	---	---	---	---	---	---	---	---	---	---	29.54	7.88	21.66	---
MW-1	12/03/2010	---	---	---	---	---	---	---	---	---	---	---	29.54	7.98	21.56	---

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-1	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	29.54	7.52	22.02	---
MW-1	05/31/2011	---	---	---	---	---	---	---	---	---	---	---	29.54	7.28	22.26	---
MW-1	12/13/2011	---	---	---	---	---	---	---	---	---	---	---	29.54	7.64	21.90	---
MW-1	06/13/2012	---	---	---	---	---	---	---	---	---	---	---	29.54	7.56	21.98	---
MW-1	11/19/2012	---	---	---	---	---	---	---	---	---	---	---	29.54	8.48	21.06	---
MW-1	05/30/2013	---	---	---	---	---	---	---	---	---	---	---	29.54	7.32	22.22	---
MW-1	11/18/2013	---	---	---	---	---	---	---	---	---	---	---	29.54	9.11	20.43	---
MW-1	06/06/2014	---	---	---	---	---	---	---	---	---	---	---	29.54	8.40	21.14	---
MW-1	12/01/2014	---	---	---	---	---	---	---	---	---	---	---	29.54	9.37	20.17	---
MW-1	05/22/2015	---	---	---	---	---	---	---	---	---	---	---	29.54	7.45	22.09	---
MW-1	12/18/2015	---	---	---	---	---	---	---	---	---	---	---	29.54	9.39	20.15	---
MW-1	05/16/2016	---	---	---	---	---	---	---	---	---	---	---	29.54	7.14	22.40	---
MW-1	12/08/2016	---	---	---	---	---	---	---	---	---	---	---	29.54	8.78	20.76	---
<b>MW-1</b>	<b>05/30/2017</b>	---	---	---	---	---	---	---	---	---	---	---	<b>29.54</b>	<b>7.36</b>	<b>22.18</b>	---
MW-2	08/05/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	8.35	14.12	---
MW-2	10/17/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	9.32	13.15	---
MW-2 (D)	10/17/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	---	---	---
MW-2	01/08/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	6.80	15.67	---
MW-2 (D)	01/08/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	---	---	---
MW-2	04/07/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	7.81	14.66	---
MW-2	07/02/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	8.27	14.20	---
MW-2	10/24/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	9.12	13.35	---
MW-2	01/09/1998	<50	<0.50	<0.50	<0.50	<0.50	6.3	---	---	---	---	---	22.47	7.41	15.06	---
MW-2	04/02/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	6.59	15.88	---
MW-2	07/14/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	7.49	14.98	---
MW-2	10/01/1998	<50	<0.50	<0.50	<0.50	0.59	<2.5	---	---	---	---	---	22.47	8.58	13.89	---
MW-2	01/18/1999	<50.0	<0.500	0.971	<0.500	<0.500	2.47	---	---	---	---	---	22.47	8.68	13.79	---
MW-2	04/29/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	22.47	8.62	13.85	---

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-2	08/23/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	22.47	7.43	15.04	---
MW-2	10/06/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	---	---	---	---	---	22.47	9.00	13.47	---
MW-2	01/27/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	22.47	8.15	14.32	---
MW-2	04/18/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	22.47	7.04	15.43	---
MW-2	07/19/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	22.47	7.13	15.34	---
MW-2	10/24/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	22.47	8.78	13.69	---
MW-2	01/04/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	22.47	8.33	14.14	---
MW-2	05/03/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.47	7.24	15.23	---
MW-2	07/09/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.47	8.55	13.92	---
MW-2	10/18/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.47	9.42	13.05	---
MW-2	01/24/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.47	7.23	15.24	---
MW-2	04/04/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.47	6.90	15.57	---
MW-2	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.47	7.97	14.50	---
MW-2	10/21/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	28.47	8.62	19.85	---
MW-2	01/21/2003	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	28.47	7.08	21.39	---
MW-2	04/17/2003	<50	<0.50	<0.50	0.98	2.5	---	<5.0	---	---	---	---	28.47	6.94	21.53	---
MW-2	07/22/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	28.47	8.10	20.37	---
MW-2	10/20/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	28.47	9.09	19.38	---
MW-2	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	28.47	7.28	21.19	---
MW-2	01/22/2004	---	---	---	---	---	---	---	---	---	---	---	28.47	8.99	19.48	2.8
MW-2	04/01/2004	---	---	---	---	---	---	---	---	---	---	---	28.47	6.88	21.59	---
MW-2	07/13/2004	---	---	---	---	---	---	---	---	---	---	---	28.47	8.28	20.19	---
MW-2	10/26/2004	---	---	---	---	---	---	---	---	---	---	---	28.47	8.43	20.04	---
MW-2	01/13/2005	---	---	---	---	---	---	---	---	---	---	---	28.47	6.52	21.95	---
MW-2	04/28/2005	---	---	---	---	---	---	---	---	---	---	---	28.47	6.38	22.09	---
MW-2	08/01/2005	---	---	---	---	---	---	---	---	---	---	---	28.47	7.73	20.74	---
MW-2	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	28.47	8.47	20.00	---
MW-2	01/11/2006	---	---	---	---	---	---	---	---	---	---	---	28.48	6.30	22.18	---
MW-2	05/26/2006	59.9	<0.500	<0.500	<0.500	<0.500	---	<0.500	<10.0	<0.500	<0.500	<0.500	28.48	6.84	21.64	3.02



**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-2	08/30/2006	---	---	---	---	---	---	---	---	---	---	---	28.48	8.11	20.37	---
MW-2	11/08/2006	---	---	---	---	---	---	---	---	---	---	---	28.48	8.61	19.87	---
MW-2	02/22/2007	---	---	---	---	---	---	---	---	---	---	---	28.48	6.92	21.56	---
MW-2	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	28.48	7.32	21.16	---
MW-2	08/27/2007	---	---	---	---	---	---	---	---	---	---	---	28.48	8.38	20.10	---
MW-2	11/08/2007	---	---	---	---	---	---	---	---	---	---	---	28.48	8.58	19.90	---
MW-2	02/20/2008	---	---	---	---	---	---	---	---	---	---	---	28.48	6.48	22.00	---
MW-2	05/01/2008	---	---	---	---	---	---	---	---	---	---	---	28.48	19.00	9.48	---
MW-2	08/12/2008	---	---	---	---	---	---	---	---	---	---	---	28.48	8.53	19.95	---
MW-2	11/26/2008	---	---	---	---	---	---	---	---	---	---	---	28.48	8.88	19.60	---
MW-2	02/03/2009	---	---	---	---	---	---	---	---	---	---	---	28.48	8.20	20.28	---
MW-2	06/02/2009	---	---	---	---	---	---	---	---	---	---	---	28.48	7.50	20.98	---
MW-2	11/10/2009	---	---	---	---	---	---	---	---	---	---	---	28.48	8.69	19.79	---
MW-2	05/10/2010	---	---	---	---	---	---	---	---	---	---	---	28.48	7.09	21.39	---
MW-2	09/09/2010	---	---	---	---	---	---	---	---	---	---	---	28.48	8.70	19.78	---
MW-2	12/03/2010	---	---	---	---	---	---	---	---	---	---	---	28.48	8.22	20.26	---
MW-2	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	28.48	6.40	22.08	---
MW-2	05/31/2011	---	---	---	---	---	---	---	---	---	---	---	28.48	7.46	21.02	---
MW-2	12/13/2011	---	---	---	---	---	---	---	---	---	---	---	28.48	8.28	20.20	---
MW-2	06/13/2012	---	---	---	---	---	---	---	---	---	---	---	28.48	7.51	20.97	---
MW-2	11/19/2012	---	---	---	---	---	---	---	---	---	---	---	28.48	8.85	19.63	---
MW-2	05/30/2013	---	---	---	---	---	---	---	---	---	---	---	28.48	7.82	20.66	---
MW-2	11/18/2013	---	---	---	---	---	---	---	---	---	---	---	28.48	9.55	18.93	---
MW-2	06/06/2014	---	---	---	---	---	---	---	---	---	---	---	28.48	7.99	20.49	---
MW-2	12/01/2014	---	---	---	---	---	---	---	---	---	---	---	28.48	9.52	18.96	---
MW-2	05/22/2015	---	---	---	---	---	---	---	---	---	---	---	28.48	8.30	20.18	---
MW-2	12/18/2015	---	---	---	---	---	---	---	---	---	---	---	28.48	10.86	17.62	---
MW-2	05/16/2016	---	---	---	---	---	---	---	---	---	---	---	28.48	7.45	21.03	---
MW-2	12/08/2016	---	---	---	---	---	---	---	---	---	---	---	28.48	9.10	19.38	---

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
<b>MW-2</b>	<b>05/30/2017</b>	---	---	---	---	---	---	---	---	---	---	---	<b>28.48</b>	<b>7.35</b>	<b>21.13</b>	---
MW-3	04/25/2001	---	---	---	---	---	---	---	---	---	---	---	22.30	7.16	15.14	---
MW-3	05/03/2001	<100	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.30	7.28	15.02	---
MW-3	07/09/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.30	8.45	13.85	---
MW-3	10/18/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.30	9.44	12.86	---
MW-3	01/24/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.30	5.88	16.42	---
MW-3	04/04/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.30	6.68	15.62	---
MW-3	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	22.30	7.63	14.67	---
MW-3	10/21/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	28.30	8.56	19.74	---
MW-3	01/21/2003	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	28.30	6.95	21.35	---
MW-3	04/17/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<5.0	---	---	---	---	28.30	6.77	21.53	---
MW-3	07/22/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	28.30	7.92	20.38	---
MW-3	10/20/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	28.30	9.12	19.18	---
MW-3	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	28.30	7.21	21.09	---
MW-3	01/22/2004	---	---	---	---	---	---	---	---	---	---	---	28.30	9.00	19.30	0.6
MW-3	04/01/2004	---	---	---	---	---	---	---	---	---	---	---	28.30	6.65	21.65	---
MW-3	07/13/2004	---	---	---	---	---	---	---	---	---	---	---	28.30	8.24	20.06	---
MW-3	10/26/2004	---	---	---	---	---	---	---	---	---	---	---	28.30	8.50	19.80	---
MW-3	01/13/2005	---	---	---	---	---	---	---	---	---	---	---	28.30	6.32	21.98	---
MW-3	04/28/2005	---	---	---	---	---	---	---	---	---	---	---	28.30	6.05	22.25	---
MW-3	08/01/2005	---	---	---	---	---	---	---	---	---	---	---	28.30	7.65	20.65	---
MW-3	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	28.30	8.31	19.99	---
MW-3	01/11/2006	---	---	---	---	---	---	---	---	---	---	---	28.30	6.10	22.20	---
MW-3	05/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	<10.0	2.87	<0.500	<0.500	28.30	6.72	21.58	1.46
MW-3	08/30/2006	---	---	---	---	---	---	---	---	---	---	---	28.30	8.12	20.18	---
MW-3	11/08/2006	---	---	---	---	---	---	---	---	---	---	---	28.30	8.71	19.59	---
MW-3	02/22/2007	---	---	---	---	---	---	---	---	---	---	---	28.30	6.78	21.52	---
MW-3	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	28.30	7.20	21.10	---

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-3	08/27/2007	---	---	---	---	---	---	---	---	---	---	---	28.30	8.18	20.12	---
MW-3	11/08/2007	---	---	---	---	---	---	---	---	---	---	---	28.30	8.41	19.89	---
MW-3	02/20/2008	---	---	---	---	---	---	---	---	---	---	---	28.30	6.31	21.99	---
MW-3	05/01/2008	---	---	---	---	---	---	---	---	---	---	---	28.30	7.52	20.78	---
MW-3	08/12/2008	---	---	---	---	---	---	---	---	---	---	---	28.30	8.32	19.98	---
MW-3	11/26/2008	---	---	---	---	---	---	---	---	---	---	---	28.30	8.71	19.59	---
MW-3	02/03/2009	---	---	---	---	---	---	---	---	---	---	---	28.30	8.08	20.22	---
MW-3	06/02/2009	---	---	---	---	---	---	---	---	---	---	---	28.30	7.28	21.02	---
MW-3	11/10/2009	---	---	---	---	---	---	---	---	---	---	---	28.30	8.72	19.58	---
MW-3	05/10/2010	---	---	---	---	---	---	---	---	---	---	---	28.30	6.71	21.59	---
MW-3	09/09/2010	---	---	---	---	---	---	---	---	---	---	---	28.30	8.59	19.71	---
MW-3	12/03/2010	---	---	---	---	---	---	---	---	---	---	---	28.30	8.26	20.04	---
MW-3	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	28.30	6.12	22.18	---
MW-3	05/31/2011	---	---	---	---	---	---	---	---	---	---	---	28.30	7.32	20.98	---
MW-3	12/13/2011	---	---	---	---	---	---	---	---	---	---	---	28.30	8.19	20.11	---
MW-3	06/13/2012	---	---	---	---	---	---	---	---	---	---	---	28.30	7.40	20.90	---
MW-3	11/19/2012	---	---	---	---	---	---	---	---	---	---	---	28.30	8.71	19.59	---
MW-3	05/30/2013	---	---	---	---	---	---	---	---	---	---	---	28.30	7.52	20.78	---
MW-3	11/18/2013	---	---	---	---	---	---	---	---	---	---	---	28.30	9.33	18.97	---
MW-3	06/06/2014	---	---	---	---	---	---	---	---	---	---	---	28.30	7.68	20.62	---
MW-3	12/01/2014	---	---	---	---	---	---	---	---	---	---	---	28.30	9.41	18.89	---
MW-3	05/22/2015	---	---	---	---	---	---	---	---	---	---	---	28.30	8.07	20.23	---
MW-3	12/18/2015	---	---	---	---	---	---	---	---	---	---	---	28.30	9.84	18.46	---
MW-3	05/16/2016	---	---	---	---	---	---	---	---	---	---	---	28.30	7.12	21.18	---
MW-3	12/08/2016	---	---	---	---	---	---	---	---	---	---	---	28.30	9.46	18.84	---
<b>MW-3</b>	<b>05/30/2017</b>	---	---	---	---	---	---	---	---	---	---	---	<b>28.30</b>	<b>7.29</b>	<b>21.01</b>	---
MW-4	04/25/2001	---	---	---	---	---	---	---	---	---	---	---	22.51	7.05	15.46	---
MW-4	05/03/2001	8,000	3,500	24	37	350	---	<200	---	---	---	---	22.51	6.66	15.85	---

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-4	07/09/2001	16,000	4,100	32	890	790	---	<200	---	---	---	---	22.51	8.28	14.23	---
MW-4	10/18/2001	12,000	3,300	<20	430	220	---	<200	---	---	---	---	22.51	9.40	13.11	---
MW-4	01/24/2002	5,500	1,200	<5.0	280	240	---	<50	---	---	---	---	22.51	5.73	16.78	---
MW-4	04/04/2002	2,000	350	1.4	13	7.8	---	<10	---	---	---	---	22.51	5.62	16.89	---
MW-4	07/18/2002	3,400	440	1.3	200	98	---	<5.0	---	---	---	---	22.51	6.94	15.57	---
MW-4	10/21/2002	16,000	3,100	11	1,200	970	---	<5.0	---	---	---	---	28.51	8.04	20.47	---
MW-4	01/21/2003	3,600	720	3.9	110	58	---	<25	---	---	---	---	28.51	6.10	22.41	---
MW-4	04/17/2003	3,700	810	<5.0	140	17	---	<50	---	---	---	---	28.51	5.97	22.54	---
MW-4	07/22/2003	3,700	450	<2.5	110	7.9	---	<2.5	---	---	---	---	28.51	6.37	22.14	---
MW-4	10/20/2003	11,000 b	2,500	<20	550	95	---	<20	---	---	---	---	28.51	8.99	19.52	---
MW-4	01/13/2004	6,600	1,500	<10	41	37	---	<10	---	---	---	---	28.51	6.67	21.84	---
MW-4	01/22/2004	---	---	---	---	---	---	---	---	---	---	---	28.51	8.80	19.71	0.3
MW-4	04/01/2004	9,500	2,100	12	170	30	---	---	---	---	---	---	28.51	6.28	22.23	0.1
MW-4	07/13/2004	12,000	3,600	39	160	58	---	<25	<250	<100	<100	<100	28.51	8.20	20.31	0.1
MW-4	10/26/2004	11,000	2,800	<25	100	<50	---	---	---	---	---	---	28.51	8.00	20.51	0.6
MW-4	01/13/2005	12,000	2,200	14	110	43	---	---	---	---	---	---	28.51	6.03	22.48	0.1
MW-4	04/28/2005	8,600	2,300	27	200	49	---	---	---	---	---	---	28.51	5.93	22.58	3.71
MW-4	08/01/2005	11,000	3,900	57	180	47	---	<10	<100	<40	<40	<40	28.51	6.20	22.31	---
MW-4	10/05/2005	9,400	3,300	45	88	33	---	---	---	---	---	---	28.51	8.22	20.29	2.76
MW-4	01/11/2006	3,900 a	1,700 a	14	95	78	---	<0.50	32	7.4	<0.50	<0.50	28.51	4.25	24.26	0.6
MW-4	05/26/2006	6,730	455	1.90	56.7	44.8	---	<0.500	<10.0	4.36	<0.500	<0.500	28.51	5.90	22.61	0.54
MW-4	08/30/2006	29,600	2,740	30.0	448	237	---	<0.500	<10.0	<0.500	<0.500	<0.500	28.51	7.98	20.53	0.44/0.46
MW-4	11/08/2006	6,300	1,500	13	130	67	---	---	---	---	---	---	28.51	8.52	19.99	0.05/0.22
MW-4	02/22/2007	11,000	2,200	18	620	310	---	---	---	---	---	---	28.51	5.63	22.88	2.96/2.98
MW-4	05/29/2007	14,000 b, f	3,200	27	640	249.0	---	---	---	---	---	---	28.51	6.60	21.91	0.19/0.11
MW-4	08/27/2007	12,000 f	1,900	19 g	250	80.9 g	---	<25	<250	<50	<50	<50	28.51	8.50	20.01	0.85/1.71
MW-4	11/08/2007	6,400 f	1,400	11 g	70	37.9 g	---	---	---	---	---	---	28.51	8.21	20.30	1.09/2.63
MW-4	02/20/2008	12,000 f	2,700	<20	690	396	---	---	---	---	---	---	28.51	4.86	23.65	0.46/0.12
MW-4	05/01/2008	8,500	2,000	<20	260	62	---	---	---	---	---	---	28.51	7.00	21.51	0.2/0.2

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-4	08/12/2008	8,400	1,800	22	<20	24	---	<20	<200	<40	<40	<40	28.51	8.31	20.20	0.21/0.68
MW-4	11/26/2008	6,900	1,800	<20	120	<20	---	---	---	---	---	---	28.51	8.94	19.57	0.88/2.18
MW-4	02/03/2009	8,800	1,800	<20	160	96	---	---	---	---	---	---	28.51	7.64	20.87	0.15/0.26
MW-4	06/02/2009	15,000	3,000	58	340	55	---	---	---	---	---	---	28.51	6.82	21.69	0.26/0.65
MW-4	11/10/2009	13,000	2,200	37	180	91	---	<20	<200	<40	<40	<40	28.51	8.38	20.13	0.61/0.57
MW-4	05/10/2010	12,000	3,100	37	570	140	---	---	---	---	---	---	28.51	5.42	23.09	0.26/2.84
MW-4	09/09/2010	---	---	---	---	---	---	---	---	---	---	---	28.51	8.31	20.20	---
MW-4	12/03/2010	6,400	1,600	21	96	68	---	<20	<200	<40	<40	<40	28.51	7.75	20.76	0.52/0.45
MW-4	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	28.51	4.25	24.26	---
MW-4	05/31/2011	11,000	3,200	61	520	68	---	---	---	---	---	---	28.51	6.34	22.17	1.46/2.63
MW-4	12/13/2011	4,000	1,120	31.1	83.0	30.3	---	<0.500	<10.0	4.64	<0.500	<0.500	28.51	7.90	20.61	0.59/0.19
MW-4	06/13/2012	12,000	3,500	47	270	<50	---	---	---	---	---	---	28.51	6.90	21.61	1.03/0.96
MW-4	11/19/2012	8,300	1,800	88	120	310	---	<25	<500	<25	<25	<25	28.51	8.34	20.17	0.88/1.02
MW-4	05/30/2013	11,000	3,400	68	220	40	---	---	---	---	---	---	28.51	7.38	21.13	0.10/0.07
MW-4	11/18/2013	10,000	2,400	33	43	<40	---	<20	<400	<20	<20	<20	28.51	9.13	19.38	0.27/0.24
MW-4	06/06/2014	8,900	1,800	<25	110	55	---	---	---	---	---	---	28.51	7.28	21.23	0.46/0.50
MW-4	12/01/2014	8,500 i	1,400	17	33	91	---	<10	<200	<10	<10	<10	28.51	8.80	19.71	0.48/1.17
MW-4	05/22/2015	7,100	1,500	48	54	<40	---	---	---	---	---	---	28.51	7.50	21.01	1.01/0.73
MW-4	12/18/2015	7,500	1,300	72	75	290	---	<10	<200	<10	<10	<10	28.51	9.28	19.23	1.58/2.35
MW-4	05/16/2016	5,900	2,500	55	110	42	---	---	---	---	---	---	28.51	6.45	22.06	2.70/8.47
MW-4	12/08/2016	7,600	1,700	34	140	71	---	<13	<250	<13	<13	<13	28.51	6.07	22.44	6.39/4.23
<b>MW-4</b>	<b>05/30/2017</b>	<b>11,000</b>	<b>2,800</b>	<b>150</b>	<b>94</b>	<b>41</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>28.51</b>	<b>6.12</b>	<b>22.39</b>	<b>5.49/4.11</b>
MW-5	04/25/2001	---	---	---	---	---	---	---	---	---	---	---	23.54	7.36	16.18	---
MW-5	05/03/2001	160,000	12,000	20,000	3,600	23,000	---	<500	---	---	---	---	23.54	7.77	15.77	---
MW-5	07/09/2001	130,000	11,000	19,000	4,500	22,000	---	<500	---	---	---	---	23.54	9.32	14.22	---
MW-5	10/18/2001	120,000	12,000	23,000	4,200	21,000	---	<500	---	---	---	---	23.54	9.39	14.15	0.5
MW-5	01/24/2002	34,000	3,300	3,300	960	6,000	---	<100	---	---	---	---	23.54	7.05	16.49	4.0
MW-5	04/04/2002	32,000	2,100	2,800	730	6,400	---	<200	---	---	---	---	23.54	6.89	16.65	1.0

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-5	07/18/2002	75,000	7,500	4,700	2,700	15,000	---	<500	---	---	---	---	23.54	8.48	15.06	1.2
MW-5	10/21/2002	140,000	13,000	18,000	4,000	26,000	---	<500	---	---	---	---	29.54	9.21	20.33	1.1
MW-5	01/21/2003	47,000	6,400	3,500	370	8,300	---	<500	---	---	---	---	29.54	7.23	22.31	0.8
MW-5	04/17/2003	93,000	9,700	16,000	3,200	20,000	---	<500	---	---	---	---	29.54	6.61	22.93	0.8
MW-5	07/22/2003	110,000	9,500	15,000	560	23,000	---	<50	---	---	---	---	29.54	8.68	20.86	1.2
MW-5	10/20/2003	88,000	6,600	12,000	1,900	16,000	---	<50	---	---	---	---	29.54	9.71	19.83	0.1
MW-5	01/13/2004	4,600	460	140	<10	930	---	<10	---	---	---	---	29.54	7.30	22.24	---
MW-5	01/22/2004	---	---	---	---	---	---	---	---	---	---	---	29.54	9.51	20.03	0.3
MW-5	04/01/2004	70,000	7,900	11,000	2,100	17,000	---	---	---	---	---	---	29.54	6.80	22.74	0.1
MW-5	07/13/2004	66,000	5,900	10,000	1,900	16,000	---	<50	<500	<200	<200	<200	29.54	9.28	20.26	0.1
MW-5	10/26/2004	6,600	670	110	7.4	2,000	---	---	---	---	---	---	29.54	8.75	20.79	0.8
MW-5	01/13/2005	9,500	1,300	950	360	1,900	---	---	---	---	---	---	29.54	5.87	23.67	6.3
MW-5	04/28/2005	17,000	2,400	1,200	320	3,400	---	---	---	---	---	---	29.54	6.32	23.22	3.54
MW-5	08/01/2005	70,000	6,600	11,000	3,400	17,000	---	<50	<500	<200	<200	<200	29.54	8.27	21.27	---
MW-5	10/05/2005	93,000	8,600	15,000	4,500	23,000	---	---	---	---	---	---	29.54	9.12	20.42	1.43
MW-5	01/11/2006	12,000	1,900	550	2,400	3,800	---	<25	<250	<25	<25	<25	29.61	5.52	24.09	0.6
MW-5	05/26/2006	112,000	6,600	11,100	3,870	19,900 e	---	<0.500	<10.0	5.37	<0.500	<0.500	29.61	7.02	22.59	0.45
MW-5	08/30/2006	281,000	8,050	15,400	4,770	26,800	---	<0.500	<10.0	<0.500	<0.500	60.6	29.61	8.93	20.68	0.55/0.51
MW-5	11/08/2006	83,000	7,000	7,400	3,200	16,000	---	---	---	---	---	---	29.61	9.40	20.21	0.08/0.05
MW-5	02/22/2007	35,000	9,500	13,000	5,300	23,000	---	---	---	---	---	---	29.61	6.87	22.74	1.17/3.17
MW-5	05/29/2007	94,000 f	6,400	9,900	4,300	22,000	---	---	---	---	---	---	29.61	7.85	21.76	0.08/0.19
MW-5	08/27/2007	110,000 f	6,900	11,000	4,300	22,000	---	<100	<1000	<200	<200	<200	29.61	9.13	20.48	0.08/0.22
MW-5	11/08/2007	61,000 f	7,500	5,300	4,700	20,400	---	---	---	---	---	---	29.61	9.27	20.34	2.15/0.65
MW-5	02/20/2008	92,000 f	14,000	14,000	5,900	30,800	---	---	---	---	---	---	29.61	6.02	23.59	0.17/0.18
MW-5	05/01/2008	130,000	8,200	12,000	4,600	24,900	---	---	---	---	---	---	29.61	8.20	21.41	0.2/0.1
MW-5	08/12/2008	150,000	7,600	12,000	8,900	24,800	---	<100	<1,000	<200	<200	<200	29.61	9.42	20.19	0.14/0.51
MW-5	11/26/2008	110,000	7,900	12,000	4,500	27,500	---	---	---	---	---	---	29.61	9.86	19.75	1.26/0.95
MW-5	02/03/2009	130,000	8,500	10,000	4,400	24,000	---	---	---	---	---	---	29.61	8.67	20.94	0.30/0.23
MW-5	06/02/2009	150,000	7,000	10,000	4,600	25,000	---	---	---	---	---	---	29.61	8.02	21.59	0.28/0.28

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-5	11/10/2009	150,000	6,900	10,000	4,600	26,000	---	<100	<1000	<200	<200	<200	29.61	9.41	20.20	0.48/0.49
MW-5	05/10/2010	80,000	5,700	7,100	4,000	22,000	---	---	---	---	---	---	29.61	6.72	22.89	0.22/0.29
MW-5	09/09/2010	---	---	---	---	---	---	---	---	---	---	---	29.61	9.51	20.10	---
MW-5	12/03/2010	73,000	5,400	8,500	4,100	21,000	---	<100	<1,000	<200	<200	<200	29.61	8.70	20.91	0.39/0.38
MW-5	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	29.61	5.04	24.57	---
MW-5	05/31/2011	72,000	5,800	7,000	4,400	23,000	---	---	---	---	---	---	29.61	7.52	22.09	0.92/1.21
MW-5	12/13/2011	130,000	9,070	10,900	7,200	38,000	---	<0.500	<10.0	<0.500	<0.500	<0.500	29.61	8.85	20.76	0.66/0.47
MW-5	06/13/2012	110,000	5,400	7,400	5,700	29,000	---	---	---	---	---	---	29.61	7.97	21.64	1.10/1.15
MW-5	11/19/2012	98,000	6,100	7,600	5,500	30,000	---	<50	<1,000	<50	<50	<50	29.61	9.30	20.31	1.45/1.27
MW-5	05/30/2013	96,000	6,000	7,200	5,700	30,000	---	---	---	---	---	---	29.61	8.43	21.18	0.07/0.10
MW-5	11/18/2013	74,000	5,000	5,300	4,400	24,000	---	<50	<1,000	<50	<50	<50	29.61	10.36	19.25	0.34/0.30
MW-5	06/06/2014	95,000 h	6,200	5,800	5,900	31,000	---	---	---	---	---	---	29.61	8.46	21.15	0.61/0.69
MW-5	12/01/2014	85,000	4,900	4,400	4,700	22,000	---	<50	<1,000	<50	<50	<50	29.61	9.84	19.77	0.47/0.29
MW-5	05/22/2015	99,000	5,300	4,100	5,000	27,000	---	---	---	---	---	---	29.61	8.64	20.97	0.33/0.29
MW-5	12/18/2015	93,000	6,200	4,100	6,000	26,000	---	<100	<2,000	<100	<100	<100	29.61	10.16	19.45	0.70/0.55
MW-5	05/16/2016	80,000	4,700	3,000	5,000	26,000	---	---	---	---	---	---	29.61	7.41	22.20	3.25/1.49
MW-5	12/08/2016	110,000	5,700	2,900	5,900	27,000	---	<130	<2,500	<130	<130	<130	29.61	7.52	22.09	4.66/0.81
<b>MW-5</b>	<b>05/30/2017</b>	<b>71,000</b>	<b>2,500</b>	<b>2,500</b>	<b>5,500</b>	<b>24,000</b>	---	---	---	---	---	---	<b>29.61</b>	<b>7.33</b>	<b>22.28</b>	<b>4.23/0.78</b>
MW-6	01/09/2006	---	---	---	---	---	---	---	---	---	---	---	28.60	4.18	24.42	---
MW-6	01/11/2006	150,000	9,300	1,600	5,100	24,000	---	<2.5 a	51 a	17 a	<2.5 a	<2.5 a	28.60	4.50	24.10	3.6
MW-6	05/26/2006	67,300	6,930	870	2,440	7,590 e	---	<5.00	<100	10.1	<5.00	<5.00	28.60	6.10	22.50	0.49
MW-6	08/30/2006	7,060	6,090	1,180	2,040	7,200	---	<0.500	<10.0	<0.500	<0.500	<0.500	28.60	8.05	20.55	0.39/0.56
MW-6	11/08/2006	8,200	1,900	200	350	890	---	---	---	---	---	---	28.60	8.53	20.07	0.12/0.95
MW-6	02/22/2007	49,000	7,300	2,300	3,600	9,500	---	---	---	---	---	---	28.60	5.94	22.66	1.54/2.03
MW-6	05/29/2007	30,000 b,f	4,100	1,000	1,600	4,900	---	---	---	---	---	---	28.60	6.87	21.73	0.11/0.51
MW-6	08/27/2007	36,000 f	2,000	440	1,000	3,400	---	<25	<250	15 g	<50	<50	28.60	8.22	20.38	0.08/0.15
MW-6	11/08/2007	7,000 f	850	130	270	880	---	---	---	---	---	---	28.60	8.32	20.28	0.94/2.48
MW-6	02/20/2008	28,000 f	6,900	1,300	1,900	7,000	---	---	---	---	---	---	28.60	5.03	23.57	0.14/0.09

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-6	05/01/2008	24,000	4,400	940	1,000	3,500	---	---	---	---	---	---	28.60	7.15	21.45	0.05/0.04
MW-6	08/12/2008	30,000	1,900	380	1,300	3,600	---	<50	<500	<100	<100	<100	28.60	8.49	20.11	0.49/0.99
MW-6	11/26/2008	15,000	2,400	320	590	2,120	---	---	---	---	---	---	28.60	8.93	19.67	0.79/2.30
MW-6	02/03/2009	25,000	3,000	330	790	3,000	---	---	---	---	---	---	28.60	7.69	20.91	0.24/0.09
MW-6	06/02/2009	Well inaccessible		---	---	---	---	---	---	---	---	---	28.60	---	---	---
MW-6	11/10/2009	19,000	2,500	490	620	2,200	---	<25	<250	<50	<50	<50	28.60	8.47	20.13	2.82/1.98
MW-6	05/10/2010	15,000	4,100	700	790	2,300	---	---	---	---	---	---	28.60	5.64	22.96	0.21/0.35
MW-6	09/09/2010	---	---	---	---	---	---	---	---	---	---	---	28.60	8.54	20.06	---
MW-6	12/03/2010	5,700	1,800	240	250	870	---	<25	<250	<50	<50	<50	28.60	7.88	20.72	0.38/0.53
MW-6	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	28.60	4.08	24.52	---
MW-6	05/31/2011	33,000	6,200	1,900	1,700	5,800	---	---	---	---	---	---	28.60	6.25	22.35	0.80/2.21
MW-6	12/13/2011	12,000	2,700	556	548	1,880	---	<0.500	<10.0	9.68	<0.500	<0.500	28.60	8.01	20.59	0.81/0.99
MW-6	06/13/2012	30,000	6,200	1,400	1,700	6,300	---	---	---	---	---	---	28.60	7.14	21.46	1.00/1.41
MW-6	11/19/2012	3,000	450	67	76	600	---	<2.5	<50	<2.5	<2.5	<2.5	28.60	8.34	20.26	2.04/2.90
MW-6	05/30/2013	<10,000	350	<100	<100	<200	---	---	---	---	---	---	28.60	7.59	21.01	0.38/2.76
MW-6	11/18/2013	3,500	460	15	150	130	---	<5.0	<100	<5.0	<5.0	<5.0	28.60	9.42	19.18	0.22/0.19
MW-6	06/06/2014	2,000	400	53	97	350	---	---	---	---	---	---	28.60	7.44	21.16	0.61/0.58
MW-6	12/01/2014	520 i	110	5.8	7.2	46	---	<1.0	<20	2.3	<1.0	<1.0	28.60	8.54	20.06	0.62/0.71
MW-6	05/22/2015	1,600	360	39	60	240	---	---	---	---	---	---	28.60	7.63	20.97	2.38/3.10
MW-6	12/18/2015	510	110	5.5	11	64	---	<1.3	<25	1.9	<1.3	<1.3	28.60	9.39	19.21	1.72/3.35
MW-6	05/16/2016	1,700	480	56	92	380	---	---	---	---	---	---	28.60	6.47	22.13	1.88/5.13
MW-6	12/08/2016	580	93	5.4	26	110	---	<0.50	<10	<0.50	<0.50	<0.50	28.60	4.76	23.84	2.71/3.84
<b>MW-6</b>	<b>05/30/2017</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	---	---	---	---	---	---	<b>28.60</b>	<b>6.22</b>	<b>22.38</b>	<b>3.87/3.11</b>
MW-7	01/09/2006	---	---	---	---	---	---	---	---	---	---	---	29.71	5.50	24.21	---
MW-7	01/11/2006	79,000	9,800	1,800	1,900	20,000	---	<5.0 a	64 a	28 a	<5.0 a	<5.0 a	29.71	5.70	24.01	1.0
MW-7	05/26/2006	98,200	9,620	1,150	3,490	13,400 e	---	<5.00	885	30.8	<5.00	<5.00	29.71	7.24	22.47	0.30
MW-7	08/30/2006	146,000	8,740	980	3,440	15,400	---	<0.500	<10.0	22.7	<0.500	<0.500	29.71	9.03	20.68	0.51/0.46
MW-7	11/08/2006	61,000	6,600	880	2,800	12,000	---	---	---	---	---	---	29.71	9.49	20.22	0.02/0.13



**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-7	02/22/2007	50,000	3,400	910	2,200	13,000	---	---	---	---	---	---	29.71	7.00	22.71	0.96/2.57
MW-7	05/29/2007	26,000 b,f	2,700	320	850	3,590	---	---	---	---	---	---	29.71	8.01	21.70	0.09/0.15
MW-7	08/27/2007	37,000 f	3,300	240	1,300	4,060	---	<25	<250	20 g	<50	<50	29.71	9.30	20.41	1.23/1.64
MW-7	11/08/2007	26,000 f	3,000	120	1,000	2,810	---	---	---	---	---	---	29.71	9.39	20.32	0.80/1.39
MW-7	02/20/2008	20,000 f	1,400	210	600	4,800	---	---	---	---	---	---	29.71	3.33	26.38	3.72/0.58
MW-7	05/01/2008	16,000	1,700	66	85	1,380	---	---	---	---	---	---	29.71	8.28	21.43	0.2/0.1
MW-7	08/12/2008	27,000	1,700	73	1,100	2,490	---	<20	<200	<40	<40	<40	29.71	9.61	20.10	1.49/1.93
MW-7	11/26/2008	25,000	2,300	61	62	1,400	---	---	---	---	---	---	29.71	9.94	19.77	0.85/1.10
MW-7	02/03/2009	54,000	2,900	170	520	5,800	---	---	---	---	---	---	29.71	8.80	20.91	0.17/0.62
MW-7	06/02/2009	14,000	1,100	43	23	810	---	---	---	---	---	---	29.71	8.16	21.55	0.21/0.18
MW-7	11/10/2009	17,000	900	42	63	1,400	---	<10	<100	<20	<20	<20	29.71	9.56	20.15	0.54/0.33
MW-7	05/10/2010	6,900	650	24	24	610	---	---	---	---	---	---	29.71	6.86	22.85	0.37/0.19
MW-7	09/09/2010	---	---	---	---	---	---	---	---	---	---	---	29.71	9.70	20.01	---
MW-7	12/03/2010	8,100	550	16	20	520	---	<5.0	<50	<10	<10	<10	29.71	8.95	20.76	0.41/0.37
MW-7	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	29.71	4.67	25.04	---
MW-7	05/31/2011	6,200	530	16	8.5	320	---	---	---	---	---	---	29.71	7.54	22.17	0.63/0.87
MW-7	12/13/2011	8,800	689	8.85	9.68	200	---	<0.500	<10.0	1.99	<0.500	<0.500	29.71	8.93	20.78	0.38/0.35
MW-7	06/13/2012	2,300	330	<5.0	<5.0	86	---	---	---	---	---	---	29.71	8.26	21.45	1.35/1.08
MW-7	11/19/2012	5,800	860	14	7.8	300	---	<5.0	<100	<5.0	<5.0	<5.0	29.71	9.51	20.20	0.96/1.10
MW-7	05/30/2013	3,200	420	11	<5.0	140	---	---	---	---	---	---	29.71	8.55	21.16	0.35/0.24
MW-7	11/18/2013	3,700	620	5.4	7.8	130	---	<5.0	<100	<5.0	<5.0	<5.0	29.71	10.41	19.30	0.19/0.17
MW-7	06/06/2014	2,000	140	<2.0	<2.0	16	---	---	---	---	---	---	29.71	8.52	21.19	0.41/0.44
MW-7	12/01/2014	2,900	490	7.1	<5.0	140	---	<5.0	<100	<5.0	<5.0	<5.0	29.71	10.12	19.59	0.41/0.78
MW-7	05/22/2015	2,100	210	3.0	<2.5	48	---	---	---	---	---	---	29.71	8.65	21.06	1.09/1.24
MW-7	12/18/2015	2,900	520	7.1	5.8	110	---	<5.0	<100	<5.0	<5.0	<5.0	29.71	10.39	19.32	1.12/1.03
MW-7	05/16/2016	2,300	84	2.2	3.2	40	---	---	---	---	---	---	29.71	7.50	22.21	2.90/0.52
MW-7	12/08/2016	640	16	0.85	0.80	56	---	<0.50	<10	<0.50	<0.50	<0.50	29.71	5.06	24.65	3.62/2.25
<b>MW-7</b>	<b>05/30/2017</b>	<b>55</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	---	---	---	---	---	---	<b>29.71</b>	<b>7.44</b>	<b>22.27</b>	<b>4.08/2.12</b>

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-8	01/09/2006	---	---	---	---	---	---	---	---	---	---	---	29.54	5.56	23.98	---
MW-8	01/11/2006	32,000	2,400	180	66	5,500	---	<0.50 a	35 a	15 a	<0.50 a	<0.50 a	29.54	5.53	24.01	0.8
MW-8	05/26/2006	24,800	423	73.0	166	2,820 e	---	<0.500	<10.0	2.18	<0.500	<0.500	29.54	7.02	22.52	0.35
MW-8	08/30/2006	72,100	1,770	114	324	3,140	---	<0.500	<10.0	23.3	<0.500	<0.500	29.54	8.81	20.73	0.51/0.50
MW-8	11/08/2006	24,000	2,000	90	190	3,400	---	---	---	---	---	---	29.54	9.25	20.29	0.11/0.40
MW-8	02/22/2007	26,000	2,100	110	180	4,400	---	---	---	---	---	---	29.54	7.08	22.46	1.37/1.71
MW-8	05/29/2007	31,000 f	2,600	99	250	3,140	---	---	---	---	---	---	29.54	7.81	21.73	0.05/0.49
MW-8	08/27/2007	41,000 f	3,400	110	260	3,880	---	<20	<200	32 g	<40	<40	29.54	9.04	20.50	0.07/0.27
MW-8	11/08/2007	42,000 f	4,900	140	440	4,000	---	---	---	---	---	---	29.54	9.14	20.40	3.20/0.10
MW-8	02/20/2008	19,000 f	760	38	52	1,930	---	---	---	---	---	---	29.54	9.00	20.54	1.72/0.13
MW-8	05/01/2008	18,000	1,000	35	42	1,520	---	---	---	---	---	---	29.54	8.10	21.44	1.10/0.19
MW-8	08/12/2008	33,000	1,600	69	1,100	2,730	---	<10	<100	<20	<20	<20	29.54	9.41	20.13	0.15/0.29
MW-8	11/26/2008	27,000	2,600	77	100	2,930	---	---	---	---	---	---	29.54	9.68	19.86	2.60/0.66
MW-8	02/03/2009	32,000	2,400	70	81	2,700	---	---	---	---	---	---	29.54	8.57	20.97	0.10/0.23
MW-8	06/02/2009	22,000	1,100	39	56	1,600	---	---	---	---	---	---	29.54	8.00	21.54	0.22/0.38
MW-8	11/10/2009	22,000	1,600	46	52	1,600	---	<25	<250	<50	<50	<50	29.54	9.32	20.22	0.45/0.29
MW-8	05/10/2010	9,800	340	15	21	700	---	---	---	---	---	---	29.54	6.74	22.80	0.28/0.54
MW-8	09/09/2010	---	---	---	---	---	---	---	---	---	---	---	29.54	9.52	20.02	---
MW-8	12/03/2010	13,000	720	26	29	870	---	<5.0	<50	<10	<10	<10	29.54	8.67	20.87	0.90/0.27
MW-8	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	29.54	4.97	24.57	---
MW-8	05/31/2011	10,000	260	7.6	9.6	390	---	---	---	---	---	---	29.54	7.51	22.03	0.78/0.81
MW-8	12/13/2011	14,000	703	15.4	25.2	467	---	<0.500	<10.0	4.95	<0.500	<0.500	29.54	8.73	20.81	0.69/0.32
MW-8	06/13/2012	8,200	290	7.9	14	430	---	---	---	---	---	---	29.54	8.01	21.53	1.48/0.94
MW-8	11/19/2012	7,000	180	7.0	13	510	---	<2.5	<50	<2.5	<2.5	<2.5	29.54	9.28	20.26	0.79/0.70
MW-8	05/30/2013	7,900	190	5.7	8.7	270	---	---	---	---	---	---	29.54	8.37	21.17	0.17/0.07
MW-8	11/18/2013	11,000	240	8.2	11	630	---	<2.0	<40	<2.0	<2.0	<2.0	29.54	10.40	19.14	0.26/0.22
MW-8	06/06/2014	7,000	120	2.5	4.6	170	---	---	---	---	---	---	29.54	8.55	20.99	0.36/0.39
MW-8	12/01/2014	6,600	92	3.2	2.9	180	---	<2.5	<50	<2.5	<2.5	<2.5	29.54	9.69	19.85	0.36/0.42
MW-8	05/22/2015	6,800	80	2.6	4.3	140	---	---	---	---	---	---	29.54	8.59	20.95	0.69/0.50

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-8	12/18/2015	6,100	95	4.3	5.8	220	---	<1.3	<25	<1.3	<1.3	<1.3	29.54	9.99	19.55	1.52/1.43
MW-8	05/16/2016	5,400	59	2.7	6.5	140	---	---	---	---	---	---	29.54	7.43	22.11	1.79/1.25
MW-8	12/08/2016	1,200	8.9	0.51	2.9	75	---	<0.50	<10	<0.50	<0.50	<0.50	29.54	6.41	23.13	1.18/0.69
<b>MW-8</b>	<b>05/30/2017</b>	<b>470</b>	<b>60</b>	<b>0.74</b>	<b>1.3</b>	<b>13</b>	---	---	---	---	---	---	<b>29.54</b>	<b>7.32</b>	<b>22.22</b>	<b>1.21/0.73</b>
MW-9	08/27/2010	---	---	---	---	---	---	---	---	---	---	---	28.52	10.33	18.19	---
MW-9	09/09/2010	13,000	32	13	880	610	---	---	---	---	---	---	28.52	10.60	17.92	0.51/0.73
MW-9	12/03/2010	6,400	33	9.5	540	280	---	---	---	---	---	---	28.52	10.42	18.10	0.22/0.33
MW-9	03/02/2011	11,000	74	11	840	170	---	---	---	---	---	---	28.52	6.45	22.07	0.53/0.48
MW-9	05/31/2011	12,000	49	6.7	570	100	---	---	---	---	---	---	28.52	8.80	19.72	0.19/0.27
MW-9	12/13/2011	13,000	35.8	5.60	470	97.2	---	---	---	---	---	---	28.52	10.24	18.28	0.54/0.51
MW-9	06/13/2012	9,700	49	6.1	420	59	---	---	---	---	---	---	28.52	9.27	19.25	0.68/0.72
MW-9	11/19/2012	9,300	26	<5.0	340	68	---	---	---	---	---	---	28.52	10.55	17.97	1.35/0.76
MW-9	05/30/2013	7,200	19	3.4	160	36	---	---	---	---	---	---	28.52	9.32	19.20	0.41/0.59
MW-9	11/18/2013	760	<5.0	<5.0	19	<10	---	---	---	---	---	---	28.52	10.93	17.59	0.37/0.31
MW-9	06/06/2014	7,600	23	<5.0	190	31	---	---	---	---	---	---	28.52	9.60	18.92	0.16/0.20
MW-9	12/01/2014	7,700	17	<5.0	110	17	---	---	---	---	---	---	28.52	10.96	17.56	0.15/0.19
MW-9	05/22/2015	Well inaccessible		---	---	---	---	---	---	---	---	---	28.52	---	---	---
MW-9	12/18/2015	Well inaccessible		---	---	---	---	---	---	---	---	---	28.52	---	---	---
MW-9	05/16/2016	5,700	20	<5.0	79	16	---	---	---	---	---	---	28.52	8.48	20.04	1.44/0.91
MW-9	12/08/2016	Unable to locate		---	---	---	---	---	---	---	---	---	28.52	---	---	---
<b>MW-9</b>	<b>05/30/2017</b>	<b>Unable to locate</b>		---	---	---	---	---	---	---	---	---	<b>28.52</b>	---	---	---
MW-10	08/27/2010	---	---	---	---	---	---	---	---	---	---	---	28.70	10.21	18.49	---
MW-10	09/09/2010	2,600	1.9	1.3	40	170	---	---	---	---	---	---	28.70	10.70	18.00	1.43/1.67
MW-10	12/03/2010	1,600	2.0	<1.0	25	18	---	---	---	---	---	---	28.70	10.06	18.64	0.17/0.30
MW-10	03/02/2011	1,600	2.6	0.55	41	13	---	---	---	---	---	---	28.70	6.85	21.85	0.41/0.40
MW-10	05/31/2011	2,400	2.0	0.51	60	45	---	---	---	---	---	---	28.70	7.23	21.47	0.22/0.43
MW-10	12/13/2011	2,700	2.43	<0.500	20.2	2.70	---	---	---	---	---	---	28.70	9.50	19.20	0.69/0.62

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-10	06/13/2012	2,200	2.5	0.53	48	46	---	---	---	---	---	---	28.70	10.41	18.29	0.81/0.92
MW-10	11/19/2012	980	1.6	<0.50	8.8	1.1	---	---	---	---	---	---	28.70	10.12	18.58	1.20/0.66
MW-10	05/30/2013	1,300	2.0	<0.50	34	5.1	---	---	---	---	---	---	28.70	9.02	19.68	1.38/0.44
MW-10	11/18/2013	5,400	9.8	<5.0	150	19	---	---	---	---	---	---	28.70	10.42	18.28	0.50/0.52
MW-10	06/06/2014	1,000	1.7	<0.50	21	2.3	---	---	---	---	---	---	28.70	8.93	19.77	0.18/0.25
MW-10	12/01/2014	890	1.3	<0.50	8.8	<1.0	---	---	---	---	---	---	28.70	11.15	17.55	0.19/0.35
MW-10	05/22/2015	Well inaccessible		---	---	---	---	---	---	---	---	---	28.70	---	---	---
MW-10	12/18/2015	450	1.2	<0.50	4.1	1.1	---	---	---	---	---	---	28.70	14.18	14.52	1.10/1.35
MW-10	05/16/2016	1,500	1.2	<0.50	19	3.7	---	---	---	---	---	---	28.70	8.28	20.42	2.31/0.92
MW-10	12/08/2016	380	0.55	<0.50	0.93	<1.0	---	---	---	---	---	---	28.70	9.52	19.18	0.42/0.31
<b>MW-10</b>	<b>05/30/2017</b>	<b>82</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	---	---	---	---	---	---	<b>28.70</b>	<b>8.16</b>	<b>20.54</b>	<b>0.33/0.26</b>
MW-11	08/27/2010	---	---	---	---	---	---	---	---	---	---	---	27.46	9.98	17.48	---
MW-11	09/09/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	27.46	10.32	17.14	1.64/1.69
MW-11	12/03/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	27.46	9.84	17.62	0.29/0.47
MW-11	03/02/2011	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	6.13	21.33	1.08/0.88
MW-11	05/31/2011	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	8.42	19.04	0.17/0.30
MW-11	12/13/2011	<50	<0.500	<0.500	<0.500	<0.500	---	---	---	---	---	---	27.46	9.93	17.53	0.36/0.52
MW-11	06/13/2012	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	9.98	17.48	0.54/0.91
MW-11	11/19/2012	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	10.16	17.30	0.60/0.88
MW-11	05/30/2013	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	8.74	18.72	0.74/0.59
MW-11	11/18/2013	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	10.32	17.14	0.90/0.45
MW-11	06/06/2014	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	9.25	18.21	0.47/0.27
MW-11	12/01/2014	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	10.63	16.83	0.45/0.30
MW-11	05/22/2015	Well inaccessible		---	---	---	---	---	---	---	---	---	27.46	---	---	---
MW-11	12/18/2015	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	10.93	16.53	1.58/2.88
MW-11	05/16/2016	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	8.50	18.96	2.20/1.79
MW-11	12/08/2016	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	27.46	9.16	18.30	0.37/0.28
<b>MW-11</b>	<b>05/30/2017</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	---	---	---	---	---	---	<b>27.46</b>	<b>8.05</b>	<b>19.41</b>	<b>0.29/0.18</b>

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-12	05/19/2006	---	---	---	---	---	---	---	---	---	---	---	31.16	8.42	22.74	---
MW-12	05/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	<10.0	<0.500	<0.500	<0.500	31.16	8.44	22.72	3.88
MW-12	08/30/2006	746	<0.500	<0.500	<0.500	<0.500	---	---	---	---	---	---	31.16	9.54	21.62	1.75/1.81
MW-12	11/08/2006	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	31.16	8.67	22.49	2.26/3.60
MW-12	02/22/2007	<50	<0.50	<1.0	<0.50	<1.0	---	---	---	---	---	---	31.16	7.72	23.44	1.60/2.91
MW-12	05/29/2007	<50 f	0.49 g	<1.0	0.14 g	0.48 g	---	---	---	---	---	---	31.16	9.00	22.16	0.60/0.61
MW-12	08/27/2007	<50 f	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	31.16	9.90	21.26	0.47/0.24
MW-12	11/08/2007	<50 f	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	31.16	9.90	21.26	3.8/3.1
MW-12	02/20/2008	<50 f	5.4	1.7	3.4	12.4	---	---	---	---	---	---	31.16	7.40	23.76	3.43/1.91
MW-12	05/01/2008	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	31.16	9.20	21.96	0.09/0.13
MW-12	08/12/2008	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	31.16	10.40	20.76	3.6/3.2
MW-12	11/26/2008	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	31.16	10.59	20.57	1.80/1.32
MW-12	02/03/2009	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	31.16	9.39	21.77	1.72/1.75
MW-12	06/02/2009	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	31.16	9.20	21.96	0.77/1.41
MW-12	11/10/2009	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	31.16	10.12	21.04	2.70/1.52
MW-12	05/10/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	31.16	8.41	22.75	2.65/1.42
MW-12	09/09/2010	Unable to locate		---	---	---	---	---	---	---	---	---	31.16	---	---	---
MW-12	12/03/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	31.16	9.32	21.84	0.74/1.29
MW-12	03/02/2011	Unable to locate		---	---	---	---	---	---	---	---	---	31.16	---	---	---
MW-12	05/31/2011	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	31.16	8.80	22.36	0.59/0.91
MW-12	12/13/2011	<50	<0.500	<0.500	<0.500	<0.500	---	---	---	---	---	---	31.16	9.64	21.52	0.75/2.07
MW-12	06/13/2012	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	31.16	9.31	21.85	0.61/1.79
MW-12	11/19/2012	Well inaccessible		---	---	---	---	---	---	---	---	---	31.16	---	---	---
MW-12	05/30/2013	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	31.16	9.40	21.76	0.68/0.72
MW-12	11/18/2013	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	31.16	11.83	19.33	0.29/0.66
MW-12	06/06/2014	Well inaccessible		---	---	---	---	---	---	---	---	---	31.16	---	---	---
MW-12	12/01/2014	Well inaccessible		---	---	---	---	---	---	---	---	---	31.16	---	---	---
MW-12	05/22/2015	Well inaccessible		---	---	---	---	---	---	---	---	---	31.16	---	---	---
MW-12	12/18/2015	Well inaccessible		---	---	---	---	---	---	---	---	---	31.16	---	---	---

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-12	05/16/2016	Well inaccessible		---	---	---	---	---	---	---	---	---	31.16	---	---	---
MW-12	12/08/2016	Well inaccessible		---	---	---	---	---	---	---	---	---	31.16	---	---	---
<b>MW-12</b>	<b>05/30/2017</b>	<b>Well inaccessible</b>		---	---	---	---	---	---	---	---	---	<b>31.16</b>	---	---	---
MW-13	04/16/2015	---	---	---	---	---	---	---	---	---	---	---	29.70	9.31	20.39	---
MW-13	05/22/2015	4,100	430	5.9	16	<10	---	---	---	---	---	---	29.70	10.12	19.58	0.86/0.59
MW-13	08/14/2015	5,000	550	<5.0	8.5	<10	---	---	---	---	---	---	29.70	11.55	18.15	0.56/0.32
MW-13	12/18/2015	3,800	200	<2.5	3.9	<5.0	---	---	---	---	---	---	29.70	11.41	18.29	1.62/1.97
MW-13	03/17/2016	4,100	170	<5.0	<5.0	<5.0	---	---	---	---	---	---	29.70	5.03	24.67	0.24/0.31
MW-13	05/16/2016	5,400	370	<2.5	6.2	<5.0	---	---	---	---	---	---	29.70	8.91	20.79	0.72/1.01
MW-13	12/08/2016	4,700	450	<5.0	<5.0	<10	---	---	---	---	---	---	29.70	9.60	20.10	0.49/0.41
<b>MW-13</b>	<b>05/30/2017</b>	<b>1,700</b>	<b>26</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;5.0</b>	---	---	---	---	---	---	<b>29.70</b>	<b>8.48</b>	<b>21.22</b>	<b>0.34/0.28</b>
MW-14	05/19/2006	---	---	---	---	---	---	---	---	---	---	---	28.09	6.95	21.14	---
MW-14	05/26/2006	103,000	5,280	76.7	3,930	4,800 e	---	<5.00	895	49.7	<5.00	<5.00	28.09	7.05	21.04	3.60
MW-14	08/30/2006	10,200	1,260	12.5	1,310	1,330	---	<0.500	<10.0	<0.500	<0.500	<0.500	28.09	9.19	18.90	3.33/3.49
MW-14	11/08/2006	29,000	4,400 a	34	2,000	1,600	---	---	---	---	---	---	28.09	9.80	18.29	1.16/1.40
MW-14	02/22/2007	31,000	2,600	42	2,200	1,600	---	---	---	---	---	---	28.09	6.70	21.39	0.59/1.11
MW-14	05/29/2007	35,000 f	1,100	14	1,800	767	---	---	---	---	---	---	28.09	7.89	20.20	0.08/0.08
MW-14	08/27/2007	Well inaccessfble		---	---	---	---	---	---	---	---	---	---	---	---	---
MW-14	08/29/2007	45,000 f	1,000	11	870	367.8 g	---	<10	<100	20	<20	<20	28.09	9.25	18.84	0.09/0.16
MW-14	11/08/2007	32,000 f	1,600	22	1,500	889	---	---	---	---	---	---	28.09	9.21	18.88	0.04/0.35
MW-14	02/20/2008	23,000 f	1,800	32	1,600	1,021	---	---	---	---	---	---	28.09	6.34	21.75	0.09/0.08
MW-14	05/01/2008	16,000	830	15	870	452	---	---	---	---	---	---	28.09	7.95	20.14	0.12/0.09
MW-14	08/12/2008	34,000	1,400	26	550	1,151	---	<10	<100	<20	<20	<20	28.09	14.10	13.99	0.03/0.38
MW-14	11/26/2008	Well inaccessible		---	---	---	---	---	---	---	---	---	28.09	---	---	---
MW-14	02/03/2009	39,000	1,800	27	1,700	1,400	---	---	---	---	---	---	28.09	8.66	19.43	0.16/0.19
MW-14	06/02/2009	34,000	1,100	<25	1,200	710	---	---	---	---	---	---	28.09	8.21	19.88	0.16/0.26
MW-14	11/10/2009	39,000	2,300	35	2,100	1,200	---	<25	<250	<50	<50	<50	28.09	9.69	18.40	0.45/1.56

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
MW-14	05/10/2010	5,900	150	2.1	170	54	---	---	---	---	---	---	28.09	6.64	21.45	0.49/1.38
MW-14	09/09/2010	Well inaccessible			---	---	---	---	---	---	---	---	28.09	---	---	---
MW-14	12/03/2010	84,000	1,800	39	1,900	1,100	---	<5.0	<50	27	<10	<10	28.09	9.10	18.99	0.50/0.67
MW-14	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	28.09	5.60	22.49	---
MW-14	05/31/2011	21,000	460	10	930	460	---	---	---	---	---	---	28.09	8.85	19.24	0.47/0.77
MW-14	12/13/2011	30,000	1,370	23.8	1,590	871	---	<0.500	<10.0	17.8	<0.500	<0.500	28.09	9.35	18.74	0.67/0.65
MW-14	06/13/2012	26,000	1,100	13	1,400	630	---	---	---	---	---	---	28.09	8.34	19.75	0.54/0.75
MW-14	11/19/2012	27,000	1,700	30	2,800	1,200	---	<5.0	<100	23	<5.0	<5.0	28.09	9.78	18.31	2.84/3.10
MW-14	05/30/2013	34,000	1,300	23	2,100	920	---	---	---	---	---	---	28.09	8.78	19.31	0.97/1.02
MW-14	11/18/2013	33,000	1,200	23	2,700	950	---	<10	<200	16	<10	<10	28.09	10.41	17.68	0.21/0.33
MW-14	06/06/2014	68,000	900	<50	2,800	680	---	---	---	---	---	---	28.09	8.77	19.32	0.20/0.27
MW-14	12/01/2014	36,000	1,600	24	2,700	700	---	<20	<400	<20	<20	<20	28.09	9.50	18.59	0.18/0.25
MW-14	05/22/2015	5,200	320	<10	490	120	---	---	---	---	---	---	28.09	9.08	19.01	1.04/0.96
MW-14	12/18/2015	18,000	1,200	<20	2,000	450	---	<20	<400	<20	<20	<20	28.09	10.43	17.66	2.83/3.17
MW-14	05/16/2016	15,000	950	<25	1,100	200	---	---	---	---	---	---	28.09	7.71	20.38	2.18/3.03
MW-14	12/08/2016	28,000	650	11	990	140	---	<10	<200	<10	<10	<10	28.09	8.49	19.60	0.86/0.83
<b>MW-14</b>	<b>05/30/2017</b>	<b>2,400</b>	<b>1.9</b>	<b>&lt;0.50</b>	<b>1.1</b>	<b>&lt;1.0</b>	---	---	---	---	---	---	<b>28.09</b>	<b>7.05</b>	<b>21.04</b>	<b>0.74/0.65</b>
V-1	08/02/1996	---	---	---	---	---	---	---	---	---	---	---	23.26	---	---	---
V-1	08/05/1996	---	---	---	---	---	---	---	---	---	---	---	23.26	8.58	14.68	---
V-1	10/17/1996	---	---	---	---	---	---	---	---	---	---	---	23.26	10.02	13.24	---
V-1	01/16/1997	9,500	1,200	250	280	880	<50	---	---	---	---	---	23.26	5.55	17.71	---
V-1	04/07/1997	2,200	42	<5.0	130	15	<25	---	---	---	---	---	23.26	7.40	15.86	---
V-1	07/02/1997	2,600	340	5.8	49	12	74	<4.0	---	---	---	---	23.26	8.94	14.32	---
V-1	10/24/1997	57,000	5,200	2,300	3,600	16,000	1,900	<200	---	---	---	---	23.26	9.43	13.83	---
V-1	01/09/1998	23,000	2,400	1,700	1,300	2,300	310	---	---	---	---	---	23.26	6.81	16.45	---
V-1 (D)	01/09/1998	24,000	2,500	1,800	1,400	2,400	450	---	---	---	---	---	23.26	---	---	---
V-1	04/02/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.26	4.58	18.68	---
V-1 (D)	04/02/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.26	---	---	---

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
V-1	07/14/1998	160	1.9	<0.50	4.2	<0.50	6.1	---	---	---	---	---	23.26	7.51	15.75	---
V-1	10/01/1998	440	18	<0.50	11	0.80	7.9	---	---	---	---	---	23.26	8.49	14.77	---
V-1	01/18/1999	697	55.7	0.839	28.2	<0.500	9.35	---	---	---	---	---	23.26	8.59	14.67	---
V-1	04/29/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	23.26	8.69	14.57	---
V-1	08/23/1999	457	33.4	3.59	16.3	<0.500	13.9	---	---	---	---	---	23.26	8.99	14.27	---
V-1	10/06/1999	714	53.7	0.740	8.69	<0.500	9.83	---	---	---	---	---	23.26	9.55	13.71	---
V-1	01/27/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	23.26	7.19	16.07	---
V-1	04/18/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	23.26	7.67	15.59	---
V-1	07/19/2000	255	21.7	<0.500	10.2	<0.500	7.33	<1.00 a	---	---	---	---	23.26	7.53	15.73	---
V-1	10/24/2000	200	4.05	0.566	<0.500	<0.500	7.82	---	---	---	---	---	23.26	7.38	15.88	---
V-1	01/04/2001	128	1.77	<0.500	<0.500	<0.500	6.40	<10.0	---	---	---	---	23.26	8.41	14.85	---
V-1	05/03/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	23.26	7.20	16.06	---
V-1	07/09/2001	110	4.4	<0.50	0.88	1.7	---	<5.0	---	---	---	---	23.26	9.22	14.04	---
V-1	10/18/2001	1,500	180	12	43	46	---	<5.0	---	---	---	---	23.26	10.08	13.18	0.8
V-1	01/24/2002	210	7.1	15	4.6	32	---	<5.0	---	---	---	---	23.26	6.44	16.82	3.5
V-1	04/04/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	23.26	6.18	17.08	1.0
V-1	07/18/2002	100	1.6	1.2	1.2	6.1	---	<5.0	---	---	---	---	23.26	8.08	15.18	1.7
V-1	10/21/2002	210	1.4	<0.50	1.0	1.3	---	<5.0	---	---	---	---	29.26	8.94	20.32	1.2
V-1	01/21/2003	61	5.2	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	29.26	6.62	22.64	0.6
V-1	04/17/2003	<50	<0.50	<0.50	<0.50	1.2	---	<5.0	---	---	---	---	29.26	6.00	23.26	1.3
V-1	07/22/2003	Well inaccessible		---	---	---	---	---	---	---	---	---	29.26	---	---	---
V-1	10/20/2003	540	11	1.6	6.0	8.9	---	<0.50	---	---	---	---	29.26	9.53	19.73	0.1
V-1	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	29.26	6.62	22.64	---
V-1	01/22/2004	---	---	---	---	---	---	---	---	---	---	---	29.26	9.08	20.18	0.1
V-1	04/01/2004	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	29.26	6.24	23.02	0.1
V-1	07/13/2004	120	1.8	<0.50	<0.50	<1.0	---	<0.50	<5.0	<2.0	<2.0	<2.0	29.26	8.78	20.48	0.1
V-1	10/26/2004	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	29.26	8.09	21.17	0.6
V-1	01/13/2005	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	29.26	4.30	24.96	0.1
V-1	04/28/2005	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	29.26	5.27	23.99	3.34



**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
V-1	08/01/2005	54	<0.50	<0.50	<0.50	<1.0	---	<0.50	<5.0	<2.0	<2.0	<2.0	29.26	7.77	21.49	---
V-1	10/05/2005	120 c	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	29.26	8.72	20.54	1.67
V-1	01/11/2006	<50	<0.50	<0.50	<0.50	<0.50	---	<0.50	<5.0	<0.50	<0.50	<0.50	29.24	4.78	24.46	0.3
V-1	05/26/2006	<50.0	<0.500	<0.500	<0.500	1.02 e	---	<0.500	<10.0	<0.500	<0.500	<0.500	29.24	6.61	22.63	1.94
V-1	08/30/2006	5,660	6.81	1.39	27.3	21.0	---	<0.500	<10.0	<0.500	<0.500	<0.500	29.24	8.46	20.78	0.33/0.33
V-1	11/08/2006	1,300	3.7	1.5	5.1	6.9	---	---	---	---	---	---	29.24	8.95	20.29	0.05/0.11
V-1	02/22/2007	<50	<0.50	<1.0	<0.50	<1.0	---	---	---	---	---	---	29.24	6.17	23.07	0.76/0.99
V-1	05/29/2007	650 f	0.64	<1.0	1.2	0.95 g	---	---	---	---	---	---	29.24	7.21	22.03	0.69/0.74
V-1	08/27/2007	510 b, f	0.24	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	29.24	8.78	20.46	0.12/0.57
V-1 d	11/08/2007	2,000 f	19	2.9	23	18.5	---	---	---	---	---	---	29.24	8.41	20.83	0.61/1.54
V-1	02/20/2008	54 f	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	29.24	5.11	24.13	0.13/0.22
V-1	05/01/2008	280	0.57	<1.0	<1.0	<1.0	---	---	---	---	---	---	29.24	7.60	21.64	0.08/0.08
V-1	08/12/2008	390	0.80	<1.0	<1.0	1.1	---	<1.0	<10	<2.0	<2.0	<2.0	29.24	9.00	20.24	0.81/1.51
V-1	11/26/2008	3,300	46	8.3	62	44.2	---	---	---	---	---	---	29.24	9.50	19.74	0.76/1.28
V-1	02/03/2009	450	0.98	<1.0	1.7	<1.0	---	---	---	---	---	---	29.24	8.18	21.06	0.13/0.39
V-1	06/02/2009	230	<0.50	<1.0	1.3	<1.0	---	---	---	---	---	---	29.24	7.45	21.79	0.25/0.31
V-1	11/10/2009	900	3.1	<1.0	6.5	2.0	---	<1.0	<10	<2.0	<2.0	<2.0	29.24	8.91	20.33	0.84/0.56
V-1	05/10/2010	81	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	29.24	5.94	23.30	0.17/0.43
V-1	09/09/2010	---	---	---	---	---	---	---	---	---	---	---	29.24	8.95	20.29	---
V-1	12/03/2010	560	1.1	<1.0	3.2	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	29.24	8.25	20.99	0.47/0.95
V-1	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	29.24	4.18	25.06	---
V-1	05/31/2011	160	<0.50	<0.50	0.57	<1.0	---	---	---	---	---	---	29.24	6.82	22.42	0.69/1.26
V-1	12/13/2011	1,300	1.09	<0.500	5.63	0.980	---	<0.500	<10.0	<0.500	<0.500	<0.500	29.24	8.37	20.87	0.94/0.81
V-1	06/13/2012	410	0.63	<0.50	3.9	<1.0	---	---	---	---	---	---	29.24	7.52	21.72	1.65/1.73
V-1	11/19/2012	57	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	29.24	8.35	20.89	1.48/1.37
V-1	05/30/2013	710	1.8	<0.50	9.3	<1.0	---	---	---	---	---	---	29.24	7.93	21.31	0.44/0.85
V-1	11/18/2013	610	1.7	<0.50	1.5	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	29.24	9.33	19.91	0.14/0.13
V-1	06/06/2014	410	1.7	<0.50	5.1	<1.0	---	---	---	---	---	---	29.24	7.85	21.39	0.11/0.65
V-1	12/01/2014	50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	29.24	8.45	20.79	0.10/0.60

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
V-1	05/22/2015	500	1.1	<0.50	2.3	<1.0	---	---	---	---	---	---	29.24	8.10	21.14	0.15/0.61
V-1	12/18/2015	540	2.1	<0.50	9.2	6.9	---	<0.50	<10	<0.50	<0.50	<0.50	29.24	9.53	19.71	1.22/3.49
V-1	05/16/2016	60	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	29.24	6.74	22.50	0.81/0.70
V-1	12/08/2016	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	29.24	6.31	22.93	1.53/1.63
<b>V-1</b>	<b>05/30/2017</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	---	---	---	---	---	---	<b>29.24</b>	<b>6.91</b>	<b>22.33</b>	<b>1.26/1.37</b>
V-2	08/02/1996	---	---	---	---	---	---	---	---	---	---	---	22.80	---	---	---
V-2	08/05/1996	---	---	---	---	---	---	---	---	---	---	---	22.80	7.94	14.86	---
V-2	10/17/1996	---	---	---	---	---	---	---	---	---	---	---	22.80	9.30	13.50	---
V-2	01/08/1997	69,000	4,800	2,800	2,700	13,000	750	---	---	---	---	---	22.80	5.82	16.98	---
V-2	04/07/1997	90,000	4,400	1,900	3,300	14,000	<500	---	---	---	---	---	22.80	7.10	15.70	---
V-2 (D)	04/07/1997	77,000	4,400	2,000	3,200	14,000	<250	---	---	---	---	---	22.80	---	---	---
V-2	07/02/1997	82,000	5,500	2,700	3,500	16,000	530	<100	---	---	---	---	22.80	8.35	14.45	---
V-2 (D)	07/02/1997	85,000	5,600	2,800	3,600	17,000	520	<100	---	---	---	---	22.80	---	---	---
V-2	10/24/1997	7,300	1,100	97	230	180	91	<12	---	---	---	---	22.80	10.03	12.77	---
V-2 (D)	10/24/1997	12,000	1,700	340	650	630	120	<20	---	---	---	---	22.80	---	---	---
V-2	01/09/1998	40,000	4,100	1,500	2,500	9,000	280	---	---	---	---	---	22.80	6.94	15.86	---
V-2	04/02/1998	62,000	6,800	2,400	3,400	14,000	<250	---	---	---	---	---	22.80	5.35	17.45	---
V-2	07/14/1998	43,000	4,700	1,100	2,500	6,600	<250	---	---	---	---	---	22.80	6.48	16.32	---
V-2 (D)	07/14/1998	48,000	5,100	1,300	2,600	8,100	<250	---	---	---	---	---	22.80	---	---	---
V-2	10/01/1998	53,000	5,200	1,800	3,200	10,000	83	---	---	---	---	---	22.80	8.41	14.39	---
V-2 (D)	10/01/1998	55,000	5,300	1,900	3,300	11,000	65	---	---	---	---	---	22.80	---	---	---
V-2	01/18/1999	47,100	5,800	1,960	3,450	10,200	<100	---	---	---	---	---	22.80	8.29	14.51	---
V-2	04/29/1999	65,000	6,100	2,800	3,200	12,000	540	---	---	---	---	---	22.80	8.19	14.61	---
V-2	08/23/1999	59,600	6,240	2,190	3,900	14,700	390	---	---	---	---	---	22.80	8.44	14.36	---
V-2	10/06/1999	63,800	4,820	1,860	2,840	11,100	<1000	---	---	---	---	---	22.80	8.96	13.84	---
V-2	01/27/2000	59,600	10,200	2,840	3,450	12,100	<500	---	---	---	---	---	22.80	7.57	15.23	---
V-2	04/18/2000	45,000	6,050	2,700	3,340	12,200	<250	---	---	---	---	---	22.80	8.14	14.66	---
V-2	07/19/2000	31,800	4,440	1,270	2,390	6,820	<500	---	---	---	---	---	22.80	8.21	14.59	---

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
V-2	10/24/2000	40,100	4,810	1,730	2,960	8,650	734	<10.0	---	---	---	---	22.80	8.53	14.27	---
V-2	01/04/2001	37,500	4,510	1,390	2,710	6,880	375	---	---	---	---	---	22.80	8.03	14.77	---
V-2	05/03/2001	51,000	4,000	1,900	2,800	8,200	---	<200	---	---	---	---	22.80	6.63	16.17	---
V-2	07/09/2001	9,600	710	190	180	1,400	---	<25	---	---	---	---	22.80	8.75	14.05	---
V-2	10/18/2001	20,000	2,000	540	560	6,000	---	<50	---	---	---	---	22.80	9.60	13.20	0.4
V-2	01/24/2002	36,000	2,900	870	1,700	5,900	---	<100	---	---	---	---	22.80	5.93	16.87	4.0
V-2	04/04/2002	49,000	3,900	1,500	2,900	9,300	---	<200	---	---	---	---	22.80	5.78	17.02	0.9
V-2	07/18/2002	50,000	3,600	1,300	2,800	9,300	---	<200	---	---	---	---	22.80	7.58	15.22	1.3
V-2	10/21/2002	86,000	6,000	1,900	4,200	20,000	---	<250	---	---	---	---	28.80	8.40	20.40	1.3
V-2	01/21/2003	13,000	630	200	300	2,400	---	<25	---	---	---	---	28.80	6.52	22.28	1.2
V-2	04/17/2003	26,000	2,000	570	750	6,000	---	<100	---	---	---	---	28.80	5.93	22.87	1.1
V-2	07/22/2003	6,800	130	34	150	440	---	<2.5	---	---	---	---	28.80	7.96	20.84	1.4
V-2	10/20/2003	14,000	660	160	260	2,400	---	<10	---	---	---	---	28.80	9.21	19.59	0.7
V-2	01/13/2004	20,000	1,400	410	700	4,200	---	<13	---	---	---	---	28.80	6.90	21.90	---
V-2	01/22/2004	---	---	---	---	---	---	---	---	---	---	---	28.80	8.50	20.30	0.1
V-2	04/01/2004	28,000	2,000	520	650	8,700	---	---	---	---	---	---	28.80	6.84	21.96	0.2
V-2	07/13/2004	21,000	1,900	460	1,000	4,300	---	---	---	---	---	---	28.80	8.28	20.52	0.1
V-2	10/26/2004	43,000	2,700	880	2,300	12,000	---	---	---	---	---	---	28.80	8.43	20.37	0.8
V-2	01/13/2005	23,000	1,400	330	1,800	5,800	---	---	---	---	---	---	28.80	6.67	22.13	0.6
V-2	04/28/2005	16,000	970	230	620	3,800	---	---	---	---	---	---	28.80	5.69	23.11	4.55
V-2	08/01/2005	14,000	610	190	450	3,600	---	---	---	---	---	---	28.80	5.25	23.55	---
V-2	10/05/2005	37,000	2,200	680	2,300	8,500	---	---	---	---	---	---	28.80	8.24	20.56	0.75
V-2	01/11/2006	45,000 a	1,900 a	720 a	3,000 a	13,000 a	---	<25 a	<250 a	<25 a	<25 a	<25 a	28.81	6.60	22.21	0.4
V-2	05/26/2006	66,600	1,300	400	2,950	9,700 e	---	<0.500	<10.0	<0.500	<0.500	<0.500	28.81	6.28	22.53	0.28
V-2	08/30/2006	7,290	2,390	750	4,680	17,000	---	---	---	---	---	---	28.81	8.03	20.78	0.37/0.31
V-2	11/08/2006	68,000	1,700	580	3,900	13,000	---	---	---	---	---	---	28.81	8.60	20.21	0.05/0.14
V-2	02/22/2007	57,000	1,300	600	4,000	15,000	---	---	---	---	---	---	28.81	5.88	22.93	1.23/2.50
V-2	05/29/2007	48,000 b,f	2,000	650	3,300	10,000	---	---	---	---	---	---	28.81	6.82	21.99	0.07/0.12
V-2	08/27/2007	55,000 f	1,600	520	2,900	8,000	---	---	---	---	---	---	28.81	8.22	20.59	0.22/0.48

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

Well ID	Date	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)	GW Elevation (ft MSL)	DO (mg/L)
V-2 d	11/08/2007	74,000 f	1,300	500	3,000	9,600	---	---	---	---	---	---	28.81	8.82	19.99	0.87/1.46
V-2	02/20/2008	52,000 f	1,200	560	3,200	12,400	---	---	---	---	---	---	28.81	5.13	23.68	0.16/0.05
V-2	05/01/2008	53,000	960	350	3,000	9,600	---	---	---	---	---	---	28.81	7.25	21.56	0.06/0.05
V-2	08/12/2008	55,000	950	230	2,700	6,030	---	---	---	---	---	---	28.81	8.50	20.31	0.53/1.47
V-2	11/26/2008	71,000	1,400	430	3,900	10,400	---	---	---	---	---	---	28.81	9.08	19.73	0.66/1.62
V-2	02/03/2009	81,000	1,100	340	3,700	11,000	---	---	---	---	---	---	28.81	7.78	21.03	0.48/0.15
V-2	06/02/2009	78,000	920	350	3,500	9,200	---	---	---	---	---	---	28.81	6.90	21.91	0.19/0.26
V-2	11/10/2009	66,000	890	310	3,400	7,900	---	---	---	---	---	---	28.81	8.62	20.19	0.44/0.98
V-2	05/10/2010	28,000	490	160	2,200	4,800	---	---	---	---	---	---	28.81	5.63	23.18	0.18/0.28
V-2	09/09/2010	---	---	---	---	---	---	---	---	---	---	---	28.81	8.49	20.32	---
V-2	12/03/2010	31,000	640	210	2,600	4,300	---	---	---	---	---	---	28.81	7.90	20.91	0.86/1.16
V-2	03/02/2011	---	---	---	---	---	---	---	---	---	---	---	28.81	3.95	24.86	---
V-2	05/31/2011	36,000	510	180	3,600	6,700	---	---	---	---	---	---	28.81	6.55	22.26	0.47/0.92
V-2	12/13/2011	51,000	652	129	3,760	5,040	---	---	---	---	---	---	28.81	7.96	20.85	0.60/1.51
V-2	06/13/2012	44,000	540	150	4,300	5,000	---	---	---	---	---	---	28.81	7.08	21.73	0.91/1.36
V-2	11/19/2012	43,000	530	170	4,100	5,700	---	---	---	---	---	---	28.81	8.73	20.08	0.99/0.82
V-2	05/30/2013	35,000	480	130	3,900	4,000	---	---	---	---	---	---	28.81	7.49	21.32	0.44/1.21
V-2	11/18/2013	45,000	460	140	4,500	4,400	---	---	---	---	---	---	28.81	9.33	19.48	0.19/1.33
V-2	06/06/2014	65,000	420	130	5,400	4,800	---	---	---	---	---	---	28.81	7.40	21.41	0.89/1.13
V-2	12/01/2014	42,000	470	140	3,900	3,600	---	---	---	---	---	---	28.81	9.42	19.39	0.62/0.74
V-2	12/18/2015	34,000	400	99	4,700	2,100	---	---	---	---	---	---	28.81	9.35	19.46	0.82/1.83
V-2	05/16/2016	29,000	210	53	3,600	2,500	---	---	---	---	---	---	28.81	6.27	22.54	0.86/0.82
V-2	12/08/2016	29,000	270	76	4,500	2,200	---	---	---	---	---	---	28.81	6.88	21.93	0.56/0.73
<b>V-2</b>	<b>05/30/2017</b>	<b>20,000</b>	<b>170</b>	<b>50</b>	<b>2,200</b>	<b>940</b>	---	---	---	---	---	---	<b>28.81</b>	<b>6.19</b>	<b>22.62</b>	<b>0.41/0.59</b>

**Notes:** See following page.

**Table 1**  
**Groundwater Data**  
**Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California**

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- Notes:**
- BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to May 3, 2001, analyzed by EPA Method 8020.
  - DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
  - ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
  - MTBE = Methyl tertiary-butyl ether analyzed as noted
  - TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
  - TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
  - TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to May 3, 2001, analyzed by EPA Method 8015 unless otherwise noted.
  
  - = Not analyzed or available
  - µg/L = Micrograms per liter
  - <X.XX = Not detected at or above reporting limit X.XX
  
  - (D) = Duplicate sample
  - DO = Dissolved oxygen concentrations in mg/L (Pre-purge/Post-purge)
  - ft = Feet
  - GW = Groundwater
  - mg/L = Milligrams per liter
  - MSL = Mean sea level
  - TOC = Top of casing elevation, in feet relative to mean sea level
  
  - a = Sample analyzed outside of EPA recommended holding time.
  - b = Hydrocarbon does not match pattern of laboratory's standard.
  - c = Quantity of unknown hydrocarbon(s) in sample based on gasoline.
  - d = Samples were switched in the field for wells V-1 and V-2 due to field error. Data corrected for this table.
  - e = Analyte was detected in the associated Method Blank.
  - f = Analyzed by EPA Method 8015B (M).
  - g = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
  - h = Concentration reported is due to the presence of discrete peaks of xylenes.
  - i = Concentration reported is due to the presence of discrete peak of benzene.

Site wells surveyed June 14, 2001 by Virgil Chavez Land Surveying

Site wells surveyed August 13, 2002 by Virgil Chavez Land Surveying

Wells MW-1 through MW-8, V-1, and V-2 surveyed on February 14, 2006 by Virgil Chavez Land Surveying

Wells MW-12 and MW-14 surveyed on April 19, 2006 by Virgil Chavez Land Surveying

Wells MW-9, MW-10, and MW-11 surveyed on August 18, 2010 by Virgil Chavez Land Surveying

## **Appendix A**

### **Field Notes** (Blaine Tech Services, Inc.)

# WELL GAUGING DATA

Project # 170530-GR2 Date 5/30/17 Client AECOM

Site 2703 MARTIN LUTHER KING JR. WAY - OAKLAND, CA

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 <u>TOC</u>	Notes
MW-1	1100	2					7.36	19.80		G.O.
MW-2	1105	2					7.35	18.62		G.O.
MW-3	1100	4					7.29	20.02		G.O.
MW-4	1135	4					6.12	19.94		
MW-5	1150	4					7.33	19.91		
MW-6	1125	4	<del>SHAEN</del> ODOR	—	—	—	6.22	14.60		
MW-7	1140	4					7.44	19.60		
MW-8	1130	4					7.32	19.55		
MW-9			UNABLE TO LOCATE. MAY BE BURIED. CONSTRUCTION							
MW-10	1418	4						19.99		
MW-11	1421	4					8.05	19.65		
MW-12			UNABLE TO ACCESS. PARKED OVER. GATE LOCKED.							
MW-13	1100	2						19.87		
MW-14	1105	1						14.10		
V-1	1120	2					6.91	13.11		
V-2	1145	2	ODOR				6.19	13.29	↓	

# Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170530-GR2	Site: 97093397
Sampler: DH	Date: 5/30/17
Well I.D.: NW-4	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 19.94	Depth to Water (DTW): 6.12
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.08	

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

$\frac{9.0 \text{ (Gals.)} \times 3}{1 \text{ Case Volume}} = \frac{27.0 \text{ Gals.}}{\text{Specified Volumes}} = \text{Calculated Volume}$	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <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> </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
1225	65.4	6.70	618	27	9.0	
1227	65.7	6.68	904	24	18.0	
		well dewatered @			20.0	
1420	64.8	6.69	758	29	Grab	

Did well dewater?  Yes    No      Gallons actually evacuated: 20.0

Sampling Date: 5/30/17      Sampling Time: 1420      Depth to Water: 7.98

Sample I.D.: NW-4      Laboratory: Test America    Other \_\_\_\_\_

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

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:	5.49 mg/L	Post-purge:	4.4 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV



## Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170530-GH1	Site: 970933a7
Sampler: DH	Date: 5/30/17
Well I.D.: MW-5	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth (TD): 14.91	Depth to Water (DTW): 7.33
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YSI)</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.85	

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

$8.2 \text{ (Gals.)} \times 3 = 24.6 \text{ Gals.}$ 1 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
1253	64.7	6.82	1263	76	8.5	atr
1255	64.9	6.80	1242	63	17.0	odr
1257	64.6	6.76	1251	54	25.0	odr

Did well dewater?    Yes    (No)      Gallons actually evacuated: 25.0

Sampling Date: 5/30/17      Sampling Time: 1305      Depth to Water: 7.47

Sample I.D.: MW-5      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:	4.23 <sup>mg/L</sup>	Post-purge:	0.78 <sup>mg/L</sup>
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV





## Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170530-GR1	Site: 97093397
Sampler: DH	Date: 5/30/17
Well I.D.: MW-8	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 19.55	Depth to Water (DTW): 7.52
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.77	

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

$\frac{8.0 \text{ (Gals.)} \times 3}{1 \text{ Case Volume Specified Volumes}} = \frac{24.0 \text{ Gals.}}{\text{Calculated Volume}}$	<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 $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1213	61.7	7.17	298	97	8.0	
1215	61.9	7.01	318	101	46.0	
1217	61.4	6.89	333	63	24.0	

Did well dewater? Yes  No      Gallons actually evacuated: 24.0

Sampling Date: 5/30/17      Sampling Time: 1220      Depth to Water: 7.98

Sample I.D.: MW-8      Laboratory: Test America      Other \_\_\_\_\_

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

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:	1.21 <sup>mg/L</sup>	Post-purge:	0.73 <sup>mg/L</sup>
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170530 - GR2	Site: 97093397
Sampler: GR	Date: 5/30/17
Well I.D.: MW-9	Well Diameter: 2 3 4 6 8 _____
Total Well Depth (TD):	Depth to Water (DTW):
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: <del>                     Bailer                      Disposable Bailer                      Positive Air Displacement                      Electric Submersible                 </del>	<del>                     Waterra                      Peristaltic                      Extraction Pump                      Other _____                 </del>	Sampling Methods: <del>                     Bailer                      Disposable Bailer                      Extraction Port                      Dedicated Tubing                      Other: _____                 </del>
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_____ (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. MAY BE BURIED DUE TO CONSTRUCTION.
	↳	NO	SAMPLE	TAKEN		

Did well dewater?	Yes	No	Gallons actually evacuated:
Sampling Date:	Sampling Time:	Depth to Water:	
Sample I.D.:	Laboratory: Test America	Other: _____	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:			
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):		
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:			
D.O. (if req'd): Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

# Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170530 - GR2	Site: 97093397
Sampler: GR	Date: 5/30/2017
Well I.D.: MW-10	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 19.99	Depth to Water (DTW): 8.16
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.53	

Purge Method: Bailer Disposable Bailer Positive Air Displacement <u>Electric Submersible</u>	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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$\frac{7.7 \text{ (Gals.)} \times 3}{1 \text{ Case Volume}} = 23.1 \text{ Gals.}$ 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 <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1435	66.8	6.89	1321	>1000	8.0	
1438	66.6	6.93	1304	>1000	16.0	
1441	66.5	6.92	1298	>1000	24.0	DTW - 9.15

Did well dewater? Yes No      Gallons actually evacuated: 24.0

Sampling Date: 5/30/17      Sampling Time: 1450      Depth to Water: 9.15

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

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

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):	<u>Pre-purge:</u> 0.33 mg/L	<u>Post-purge:</u> 0.26 mg/L	
O.R.P. (if req'd):	Pre-purge: mV	Post-purge: mV	

# Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: <u>170530-GR2</u>	Site: <u>9709 3397</u>
Sampler: <u>GR</u>	Date: <u>5/30/2017</u>
Well I.D.: <u>MW-11</u>	Well Diameter: 2 3 <u>4</u> 6 8 _____
Total Well Depth (TD): <u>19.65</u>	Depth to Water (DTW): <u>8.05</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>10.37</u>	

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

$\frac{7.5 \text{ (Gals.)} \times 3}{1 \text{ Case Volume}} = \frac{22.5 \text{ Gals.}}{\text{Specified Volumes}} = \text{Calculated Volume}$	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <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> </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 <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1459	65.1	7.01	1009	612	7.5	
1501	64.9	7.04	1027	499	15.0	
1504	64.8	7.03	1034	478	22.5	DTW - 9.78

Did well dewater? Yes No Gallons actually evacuated: 22.5

Sampling Date: 5/30/17 Sampling Time: 1510 Depth to Water: 9.78

Sample I.D.: MW-11 Laboratory: Test America Other \_\_\_\_\_

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

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): <u>Pre-purge</u>	0.29 <sup>mg/L</sup>	D.O. (if req'd): <u>Post-purge</u>	0.18 <sup>mg/L</sup>
O.R.P. (if req'd): Pre-purge:	mV	O.R.P. (if req'd): Post-purge:	mV

## Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170530-GR2	Site: 97093397
Sampler: GR	Date: 5/30/2017
Well I.D.: MW-12	Well Diameter: 2 3 4 6 8 _____
Total Well Depth (TD):	Depth to Water (DTW):
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
-	UNABLE TO ACCESS. GATES LOCKED. MAY BE PARKED OVER					
	↳	NO	SAMPLE TAKEN.			

Did well dewater? Yes No	Gallons actually evacuated:
Sampling Date:	Sampling Time: Depth to Water:
Sample I.D.:	Laboratory: Test America Other _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:	
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:	
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV



# Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170530 - GR2	Site: 97093397
Sampler: GR	Date: 5/30/2017
Well I.D.: MW-13	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 19.87	Depth to Water (DTW): 8.48
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVG</u> Grade	D.O. Meter (if req'd): <u>YST</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.76	

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

$\frac{1.8 \text{ (Gals.)} \times 3 \text{ Specified Volumes}}{1 \text{ Case Volume}} = 5.4 \text{ Gals. Calculated Volume}$	<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 <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1120	65.1	7.12	1598	71000	2.0	GREY/ODOR
1124	64.8	7.08	1626	70000	4.0	
1128	64.7	7.05	1633	70000	6.0	DTW - 8.99

Did well dewater? Yes  No  Gallons actually evacuated: 6.0

Sampling Date: 5/30/17      Sampling Time: 1130      Depth to Water: 8.99

Sample I.D.: MW-13      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):	<u>Pre-purge:</u> 0.34 mg/L	<u>Post-purge:</u> 0.28 mg/L	
O.R.P. (if req'd):	Pre-purge: _____ mV	Post-purge: <del>65</del> <u>62</u> mV	



# Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170520-GR1	Site: 9709337
Sampler: GR	Date: 5/30/17
Well I.D.: V-1	Well Diameter: ② 3 4 6 8 _____
Total Well Depth (TD): 13.11	Depth to Water (DTW): 6.91
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]: 8.15	

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

Other: \_\_\_\_\_

1.0 (Gals.) X 3 = 3.0 Gals.
1 Case Volume      Specified Volumes      Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1300	65.2	6.78	994	116	1.0	
1302	65.1	6.83	987	92	2.0	
1305	65.1	6.84	985	88	3.0	DTW - 7.26

Did well dewater? Yes No      Gallons actually evacuated: 3.0

Sampling Date: 5/30/17      Sampling Time: 1310      Depth to Water: 7.26

Sample I.D.: V-1      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): <u>Pre-purge</u>	1.26 mg/L	Post-purge	1.37 mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

# Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170530-GR2	Site: 97093397
Sampler: GR	Date: 5/30/17
Well I.D.: V-2	Well Diameter: 2) 3 4 6 8
Total Well Depth (TD): 13.29	Depth to Water (DTW): 6.19
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]: 7.61	

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

$1.2 \text{ (Gals.)} \times 3 = 3.6 \text{ Gals.}$ 1 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
1328	66.1	6.92	998	227	1.2	
1331	66.0	6.89	983	636	2.4	
1334	—	WELL	DEWATERED	0	3.0	
1405	65.9	6.88	989	58	GRAB	

Did well dewater? Yes No      Gallons actually evacuated: 3.0

Sampling Date: 5/30/17      Sampling Time: 1405      Depth to Water: 7.58

Sample I.D.: V-2      Laboratory: Test America Other \_\_\_\_\_

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

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): <u>Pre-purge</u> : 0.41 mg/L	Post-purge: 0.59 mg/L
O.R.P. (if req'd): Pre-purge: mV	Post-purge: mV



LAB (LOCATION)

- ACCUTEST ( )
- ALS SCIENCE ( )
- TEST AMERICA ( )
- Other ( )



Equilon Enterprises LLC dba Shell Oil Products US Chain Of Custody Record



Please Check Appropriate Box:

<input type="checkbox"/> BGW FDG	<input type="checkbox"/> PIPELINE	<input type="checkbox"/> RETAIL
<input type="checkbox"/> CHEMICALS	<input checked="" type="checkbox"/> CONSULTANT	<input type="checkbox"/> UBES
<input type="checkbox"/> TRANSPORTATION	<input type="checkbox"/> OTHER	

Print Bill To Contact Name: Shane Olton	Planef Site or Project ID: 27482	<input type="checkbox"/> CHECK IF NO INCIDENT # APPLIES DATE: 5/30/17 PAGE: 2 of 2
PO #	GSAP Project ID	
USPC/00227, USRT/01252		

SAMPLING COMPANY: Blaine Tech Services, Inc.  
 ADDRESS: 1680 Rogers Ave., San Jose, CA, 95112  
 PROJECT CONTACT (Hardcopy or PDF Report to): Bart Gebbie  
 TELEPHONE: 310-885-4455 Ext. 103 FAX: 310-637-5802  
 E-MAIL TO CONTACT: shane.olton@aecom.com

SITE ADDRESS: Street and City: 2703 Martin Luther King Jr. Way, Oakland CA  
 AECOM Project / Task Number: 60528876  
 E-MAIL: helen.hild@aecom.com, joshua.fox@aecom.com  
 AECOM Other ID: USF04645  
 SAMPLER NAME(S) (Print): GREG R., DAVID V.

TURNAROUND TIME (CALENDAR DAYS):  
 STANDARD (14 DAY)  7 DAYS  5 DAYS  4 HOURS  RESULTS NEEDED ON WEEKEND  
 LA - RWQCB REPORT FORMAT  JUST AGENCY:  
 DELIVERABLES:  LEVEL 1  LEVEL 2  LEVEL 3  LEVEL 4  OTHER (SPECIFY)  
 TEMPERATURE ON RECEIPT C°: Cooler #1, Cooler #2, Cooler #3  
 SPECIAL INSTRUCTIONS OR NOTES:  
 SHELL CONTRACT RATE APPLIES  
 STATE REIMBURSEMENT RATE APPLIES  
 LEAD NOT NEEDED  
 RECEIPT VERIFICATION REQUESTED  
 PROVIDE LEAD DISK  
 Email invoice to USAPimaging@aecom.com

UNIT COST	REQUESTED ANALYSIS		NON-UNIT COST	FIELD NOTES:
	TPH-GRO, Purgeable (8260B)	BTEX (8260B)		
				TEMPERATURE ON RECEIPT C°
				Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification		SAMPLING		MATRIX	PRESERVATIVE					NO. OF CONT.				
	DATE	TIME	DATE	TIME		HLL	HNO3	H2SO4	NONE	OTHER					
	V-2	5/30/17	1405	WG	X						3	X	X		

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	(SAMPLE CUSTODIAN)	5/30/17	1215
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

INCIDENT # 97093397

ADDRESS 2703 MARTIN LUTHER KING JR. WAY

DATE: 5/30/2017

CITY & STATE OAKLAND, 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															
MW-12	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N											
MW-13	Standpipe	Flush	G	P	10	Y	N	G	R	G	R	NL	G	P		Y	N											
MW-14	Standpipe	Flush	G	P	8	Y	N	G	R	G	R	NL	G	P		Y	N											
V-1	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N											
V-2	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											
	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						
		Y	N	N/A	Y	N	N/A	G	P	N/A	Y	N	Y	N	N/A					Y	N							

G = Good (Acceptable) R = Replaced  
P = Poor (needs attention) NL = No Lock Required

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

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

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

INCIDENT #

97093397

ADDRESS

2703 MARTIN LUTHER KING JR. WAY

DATE:

5/30/2017

CITY & STATE

OAKLAND, 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							
MW-1	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N			
MW-2	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N			
MW-3	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N			
MW-4	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N			
MW-5	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N			
MW-6	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N			
MW-7	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N			
MW-8	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N			
MW-9	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N			
MW-10	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N			
MW-11	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
	Y	N	N/A	Y	N	N/A	G	P	N/A	Y	N	Y	N	N/A				Y	N	

G = Good (Acceptable) R = Replaced  
P = Poor (needs attention) NL = No Lock Required

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

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

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


GREG ROBERTS (RTS)  
Print or type Name of Field Personnel & Consultant Company

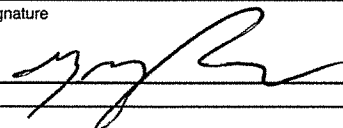


# NON-HAZARDOUS WASTE DATA FORM

BESI # \_\_\_\_\_

GENERATOR	Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)																		
	EQUILON ENTERPRISES, LLC C/O AECOM 300 S. GRAND AVE., 8TH FLOOR LOS ANGELES, CA 90071		EQUILON ENTERPRISES LLC USF04645 2703 MARTIN LUTHER KING JR WAY OAKLAND, CA 94612																		
	Generator's Phone: <u>213-503-8400</u>																				
	Container type removed from site:		Container type transported to receiving facility:																		
	<input type="checkbox"/> Drums <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input checked="" type="checkbox"/> Other <u>TANK TRUCK</u>		<input type="checkbox"/> Drums <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input type="checkbox"/> Other _____																		
Quantity <u>175.0 GAL</u>		Quantity _____ Volume _____																			
WASTE DESCRIPTION <u>NON-HAZARDOUS WATER</u>		GENERATING PROCESS <u>WELL PURGING / DECON WATER</u>																			
<table border="0" style="width:100%;"> <tr> <td style="width:30%;">COMPONENTS OF WASTE</td> <td style="width:10%;">PPM</td> <td style="width:10%;">%</td> <td style="width:30%;">COMPONENTS OF WASTE</td> <td style="width:10%;">PPM</td> <td style="width:10%;">%</td> </tr> <tr> <td>1. <u>WATER</u></td> <td></td> <td><u>99-100%</u></td> <td>3. _____</td> <td></td> <td></td> </tr> <tr> <td>2. <u>TPH</u></td> <td></td> <td><u>&lt;1%</u></td> <td>4. _____</td> <td></td> <td></td> </tr> </table>		COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%	1. <u>WATER</u>		<u>99-100%</u>	3. _____			2. <u>TPH</u>		<u>&lt;1%</u>	4. _____				
COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%																
1. <u>WATER</u>		<u>99-100%</u>	3. _____																		
2. <u>TPH</u>		<u>&lt;1%</u>	4. _____																		
Waste Profile _____		PROPERTIES: pH <u>7-10</u> <input type="checkbox"/> SOLID <input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> SLUDGE <input type="checkbox"/> SLURRY <input type="checkbox"/> OTHER _____																			
HANDLING INSTRUCTIONS: _____																					

Generator Printed/Typed Name <u>GREGORY ROBERTS</u>	Signature 	Month <u>5</u>	Day <u>30</u>	Year <u>17</u>
The Generator certifies that the waste as described is 100% non-hazardous				

TRANSPORTER	Transporter 1 Company Name <u>BLAINE TECH SERVICES, INC.</u>		Phone# <u>408-573-0555</u>	
	Transporter 1 Printed/Typed Name <u>GREGORY ROBERTS</u>		Signature 	
	Transporter 2 Company Name <u>NIETO &amp; SONS TRUCKING, INC.</u>		Phone# <u>714-990-8855</u>	
	Transporter 2 Printed/Typed Name		Signature	
Transporter Acknowledgment of Receipt of Materials				

RECEIVING FACILITY	Designated Facility Name and Site Address <u>CROSBY &amp; OVERTON 1630 W. 17TH STREET LONG BEACH, CA 90813</u>		Phone# <u>562-432-5445</u>	
	Printed/Typed Name		Signature	
	Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.			

## **Appendix B**

### **Analytical Report** (TestAmerica Laboratories, Inc.)

# 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: 440-185499-1

Client Project/Site: Shell - 2703 Martin Luther King Jr. Way,

For:

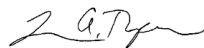
AECOM Technical Services Inc.

300 Lakeside Drive

Suite 400

Oakland, California 94612

Attn: Shane Olton



Authorized for release by:

6/7/2017 12:08:13 PM

Laura Turpen, Project Manager I

(916)374-4414

[laura.turpen@testamericainc.com](mailto:laura.turpen@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.*

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13



# Table of Contents

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QC Sample Results . . . . .	15
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# Sample Summary

Client: AECOM Technical Services Inc.  
Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-185499-1	MW-4	Water	05/30/17 14:20	06/01/17 11:43
440-185499-2	MW-5	Water	05/30/17 13:05	06/01/17 11:43
440-185499-3	MW-6	Water	05/30/17 14:35	06/01/17 11:43
440-185499-4	MW-7	Water	05/30/17 13:50	06/01/17 11:43
440-185499-5	MW-8	Water	05/30/17 12:20	06/01/17 11:43
440-185499-6	MW-10	Water	05/30/17 14:50	06/01/17 11:43
440-185499-7	MW-11	Water	05/30/17 15:10	06/01/17 11:43
440-185499-8	MW-13	Water	05/30/17 11:30	06/01/17 11:43
440-185499-9	MW-14	Water	05/30/17 11:55	06/01/17 11:43
440-185499-10	V-1	Water	05/30/17 13:10	06/01/17 11:43
440-185499-11	V-2	Water	05/30/17 14:05	06/01/17 11:43

# Case Narrative

Client: AECOM Technical Services Inc.  
Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

---

**Job ID: 440-185499-1**

---

**Laboratory: TestAmerica Irvine**

## Narrative

---

**Job Narrative  
440-185499-1**

## Comments

No additional comments.

## Receipt

The samples were received on 6/1/2017 11:43 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

## GC/MS VOA

Method(s) 8260B: The following sample was diluted due to the nature of the sample matrix: MW-13 (440-185499-8). Elevated reporting limits (RLs) are provided.

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

## VOA Prep

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

- 1
- 2
- 3
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- 10
- 11
- 12
- 13

# Client Sample Results

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

**Client Sample ID: MW-4**  
**Date Collected: 05/30/17 14:20**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-1**  
**Matrix: 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>11000</b>		1000		ug/L			06/05/17 09:49	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	107		76 - 132					06/05/17 09:49	20
4-Bromofluorobenzene (Surr)	102		80 - 120					06/05/17 09:49	20
Toluene-d8 (Surr)	107		80 - 128					06/05/17 09:49	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>2800</b>		10		ug/L			06/05/17 09:49	20
<b>Ethylbenzene</b>	<b>94</b>		10		ug/L			06/05/17 09:49	20
<b>m,p-Xylene</b>	<b>41</b>		20		ug/L			06/05/17 09:49	20
o-Xylene	ND		10		ug/L			06/05/17 09:49	20
<b>Toluene</b>	<b>150</b>		10		ug/L			06/05/17 09:49	20
<b>Xylenes, Total</b>	<b>41</b>		20		ug/L			06/05/17 09:49	20
<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)	102		80 - 120					06/05/17 09:49	20
Dibromofluoromethane (Surr)	107		76 - 132					06/05/17 09:49	20
Toluene-d8 (Surr)	107		80 - 128					06/05/17 09:49	20

**Client Sample ID: MW-5**  
**Date Collected: 05/30/17 13:05**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-2**  
**Matrix: 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>71000</b>		10000		ug/L			06/05/17 11:13	200
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	106		76 - 132					06/05/17 11:13	200
4-Bromofluorobenzene (Surr)	100		80 - 120					06/05/17 11:13	200
Toluene-d8 (Surr)	109		80 - 128					06/05/17 11:13	200

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>2500</b>		100		ug/L			06/05/17 11:13	200
<b>Ethylbenzene</b>	<b>5500</b>		100		ug/L			06/05/17 11:13	200
<b>m,p-Xylene</b>	<b>18000</b>		200		ug/L			06/05/17 11:13	200
o-Xylene	5800		100		ug/L			06/05/17 11:13	200
<b>Toluene</b>	<b>2500</b>		100		ug/L			06/05/17 11:13	200
<b>Xylenes, Total</b>	<b>24000</b>		200		ug/L			06/05/17 11:13	200
<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)	100		80 - 120					06/05/17 11:13	200
Dibromofluoromethane (Surr)	106		76 - 132					06/05/17 11:13	200
Toluene-d8 (Surr)	109		80 - 128					06/05/17 11:13	200

TestAmerica Irvine

# Client Sample Results

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

**Client Sample ID: MW-6**  
**Date Collected: 05/30/17 14:35**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/06/17 03:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	99		76 - 132					06/06/17 03:44	1
4-Bromofluorobenzene (Surr)	92		80 - 120					06/06/17 03:44	1
Toluene-d8 (Surr)	106		80 - 128					06/06/17 03:44	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			06/06/17 03:44	1
Ethylbenzene	ND		0.50		ug/L			06/06/17 03:44	1
m,p-Xylene	ND		1.0		ug/L			06/06/17 03:44	1
o-Xylene	ND		0.50		ug/L			06/06/17 03:44	1
Toluene	ND		0.50		ug/L			06/06/17 03:44	1
Xylenes, Total	ND		1.0		ug/L			06/06/17 03:44	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)	92		80 - 120					06/06/17 03:44	1
Dibromofluoromethane (Surr)	99		76 - 132					06/06/17 03:44	1
Toluene-d8 (Surr)	106		80 - 128					06/06/17 03:44	1

**Client Sample ID: MW-7**  
**Date Collected: 05/30/17 13:50**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-4**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	55		50		ug/L			06/06/17 04:14	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	102		76 - 132					06/06/17 04:14	1
4-Bromofluorobenzene (Surr)	92		80 - 120					06/06/17 04:14	1
Toluene-d8 (Surr)	105		80 - 128					06/06/17 04:14	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			06/06/17 04:14	1
Ethylbenzene	ND		0.50		ug/L			06/06/17 04:14	1
m,p-Xylene	ND		1.0		ug/L			06/06/17 04:14	1
o-Xylene	ND		0.50		ug/L			06/06/17 04:14	1
Toluene	ND		0.50		ug/L			06/06/17 04:14	1
Xylenes, Total	ND		1.0		ug/L			06/06/17 04:14	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)	92		80 - 120					06/06/17 04:14	1
Dibromofluoromethane (Surr)	102		76 - 132					06/06/17 04:14	1
Toluene-d8 (Surr)	105		80 - 128					06/06/17 04:14	1

TestAmerica Irvine



# Client Sample Results

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

**Client Sample ID: MW-8**  
**Date Collected: 05/30/17 12:20**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-5**  
**Matrix: 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>470</b>		50		ug/L			06/06/17 04:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	99		76 - 132					06/06/17 04:44	1
4-Bromofluorobenzene (Surr)	90		80 - 120					06/06/17 04:44	1
Toluene-d8 (Surr)	105		80 - 128					06/06/17 04:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>60</b>		0.50		ug/L			06/06/17 04:44	1
<b>Ethylbenzene</b>	<b>1.3</b>		0.50		ug/L			06/06/17 04:44	1
<b>m,p-Xylene</b>	<b>9.0</b>		1.0		ug/L			06/06/17 04:44	1
<b>o-Xylene</b>	<b>3.5</b>		0.50		ug/L			06/06/17 04:44	1
<b>Toluene</b>	<b>0.74</b>		0.50		ug/L			06/06/17 04:44	1
<b>Xylenes, Total</b>	<b>13</b>		1.0		ug/L			06/06/17 04:44	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)	90		80 - 120					06/06/17 04:44	1
Dibromofluoromethane (Surr)	99		76 - 132					06/06/17 04:44	1
Toluene-d8 (Surr)	105		80 - 128					06/06/17 04:44	1

**Client Sample ID: MW-10**  
**Date Collected: 05/30/17 14:50**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-6**  
**Matrix: 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>82</b>		50		ug/L			06/05/17 13:06	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	108		76 - 132					06/05/17 13:06	1
4-Bromofluorobenzene (Surr)	98		80 - 120					06/05/17 13:06	1
Toluene-d8 (Surr)	106		80 - 128					06/05/17 13:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>ND</b>		0.50		ug/L			06/05/17 13:06	1
<b>Ethylbenzene</b>	<b>ND</b>		0.50		ug/L			06/05/17 13:06	1
<b>m,p-Xylene</b>	<b>ND</b>		1.0		ug/L			06/05/17 13:06	1
<b>o-Xylene</b>	<b>ND</b>		0.50		ug/L			06/05/17 13:06	1
<b>Toluene</b>	<b>ND</b>		0.50		ug/L			06/05/17 13:06	1
<b>Xylenes, Total</b>	<b>ND</b>		1.0		ug/L			06/05/17 13:06	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)	98		80 - 120					06/05/17 13:06	1
Dibromofluoromethane (Surr)	108		76 - 132					06/05/17 13:06	1
Toluene-d8 (Surr)	106		80 - 128					06/05/17 13:06	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM Technical Services Inc.  
Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

**Client Sample ID: MW-11**

**Date Collected: 05/30/17 15:10**

**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-7**

**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/05/17 13:34	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	107		76 - 132					06/05/17 13:34	1
4-Bromofluorobenzene (Surr)	99		80 - 120					06/05/17 13:34	1
Toluene-d8 (Surr)	111		80 - 128					06/05/17 13:34	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			06/05/17 13:34	1
Ethylbenzene	ND		0.50		ug/L			06/05/17 13:34	1
m,p-Xylene	ND		1.0		ug/L			06/05/17 13:34	1
o-Xylene	ND		0.50		ug/L			06/05/17 13:34	1
Toluene	ND		0.50		ug/L			06/05/17 13:34	1
Xylenes, Total	ND		1.0		ug/L			06/05/17 13:34	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)	99		80 - 120					06/05/17 13:34	1
Dibromofluoromethane (Surr)	107		76 - 132					06/05/17 13:34	1
Toluene-d8 (Surr)	111		80 - 128					06/05/17 13:34	1

**Client Sample ID: MW-13**

**Date Collected: 05/30/17 11:30**

**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-8**

**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	1700		250		ug/L			06/05/17 14:02	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	107		76 - 132					06/05/17 14:02	5
4-Bromofluorobenzene (Surr)	102		80 - 120					06/05/17 14:02	5
Toluene-d8 (Surr)	107		80 - 128					06/05/17 14:02	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	26		2.5		ug/L			06/05/17 14:02	5
Ethylbenzene	ND		2.5		ug/L			06/05/17 14:02	5
m,p-Xylene	ND		5.0		ug/L			06/05/17 14:02	5
o-Xylene	ND		2.5		ug/L			06/05/17 14:02	5
Toluene	ND		2.5		ug/L			06/05/17 14:02	5
Xylenes, Total	ND		5.0		ug/L			06/05/17 14:02	5
<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)	102		80 - 120					06/05/17 14:02	5
Dibromofluoromethane (Surr)	107		76 - 132					06/05/17 14:02	5
Toluene-d8 (Surr)	107		80 - 128					06/05/17 14:02	5

TestAmerica Irvine

# Client Sample Results

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

**Client Sample ID: MW-14**  
**Date Collected: 05/30/17 11:55**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-9**  
**Matrix: 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>2400</b>		50		ug/L			06/06/17 05:13	1
<b>Surrogate</b>									
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	101		76 - 132					06/06/17 05:13	1
4-Bromofluorobenzene (Surr)	96		80 - 120					06/06/17 05:13	1
Toluene-d8 (Surr)	111		80 - 128					06/06/17 05:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>1.9</b>		0.50		ug/L			06/06/17 05:13	1
<b>Ethylbenzene</b>	<b>1.1</b>		0.50		ug/L			06/06/17 05:13	1
m,p-Xylene	ND		1.0		ug/L			06/06/17 05:13	1
o-Xylene	ND		0.50		ug/L			06/06/17 05:13	1
Toluene	ND		0.50		ug/L			06/06/17 05:13	1
Xylenes, Total	ND		1.0		ug/L			06/06/17 05:13	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)	96		80 - 120					06/06/17 05:13	1
Dibromofluoromethane (Surr)	101		76 - 132					06/06/17 05:13	1
Toluene-d8 (Surr)	111		80 - 128					06/06/17 05:13	1

**Client Sample ID: V-1**

**Date Collected: 05/30/17 13:10**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-10**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/05/17 14:58	1
<b>Surrogate</b>									
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	103		76 - 132					06/05/17 14:58	1
4-Bromofluorobenzene (Surr)	101		80 - 120					06/05/17 14:58	1
Toluene-d8 (Surr)	107		80 - 128					06/05/17 14:58	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			06/05/17 14:58	1
Ethylbenzene	ND		0.50		ug/L			06/05/17 14:58	1
m,p-Xylene	ND		1.0		ug/L			06/05/17 14:58	1
o-Xylene	ND		0.50		ug/L			06/05/17 14:58	1
Toluene	ND		0.50		ug/L			06/05/17 14:58	1
Xylenes, Total	ND		1.0		ug/L			06/05/17 14:58	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)	101		80 - 120					06/05/17 14:58	1
Dibromofluoromethane (Surr)	103		76 - 132					06/05/17 14:58	1
Toluene-d8 (Surr)	107		80 - 128					06/05/17 14:58	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

**Client Sample ID: V-2**

**Lab Sample ID: 440-185499-11**

**Date Collected: 05/30/17 14:05**

**Matrix: Water**

**Date Received: 06/01/17 11:43**

**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>20000</b>		2000		ug/L			06/06/17 12:13	40
<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>	108		76 - 132					06/06/17 12:13	40
<i>4-Bromofluorobenzene (Surr)</i>	96		80 - 120					06/06/17 12:13	40
<i>Toluene-d8 (Surr)</i>	104		80 - 128					06/06/17 12:13	40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>170</b>		20		ug/L			06/06/17 12:13	40
<b>Ethylbenzene</b>	<b>2200</b>		20		ug/L			06/06/17 12:13	40
<b>m,p-Xylene</b>	<b>880</b>		40		ug/L			06/06/17 12:13	40
<b>o-Xylene</b>	<b>61</b>		20		ug/L			06/06/17 12:13	40
<b>Toluene</b>	<b>50</b>		20		ug/L			06/06/17 12:13	40
<b>Xylenes, Total</b>	<b>940</b>		40		ug/L			06/06/17 12:13	40
<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>	96		80 - 120					06/06/17 12:13	40
<i>Dibromofluoromethane (Surr)</i>	108		76 - 132					06/06/17 12:13	40
<i>Toluene-d8 (Surr)</i>	104		80 - 128					06/06/17 12:13	40

# Method Summary

Client: AECOM Technical Services Inc.  
Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

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

**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: AECOM Technical Services Inc.  
Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

**Client Sample ID: MW-4**  
**Date Collected: 05/30/17 14:20**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-1**  
**Matrix: 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		20	10 mL	10 mL	409956	06/05/17 09:49	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		20	10 mL	10 mL	409955	06/05/17 09:49	HR	TAL IRV

**Client Sample ID: MW-5**  
**Date Collected: 05/30/17 13:05**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-2**  
**Matrix: 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		200	10 mL	10 mL	409956	06/05/17 11:13	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		200	10 mL	10 mL	409955	06/05/17 11:13	HR	TAL IRV

**Client Sample ID: MW-6**  
**Date Collected: 05/30/17 14:35**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-3**  
**Matrix: 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	410111	06/06/17 03:44	K1S	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		1	10 mL	10 mL	410110	06/06/17 03:44	K1S	TAL IRV

**Client Sample ID: MW-7**  
**Date Collected: 05/30/17 13:50**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-4**  
**Matrix: 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	410111	06/06/17 04:14	K1S	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		1	10 mL	10 mL	410110	06/06/17 04:14	K1S	TAL IRV

**Client Sample ID: MW-8**  
**Date Collected: 05/30/17 12:20**  
**Date Received: 06/01/17 11:43**

**Lab Sample ID: 440-185499-5**  
**Matrix: 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	410111	06/06/17 04:44	K1S	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		1	10 mL	10 mL	410110	06/06/17 04:44	K1S	TAL IRV

# Lab Chronicle

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

**Client Sample ID: MW-10**

**Lab Sample ID: 440-185499-6**

**Date Collected: 05/30/17 14:50**

**Matrix: Water**

**Date Received: 06/01/17 11:43**

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	409956	06/05/17 13:06	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	409955	06/05/17 13:06	HR	TAL IRV

**Client Sample ID: MW-11**

**Lab Sample ID: 440-185499-7**

**Date Collected: 05/30/17 15:10**

**Matrix: Water**

**Date Received: 06/01/17 11:43**

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	409956	06/05/17 13:34	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	409955	06/05/17 13:34	HR	TAL IRV

**Client Sample ID: MW-13**

**Lab Sample ID: 440-185499-8**

**Date Collected: 05/30/17 11:30**

**Matrix: Water**

**Date Received: 06/01/17 11:43**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	10 mL	10 mL	409956	06/05/17 14:02	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		5	10 mL	10 mL	409955	06/05/17 14:02	HR	TAL IRV

**Client Sample ID: MW-14**

**Lab Sample ID: 440-185499-9**

**Date Collected: 05/30/17 11:55**

**Matrix: Water**

**Date Received: 06/01/17 11:43**

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	410111	06/06/17 05:13	K1S	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	410110	06/06/17 05:13	K1S	TAL IRV

**Client Sample ID: V-1**

**Lab Sample ID: 440-185499-10**

**Date Collected: 05/30/17 13:10**

**Matrix: Water**

**Date Received: 06/01/17 11:43**

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	409956	06/05/17 14:58	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	409955	06/05/17 14:58	HR	TAL IRV

TestAmerica Irvine

# Lab Chronicle

Client: AECOM Technical Services Inc.  
Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

**Client Sample ID: V-2**

**Lab Sample ID: 440-185499-11**

**Date Collected: 05/30/17 14:05**

**Matrix: Water**

**Date Received: 06/01/17 11:43**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		40	10 mL	10 mL	410226	06/06/17 12:13	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTM S		40	10 mL	10 mL	410227	06/06/17 12:13	RM	TAL IRV

**Laboratory References:**

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

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# QC Sample Results

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

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

**Lab Sample ID: MB 440-409956/4**  
**Matrix: Water**  
**Analysis Batch: 409956**

**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			06/05/17 08:24	1
Ethylbenzene	ND		0.50		ug/L			06/05/17 08:24	1
m,p-Xylene	ND		1.0		ug/L			06/05/17 08:24	1
o-Xylene	ND		0.50		ug/L			06/05/17 08:24	1
Toluene	ND		0.50		ug/L			06/05/17 08:24	1
Xylenes, Total	ND		1.0		ug/L			06/05/17 08:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		06/05/17 08:24	1
Dibromofluoromethane (Surr)	102		76 - 132		06/05/17 08:24	1
Toluene-d8 (Surr)	111		80 - 128		06/05/17 08:24	1

**Lab Sample ID: LCS 440-409956/5**  
**Matrix: Water**  
**Analysis Batch: 409956**

**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	27.7		ug/L		111	68 - 130
Ethylbenzene	25.0	27.4		ug/L		109	70 - 130
m,p-Xylene	25.0	28.0		ug/L		112	70 - 130
o-Xylene	25.0	27.5		ug/L		110	70 - 130
Toluene	25.0	28.4		ug/L		114	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	104		76 - 132
Toluene-d8 (Surr)	105		80 - 128

**Lab Sample ID: 440-185499-1 MS**  
**Matrix: Water**  
**Analysis Batch: 409956**

**Client Sample ID: MW-4**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2800		500	3080	4	ug/L		55	66 - 130
Ethylbenzene	94		500	641		ug/L		110	70 - 130
m,p-Xylene	41		500	586		ug/L		109	70 - 133
o-Xylene	ND		500	561		ug/L		110	70 - 133
Toluene	150		500	691		ug/L		108	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	108		76 - 132
Toluene-d8 (Surr)	104		80 - 128

# QC Sample Results

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

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

**Lab Sample ID: 440-185499-1 MSD**

**Matrix: Water**

**Analysis Batch: 409956**

**Client Sample ID: MW-4**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	2800		500	2820	4	ug/L		3	66 - 130	9	20
Ethylbenzene	94		500	609		ug/L		103	70 - 130	5	20
m,p-Xylene	41		500	553		ug/L		102	70 - 133	6	25
o-Xylene	ND		500	529		ug/L		104	70 - 133	6	20
Toluene	150		500	666		ug/L		103	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	103		76 - 132
Toluene-d8 (Surr)	108		80 - 128

**Lab Sample ID: MB 440-410111/4**

**Matrix: Water**

**Analysis Batch: 410111**

**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			06/05/17 19:51	1
Ethylbenzene	ND		0.50		ug/L			06/05/17 19:51	1
m,p-Xylene	ND		1.0		ug/L			06/05/17 19:51	1
o-Xylene	ND		0.50		ug/L			06/05/17 19:51	1
Toluene	ND		0.50		ug/L			06/05/17 19:51	1
Xylenes, Total	ND		1.0		ug/L			06/05/17 19:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		80 - 120		06/05/17 19:51	1
Dibromofluoromethane (Surr)	99		76 - 132		06/05/17 19:51	1
Toluene-d8 (Surr)	108		80 - 128		06/05/17 19:51	1

**Lab Sample ID: LCS 440-410111/5**

**Matrix: Water**

**Analysis Batch: 410111**

**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	25.5		ug/L		102	68 - 130
Ethylbenzene	25.0	26.0		ug/L		104	70 - 130
m,p-Xylene	25.0	26.7		ug/L		107	70 - 130
o-Xylene	25.0	26.6		ug/L		106	70 - 130
Toluene	25.0	26.6		ug/L		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		80 - 120
Dibromofluoromethane (Surr)	96		76 - 132
Toluene-d8 (Surr)	104		80 - 128

TestAmerica Irvine

# QC Sample Results

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

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

**Lab Sample ID: MB 440-410226/4**  
**Matrix: Water**  
**Analysis Batch: 410226**

**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			06/06/17 08:21	1
Ethylbenzene	ND		0.50		ug/L			06/06/17 08:21	1
m,p-Xylene	ND		1.0		ug/L			06/06/17 08:21	1
o-Xylene	ND		0.50		ug/L			06/06/17 08:21	1
Toluene	ND		0.50		ug/L			06/06/17 08:21	1
Xylenes, Total	ND		1.0		ug/L			06/06/17 08:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		06/06/17 08:21	1
Dibromofluoromethane (Surr)	116		76 - 132		06/06/17 08:21	1
Toluene-d8 (Surr)	107		80 - 128		06/06/17 08:21	1

**Lab Sample ID: LCS 440-410226/5**  
**Matrix: Water**  
**Analysis Batch: 410226**

**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	26.3		ug/L		105	68 - 130
Ethylbenzene	25.0	26.2		ug/L		105	70 - 130
m,p-Xylene	25.0	27.6		ug/L		110	70 - 130
o-Xylene	25.0	28.5		ug/L		114	70 - 130
Toluene	25.0	25.6		ug/L		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		80 - 120
Dibromofluoromethane (Surr)	110		76 - 132
Toluene-d8 (Surr)	102		80 - 128

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

**Lab Sample ID: MB 440-409955/4**  
**Matrix: Water**  
**Analysis Batch: 409955**

**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			06/05/17 08:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		76 - 132		06/05/17 08:24	1
4-Bromofluorobenzene (Surr)	101		80 - 120		06/05/17 08:24	1
Toluene-d8 (Surr)	111		80 - 128		06/05/17 08:24	1

# QC Sample Results

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

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

**Lab Sample ID: LCS 440-409955/6**

**Matrix: Water**

**Analysis Batch: 409955**

**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	467		ug/L		93	55 - 130
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Dibromofluoromethane (Surr)	103		76 - 132				
4-Bromofluorobenzene (Surr)	98		80 - 120				
Toluene-d8 (Surr)	111		80 - 128				

**Lab Sample ID: 440-185499-1 MS**

**Matrix: Water**

**Analysis Batch: 409955**

**Client Sample ID: MW-4**

**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)	11000		34500	42900		ug/L		91	50 - 145
<b>Surrogate</b>	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
Dibromofluoromethane (Surr)	108		76 - 132						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Toluene-d8 (Surr)	104		80 - 128						

**Lab Sample ID: 440-185499-1 MSD**

**Matrix: Water**

**Analysis Batch: 409955**

**Client Sample ID: MW-4**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Volatile Fuel Hydrocarbons (C4-C12)	11000		34500	37600		ug/L		76	50 - 145	13	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
Dibromofluoromethane (Surr)	103		76 - 132								
4-Bromofluorobenzene (Surr)	99		80 - 120								
Toluene-d8 (Surr)	108		80 - 128								

**Lab Sample ID: MB 440-410110/4**

**Matrix: Water**

**Analysis Batch: 410110**

**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			06/05/17 19:51	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)	99		76 - 132					06/05/17 19:51	1
4-Bromofluorobenzene (Surr)	91		80 - 120					06/05/17 19:51	1
Toluene-d8 (Surr)	108		80 - 128					06/05/17 19:51	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

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

**Lab Sample ID: LCS 440-410110/6**

**Matrix: Water**

**Analysis Batch: 410110**

**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	461		ug/L		92	55 - 130
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Dibromofluoromethane (Surr)	96		76 - 132				
4-Bromofluorobenzene (Surr)	92		80 - 120				
Toluene-d8 (Surr)	107		80 - 128				

**Lab Sample ID: MB 440-410227/4**

**Matrix: Water**

**Analysis Batch: 410227**

**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			06/06/17 08:21	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)	116		76 - 132					06/06/17 08:21	1
4-Bromofluorobenzene (Surr)	97		80 - 120					06/06/17 08:21	1
Toluene-d8 (Surr)	107		80 - 128					06/06/17 08:21	1

**Lab Sample ID: LCS 440-410227/6**

**Matrix: Water**

**Analysis Batch: 410227**

**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	486		ug/L		97	55 - 130
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Dibromofluoromethane (Surr)	110		76 - 132				
4-Bromofluorobenzene (Surr)	96		80 - 120				
Toluene-d8 (Surr)	105		80 - 128				

# QC Association Summary

Client: AECOM Technical Services Inc.  
 Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

## GC/MS VOA

### Analysis Batch: 409955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-185499-1	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
440-185499-2	MW-5	Total/NA	Water	8260B/CA_LUFT MS	
440-185499-6	MW-10	Total/NA	Water	8260B/CA_LUFT MS	
440-185499-7	MW-11	Total/NA	Water	8260B/CA_LUFT MS	
440-185499-8	MW-13	Total/NA	Water	8260B/CA_LUFT MS	
440-185499-10	V-1	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-409955/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-409955/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
440-185499-1 MS	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
440-185499-1 MSD	MW-4	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 409956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-185499-1	MW-4	Total/NA	Water	8260B	
440-185499-2	MW-5	Total/NA	Water	8260B	
440-185499-6	MW-10	Total/NA	Water	8260B	
440-185499-7	MW-11	Total/NA	Water	8260B	
440-185499-8	MW-13	Total/NA	Water	8260B	
440-185499-10	V-1	Total/NA	Water	8260B	
MB 440-409956/4	Method Blank	Total/NA	Water	8260B	
LCS 440-409956/5	Lab Control Sample	Total/NA	Water	8260B	
440-185499-1 MS	MW-4	Total/NA	Water	8260B	
440-185499-1 MSD	MW-4	Total/NA	Water	8260B	

### Analysis Batch: 410110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-185499-3	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
440-185499-4	MW-7	Total/NA	Water	8260B/CA_LUFT MS	
440-185499-5	MW-8	Total/NA	Water	8260B/CA_LUFT MS	
440-185499-9	MW-14	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-410110/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-410110/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 410111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-185499-3	MW-6	Total/NA	Water	8260B	
440-185499-4	MW-7	Total/NA	Water	8260B	
440-185499-5	MW-8	Total/NA	Water	8260B	
440-185499-9	MW-14	Total/NA	Water	8260B	

TestAmerica Irvine

# QC Association Summary

Client: AECOM Technical Services Inc.  
Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

## GC/MS VOA (Continued)

### Analysis Batch: 410111 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-410111/4	Method Blank	Total/NA	Water	8260B	
LCS 440-410111/5	Lab Control Sample	Total/NA	Water	8260B	

### Analysis Batch: 410226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-185499-11	V-2	Total/NA	Water	8260B	
MB 440-410226/4	Method Blank	Total/NA	Water	8260B	
LCS 440-410226/5	Lab Control Sample	Total/NA	Water	8260B	

### Analysis Batch: 410227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-185499-11	V-2	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-410227/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-410227/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	

# Definitions/Glossary

Client: AECOM Technical Services Inc.  
Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)



# Accreditation/Certification Summary

Client: AECOM Technical Services Inc.  
Project/Site: Shell - 2703 Martin Luther King Jr. Way,

TestAmerica Job ID: 440-185499-1

## Laboratory: TestAmerica Irvine

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	CA01531	06-30-17 *
Arizona	State Program	9	AZ0671	10-14-17
California	LA Cty Sanitation Districts	9	10256	06-30-18
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 17-003R	01-23-18
Hawaii	State Program	9	N/A	01-29-18
Kansas	NELAP Secondary AB	7	E-10420	07-31-17
Nevada	State Program	9	CA015312017-1	07-31-17
New Mexico	State Program	6	N/A	01-29-17 *
Northern Mariana Islands	State Program	9	MP0002	01-29-17 *
Oregon	NELAP	10	4028	01-29-18
USDA	Federal		P330-15-00184	07-08-18
Washington	State Program	10	C900	09-03-17

## Laboratory: TestAmerica Pleasanton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-18

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.



LAB (LOCATION)

- ACCUTEST (\_\_\_\_\_)
- CALSCIENCE (\_\_\_\_\_)
- TESTAMERICA (\_\_\_\_\_)
- Other (\_\_\_\_\_)

Lab Vendor # 1364589 (TestAmerica)



Equilon Enterprises LLC dba Shell Oil Products US Chain Of Custody Record



Please Check Appropriate Box:

<input type="checkbox"/> BGV FDG	<input type="checkbox"/> PIPELINE	<input type="checkbox"/> RETAIL
<input type="checkbox"/> CHEMICALS	<input checked="" type="checkbox"/> CONSULTANT	<input type="checkbox"/> LUBES
<input type="checkbox"/> TRANSPORTATION	<input type="checkbox"/> OTHER _____	

Print Bill To Contact Name:

Shane Olton

PO # \_\_\_\_\_

Planet Site or Project ID:

27482

GSAP Project ID \_\_\_\_\_

USPC/00227, USRT/01252

CHECK IF NO INCIDENT # APPLIES

DATE: 5/30/17

PAGE: 2 of 2

SAMPLING COMPANY: Blaine Tech Services, Inc. (LOG CODE) BTSS

ADDRESS: 1680 Rogers Ave., San Jose, CA, 95112

PROJECT CONTACT (Hardcopy or PDF Report to): Bart Gebbie

TELEPHONE: 310-885-4455 Ext. 103 FAX: 310-637-5802

EMAIL: shane.olton@aecom.com

TURNAROUND TIME (CALENDAR DAYS):  STANDARD (14 DAY)  3 DAYS  5 DAYS  7 DAYS  14 HOURS  RESULTS NEEDED ON WEEKEND

IA - RWQCB REPORT FORMAT  JUST AGENCY:

DELIVERABLES:  LEVEL 1  LEVEL 2  LEVEL 3  LEVEL 4  OTHER (SPECIFY) \_\_\_\_\_

TEMPERATURE ON RECEIPT C° Cooler #1 \_\_\_\_\_ Cooler #2 \_\_\_\_\_ Cooler #3 \_\_\_\_\_

SPECIAL INSTRUCTIONS OR NOTES:

SHELL CONTRACT RATE APPLIES

STATE REIMBURSEMENT RATE APPLIES

LEDD NOT NEEDED

RECEIPT VERIFICATION REQUESTED

PROVIDE LEDD DISK

Email invoice to USAPimaging@aecom.com

SITE ADDRESS: Street and City State AECOM Project / Task Number:

2703 Martin Luther King Jr. Way, Oakland CA 60528676

EDF DELIVERABLE TO (Name, Company, Office Location) PHONE NO E-MAIL AECOM Other ID

Helen Hild/Josh Fox, AECOM, Oakland, CA 510-893-3600 helen.hild@aecom.com USF04645

joshua.fox@aecom.com

SAMPLER NAME(S) (Print) LAB USE ONLY

GREG R., DAVID V.

REQUESTED ANALYSIS

UNIT COST	NON-UNIT COST
TPH-GRC, Purgeable (8260B)	
BTEX (8260B)	
5 OXY (8260B)	

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification		SAMPLING		MATRIX	PRESERVATIVE					NO. OF CONT.
	DATE	TIME	H.L.	HNO3		H2SO4	NONE	OTHER			
	V-2	5/30/17	1405	WG		X					

Relinquished by: (Signature)	Received by: (Signature)  (SAMPLE CUSTODIAN)	Date: 5/30/17	Time: 12:15
Relinquished by: (Signature)  (SC)	Received by: (Signature)	Date: 5/30/17	Time: 10:00
Relinquished by: (Signature)	Received by: (Signature)	Date: 5/31/17	Time: 14:50

John Muelke 5-31-17 1600 Magyatta Lab A25 IR 602.4/2.22.

Version: 14Dec15



## Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 440-185499-1

**Login Number: 185499**

**List Number: 1**

**Creator: Skinner, Alma D**

**List Source: TestAmerica Irvine**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

