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By Alameda County Environmental Health 8:19 am, Mar 16, 2017



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Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Re: Former Chevron Service Station No. 90121  
3026 Lakeshore Avenue  
Oakland, California  
Fuel Leak Case RO0000284

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached *First Quarter 2017 Groundwater Monitoring and Sampling Report* submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

Sincerely,

A handwritten signature in cursive script that reads "Carryl MacLeod".

Carryl MacLeod  
Project Manager

Attachment: *First Quarter 2017 Groundwater Monitoring and Sampling Report*



March 15, 2017

Reference No. 311973

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

**Re: First Semi-Annual 2017 Groundwater Monitoring and Sampling Report  
Former Chevron Service Station 90121  
3026 Lakeshore Avenue  
Oakland, California  
Fuel Leak Case RO0000284**

Dear Mr. Detterman:

GHD is submitting this *First Semi-Annual 2017 Groundwater Monitoring and Sampling Report* for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company (Chevron). Groundwater monitoring and sampling was performed by Blaine Tech Services (Blaine Tech) of San Jose, California. Blaine Tech's MW-10 *Well Development Data Sheet, Fourth Quarter 2016 Monitoring and First Quarter 2017 Monitoring* data packages are included as Attachment A. Current and historical groundwater monitoring and sampling data are presented in Table 1 and current data are shown on Figure 2. Eurofins Lancaster Laboratory Environmental, LLCs of Lancaster, Pennsylvania *Analytical Results* reports are included as Attachment B.

## 1. Well Development and Sampling Event - MW-10

On December 5, 2016, Blaine Tech developed new well MW-10 using a peristaltic pump, and on December 16, 2016 sampled well MW-10. No hydrocarbons were detected.

## 2. Results of First Semi-Annual 2017 Event

On January 13, 2017, Blaine Tech monitored and sampled all site wells per the established schedule.

Results of the current monitoring event indicate the following:

- General Groundwater Flow Direction                      Variable onsite; Southwest offsite
- Hydraulic Gradient    0.03
- Approximate Depth to Water                                2 to 11 feet below grade



Results of the January 13, 2017 sampling event are presented below in Table 1.1.

**Table 1.1: First Quarter 2017 Petroleum Hydrocarbon Concentrations**

Well ID	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
<b>WQO</b>	<b>100</b>	<b>100</b>	<b>1</b>	<b>40</b>	<b>13</b>	<b>20</b>	<b>5</b>
MW-1	310	<100	<1	<1	<1	<1	4
MW-2A	120	480	11	<1	0.6 J	1	39
MW-3A	<100	<100	<1	<1	<1	<1	<1
MW-4A	<100	<100	<1	<1	<1	<1	<1
MW-5	<100	<100	<1	<1	<1	<1	<1
MW-6	97 J	150	<10	<10	<10	<10	<10
MW-8	120	<100	<1	<1	<1	<1	<1
MW-9	390	<100	<1	<1	<1	<1	<1
MW-10	69 J	<100	<1	<1	<1	<1	<1
Sump	<100	680	<1	<1	<1	<1	3

**Notes:**

- µg/L micrograms per liter
- WQO Water Quality Objective – San Francisco Regional Water Quality Control Board Environmental Screening Level for drinking water
- J Estimated value the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ)
- TPHd Total petroleum hydrocarbons as diesel using silica gel cleanup
- TPHg Total petroleum hydrocarbons as gasoline
- MTBE Methyl tertiary butyl ether
- <x Indicates constituent was not detected at or above the laboratory reporting limit

### 3. Conclusions and Recommendations

The results of ongoing groundwater monitoring and sampling at the site indicate the following:

- Dissolved total petroleum hydrocarbons as diesel (TPHd) and gasoline (TPHg) have decreased to concentrations near or below the laboratory reporting limits and/or water quality objectives (WQOs). A trend graph for source area well MW-2A is included as Attachment C.



- Dissolved benzene is limited to source area well MW-2A; toluene, ethylbenzene, and xylenes are below laboratory reporting limits and/or WQO.
- Dissolved methyl tertiary butyl ether (MTBE) concentrations are detected above laboratory reporting limits and/or WQOs only in well MW-2A.
- The dissolved hydrocarbon plume is defined downgradient to the southwest by well MW-10, to the south by MW-5, to the southeast by MW-3A, and upgradient to the northeast by MW-4A.

#### 4. Anticipated Future Activities

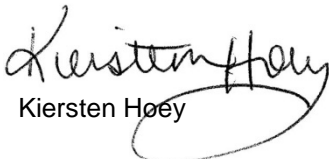
##### **Groundwater Monitoring**

Blaine Tech will monitor and sample new well MW-10 during the second quarter 2017 and all site wells during the third quarter 2017 per the established schedule. GHD will submit a groundwater monitoring and sampling report after the third quarter 2017 event.

Please contact Chevron Project Manager, Carryl MacLeod at (925) 842-3201 or GHD Project Manager, Kiersten Hoey at (510) 510-3347 if you have any questions or require additional information.

Sincerely,

GHD

  
Kiersten Hoey

KH/cw/32  
Encl.

  
Greg Barclay, PG 6260

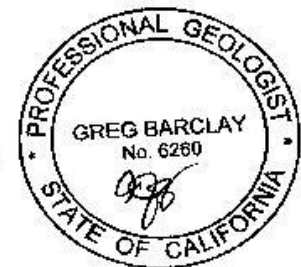
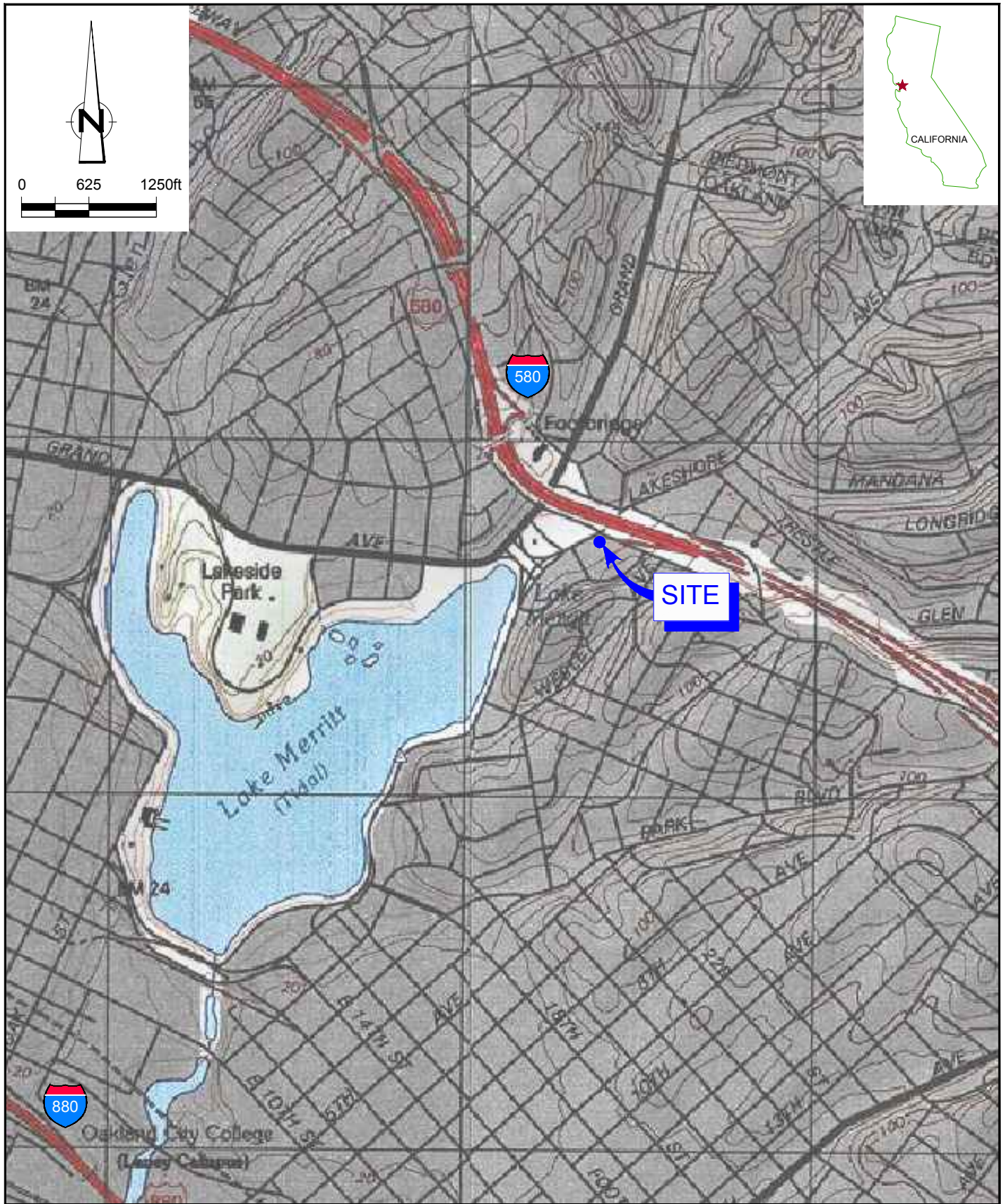


Figure 1	Vicinity Map
Figure 2	Groundwater Elevation and Hydrocarbon Concentration Map
Table 1	Groundwater Monitoring and Sampling Data
Attachment A	Monitoring Data Packages
Attachment B	Laboratory Analytical Reports
Attachment C	Trend Graph

cc: Carryl MacLeod, Chevron (*electronic copy*)  
Diocese of Oakland  
Michael E. Delehunt Foley & Lardner LLP  
William Spencer, FWS Highland LLC

# Figures





SOURCE: TOPOI MAPS



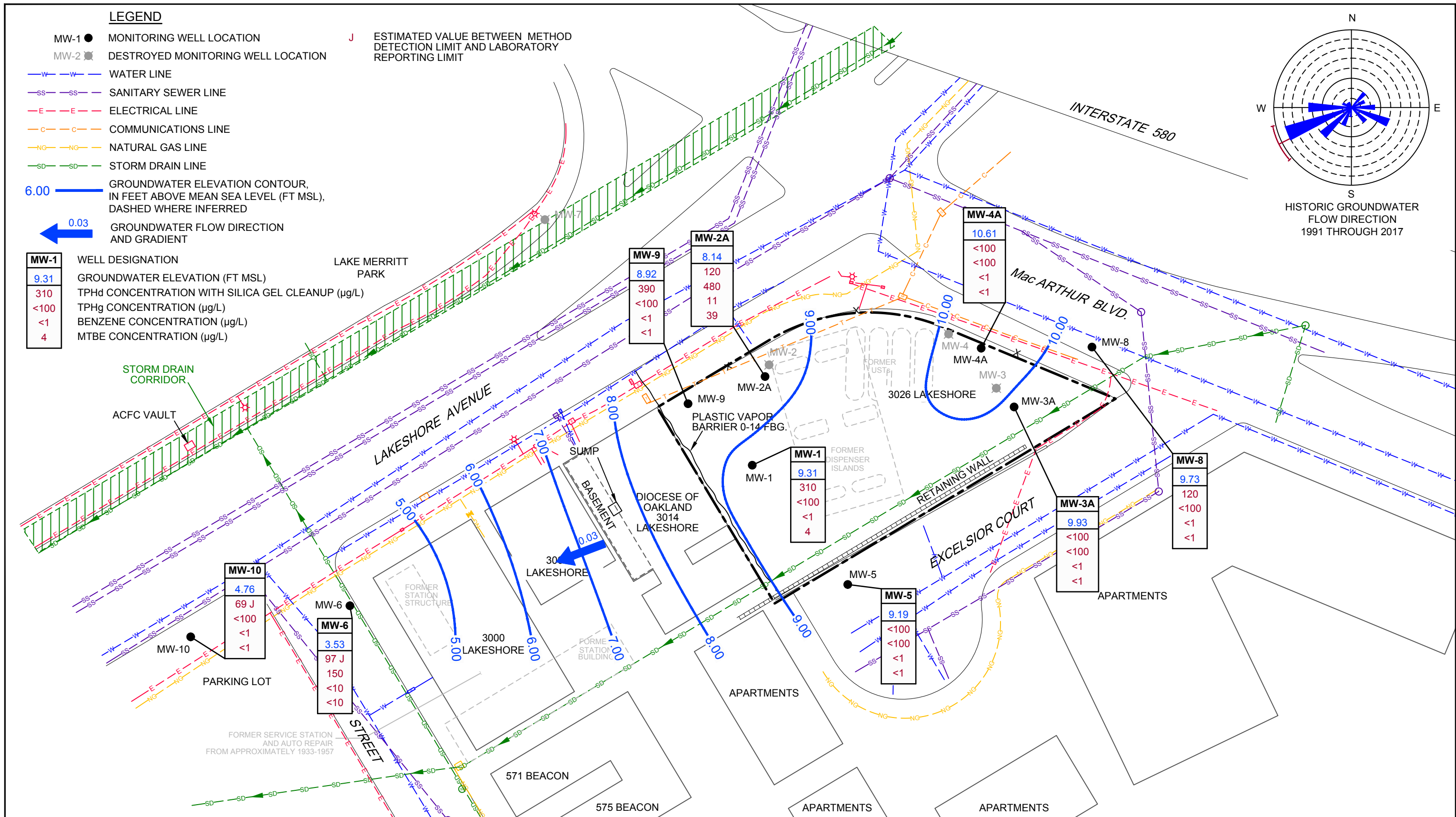
FORMER CHEVRON-BRANDED SERVICE STATION 90121  
 3026 LAKESHORE AVENUE  
 OAKLAND, CALIFORNIA

311973-95  
 Feb 16, 2017

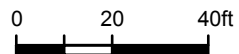
VICINITY MAP

FIGURE 1





SOURCE: MORROW SURVEY LAND SURVEYORS, NOV 4, 2016.



Coordinate System:  
California State  
Plane Zone 3



FORMER CHEVRON SERVICE STATION 90121  
3026 LAKESHORE AVENUE  
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR AND HYDROCARBON  
CONCENTRATION MAP - JANUARY 13, 2017

311973-95

Mar 10, 2017

FIGURE 2

# Table



**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW6260	Ethanol	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids		
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW-1	08/20/1991	6.82	5.20	1.62	0.00	0.00	-	-	260	-	5,100	1,700	21	220	34	-	-	-	-	-	-	-	-	-
MW-1	09/30/1991	6.82	5.67	1.15	Sheen	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	10/28/1991	6.82	5.30	1.50	0.03	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	01/08/1992	6.82	5.15	1.67	Sheen	0.00	-	4,400	-	5,400	770	13	95	31	-	-	-	-	-	-	-	-	-	-
MW-1	01/13/1992	6.82	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	06/23/1992	6.89	5.41	1.48	0.00	0.00	-	2,000	-	7,700	1,500	40	230	100	-	-	-	-	-	-	-	-	-	-
MW-1	08/24/1992	6.89	5.77	1.12	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	09/21/1992	6.89	5.89	1.00	0.00	0.00	-	<50	-	3,500	1,700	28	190	78	-	-	-	-	-	-	-	-	-	-
MW-1	10/26/1992	6.89	5.94	0.95	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	12/23/1992	6.89	4.71	2.18	0.00	0.00	-	5,500	-	60,000	7,100	240	2,000	1,300	-	-	-	-	-	-	-	-	-	-
MW-1	01/08/1993	6.89	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	03/25/1993	6.89	4.72	2.17	0.00	0.00	-	<10	-	530	1,100	41	67	79	-	-	-	-	-	-	-	-	-	-
MW-1	06/11/1993	6.89	5.07	5.37	0.00	0.00	-	-	-	7,000	1,900	33	120	69	9,600	-	-	-	-	-	-	-	-	840
MW-1	09/29/1993	6.89	5.76	1.13	0.00	0.00	-	<10	-	6,600	1,600	28	43	74	-	-	-	-	-	-	-	-	-	-
MW-1	12/20/1993	6.89	5.15	1.74	0.00	0.00	-	<10	-	6,300	1,900	36	82	65	-	-	-	-	-	-	-	-	-	-
MW-1	03/07/1994	6.89	4.68	2.21	0.00	0.00	-	<10	-	7,700	1,100	55	66	38	12,000	-	-	-	-	-	-	-	-	-
MW-1	06/17/1994	6.89	5.06	1.83	0.00	0.00	-	2,200	-	4,300	710	12	90	38	-	-	-	-	-	-	-	-	-	-
MW-1	09/12/1994	6.89	5.65	1.24	0.00	0.00	-	2,500	-	6,400	1,500	<25	180	<25	12,000	-	-	-	-	-	-	-	-	-
MW-1	11/30/1994	6.89	4.57	2.32	0.00	0.00	-	2,300 <sup>1</sup>	-	4,900	690	26	97	60	3,900	-	-	-	-	-	-	-	-	-
MW-1	03/24/1995	6.89	2.98	3.91	0.00	0.00	-	1,400 <sup>2</sup>	-	1,800	160	7.3	11	14	1,300	-	-	-	-	-	-	-	-	-
MW-1	06/27/1995	6.89	5.02	1.87	0.00	0.00	-	2,300 <sup>2</sup>	-	4,600	1,300	11	97	13	5,100	-	-	-	-	-	-	-	-	-
MW-1	09/28/1995	6.89	5.30	1.59	0.00	0.00	-	3,900 <sup>2</sup>	-	6,600	1,500	<20	<20	<20	5,800	-	-	-	-	-	-	-	-	-
MW-1	12/19/1995	6.89	4.68	2.21	0.00	0.00	-	2,600 <sup>2</sup>	-	3,800	930	<10	100	<10	6,300	-	-	-	-	-	-	-	-	-
MW-1	02/28/1996	6.89	3.62	3.27	0.00	0.00	-	1,800 <sup>2</sup>	-	3,600	280	<5.0	18	5.5	2,200	-	-	-	-	-	-	-	-	-
MW-1	06/25/1996	6.89	5.02	1.87	0.00	0.00	-	3,000	-	4,700	1,600	36	150	31	3,000	-	-	-	-	-	-	-	-	-
MW-1	12/17/1996	6.89	4.66	2.23	0.00	0.00	-	2,700 <sup>3</sup>	-	7,800	1,000	28	340	63	1,200	-	-	-	-	-	-	-	-	-
MW-1	03/31/1997	6.89	4.88	2.01	0.00	0.00	-	2,200 <sup>2</sup>	-	5,300	590	55	210	53	950	-	-	-	-	-	-	-	-	-
MW-1	06/30/1997	6.89	5.57	1.32	0.00	0.00	-	2,200 <sup>2</sup>	-	4,400	350	<10	<10	11	580	-	-	-	-	-	-	-	-	-
MW-1	09/12/1997	6.89	5.33	1.56	0.00	0.00	-	2,300 <sup>2</sup>	-	3,400	220	9.5	15	11	460	-	-	-	-	-	-	-	-	-
MW-1	12/05/1997	6.89	4.45	2.44	0.00	0.00	-	1,900 <sup>2</sup>	-	4,700	870	21	120	18	750	-	-	-	-	-	-	-	-	-
MW-1	02/16/1998	6.89	3.37	3.52	0.00	0.00	-	1,600 <sup>2</sup>	-	4,400	120	12	11	7.7	270	-	-	-	-	-	-	-	-	-
MW-1	06/17/1998	6.89	4.65	2.24	0.00	0.00	-	1,300 <sup>2</sup>	-	7,800	<25	50	34	650	650	-	-	-	-	-	-	-	-	-
MW-1	08/31/1998	6.89	5.19	1.70	0.00	0.00	-	2,400 <sup>2</sup>	-	3,700	620	17	120	31	380	-	-	-	-	-	-	-	-	-
MW-1	12/28/1998	6.89	4.95	1.94	0.00	0.00	-	1,500 <sup>2</sup>	-	3,800	250	14	28	15	330	-	-	-	-	-	-	-	-	-
MW-1	03/04/1999	6.89	3.65	3.24	0.00	0.00	-	1,070 <sup>2</sup>	-	1,560	17.9	<0.5	4.17	1.05	70.4	-	4900	<1,000	390000	<1,000	<1,000	-	-	-
MW-1	06/14/1999	6.89	5.00	1.89	0.00	0.00	-	2,500 <sup>2</sup>	-	<10,000	820	240	320	640	<500	-	-	-	-	-	-	-	-	-

**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
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Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-1	09/17/1999	6.89	6.59	0.30	0.00	0.00	-	-	2,110 <sup>2</sup>	-	3,300	141	12.3	<10	<10	238	-	-	-	-	-	-
MW-1	12/20/1999	6.89	4.97	1.92	0.00	0.00	-	-	1,840 <sup>2</sup>	-	2,990	218	16.3	20	<10	232	-	-	-	-	-	-
MW-1	03/20/2000	6.89	3.78	3.11	0.00	0.00	-	-	938 <sup>2</sup>	-	1,340	20	3.07	1.87	1.87	29.1	-	-	-	-	-	-
MW-1	06/24/2000	6.89	4.44	2.45	0.00	0.00	-	-	1,680 <sup>9</sup>	-	1,500 <sup>7</sup>	12	5.3	<2.5	7.9	190	-	-	-	-	-	-
MW-1	09/07/2000	6.89	5.15	1.74	0.00	0.00	-	-	1,500 <sup>9</sup>	-	3,100 <sup>7</sup>	190	13	14	<10	210	-	-	-	-	-	-
MW-1	12/05/2000	6.89	4.73	2.16	0.00	0.00	-	-	970 <sup>13</sup>	-	2,140 <sup>14</sup>	248	<5.00	20.5	<5.00	<25.0	-	-	-	-	-	-
MW-1	03/01/2001	6.89	3.56	3.33	0.00	0.00	-	-	610 <sup>9</sup>	-	1,000 <sup>7</sup>	21	<10	<10	<10	280	-	-	-	-	-	-
MW-1	06/04/2001	6.89	4.76	2.13	0.00	0.00	-	-	1,100 <sup>9</sup>	-	2,800 <sup>7</sup>	310	23	11	15	470	-	-	-	-	-	-
MW-1	09/10/2001	6.89	5.61	1.28	0.00	0.00	-	-	2,600	-	2,500 <sup>16</sup>	<20	26	<20	<20	310	-	-	-	-	-	-
MW-1	12/03/2001	6.89	3.58	3.31	0.00	0.00	-	-	2,700	-	2,400	30	7.3	7.0	6.5	160	-	-	-	-	-	-
MW-1	03/04/2002	6.89	4.53	2.36	0.00	0.00	-	-	2,700	-	3,300	120	17	22	9.0	110	-	-	-	-	-	-
MW-1	05/30/2002	6.89	4.48	2.41	0.00	0.00	-	-	2,700	-	4,100	110	9.3	22	11	100	-	-	-	-	-	-
MW-1	09/03/2002	6.89	5.47	1.42	0.00	0.00	-	-	2,900	-	3,700	<5.0	7.8	3.2	10	130	-	-	-	-	-	-
MW-1	12/09/2002	6.89	5.28	1.61	0.00	0.00	-	-	3,000	-	2,900	35	5.1	5.5	8.3	170	-	-	-	-	-	-
MW-1	03/10/2003	6.89	4.39	2.50	0.00	0.00	-	-	1,600	-	3,000	42	5.0	8.2	8.7	110	-	-	-	-	-	-
MW-1	06/09/2003 <sup>5,18</sup>	6.89	4.36	2.53	0.00	0.00	-	-	2,000	-	5,200	140	16	20	15	100	-	-	-	-	-	-
MW-1	09/08/2003 <sup>5,18</sup>	6.89	5.37	1.52	0.00	0.00	-	-	2,100	-	3,500	4	10	2	11	200	<50	-	-	-	-	-
MW-1	12/08/2003 <sup>5,18</sup>	6.89	4.45	2.44	0.00	0.00	-	-	3,400	-	2,200	8	4	3	8	160	<50	-	-	-	-	-
MW-1	03/09/2004 <sup>18,20</sup>	6.89	4.03	2.86	0.00	0.00	-	-	3,300	-	1,500	16	3	5	4	99	<130	-	-	-	-	-
MW-1	06/17/2004 <sup>18</sup>	6.89	5.48	1.41	0.00	0.00	-	-	2,700	-	3,400	180	13	27	13	160	<50	-	-	-	-	-
MW-1	09/15/2004 <sup>18</sup>	6.89	7.80	-0.91	0.00	0.00	-	-	2,600	-	1,700	2	1	0.8	5	180	<50	-	-	-	-	-
MW-1	12/23/2004 <sup>18</sup>	6.89	5.54	1.35	0.00	0.00	-	-	3,000	-	1,800	120	3	5	5	120	<50	-	-	-	-	-
MW-1	03/24/2005 <sup>18</sup>	6.89	3.40	3.49	0.00	0.00	-	-	950	-	1,100	45	2	5	2	16	<50	-	-	-	-	-
MW-1	09/16/2005 <sup>18</sup>	6.89	5.79	1.10	0.00	0.00	-	-	2,200	-	3,700	74	9	21	14	150	<50	-	-	-	-	-
MW-1	12/21/2005 <sup>18</sup>	6.89	3.78	3.11	0.00	0.00	-	-	1,600 <sup>22</sup>	-	1,400	53	2	4	4	62	<50	-	-	-	-	-
MW-1	03/23/2006 <sup>18</sup>	6.89	3.56	3.33	0.00	0.00	-	-	1,400	-	1,100	3	2	2	3	26	<50	-	-	-	-	-
MW-1	06/09/2006 <sup>18</sup>	6.89	4.78	2.11	0.00	0.00	-	-	1,300	-	5,200	160	13	42	20	77	<50	-	-	-	-	-
MW-1	09/05/2006 <sup>18</sup>	6.89	6.00	0.89	0.00	0.00	-	-	1,600	-	2,000	0.8	<0.5	<0.5	0.8	1,500	<50	-	-	-	-	-
MW-1	12/15/2006 <sup>18</sup>	6.89	4.05	2.84	0.00	0.00	-	-	1,800	-	1,400	3	0.9	1	5	47	<50	-	-	-	-	-
MW-1	03/01/2007 <sup>18</sup>	6.89	3.93	2.96	0.00	0.00	-	-	1,500	-	1,000	23	3	3	3	16	<50	-	-	-	-	-
MW-1	06/05/2007 <sup>18</sup>	6.89	4.81	2.08	0.00	0.00	-	-	1,200	-	4,000	90	9	21	12	68	<50	-	-	-	-	-
MW-1	09/05/2007 <sup>18</sup>	6.89	5.71	1.18	0.00	0.00	-	-	1,800	-	2,000	3	2	1	6	66	<50	-	-	-	-	-
MW-1	12/05/2007 <sup>18</sup>	6.89	5.02	1.87	0.00	0.00	-	-	1,200	-	2,400	58	6	7	7	97	150	-	-	-	-	-
MW-1	03/03/2008 <sup>18</sup>	6.89	4.53	2.36	0.00	0.00	-	-	1,400	-	1,500	13	2	2	3	36	<50	-	-	-	-	-
MW-1	06/02/2008 <sup>18</sup>	6.89	5.77	1.12	0.00	0.00	-	-	1,000	-	1,100	1	1	<0.5	3	59	<50	-	-	-	-	-
MW-1	09/04/2008 <sup>18</sup>	6.89	6.11	0.78	0.00	0.00	-	-	1,000	-	1,200	0.6	<0.5	<0.5	2	20	<50	-	-	-	-	-

**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW6260	ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-1	12/04/2008 <sup>18</sup>	6.89	6.11	0.78	0.00	0.00	-	-	2,400	-	810	1	0.8	<0.5	1	91	<50	-	-	-	-	-	-
MW-1	02/26/2009 <sup>18</sup>	6.89	4.31	2.58	0.00	0.00	-	-	1,300	-	460	2	2	<0.5	<0.5	39	-	-	-	-	-	-	-
MW-1	06/30/2009 <sup>18</sup>	6.89	5.42	1.47	0.00	0.00	-	-	1,700	-	2,900	14	4	3	6	70	<50	-	-	-	-	-	-
MW-1	09/29/2009 <sup>18</sup>	6.89	5.81	1.08	0.00	0.00	-	-	1,600	-	1,000	<0.5	<0.5	<0.5	1	37	<50	-	-	-	-	-	-
MW-1	03/10/2010 <sup>18</sup>	6.89	3.80	3.09	0.00	0.00	-	-	570	-	450	0.9 J	<0.5	<0.5	<0.5	18	<50	-	-	-	-	-	-
MW-1	09/15/2010	6.89	6.42	0.47	0.00	0.00	-	-	1,400	-	1,600	<0.5	0.6 J	<0.5	3	25	<50	-	-	-	-	-	-
MW-1	03/14/2011	6.89	4.05	2.84	0.00	0.00	94 J	-	56 J	-	220	<0.5	<0.5	<0.5	<0.5	10	<50	-	-	-	-	-	-
MW-1	09/26/2011	6.89	6.42	0.47	0.00	0.00	-	160	-	200	260	<0.5	<0.5	<0.5	<0.5	11	<50	-	-	-	-	-	-
MW-1	03/30/2012	6.89	3.31	3.58	0.00	0.00	-	<38	-	<50	100	<0.5	<0.5	<0.5	<0.5	4	<50	-	-	-	-	-	-
MW-1	09/22/2012	6.89	6.48	0.41	0.00	0.00	-	<38	-	73 J	320	<0.5	<0.5	<0.5	<0.5	16	<50	-	-	-	-	-	-
MW-1	03/19/2013	6.89	5.37	1.52	0.00	0.00	-	<38	-	69 J	270	<0.5	<0.5	<0.5	<0.5	24	<50	-	-	-	-	-	-
MW-1	09/25/2013	6.89	6.48	0.41	0.00	0.00	-	-	2,000	-	210	<0.5	<0.5	<0.5	<0.5	13	<50	-	-	-	-	-	-
MW-1	03/28/2014	6.89	4.41	2.48	0.00	0.00	-	-	2,000	-	140	2	<0.5	<0.5	<0.5	12	<50	-	-	-	-	-	-
MW-1	09/25/2014	6.89	6.42	0.47	0.00	0.00	-	-	-	<50	160	<0.5	<0.5	<0.5	<0.5	15	<50	-	-	-	-	-	-
MW-1	03/05/2015	6.89	5.17	1.72	0.00	0.00	-	-	1,900	-	280	3	<0.5	0.6 J	<0.5	16	<50	-	-	-	-	-	-
MW-1	09/25/2015	6.89	6.56	0.33	0.00	0.00	-	-	1,800	-	180	<0.5	<0.5	<0.5	<0.5	13	<50	-	-	-	-	-	-
MW-1	03/18/2016	6.89	3.46	3.43	0.00	0.00	-	-	-	62 J	140	<1	<1	<1	<1	1	<250	-	-	-	-	-	-
MW-1	09/27/2016 <sup>26</sup>	6.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>MW-1</b>	<b>01/13/2017</b>	<b>12.42</b>	<b>3.11</b>	<b>9.31</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	<b>310</b>	<b>&lt;100</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>4</b>	<b>&lt;250</b>	-	-	-	-	-	-
MW-2	08/20/1991	6.27	4.35	1.92	0.00	0.00	-	-	600	-	9,300	3,700	55	530	75	-	-	-	-	-	-	-	-
MW-2	09/30/1991	6.27	4.99	1.28	0.00	0.00	-	-	-	-	3,500	2,600	47	440	68	-	-	-	-	-	-	-	-
MW-2	10/28/1991	6.27	4.91	1.36	0.00	0.00	-	-	-	-	4,600	1,800	29	290	53	-	-	-	-	-	-	-	-
MW-2	01/08/1992	6.27	4.64	1.63	Sheen	0.00	-	-	-	-	14,000	4,300	70	<25	130	-	-	-	-	-	-	-	-
MW-2	01/13/1992	6.27	-	-	0.00	0.00	-	-	38,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	06/23/1992	6.27	4.64	1.63	0.02	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	08/24/1992	6.27	4.94	1.34	0.02	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	09/21/1992	6.27	5.08	1.20	0.01	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	10/26/1992	6.27	5.93	0.34	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/23/1992	6.27	-	-	0.00	0.00	-	-	160,000	-	21,000	5,400	59	1,300	160	-	-	-	-	-	-	-	-
MW-2	01/08/1993	6.27	3.70	2.57	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/25/1993	6.27	3.38	2.89	Sheen	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	06/11/1993	6.27	4.18	2.09	0.00	0.00	-	-	-	-	5,900	1,100	23	240	51	-	-	-	-	-	-	-	2,300
MW-2	09/29/1993	6.27	6.20	0.07	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/20/1993	6.27	4.35	1.94	0.02	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/07/1994	6.27	3.67	2.60	0.00	0.00	-	-	<10	-	26,000	5,700	170	1,000	150	-	-	-	-	-	-	-	-

**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-2	06/17/1994	6.27	4.02	2.25	Sheen	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	09/12/1994	6.27	4.83	1.45	0.01	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	11/30/1994 <sup>2b</sup>	6.27	4.00	2.27	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/24/1995	6.27	4.01	2.73	0.59	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	06/27/1995	6.27	4.96	1.71	0.50	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	09/28/1995	6.27	4.25	2.62	0.75	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/19/1995	6.27	4.76	1.99	0.60	0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	02/28/1996	6.27	4.58	1.99	0.38	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	06/25/1996	6.27	4.29	2.36	0.47	0.030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/17/1996	6.27	4.16	2.22	0.14	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/31/1997	6.27	4.07	2.34	0.18	0.030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	06/30/1997	6.27	4.32	2.06	0.14	0.030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	09/12/1997	6.27	4.38	2.00	0.14	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/05/1997	6.27	3.78	2.51	0.02	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	02/16/1998	6.27	3.29	3.08	0.12	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	06/17/1998	6.27	4.00	2.35	0.10	0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	08/31/1998	6.27	5.71	0.65	0.11	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/28/1998	6.27	4.60	1.75	0.10	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/04/1999	6.27	3.73	2.58	0.05	0.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2A	04/19/1999	6.53	4.86	1.67	0.00	0.00	-	-	820 <sup>2</sup>	-	<2,000	<20	<20	<20	<20	9,200	-	-	-	-	-	-
MW-2A	06/14/1999	6.53	5.30	1.23	0.00	0.00	-	-	2,000 <sup>2</sup>	-	<5,000	89	<50	66	<50	10,000	-	-	-	-	-	-
MW-2A	09/17/1999	6.53	5.84	0.69	0.00	0.00	-	-	1,050 <sup>2</sup>	-	903	42	1.63	22.8	7.74	11,400	-	-	-	-	-	-
MW-2A	12/20/1999	6.53	6.60	-0.07	0.00	0.00	-	-	2,820 <sup>2</sup>	-	2,280	115	<10	87.2	27.2	14,000	-	-	-	-	-	-
MW-2A	03/20/2000	6.53	4.79	1.74	0.00	0.00	-	-	1,220 <sup>2</sup>	-	1,040	54.3	<5.0	33.8	12.1	10,900 <sup>2</sup>	-	-	-	-	-	-
MW-2A	06/24/2000	6.53	5.25	1.28	0.00	0.00	-	-	1,300 <sup>9</sup>	-	690 <sup>7</sup>	50	2.5	18	9.5	15,000 <sup>8</sup>	-	-	-	-	-	-
MW-2A	09/07/2000	6.53	5.44	1.09	0.00	0.00	-	-	770 <sup>9</sup>	-	310 <sup>7</sup>	6.7	1.4	1.6	3.8	16,000	-	-	-	-	-	-
MW-2A	12/05/2000	6.53	5.37	1.16	0.00	0.00	-	-	810 <sup>13</sup>	-	414 <sup>14</sup>	32.4	<0.500	7.49	5.96	8,910 <sup>8</sup>	-	-	-	-	-	-
MW-2A	03/01/2001	6.53	4.50	2.03	0.00	0.00	-	-	590 <sup>9</sup>	-	370 <sup>7</sup>	30	4.0	12	9.2	8,200	-	-	-	-	-	-
MW-2A	06/04/2001	6.53	5.17	1.36	0.00	0.00	-	-	930 <sup>9</sup>	-	<500	19	<5.0	<5.0	<5.0	7,800	-	-	-	-	-	-
MW-2A	09/10/2001	6.53	5.74	0.79	0.00	0.00	-	-	2,400	-	<5,000	<50	<50	<50	<50	9,700	-	-	-	-	-	-
MW-2A	12/03/2001	6.53	5.07	1.46	0.00	0.00	-	-	2,500	-	480	4.5	<1.0	1.1	<3.0	10,000	-	-	-	-	-	-
MW-2A	03/04/2002	6.53	5.01	1.52	0.00	0.00	-	-	2,300	-	630	5.4	1.5	2.9	2.3	7,000	-	-	-	-	-	-
MW-2A	05/30/2002	6.53	4.87	1.66	0.00	0.00	-	-	2,100	-	520	6.1	<1.0	2.6	5.4	7,100	-	-	-	-	-	-
MW-2A	09/03/2002	6.53	5.50	1.03	0.00	0.00	-	-	2,600	-	590	7.8	0.98	2.9	7.8	7,800	-	-	-	-	-	-
MW-2A	12/09/2002	6.53	5.47	1.06	0.00	0.00	-	-	1,900	-	670	7.9	0.88	2.1	5.0	8,300	-	-	-	-	-	-

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**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW6260	ADDITIONAL VOCS		GENERAL CHEMISTRY				
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-2A	03/10/2003	6.53	5.01	1.52	0.00	0.00	-	-	1,700	-	640	8.0	0.76	2.6	4.1	7,500	-	-	-	-	-	-	-
MW-2A	06/09/2003 <sup>18</sup>	6.53	4.76	1.77	0.00	0.00	-	-	1,900	-	540	3	<3	<3	<3	6,800	-	-	-	-	-	-	-
MW-2A	09/08/2003 <sup>18</sup>	6.53	5.37	1.16	0.00	0.00	-	-	2,000	-	540	3	0.7	0.7	3	7,000	<50	-	-	-	-	-	-
MW-2A	12/08/2003 <sup>18</sup>	6.53	5.19	1.34	0.00	0.00	-	-	3,100	-	480	<5	<5	<5	<5	6,500	<500	-	-	-	-	-	-
MW-2A	03/09/2004 <sup>18</sup>	6.53	4.72	1.81	0.00	0.00	-	-	1,200	-	1,300	44	2	15	10	2,900	<130	-	-	-	-	-	-
MW-2A	06/17/2004 <sup>18</sup>	6.53	6.60	-0.07	0.00	0.00	-	-	2,300	-	920	23	2	6	12	1,700	<100	-	-	-	-	-	-
MW-2A	09/15/2004 <sup>18</sup>	6.53	8.87	-2.34	0.00	0.00	-	-	1,900	-	880	6	2	<1	7	2,100	<100	-	-	-	-	-	-
MW-2A	12/23/2004 <sup>18</sup>	6.53	5.85	0.68	0.00	0.00	-	-	2,200	-	430	6	<3	<3	<3	5,100	<250	-	-	-	-	-	-
MW-2A	03/24/2005 <sup>18</sup>	6.53	4.75	1.78	0.00	0.00	-	-	810	-	390	<5	<5	<5	<5	5,200	<500	-	-	-	-	-	-
MW-2A	06/16/2005 <sup>18</sup>	6.53	5.23	1.30	0.00	0.00	-	-	3,000	-	380	<5	<5	<5	<5	5,500	<500	-	-	-	-	-	-
MW-2A	09/16/2005 <sup>18</sup>	6.53	6.08	0.45	0.00	0.00	-	-	2,600	-	380	<5	<5	<5	<5	5,900	<500	-	-	-	-	-	-
MW-2A	12/21/2005 <sup>18</sup>	6.53	4.98	1.55	0.00	0.00	-	-	4,000 <sup>23</sup>	-	450	1	0.6	<0.5	2	4,800	<50	-	-	-	-	-	-
MW-2A	03/23/2006 <sup>18</sup>	6.53	4.56	1.97	0.00	0.00	-	-	2,600	-	330	1	0.8	<0.5	2	4,500	-	-	-	-	-	-	-
MW-2A	06/09/2006 <sup>18</sup>	6.53	5.16	1.37	0.00	0.00	-	-	2,800	-	500	<1	<1	<1	<1	4,500	<100	-	-	-	-	-	-
MW-2A	09/05/2006 <sup>18</sup>	6.53	5.81	0.72	0.00	0.00	-	-	3,000	-	510	<5	<5	<5	<5	3,600	<500	-	-	-	-	-	-
MW-2A	12/15/2006 <sup>18</sup>	6.53	5.05	1.48	0.00	0.00	-	-	2,800	-	600	4	<1	<1	1	4,000	<100	-	-	-	-	-	-
MW-2A	03/01/2007 <sup>18</sup>	6.53	5.03	1.50	0.00	0.00	-	-	1,800	-	230	<3	<3	<3	<3	3,700	<250	-	-	-	-	-	-
MW-2A	06/05/2007 <sup>18</sup>	6.53	4.81	1.72	0.00	0.00	-	-	1,700	-	480	0.9	0.6	<0.5	2	3,500	<50	-	-	-	-	-	-
MW-2A	09/05/2007 <sup>18</sup>	6.53	5.25	1.28	0.00	0.00	-	-	2,400	-	430	1	1	<0.5	2	1,700	<50	-	-	-	-	-	-
MW-2A	12/05/2007 <sup>18</sup>	6.53	5.28	1.25	0.00	0.00	-	-	2,000	-	530	2	<1	<1	2	3,400	<100	-	-	-	-	-	-
MW-2A	03/03/2008 <sup>18</sup>	6.53	5.13	1.40	0.00	0.00	-	-	2,100	-	960	85	3	3	5	520	<50	-	-	-	-	-	-
MW-2A	06/02/2008 <sup>18</sup>	6.53	5.60	0.93	0.00	0.00	-	-	2,300	-	600	10	1	0.7	5	1,300	<50	-	-	-	-	-	-
MW-2A	09/04/2008 <sup>18</sup>	6.53	5.72	0.81	0.00	0.00	-	-	2,600	-	440	<1	<1	<1	1	2,500	<100	-	-	-	-	-	-
MW-2A	12/04/2008 <sup>18</sup>	6.53	6.20	0.33	0.00	0.00	-	-	4,000	-	480	<1	<1	<1	1	2,400	<100	-	-	-	-	-	-
MW-2A	02/26/2009 <sup>18</sup>	6.53	4.39	2.14	0.00	0.00	-	-	860	-	420	44	4	3	3	18	<50	-	-	-	-	-	-
MW-2A	06/30/2009 <sup>18</sup>	6.53	5.38	1.15	0.00	0.00	-	-	2,900	-	500	1	13	2	22	1,900	<50	-	-	-	-	-	-
MW-2A	09/29/2009 <sup>18</sup>	6.53	5.70	0.83	0.00	0.00	-	-	4,200	-	500	2	1	<0.5	5	900	<50	-	-	-	-	-	-
MW-2A	03/10/2010 <sup>18</sup>	6.53	3.77	2.76	0.00	0.00	-	-	1,100	-	900	90	4	2	2	27	<50	-	-	-	-	-	-
MW-2A	09/15/2010	6.53	5.80	0.73	0.00	0.00	-	-	2,800	-	360	<0.5	<0.5	<0.5	2	24	<50	-	-	-	-	-	-
MW-2A	03/14/2011	6.53	4.72	1.81	0.00	0.00	540	-	670	-	960	34	4	1	4	39	<50	-	-	-	-	-	-
MW-2A	09/26/2011	6.53	5.95	0.58	0.00	0.00	-	<38	-	120	340	<0.5	<0.5	<0.5	0.7 J	80	<50	-	-	-	-	-	-
MW-2A	03/30/2012	6.53	4.18	2.35	0.00	0.00	-	<38	-	82 J	360	<0.5	<0.5	<0.5	2	200	<50	-	-	-	-	-	-
MW-2A	09/22/2012	6.53	6.23	0.30	0.00	0.00	-	<38	-	50 J	350	<0.5	<0.5	<0.5	1	86	<50	-	-	-	-	-	-
MW-2A	03/20/2013	6.53	5.84	0.69	0.00	0.00	-	<38	-	<50	310	<0.5	<0.5	<0.5	<0.5	130	<50	-	-	-	-	-	-
MW-2A	09/25/2013	6.53	6.22	0.31	0.00	0.00	-	-	2,700	-	310	<0.5	<0.5	<0.5	0.6 J	48	<50	-	-	-	-	-	-
MW-2A	03/28/2014	6.53	5.08	1.45	0.00	0.00	-	-	2,200	-	340	<0.5	<0.5	<0.5	0.6 J	99	<50	-	-	-	-	-	-



**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY							
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW-2A	09/25/2014	6.53	6.02	0.51	0.00	0.00	-	-	-	54 J	350	1	<0.5	<0.5	2	39	<50	-	-	-	-	-	-	
MW-2A	03/05/2015	6.53	5.44	1.09	0.00	0.00	-	-	2,500	-	250	<0.5	<0.5	<0.5	<0.5	86	<50	-	-	-	-	-	-	
MW-2A	09/25/2015	6.53	6.13	0.40	0.00	0.00	-	-	2,700	-	420	<0.5	<0.5	<0.5	2	32	<50	-	-	-	-	-	-	
MW-2A	03/18/2016	6.53	4.05	2.48	0.00	0.00	-	-	-	<110	290	<1	<1	<1	<1	75	<250	-	-	-	-	-	-	
MW-2A	09/27/2016 <sup>2b</sup>	6.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>MW-2A</b>	<b>01/13/2017</b>	<b>11.92</b>	<b>3.78</b>	<b>8.14</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	<b>120</b>	<b>480</b>	<b>11</b>	<b>&lt;1</b>	<b>0.6 J</b>	<b>1</b>	<b>39</b>	<b>&lt;250</b>	-	-	-	-	-	-	
MW-3	08/20/1991	8.71	8.45	0.26	0.00	0.00	-	-	200	-	3,100	200	13	15	12	-	-	-	-	-	-	-	-	-
MW-3	09/30/1991	8.71	8.74	-0.03	0.00	0.00	-	-	-	-	1,000	150	8.3	13	6.7	-	-	-	-	-	-	-	-	-
MW-3	10/28/1991	8.71	8.76	-0.05	0.00	0.00	-	-	-	-	1,200	120	6.7	11	7.5	-	-	-	-	-	-	-	-	-
MW-3	01/08/1992	8.71	8.77	-0.06	0.00	0.00	-	-	-	-	410	120	0.9	4.1	3.4	-	-	-	-	-	-	-	-	-
MW-3	01/13/1992	8.71	-	-	0.00	0.00	-	-	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	06/23/1992	8.71	8.68	0.03	0.00	0.00	-	-	<50	-	630	43	0.8	8.2	3.4	-	-	-	-	-	-	-	-	-
MW-3	08/24/1992	8.71	8.85	-0.14	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	09/21/1992	8.71	8.94	-0.23	0.00	0.00	-	-	<50	-	1,800	730	1.4	66	39	-	-	-	-	-	-	-	-	-
MW-3	10/26/1992	8.71	9.07	-0.36	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	12/23/1992	8.71	-	-	0.00	0.00	-	-	850	-	840	270	3.4	15	4.2	-	-	-	-	-	-	-	-	-
MW-3	01/08/1993	8.71	7.69	1.02	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	03/25/1993	8.71	7.74	0.97	0.00	0.00	-	-	<10	-	760	270	4.0	10	5.0	-	-	-	-	-	-	-	-	-
MW-3	06/11/1993	8.71	8.52	0.19	0.00	0.00	-	-	-	-	200	32	1.0	5.0	2.0	-	-	-	-	-	-	-	-	5,600
MW-3	09/29/1993	8.71	6.05	2.66	0.00	0.00	-	-	-	-	9,300	2,800	60	270	62	-	-	-	-	-	-	-	-	-
MW-3	12/20/1993	8.71	8.83	-0.12	0.00	0.00	-	-	<10	-	460	250	4.0	8.0	4.0	-	-	-	-	-	-	-	-	-
MW-3	03/07/1994	8.71	8.07	0.64	0.00	0.00	-	-	<10	-	2,400	260	13	35	18	-	-	-	-	-	-	-	-	-
MW-3	06/17/1994	8.71	8.52	0.19	0.00	0.00	-	-	<50	-	1,000	200	4.0	6.6	6.7	-	-	-	-	-	-	-	-	-
MW-3	09/12/1994	8.71	8.92	-0.21	0.00	0.00	-	-	<50	-	360	130	3.4	4.8	3.3	130	-	-	-	-	-	-	-	-
MW-3	11/30/1994 <sup>2b</sup>	8.71	8.13	0.58	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	03/24/1995	8.71	6.78	1.93	0.00	0.00	-	-	1,200 <sup>2</sup>	-	4,100	920	<10	23	<10	70	-	-	-	-	-	-	-	-
MW-3	06/27/1995	8.71	8.22	0.49	0.00	0.00	-	-	1,000 <sup>2</sup>	-	3,100	640	16	31	<10	<50	-	-	-	-	-	-	-	-
MW-3	09/28/1995	8.71	8.85	-0.14	0.00	0.00	-	-	460 <sup>2</sup>	-	490	78	3.4	4.4	2.4	38	-	-	-	-	-	-	-	-
MW-3	12/19/1995	8.71	8.02	0.69	0.00	0.00	-	-	650 <sup>2</sup>	-	2,600	580	<10	25	<10	<50	-	-	-	-	-	-	-	-
MW-3	02/28/1996	8.71	7.55	1.16	0.00	0.00	-	-	780 <sup>2</sup>	-	1,500	510	<5.0	9.9	<5.0	<25	-	-	-	-	-	-	-	-
MW-3	06/25/1996	8.71	8.37	0.34	0.00	0.00	-	-	1,200 <sup>2</sup>	-	1,300	390	7.8	14	6.5	31	-	-	-	-	-	-	-	-
MW-3	12/17/1996	8.71	8.30	0.41	0.00	0.00	-	-	1,100 <sup>2</sup>	-	760	85	<1.2	5.9	5.1	<6.2	-	-	-	-	-	-	-	-
MW-3	03/31/1997	8.71	8.19	0.52	0.00	0.00	-	-	1,300 <sup>2</sup>	-	2,000	380	12	24	12	<25	-	-	-	-	-	-	-	-
MW-3	06/30/1997	8.71	8.71	0.00	0.00	0.00	-	-	620 <sup>2</sup>	-	1,900	340	9.9	23	6.1	<25	-	-	-	-	-	-	-	-
MW-3	09/12/1997	8.71	7.64	1.07	0.00	0.00	-	-	400 <sup>2</sup>	-	1,200	200	4.6	14	4.8	3.9	-	-	-	-	-	-	-	-

**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW6260	Ethanol	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-3	12/05/1997	8.71	8.25	0.46	0.00	0.00	-	-	190 <sup>2</sup>	-	460	72	2.7	5.2	1.7	<5.0	-	-	-	-	-	-	-
MW-3	02/16/1998	8.71	7.00	1.71	0.00	0.00	-	-	1,000 <sup>2</sup>	-	6,200	1,100	20	34	12	<50	-	-	-	-	-	-	-
MW-3	06/17/1998	8.71	8.00	0.71	0.00	0.00	-	-	1,100 <sup>2</sup>	-	3,000	350	<10	<10	<10	120	-	-	-	-	-	-	-
MW-3	08/31/1998	8.71	8.63	0.08	0.00	0.00	-	-	790 <sup>2</sup>	-	430	100	2.6	8.6	6.0	<12	-	-	-	-	-	-	-
MW-3	12/28/1998	8.71	8.73	-0.02	0.00	0.00	-	-	180 <sup>2</sup>	-	1,400	220	<10	12	<10	<50	-	4500	<1,000	980000	390000	-	-
MW-3	03/04/1999	8.71	7.65	1.06	0.00	0.00	-	-	763 <sup>2</sup>	-	2,880	355	9.15	19	<5.0	<20	-	-	-	-	-	-	-
MW-3A	04/19/1999	8.70	7.70	1.00	0.00	0.00	-	-	93 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	3.1	-	-	-	-	-	-	-
MW-3A	06/14/1999	8.70	8.20	0.50	0.00	0.00	-	-	160 <sup>2</sup>	-	148	4.55	0.82	0.53	1.1	3.7	-	-	-	-	-	-	-
MW-3A	09/17/1999	8.70	8.72	-0.02	0.00	0.00	-	-	101 <sup>2</sup>	-	169	6.02	0.806	0.515	0.786	4.68	-	-	-	-	-	-	-
MW-3A	12/20/1999	8.70	8.92	-0.22	0.00	0.00	-	-	153 <sup>2</sup>	-	<50	1.82	<0.5	<0.5	<0.5	11	-	-	-	-	-	-	-
MW-3A	03/20/2000	8.70	7.64	1.06	0.00	0.00	-	-	223 <sup>2</sup>	-	140	5.08	0.695	<0.5	<0.5	10.1	-	-	-	-	-	-	-
MW-3A	06/24/2000	8.70	8.38	0.32	0.00	0.00	-	-	128 <sup>9</sup>	-	<50	0.74	<0.50	<0.50	<0.50	34	-	-	-	-	-	-	-
MW-3A	09/07/2000	8.70	8.79	-0.09	0.00	0.00	-	-	<50	-	<50	1.4	<0.50	<0.50	<0.50	15	-	-	-	-	-	-	-
MW-3A	12/05/2000	8.70	8.68	0.02	0.00	0.00	-	-	<50	-	<50.0	1.39	<0.500	<0.500	<0.500	12.9	-	-	-	-	-	-	-
MW-3A	03/01/2001	8.70	7.82	0.88	0.00	0.00	-	-	66 <sup>11</sup>	-	<50	1.0	<0.50	<0.50	<0.50	19	-	-	-	-	-	-	-
MW-3A	06/04/2001	8.70	8.45	0.25	0.00	0.00	-	-	69 <sup>9</sup>	-	<50	2.0	<0.50	<0.50	<0.50	37	-	-	-	-	-	-	-
MW-3A	09/10/2001	8.70	9.10	-0.40	0.00	0.00	-	-	<50	-	<50	3.9	<0.50	<0.50	<0.50	19	-	-	-	-	-	-	-
MW-3A	12/03/2001	8.70	8.08	0.62	0.00	0.00	-	-	56	-	<50	<0.50	<0.50	<0.50	<1.5	19	-	-	-	-	-	-	-
MW-3A	03/04/2002	8.70	8.94	-0.24	0.00	0.00	-	-	85	-	<50	<0.50	<0.50	<0.50	<1.5	26	-	-	-	-	-	-	-
MW-3A	05/30/2002	8.70	8.78	-0.08	0.00	0.00	-	-	210	-	<50	<0.50	<0.50	<0.50	<1.5	22	-	-	-	-	-	-	-
MW-3A	09/03/2002	8.70	8.98	-0.28	0.00	0.00	-	-	89	-	<50	<0.50	<0.50	<0.50	<1.5	24	-	-	-	-	-	-	-
MW-3A	12/09/2002	8.70	8.90	-0.20	0.00	0.00	-	-	110	-	<50	<0.50	<0.50	<0.50	<1.5	22	-	-	-	-	-	-	-
MW-3A	03/10/2003	8.70	8.12	0.58	0.00	0.00	-	-	66	-	<50	<0.50	<0.50	<0.50	<1.5	40	-	-	-	-	-	-	-
MW-3A	06/09/2003 <sup>18</sup>	8.70	8.23	0.47	0.00	0.00	-	-	82	-	<50	<0.5	0.5	<0.5	<0.5	35	-	-	-	-	-	-	-
MW-3A	09/08/2003 <sup>18</sup>	8.70	8.76	-0.06	0.00	0.00	-	-	110	-	<50	<0.5	<0.5	<0.5	<0.5	27	<50	-	-	-	-	-	-
MW-3A	12/08/2003 <sup>18</sup>	8.70	8.50	0.20	0.00	0.00	-	-	74 <sup>19</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	23	<50	-	-	-	-	-	-
MW-3A	03/09/2004 <sup>18</sup>	8.70	7.71	0.99	0.00	0.00	-	-	410	-	53	1	<0.5	<0.5	<0.5	28	<50	-	-	-	-	-	-
MW-3A	06/17/2004 <sup>18</sup>	8.70	8.52	0.18	0.00	0.00	-	-	430	-	180	1	<0.5	<0.5	<0.5	3	<50	-	-	-	-	-	-
MW-3A	09/15/2004 <sup>18</sup>	8.70	9.12	-0.42	0.00	0.00	-	-	280	-	92	<0.5	<0.5	<0.5	<0.5	63	<50	-	-	-	-	-	-
MW-3A	12/23/2004 <sup>18</sup>	8.70	8.76	-0.06	0.00	0.00	-	-	330	-	76	<0.5	<0.5	<0.5	<0.5	5	<50	-	-	-	-	-	-
MW-3A	03/24/2005 <sup>18</sup>	8.70	6.28	2.42	0.00	0.00	-	-	210	-	<50	<0.5	<0.5	<0.5	<0.5	0.6	360	-	-	-	-	-	-
MW-3A	06/16/2005 <sup>18</sup>	8.70	8.18	0.52	0.00	0.00	-	-	590	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-
MW-3A	09/16/2005 <sup>18</sup>	8.70	8.78	-0.08	0.00	0.00	-	-	160 <sup>21</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	5	<50	-	-	-	-	-	-
MW-3A	12/21/2005 <sup>18</sup>	8.70	8.30	0.40	0.00	0.00	-	-	220 <sup>23</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	10	<50	-	-	-	-	-	-
MW-3A	03/23/2006 <sup>18</sup>	8.70	7.10	1.60	0.00	0.00	-	-	150	-	<50	<0.5	<0.5	<0.5	<0.5	0.5	<50	-	-	-	-	-	-

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**Former Chevron Service Station 90121**  
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Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW6260	ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-3A	06/09/2006 <sup>18</sup>	8.70	8.30	0.40	0.00	0.00	-	-	390	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-	-
MW-3A	09/05/2006 <sup>18</sup>	8.70	9.00	-0.30	0.00	0.00	-	-	140	-	<50	<0.5	<0.5	<0.5	<0.5	5	<50	-	-	-	-	-	-	-
MW-3A	12/15/2006 <sup>18</sup>	8.70	8.53	0.17	0.00	0.00	-	-	250	-	<50	<0.5	0.8	<0.5	2	9	<50	-	-	-	-	-	-	-
MW-3A	03/01/2007 <sup>18</sup>	8.70	8.07	0.63	0.00	0.00	-	-	140	-	<50	2	4	1	5	10	<50	-	-	-	-	-	-	-
MW-3A	06/05/2007 <sup>18</sup>	8.70	8.44	0.26	0.00	0.00	-	-	2,900	-	<50	<0.5	<0.5	<0.5	<0.5	7	<50	-	-	-	-	-	-	-
MW-3A	09/05/2007 <sup>18</sup>	8.70	9.05	-0.35	0.00	0.00	-	-	520	-	<50	<0.5	<0.5	<0.5	<0.5	8	<50	-	-	-	-	-	-	-
MW-3A	12/05/2007 <sup>18</sup>	8.70	8.71	-0.01	0.00	0.00	-	-	110	-	<50	<0.5	<0.5	<0.5	<0.5	30	<50	-	-	-	-	-	-	-
MW-3A	03/03/2008 <sup>18</sup>	8.70	8.22	0.48	0.00	0.00	-	-	240	-	<50	<0.5	<0.5	<0.5	<0.5	9	<50	-	-	-	-	-	-	-
MW-3A	06/02/2008 <sup>18</sup>	8.70	8.68	0.02	0.00	0.00	-	-	160	-	<50	<0.5	<0.5	<0.5	<0.5	25	<50	-	-	-	-	-	-	-
MW-3A	09/04/2008 <sup>18</sup>	8.70	9.17	-0.47	0.00	0.00	-	-	220	-	<50	<0.5	<0.5	<0.5	<0.5	54	<50	-	-	-	-	-	-	-
MW-3A	12/04/2008 <sup>18</sup>	8.70	8.95	-0.25	0.00	0.00	-	-	150	-	<50	<0.5	<0.5	<0.5	<0.5	29	<50	-	-	-	-	-	-	-
MW-3A	02/26/2009 <sup>18</sup>	8.70	7.77	0.93	0.00	0.00	-	-	440	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-
MW-3A	06/30/2009 <sup>18</sup>	8.70	5.73	2.97	0.00	0.00	-	-	52 J	-	<50	<0.5	<0.5	<0.5	<0.5	25	<50	-	-	-	-	-	-	-
MW-3A	09/29/2009 <sup>18,25</sup>	8.70	6.30	2.40	0.00	0.00	-	-	400	-	<50	<0.5	<0.5	<0.5	<0.5	39	<50	-	-	-	-	-	-	-
MW-3A	03/10/2010 <sup>18</sup>	8.70	4.43	4.27	0.00	0.00	-	-	1,200	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-	-
MW-3A	09/15/2010	8.70	8.95	-0.25	0.00	0.00	-	-	360	-	<50	<0.5	<0.5	<0.5	<0.5	8	<50	-	-	-	-	-	-	-
MW-3A	03/14/2011	8.70	5.50	3.20	0.00	0.00	<38	-	<33	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-
MW-3A	09/26/2011	8.70	8.78	-0.08	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-
MW-3A	03/30/2012	8.70	6.17	2.53	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-
MW-3A	09/22/2012	8.70	8.69	0.01	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-	-
MW-3A	03/20/2013	8.70	7.72	0.98	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-
MW-3A	09/25/2013	8.70	8.54	0.16	0.00	0.00	-	-	400	-	<50	<0.5	<0.5	<0.5	<0.5	0.8 J	<50	-	-	-	-	-	-	-
MW-3A	03/28/2014	8.70	6.45	2.25	0.00	0.00	-	-	530	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-
MW-3A	09/25/2014	8.70	8.72	-0.02	0.00	0.00	-	-	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-
MW-3A	03/05/2015	8.70	7.29	1.41	0.00	0.00	-	-	1,000	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-
MW-3A	09/25/2015	8.70	8.66	0.04	0.00	0.00	-	-	540	-	72 J	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-
MW-3A	03/18/2016	8.70	4.88	3.82	0.00	0.00	-	-	-	<110	<100	<1	<1	<1	<1	<1	<250	-	-	-	-	-	-	-
MW-3A	09/27/2016	8.70	8.64	0.06	0.00	0.00	-	-	930	-	<100	<1	<1	<1	<1	0.7 J	<250	-	-	-	-	-	-	-
<b>MW-3A</b>	<b>01/13/2017</b>	<b>14.04</b>	<b>4.11</b>	<b>9.93</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	<100	<100	<1	<1	<1	<1	<1	<250	-	-	-	-	-	-	-
MW-4	08/20/1991	7.37	5.05	1.32	0.00	0.00	-	-	160	-	1,800	870	4.0	3.0	9.0	-	-	-	-	-	-	-	-	-
MW-4	09/30/1991	7.37	5.67	1.70	0.00	0.00	-	-	-	-	670	830	5.5	2.7	12	-	-	-	-	-	-	-	-	-
MW-4	10/28/1991	7.37	5.81	1.56	0.00	0.00	-	-	-	-	2,800	990	5.8	4.8	19	-	-	-	-	-	-	-	-	-
MW-4	01/08/1992	7.37	5.34	2.03	0.00	0.00	-	-	-	-	2,900	1,200	10	7.0	18	-	-	-	-	-	-	-	-	-
MW-4	01/13/1992	7.37	-	-	0.00	0.00	-	-	1,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	06/23/1992	7.37	5.37	2.00	0.00	0.00	-	-	<50	-	1,600	380	6.5	3.0	12	-	-	-	-	-	-	-	-	-

**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4	08/24/1992	7.37	5.75	1.62	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	09/21/1992	7.37	5.95	1.42	0.00	0.00	-	-	<50	-	1,200	480	5.6	3.7	11	-	-	-	-	-	-	-	-
MW-4	10/26/1992	7.37	5.96	1.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	12/23/1992	7.37	-	-	0.00	0.00	-	-	1,800	-	1,500	700	3.6	3.2	11	-	-	-	-	-	-	-	-
MW-4	01/08/1993	7.37	4.64	2.73	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	03/25/1993	7.37	4.42	2.95	0.00	0.00	-	-	<10	-	520	160	3.0	1.0	4.0	-	-	-	-	-	-	-	-
MW-4	06/11/1993	7.37	5.12	2.25	0.00	0.00	-	-	-	-	1,200	430	5.0	6.0	11	-	-	-	-	-	-	-	2,600
MW-4	09/29/1993	7.37	5.80	1.57	0.00	0.00	-	-	-	-	1,300	210	8.0	2.0	14	-	-	-	-	-	-	-	-
MW-4	12/20/1993	7.37	5.10	2.27	0.00	0.00	-	-	3,900	-	570	230	5.0	4.0	8.0	-	-	-	-	-	-	-	-
MW-4	03/07/1994	7.37	5.01	2.36	0.00	0.00	-	-	2,600	-	2,200	290	18	2.5	11	22,000	-	-	-	-	-	-	-
MW-4	06/17/1994	7.37	5.82	1.55	0.00	0.00	-	-	2,800	-	2,100	480	11	4.3	9.5	-	-	-	-	-	-	-	-
MW-4	09/12/1994	7.37	5.64	1.73	0.00	0.00	-	-	3,000	-	1,700	340	6.1	2.7	9.7	63,000	-	-	-	-	-	-	-
MW-4	11/30/1994 <sup>2b</sup>	7.37	5.58	1.79	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	03/24/1995	7.37	4.95	2.42	0.00	0.00	-	-	3,000 <sup>2</sup>	-	1,500	280	<5.0	<5.0	6.9	-	-	-	-	-	-	-	-
MW-4	06/27/1995	7.37	8.79	-1.42	0.00	0.00	-	-	3,100 <sup>2</sup>	-	<10,000	310	<100	<100	<100	32,000	-	-	-	-	-	-	-
MW-4	09/28/1995	7.37	5.85	1.52	0.00	0.00	-	-	6,300 <sup>2</sup>	-	330	64	1.1	<0.5	<0.5	630	-	-	-	-	-	-	-
MW-4	12/19/1995	7.37	5.50	1.87	0.00	0.00	-	-	3,400 <sup>2</sup>	-	3,000	520	<25	<25	<25	44,000	-	-	-	-	-	-	-
MW-4	02/28/1996	7.37	5.10	2.27	0.00	0.00	-	-	4,700 <sup>2</sup>	-	<10,000	230	<100	<100	<100	32,000	-	-	-	-	-	-	-
MW-4	06/25/1996	7.37	5.78	1.59	0.00	0.00	-	-	3,100	-	<10,000	160	<100	<100	<100	31,000	-	-	-	-	-	-	-
MW-4	12/17/1996	7.37	5.95	1.42	0.00	0.00	-	-	3,600 <sup>3</sup>	-	<5,000	110	<50	<50	<50	22,000	-	-	-	-	-	-	-
MW-4	03/31/1997	7.37	5.62	1.75	0.00	0.00	-	-	2,700 <sup>2</sup>	-	<2,500	130	<25	<25	<25	16,000	-	-	-	-	-	-	-
MW-4	06/30/1997	7.37	6.03	1.34	0.00	0.00	-	-	2,700 <sup>2</sup>	-	<2,500	130	<25	<25	<25	14,000	-	-	-	-	-	-	-
MW-4	09/12/1997	7.37	5.69	1.68	0.00	0.00	-	-	2,100 <sup>2</sup>	-	<5,000	63	<50	<50	<50	15,000	-	-	-	-	-	-	-
MW-4	12/05/1997	7.37	5.15	2.22	0.00	0.00	-	-	2,600 <sup>2</sup>	-	1,300	120	<5.0	<5.0	8.5	15,000	-	-	-	-	-	-	-
MW-4	02/16/1998	7.37	6.26	1.11	0.00	0.00	-	-	1,300 <sup>2</sup>	-	1,200	57	4.5	<2.5	7.0	12,000	-	-	-	-	-	-	-
MW-4	06/17/1998	7.37	4.96	2.41	0.00	0.00	-	-	530 <sup>2</sup>	-	5,300	390	290	28	150	17,000	-	-	-	-	-	-	-
MW-4	08/31/1998	7.37	5.91	1.46	0.00	0.00	-	-	2,400 <sup>2</sup>	-	<50	89	<0.5	<0.5	<0.5	14,000/16,000 <sup>4</sup>	-	-	-	-	-	-	-
MW-4	12/28/1998	7.37	5.41	1.96	0.00	0.00	-	-	2,900 <sup>2</sup>	-	1,000	52	5.6	4.6	9.1	8,400	-	3500	<1,000	670000	6800	-	-
MW-4	03/04/1999	7.37	5.20	2.17	0.00	0.00	-	-	4,490 <sup>2</sup>	-	<2,500	85.5	40.9	<25	<25	11,400	-	-	-	-	-	-	-
MW-4A	03/20/1999	7.69	5.62	2.07	0.00	0.00	-	-	1,280 <sup>2</sup>	-	1,370	129	8.6	18.3	7.3	2,110	-	-	-	-	-	-	-
MW-4A	04/19/1999	7.69	4.91	2.78	0.00	0.00	-	-	370 <sup>2</sup>	-	<500	<5.0	<5.0	<5.0	<5.0	1,600	-	-	-	-	-	-	-
MW-4A	06/14/1999	7.69	5.25	2.44	0.00	0.00	-	-	2,500 <sup>2</sup>	-	5,360	312	<20	44	<20	2,880	-	-	-	-	-	-	-
MW-4A	09/17/1999	7.69	7.37	0.32	0.00	0.00	-	-	1,430 <sup>2</sup>	-	1,290	38.6	<5.0	7.01	<5.0	1,780	-	-	-	-	-	-	-
MW-4A	12/20/1999	7.69	6.30	1.39	0.00	0.00	-	-	7,480 <sup>2</sup>	-	852	43.5	4.63	9.18	4.36	1,070	-	-	-	-	-	-	-
MW-4A	06/24/2000	7.69	6.12	1.57	0.00	0.00	-	-	1,190 <sup>3</sup>	-	190 <sup>7</sup>	1.4	1.7	1.7	3.3	3,900 <sup>7</sup>	-	-	-	-	-	-	-

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**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW6260	Ethanol	GENERAL CHEMISTRY				
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4A	09/07/2000	7.69	6.26	1.43	0.00	0.00	-	-	740 <sup>9</sup>	-	490 <sup>7</sup>	15	1.9	1.1	3.9	3,300	-	-	-	-	-	-
MW-4A	12/05/2000	7.69	5.99	1.70	0.00	0.00	-	-	560 <sup>12</sup>	-	<500	<5.00	<5.00	<5.00	<5.00	3,380 <sup>8</sup>	-	-	-	-	-	-
MW-4A	03/01/2001	7.69	5.68	2.01	0.00	0.00	-	-	600 <sup>9</sup>	-	<1,000	10	<10	<10	<10	4,600	-	-	-	-	-	-
MW-4A	06/04/2001	7.69	6.60	1.09	0.00	0.00	-	-	770 <sup>9</sup>	-	390 <sup>15</sup>	8.4	3.8	<2.5	3.0	3,800	-	-	-	-	-	-
MW-4A	09/10/2001	7.69	6.57	1.12	0.00	0.00	-	-	810	-	<500	13	<5.0	22	<5.0	4,900	-	-	-	-	-	-
MW-4A	12/03/2001	7.69	5.95	1.74	0.00	0.00	-	-	2,100	-	<250	1.5	<1.0	<1.0	<3.0	3,800	-	-	-	-	-	-
MW-4A	03/04/2002	7.69	8.88	-1.19	0.00	0.00	-	-	2,400	-	2,500	49	6.8	21	9.5	2,600	-	-	-	-	-	-
MW-4A	05/30/2002	7.69	6.20	1.49	0.00	0.00	-	-	2,600	-	430	4.6	<1.0	2.0	<3.0	3,700	-	-	-	-	-	-
MW-4A	09/03/2002	7.69	6.49	1.20	0.00	0.00	-	-	3,200	-	<500	4.5	<2.0	3.5	7.5	3,800	-	-	-	-	-	-
MW-4A	12/09/2002	7.69	6.26	1.43	0.00	0.00	-	-	1,600	-	440	1.1	<0.50	0.71	<5.0	4,000	-	-	-	-	-	-
MW-4A	03/10/2003	7.69	5.83	1.86	0.00	0.00	-	-	1,700	-	710	14	2.2	4.2	<10	4,100	-	-	-	-	-	-
MW-4A	06/09/2003 <sup>18</sup>	7.69	6.44	1.25	0.00	0.00	-	-	3,200	-	400	3	<1	2	<1	4,100	-	-	-	-	-	-
MW-4A	09/08/2003 <sup>18</sup>	7.69	5.86	1.83	0.00	0.00	-	-	3,900	-	1,300	28	4	4	<3	2,900	<250	-	-	-	-	-
MW-4A	12/08/2003 <sup>18</sup>	7.69	6.12	1.57	0.00	0.00	-	-	2,500	-	360	3	<3	<3	<3	3,200	<250	-	-	-	-	-
MW-4A	03/09/2004 <sup>18</sup>	7.69	5.37	2.32	0.00	0.00	-	-	4,300	-	1,400	28	5	10	3	3,200	<250	-	-	-	-	-
MW-4A	06/17/2004 <sup>18</sup>	7.69	6.05	1.64	0.00	0.00	-	-	7,900	-	6,000	140	20	52	16	1,500	<50	-	-	-	-	-
MW-4A	09/15/2004 <sup>18</sup>	7.69	7.40	0.29	0.00	0.00	-	-	4,200	-	3,300	14	5	4	6	2,400	<100	-	-	-	-	-
MW-4A	12/23/2004 <sup>18</sup>	7.69	6.26	1.43	0.00	0.00	-	-	2,800	-	1,500	7	3	4	4	3,000	<100	-	-	-	-	-
MW-4A	03/24/2005 <sup>18</sup>	7.69	5.01	2.68	0.00	0.00	-	-	900	-	2,700	28	7	9	4	2,300	<250	-	-	-	-	-
MW-4A	06/16/2005 <sup>18</sup>	7.69	6.03	1.66	0.00	0.00	-	-	3,600	-	1,000	3	5	3	6	3,200	<250	-	-	-	-	-
MW-4A	09/16/2005 <sup>18</sup>	7.69	6.62	1.07	0.00	0.00	-	-	2,400	-	380	<5	<5	<5	<5	3,700	<500	-	-	-	-	-
MW-4A	12/21/2005 <sup>18</sup>	7.69	5.86	1.83	0.00	0.00	-	-	2,900 <sup>23</sup>	-	580	2	0.7	1	2	3,000	<50	-	-	-	-	-
MW-4A	03/23/2006 <sup>18</sup>	7.69	5.14	2.55	0.00	0.00	-	-	1,900	-	1,400	16	5	9	<3	2,800	<250	-	-	-	-	-
MW-4A	06/09/2006 <sup>18</sup>	7.69	5.93	1.76	0.00	0.00	-	-	3,900	-	1,200	4	2	3	3	3,000	<50	-	-	-	-	-
MW-4A	09/05/2006 <sup>18</sup>	7.69	6.62	1.07	0.00	0.00	-	-	3,800	-	650	<5	<5	<5	<5	1,600	<500	-	-	-	-	-
MW-4A	12/15/2006 <sup>18</sup>	7.69	6.00	1.69	0.00	0.00	-	-	3,500	-	1,000	2	1	0.8	3	520	<50	-	-	-	-	-
MW-4A	03/01/2007 <sup>18</sup>	7.69	5.83	1.86	0.00	0.00	-	-	1,600	-	1,200	11	5	6	5	1,100	<50	-	-	-	-	-
MW-4A	06/05/2007 <sup>18</sup>	7.69	5.36	2.33	0.00	0.00	-	-	3,000	-	3,300	34	9	7	8	330	<100	-	-	-	-	-
MW-4A	09/05/2007 <sup>18</sup>	7.69	5.72	1.97	0.00	0.00	-	-	3,800	-	1,700	11	4	2	4	130	<50	-	-	-	-	-
MW-4A	12/05/2007 <sup>18</sup>	7.69	6.12	1.57	0.00	0.00	-	-	2,100	-	1,300	3	3	1	3	82	<50	-	-	-	-	-
MW-4A	03/03/2008 <sup>18</sup>	7.69	5.83	1.86	0.00	0.00	-	-	4,900	-	2,700	13	6	9	7	700	<50	-	-	-	-	-
MW-4A	06/02/2008 <sup>18</sup>	7.69	5.69	2.00	0.00	0.00	-	-	6,500	-	6,200	60	17	17	16	1,100	<50	-	-	-	-	-
MW-4A	09/04/2008 <sup>18</sup>	7.69	6.23	1.46	0.00	0.00	-	-	3,000	-	1,800	11	2	1	3	58	<50	-	-	-	-	-
MW-4A	12/04/2008 <sup>18</sup>	7.69	6.27	1.42	0.00	0.00	-	-	3,800	-	470	<0.5	<0.5	<0.5	<0.5	58	<50	-	-	-	-	-
MW-4A	02/26/2009 <sup>18</sup>	7.69	5.46	2.23	0.00	0.00	-	-	4,000	-	1,900	4	3	5	6	140	<50	-	-	-	-	-
MW-4A	06/30/2009 <sup>18</sup>	7.69	8.70	-1.01	0.00	0.00	-	-	6,100	-	7,400	33	16	13	17	920	<50	-	-	-	-	-



**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW6260	ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids		
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4A	09/29/2009 <sup>18</sup>	7.69	6.60	1.09	0.00	0.00	-	-	4,700	-	250	3	3	1 J	6	36	<50	-	-	-	-	-	-	-
MW-4A	03/10/2010 <sup>18</sup>	7.69	4.67	3.02	0.00	0.00	-	-	3,700	-	5,100	22	11	12	12	690	<50	-	-	-	-	-	-	-
MW-4A	09/15/2010	7.69	7.07	0.62	0.00	0.00	-	-	5,700	-	3,500	6	2	3	10	18	<50	-	-	-	-	-	-	-
MW-4A	03/14/2011	7.69	4.90	2.79	0.00	0.00	590	-	2,800	-	6,200	24	12	14	14	870	<50	-	-	-	-	-	-	-
MW-4A	09/26/2011	7.69	6.51	1.18	0.00	0.00	-	<39	-	1,000	5,000	9	3	2	10	43	<50	-	-	-	-	-	-	-
MW-4A	03/30/2012	7.69	4.43	3.26	0.00	0.00	-	<38	-	430	1,300	5	2	2	3	130	<50	-	-	-	-	-	-	-
MW-4A	09/22/2012	7.69	6.53	1.16	0.00	0.00	-	<38	-	210	990	2	<0.5	<0.5	0.7 J	51	<50	-	-	-	-	-	-	-
MW-4A	03/20/2013	7.69	5.73	1.96	0.00	0.00	-	<38	-	78 J	410	2	0.8 J	0.7 J	0.7 J	120	<50	-	-	-	-	-	-	-
MW-4A	09/25/2013	7.69	6.62	1.07	0.00	0.00	-	-	4,500	-	1,900	0.7 J	<0.5	<0.5	3	16	<50	-	-	-	-	-	-	-
MW-4A	03/28/2014	7.69	5.07	2.62	0.00	0.00	-	-	5,200	-	770	4	2	2	2	230	<50	-	-	-	-	-	-	-
MW-4A	09/25/2014	7.69	6.61	1.08	0.00	0.00	-	-	-	420	2,500	2	1	2	4	35	<50	-	-	-	-	-	-	-
MW-4A	03/05/2015	7.69	5.50	2.19	0.00	0.00	-	-	6,200	-	1,400	3	1	2	2	130	<50	-	-	-	-	-	-	-
MW-4A	09/25/2015	7.69	6.73	0.96	0.00	0.00	-	-	5,200	-	1,600	<0.5	<0.5	<0.5	0.6 J	9	<50	-	-	-	-	-	-	-
MW-4A	03/18/2016	7.69	3.29	4.40	0.00	0.00	-	-	-	<110	72 J	<1	<1	<1	<1	4	<250	-	-	-	-	-	-	-
MW-4A	09/27/2016	7.69	6.60	1.09	0.00	0.00	-	-	3,300	-	<1,000	<1	<1	<1	<1	8	<250	-	-	-	-	-	-	-
<b>MW-4A</b>	<b>01/13/2017</b>	<b>13.11</b>	<b>2.50</b>	<b>10.61</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	<b>&lt;100</b>	<b>&lt;100</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;250</b>	-	-	-	-	-	-	-
MW-5	06/23/1992	14.14	12.24	1.90	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	08/24/1992	14.14	12.29	1.85	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/21/1992	14.14	12.46	1.68	0.00	0.00	-	-	60	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	10/26/1992	14.14	12.52	1.62	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	12/23/1992	14.14	11.12	3.02	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	01/08/1993	14.14	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/25/1993	14.14	9.74	4.40	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	0.9	-	-	-	-	-	-	-	-	-
MW-5	06/11/1993	14.14	10.44	3.70	0.00	0.00	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	770
MW-5	09/29/1993	14.14	11.92	2.22	0.00	0.00	-	-	<10	-	<50	<0.5	0.6	<0.5	0.6	-	-	-	-	-	-	-	-	-
MW-5	12/20/1993	14.14	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/07/1994	14.14	11.34	2.80	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	06/17/1994	14.14	11.27	2.87	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	09/12/1994	14.14	12.86	1.28	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	-	-	-	-	-	-	-
MW-5	11/30/1994	14.14	11.91	2.23	0.00	0.00	-	-	99 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	03/24/1995	14.14	9.76	4.38	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	06/27/1995	14.14	11.40	2.74	0.00	0.00	-	-	55 <sup>3</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	09/28/1995	14.14	11.90	2.24	0.00	0.00	-	-	300 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	12/19/1995	14.14	12.58	1.56	0.00	0.00	-	-	53 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	3.1	-	-	-	-	-	-	-	-
MW-5	02/28/1996	14.14	11.70	2.44	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-

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**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW6260	ADDITIONAL VOCS	GENERAL CHEMISTRY							
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids			
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW-5	06/25/1996	14.14	11.43	2.71	0.00	0.00	-	-	120 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	36	-	-	-	-	-	-	-	-	-
MW-5	12/17/1996	14.14	11.40	2.74	0.00	0.00	-	-	89 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-
MW-5	03/31/1997	14.14	12.10	2.04	0.00	0.00	-	-	150 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-
MW-5	06/30/1997 <sup>25</sup>	14.14	12.78	1.36	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/12/1997	14.14	13.68	0.46	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-
MW-5	12/05/1997	14.14	13.03	1.11	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	02/16/1998	14.14	9.97	4.17	0.00	0.00	-	-	62 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-
MW-5	06/17/1998	14.14	11.85	2.29	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	08/31/1998	14.14	12.82	1.32	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-
MW-5	12/28/1998	14.14	13.43	0.71	0.00	0.00	-	-	-	-	-	-	-	-	-	-	15	<1,000	480000	51000	-	-	-	-	-
MW-5	03/04/1999	14.14	13.75	0.39	0.00	0.00	-	-	70.5	-	<50	<0.5	<0.5	<0.5	<0.5	3.34	-	-	-	-	-	-	-	-	-
MW-5	06/14/1999	14.14	14.10	0.04	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/17/1999	14.14	14.18	-0.04	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-
MW-5	12/20/1999	14.14	13.70	0.44	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/20/2000	14.14	12.64	1.50	0.00	0.00	-	-	115 <sup>3</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-
MW-5	06/24/2000	14.14	13.04	1.10	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/07/2000	14.14	13.17	0.97	0.00	0.00	-	-	<50	-	<50	<0.50	<0.50	<0.50	<0.50	5.0	-	-	-	-	-	-	-	-	-
MW-5	12/05/2000	14.14	11.28	2.86	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/01/2001	14.14	10.30	3.84	0.00	0.00	-	-	<50	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-	-	-
MW-5	06/04/2001 <sup>25</sup>	14.14	11.31	2.83	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/10/2001	14.14	12.16	1.98	0.00	0.00	-	-	<50	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-	-	-
MW-5	12/03/2001 <sup>25</sup>	14.14	8.62	5.52	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/04/2002	14.14	9.85	4.29	0.00	0.00	-	-	78	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-	-	-
MW-5	05/30/2002 <sup>25</sup>	14.14	10.83	3.31	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/03/2002 <sup>25</sup>	14.14	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	12/09/2002 <sup>25</sup>	14.14	11.36	2.78	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/10/2003	14.14	11.19	2.95	0.00	0.00	-	-	100	-	<50	<0.50	<0.50	<0.50	<1.5	8.2	-	-	-	-	-	-	-	-	-
MW-5	06/09/2003 <sup>25</sup>	14.14	12.57	1.57	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/08/2003 <sup>18</sup>	14.14	12.01	2.13	0.00	0.00	-	-	65	-	<50	<0.5	<0.5	<0.5	<0.5	8	<50	-	-	-	-	-	-	-	-
MW-5	12/08/2003 <sup>25</sup>	14.14	11.13	3.01	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/09/2004 <sup>18</sup>	14.14	10.58	3.56	0.00	0.00	-	-	110	-	<50	<0.5	<0.5	<0.5	<0.5	4	<50	-	-	-	-	-	-	-	-
MW-5	06/17/2004 <sup>25</sup>	14.14	12.10	2.04	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/15/2004 <sup>18</sup>	14.14	12.58	1.56	0.00	0.00	-	-	92	-	<50	<0.5	<0.5	<0.5	<0.5	7	<50	-	-	-	-	-	-	-	-
MW-5	12/23/2004 <sup>25</sup>	14.14	12.20	1.94	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/24/2005 <sup>18</sup>	14.14	7.70	6.44	0.00	0.00	-	-	85	-	<50	<0.5	<0.5	<0.5	3	6	<50	-	-	-	-	-	-	-	-
MW-5	06/16/2005 <sup>25</sup>	14.14	11.55	2.59	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW6260	ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-5	09/16/2005 <sup>18</sup>	14.14	11.78	2.36	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	6	<50	-	-	-	-	-	-	-
MW-5	12/21/2005 <sup>25</sup>	14.14	9.70	4.44	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/23/2006 <sup>18</sup>	14.14	9.20	4.94	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	4	<50	-	-	-	-	-	-	-
MW-5	06/09/2006 <sup>25</sup>	14.14	10.67	3.47	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/05/2006 <sup>18</sup>	14.14	11.80	2.34	0.00	0.00	-	-	120	-	<50	<0.5	<0.5	<0.5	<0.5	4	<50	-	-	-	-	-	-	-
MW-5	12/15/2006 <sup>25</sup>	14.14	11.50	2.64	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/01/2007 <sup>18</sup>	14.14	9.22	4.92	0.00	0.00	-	-	150	-	<50	1	3	0.7	3	2	<50	-	-	-	-	-	-	-
MW-5	06/05/2007 <sup>25</sup>	14.14	11.02	3.12	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/05/2007 <sup>18</sup>	14.14	12.50	1.64	0.00	0.00	-	-	68	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-
MW-5	12/05/2007 <sup>25</sup>	14.14	10.65	3.49	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/03/2008 <sup>18</sup>	14.14	10.51	3.63	0.00	0.00	-	-	89	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-
MW-5	06/02/2008 <sup>25</sup>	14.14	12.57	1.57	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/04/2008 <sup>18</sup>	14.14	12.48	1.66	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-	-
MW-5	12/04/2008 <sup>25</sup>	14.14	12.10	2.04	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	02/26/2009 <sup>18</sup>	14.14	10.35	3.79	0.00	0.00	-	-	320	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-
MW-5	06/30/2009 <sup>18</sup>	14.14	10.93	3.21	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/29/2009 <sup>18,25</sup>	14.14	12.27	1.87	0.00	0.00	-	-	270	-	<500	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-	-
MW-5	03/10/2010 <sup>18</sup>	14.14	10.21	3.93	0.00	0.00	-	-	540	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-
MW-5	09/15/2010	14.14	11.25	2.89	0.00	0.00	-	-	<32	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-
MW-5	03/14/2011	14.14	10.30	3.84	0.00	0.00	<38	-	<33	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-
MW-5	09/26/2011	14.14	10.34	3.80	0.00	0.00	-	<39	-	<50	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-
MW-5	03/30/2012	14.14	10.91	3.23	0.00	0.00	-	48 J	-	<50	<50	<0.5	<0.5	<0.5	<0.5	1 J	<50	-	-	-	-	-	-	-
MW-5	09/21/2012	14.14	12.48	1.66	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-
MW-5	03/19/2013	14.14	10.97	3.17	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	0.9 J	<50	-	-	-	-	-	-	-
MW-5	09/25/2013	14.14	12.46	1.68	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	0.7 J	<50	-	-	-	-	-	-	-
MW-5	03/28/2014	14.14	10.32	3.82	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-
MW-5	09/25/2014	14.14	12.50	1.64	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	0.6 J	<50	-	-	-	-	-	-	-
MW-5	03/05/2015	14.14	11.41	2.73	0.00	0.00	-	-	530	-	<50	<0.5	<0.5	<0.5	<0.5	0.5 J	<50	-	-	-	-	-	-	-
MW-5	09/25/2015	14.14	12.49	1.65	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	0.6 J	<50	-	-	-	-	-	-	-
MW-5	03/18/2016	14.14	9.84	4.30	0.00	0.00	-	-	<110	-	<100	<1	<1	<1	<1	<1	<250	-	-	-	-	-	-	-
MW-5	09/27/2016	14.14	12.74	1.40	0.00	0.00	-	-	<100	-	<100	<1	<1	<1	<1	<1	<250	-	-	-	-	-	-	-
<b>MW-5</b>	<b>01/13/2017</b>	<b>19.73</b>	<b>10.54</b>	<b>9.19</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	-	<b>&lt;100</b>	<b>&lt;100</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;250</b>	-	-	-	-	-	-	-
MW-6	06/23/1992	4.46	5.14	-0.68	0.00	0.00	-	-	120	-	<50	4.3	<0.5	0.8	0.9	-	-	-	-	-	-	-	-	-
MW-6	08/24/1992	4.46	4.95	-0.49	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/21/1992	4.46	4.90	-0.44	0.00	0.00	-	-	<50	-	<250	<2.5	<2.5	<2.5	<2.5	-	-	-	-	-	-	-	-	-

**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	10/26/1992	4.46	5.52	-1.06	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	12/23/1992	4.46	5.40	-0.94	0.00	0.00	-	-	81	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-6	01/08/1993	4.46	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/25/1993	4.46	6.10	-1.64	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	0.7	-	-	-	-	-	-	-
MW-6	06/11/1993	4.46	6.56	-2.10	0.00	0.00	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	15,000
MW-6	09/29/1993	4.46	5.17	-0.71	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-6	12/20/1993	4.46	5.93	-1.47	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-6	03/07/1994	4.46	5.27	-0.81	0.00	0.00	-	-	<10	-	54	<0.5	<0.5	<0.5	0.6	-	-	-	-	-	-	-
MW-6	06/17/1994	4.46	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/12/1994	4.46	5.10	-0.64	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	11/30/1994	4.46	5.58	-1.12	0.00	0.00	-	-	800 <sup>1</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-6	03/24/1995	4.46	6.33	-1.87	0.00	0.00	-	-	490 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-6	06/27/1995	4.46	8.20	-3.74	0.00	0.00	-	-	300 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-6	09/28/1995	4.46	4.65	-0.19	0.00	0.00	-	-	1,200 <sup>2</sup>	-	120	1.1	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-6	12/19/1995	4.46	6.04	-1.58	0.00	0.00	-	-	820 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-6	02/28/1996	4.46	6.00	-1.54	0.00	0.00	-	-	270 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-6	06/25/1996	4.46	6.17	-1.71	0.00	0.00	-	-	750 <sup>2</sup>	-	97	<0.5	<0.5	<0.5	0.71	<2.5	-	-	-	-	-	-
MW-6	12/17/1996	4.46	6.13	-1.67	0.00	0.00	-	-	540 <sup>2</sup>	-	65	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-6	03/31/1997	4.46	6.69	-2.23	0.00	0.00	-	-	780 <sup>2</sup>	-	65	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-6	06/30/1997 <sup>25</sup>	4.46	7.08	-2.62	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/12/1997	4.46	5.41	-0.95	0.00	0.00	-	-	270 <sup>2</sup>	-	65	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-6	12/05/1997	4.46	6.42	-1.96	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	02/16/1998	4.46	4.76	-0.30	0.00	0.00	-	-	3302	-	140	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-6	06/17/1998	4.46	6.00	-1.54	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	08/31/1998	4.46	5.10	-0.64	0.00	0.00	-	-	2701	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-6	12/28/1998	4.46	6.50	-2.04	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/04/1999	4.46	5.81	-1.35	0.00	0.00	-	-	638 <sup>1</sup>	-	95.5	<0.5	<0.5	<0.5	<0.5	<2.0	-	810	<1,000	2400000	110000	-
MW-6	06/14/1999	4.46	5.43	-0.97	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/17/1999	4.46	6.20	-1.74	0.00	0.00	-	-	258 <sup>1</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-6	12/20/1999	4.46	6.77	-2.31	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/20/2000	4.46	6.58	-2.12	0.00	0.00	-	-	257 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-6	06/24/2000 <sup>25</sup>	4.46	6.98	-2.52	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/07/2000	4.46	4.92	-0.46	0.00	0.00	-	-	98 <sup>11</sup>	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-
MW-6	12/05/2000	4.46	5.10	-0.64	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/01/2001	4.46	4.89	-0.43	0.00	0.00	-	-	190 <sup>9</sup>	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-
MW-6	06/04/2001 <sup>25</sup>	4.46	5.21	-0.75	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	09/10/2001	4.46	5.11	-0.65	0.00	0.00	-	-	140 <sup>17</sup>	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-
MW-6	12/03/2001 <sup>25</sup>	4.46	5.03	-0.57	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/04/2002 <sup>26</sup>	4.46	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	05/30/2002 <sup>25</sup>	4.46	6.11	-1.65	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/03/2002	4.46	5.28	-0.82	0.00	0.00	-	-	340	-	<500	<2.0	<2.0	<2.0	<6.0	<3.0	-	-	-	-	-	-
MW-6	12/09/2002 <sup>25</sup>	4.46	5.12	-0.66	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/10/2003	4.46	6.26	-1.80	0.00	0.00	-	-	420	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-
MW-6	06/09/2003 <sup>25</sup>	4.46	5.91	-1.45	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/08/2003 <sup>18</sup>	4.46	4.65	-0.19	0.00	0.00	-	-	230	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	12/08/2003 <sup>25</sup>	4.46	5.24	-0.78	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/09/2004 <sup>18</sup>	4.46	5.85	-1.39	0.00	0.00	-	-	1,500	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	06/17/2004 <sup>25</sup>	4.46	6.08	-1.62	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/15/2004 <sup>18</sup>	4.46	6.74	-2.28	0.00	0.00	-	-	1,200	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	12/23/2004 <sup>25</sup>	4.46	5.76	-1.30	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/24/2005 <sup>18</sup>	4.46	4.65	-0.19	0.00	0.00	-	-	290	-	60	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	06/16/2005 <sup>25</sup>	4.46	5.50	-1.04	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/16/2005 <sup>18</sup>	4.46	5.09	-0.63	0.00	0.00	-	-	640	-	<50	<3	<3	<3	<3	<3	<250	-	-	-	-	-
MW-6	12/21/2005 <sup>25</sup>	4.46	5.00	-0.54	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/23/2006 <sup>18</sup>	4.46	4.63	-0.17	0.00	0.00	-	-	1,500	-	50	<3	<3	<3	<3	<3	<250	-	-	-	-	-
MW-6	06/09/2006 <sup>25</sup>	4.46	4.95	-0.49	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/05/2006 <sup>18</sup>	4.46	4.85	-0.39	0.00	0.00	-	-	820	-	<250	<3	<3	<3	<3	<3	<250	-	-	-	-	-
MW-6	12/15/2006 <sup>25</sup>	4.46	5.40	-0.94	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/01/2007 <sup>18</sup>	4.46	5.42	-0.96	0.00	0.00	-	-	1,600	-	<250	0.9	3	0.7	4	<0.5	<50	-	-	-	-	-
MW-6	06/05/2007 <sup>25</sup>	4.46	5.87	-1.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/05/2007 <sup>18</sup>	4.46	4.75	-0.29	0.00	0.00	-	-	850	-	58	<5	<5	<5	<5	<5	<500	-	-	-	-	-
MW-6	12/05/2007 <sup>25</sup>	4.46	5.58	-1.12	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/03/2008 <sup>18</sup>	4.46	5.86	-1.40	0.00	0.00	-	-	1,800	-	82	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	06/02/2008 <sup>25</sup>	4.46	5.24	-0.78	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/04/2008 <sup>18</sup>	4.46	4.71	-0.25	0.00	0.00	-	-	770	-	<50	<5 <sup>24</sup>	<5 <sup>24</sup>	<5 <sup>24</sup>	<5 <sup>24</sup>	<5 <sup>24</sup>	<500	-	-	-	-	-
MW-6	12/04/2008 <sup>25</sup>	4.46	4.80	-0.34	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	02/26/2009 <sup>18,26</sup>	4.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	06/30/2009 <sup>18</sup>	4.46	5.29	-0.83	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/29/2009 <sup>18,24</sup>	4.46	4.82	-0.36	0.00	0.00	-	-	1,500	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	03/10/2010 <sup>18</sup>	4.46	2.91	1.55	0.00	0.00	-	-	2,500	-	120	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	09/15/2010	4.46	5.00	-0.54	0.00	0.00	-	-	1,300	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	03/14/2011	4.46	7.15	-2.69	0.00	0.00	72 J	-	710	-	89 J	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-



**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	09/26/2011	4.46	4.79	-0.33	0.00	0.00	-	<38	-	<50	<50	<1	<1	<1	<1	<1	<100	-	-	-	-	-
MW-6	03/30/2012	4.46	6.87	-2.41	0.00	0.00	-	<38	-	<50	<50	<5	<5	<5	<5	<5	<500	-	-	-	-	-
MW-6	09/22/2012	4.46	6.88	-2.42	0.00	0.00	-	<38	-	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	03/19/2013	4.46	7.41	-2.95	0.00	0.00	-	<38	-	<50	62 J	<3	<3	<3	<3	<3	<250	-	-	-	-	-
MW-6	09/25/2013	4.46	5.25	-0.79	0.00	0.00	-	-	1,600	-	70 J	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	03/28/2014	4.46	7.00	-2.54	0.00	0.00	-	-	1,500	-	69 J	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	09/25/2014	4.46	5.09	-0.63	0.00	0.00	-	-	-	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	03/05/2015	4.46	6.43	-1.97	0.00	0.00	-	-	1,300	-	70 J	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
MW-6	09/25/2015	4.46	4.99	-0.53	0.00	0.00	-	-	1,000	-	<500	<5	<5	<5	<5	<5	<500	-	-	-	-	-
MW-6	03/18/2016	4.46	5.81	-1.35	0.00	0.00	-	-	-	<110	<1,000	<5	<5	<5	<5	<5	<1,300	-	-	-	-	-
MW-6	09/27/2016	4.46	5.10	-0.64	0.00	0.00	-	-	1,500	-	<1,000	<10	<10	<10	<10	<10	<2,500	-	-	-	-	-
<b>MW-6</b>	<b>01/13/2017</b>	<b>9.99</b>	<b>6.46</b>	<b>3.53</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	<b>97 J</b>	<b>150</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;2,500</b>	-	-	-	-	-
MW-7	08/24/1992	5.26	5.55	-0.29	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/21/1992	5.26	5.65	-0.39	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-7	10/26/1992	5.26	5.51	-0.25	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/23/1992	5.26	3.95	1.31	0.00	0.00	-	-	60	-	<50	2.9	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-7	01/08/1993	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/25/1993	5.26	2.50	2.76	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-7	06/11/1993	5.26	3.46	1.80	0.00	0.00	-	-	-	-	<50	0.6	<0.5	<0.5	<0.5	-	-	-	-	-	-	2,200
MW-7	09/29/1993	5.26	5.52	-0.26	0.00	0.00	-	-	<10	-	<50	2.0	1.0	1.0	7.0	-	-	-	-	-	-	-
MW-7	12/20/1993	5.26	4.41	0.85	0.00	0.00	-	-	<10	-	<50	2.0	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-7	03/07/1994	5.26	2.62	2.64	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-7	06/17/1994	5.26	3.27	1.99	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-7	09/12/1994	5.26	4.11	1.15	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	-	-	-	-	-
MW-7	11/30/1994	5.26	2.76	2.50	0.00	0.00	-	-	92 <sup>1</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-7	03/24/1995	5.26	2.20	3.06	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-7	06/27/1995	5.26	3.90	1.36	0.00	0.00	-	-	69 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-7	09/28/1995	5.26	4.85	0.41	0.00	0.00	-	-	84 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
MW-7	12/19/1995	5.26	3.02	2.24	0.00	0.00	-	-	84 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-7	02/28/1996	5.26	1.43	3.83	0.00	0.00	-	-	99 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-7	06/25/1996	5.26	4.29	0.97	0.00	0.00	-	-	110 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-7	12/17/1996	5.26	2.18	3.08	0.00	0.00	-	-	54 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-7	03/31/1997	5.26	2.94	2.32	0.00	0.00	-	-	100 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-
MW-7	06/30/1997 <sup>27</sup>	5.26	3.58	1.68	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/12/1997	5.26	3.41	1.85	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-7	12/05/1997	5.26	1.89	3.37	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	02/16/1998	5.26	1.83	3.43	0.00	0.00	-	-	77 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-7	06/17/1998	5.26	1.94	3.32	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	08/31/1998	5.26	4.19	1.07	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/28/1998	5.26	4.47	0.79	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/04/1999	5.26	1.75	3.51	0.00	0.00	-	-	73.4	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0	-	12000	<1,000	350000	79000	-	-
MW-7	06/14/1999	5.26	1.62	3.64	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/17/1999	5.26	4.84	0.42	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/20/1999	5.26	4.81	0.45	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/20/2000	5.26	1.85	3.41	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-7	06/24/2000	5.26	2.21	3.05	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/07/2000	5.26	3.65	1.61	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/05/2000	5.26	2.95	2.31	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/01/2001	5.26	0.65	4.61	0.00	0.00	-	-	<50	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-
MW-7	06/04/2001	5.26	1.52	3.74	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/10/2001 <sup>27</sup>	5.26	4.18	1.08	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/03/2001 <sup>27</sup>	5.26	1.06	4.20	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/04/2002	5.26	1.50	3.76	0.00	0.00	-	-	<50	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
MW-7	05/30/2002 <sup>27</sup>	5.26	2.75	2.51	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/03/2002 <sup>27</sup>	5.26	3.02	2.24	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/09/2002 <sup>27</sup>	5.26	2.85	2.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/10/2003	5.26	1.94	3.32	0.00	0.00	-	-	85	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
MW-7	06/09/2003 <sup>27</sup>	5.26	2.54	2.72	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/08/2003 <sup>27</sup>	5.26	2.60	2.66	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/08/2003 <sup>27</sup>	5.26	2.45	2.81	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/09/2004 <sup>18</sup>	5.26	0.73	4.53	0.00	0.00	-	-	230	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-7	06/17/2004 <sup>26</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/15/2004 <sup>26</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/23/2004 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/24/2005 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	06/16/2005 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/16/2005 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/21/2005 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/23/2006 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	06/09/2006 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/05/2006 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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**3026 Lakeshore Avenue**  
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Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY									
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids			
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
MW-7	12/15/2006 <sup>2b</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW-8	06/23/1992	8.94	24.14	-15.20	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	
MW-8	08/24/1992	8.94	8.60	0.34	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-8	09/21/1992	8.94	8.39	0.55	0.00	0.00	-	-	<50	-	94	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	
MW-8	10/26/1992	8.94	9.12	-0.18	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-8	12/23/1992	8.94	8.11	0.83	0.00	0.00	-	-	79	-	<50	0.7	5.0	0.7	2.9	-	-	-	-	-	-	-	-	-	-	
MW-8	01/08/1993	8.94	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-8	03/25/1993	8.94	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-8	06/11/1993	8.94	8.39	0.55	0.00	0.00	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	3,500	
MW-8	09/29/1993	8.94	8.25	0.69	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	
MW-8	12/20/1993	8.94	8.46	0.48	0.00	0.00	-	-	<10	-	<50	<0.5	0.6	<0.5	1.0	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/07/1994	8.94	8.66	0.28	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-
MW-8	06/17/1994	8.94	8.82	0.12	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/12/1994	8.94	8.83	0.11	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	0.8	<5.0	-	-	-	-	-	-	-	-	-
MW-8	11/30/1994	8.94	8.63	0.31	0.00	0.00	-	-	120 <sup>1</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/24/1995	8.94	8.51	0.43	0.00	0.00	-	-	110 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-
MW-8	06/27/1995	8.94	8.97	-0.03	0.00	0.00	-	-	67 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/28/1995	8.94	8.90	0.04	0.00	0.00	-	-	91 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/19/1995	8.94	8.40	0.54	0.00	0.00	-	-	76 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-	-
MW-8	02/28/1996	8.94	8.44	0.50	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-	-
MW-8	06/25/1996	8.94	8.89	0.05	0.00	0.00	-	-	80 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-	-
MW-8	12/17/1996	8.94	8.45	0.49	0.00	0.00	-	-	79 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-	-	-
MW-8	03/31/1997	8.94	8.76	0.18	0.00	0.00	-	-	72 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	3.6	-	-	-	-	-	-	-	-	-	-
MW-8	06/30/1997	8.94	9.12	-0.18	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/12/1997	8.94	8.81	0.13	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/05/1997	8.94	8.35	0.59	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	02/16/1998	8.94	7.94	1.00	0.00	0.00	-	-	68 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	4.3	-	-	-	-	-	-	-	-	-	-
MW-8	06/17/1998	8.94	8.43	0.51	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	08/31/1998	8.94	8.88	0.06	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/28/1998	8.94	8.30	0.64	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/04/1999	8.94	8.65	0.29	0.00	0.00	-	-	106	-	<50	<0.5	<0.5	<0.5	<0.5	3.83	-	-	-	-	-	-	-	-	-	-
MW-8	06/14/1999	8.94	8.42	0.52	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/17/1999	8.94	9.87	-0.93	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/20/1999	8.94	8.40	0.54	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/20/2000	8.94	8.12	0.82	0.00	0.00	-	-	82.2 <sup>6</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	3.46	-	-	-	-	-	-	-	-	-	-

**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-8	06/24/2000 <sup>27</sup>	8.94	8.63	0.31	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/07/2000	8.94	8.68	0.26	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/05/2000	8.94	8.13	0.81	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/01/2001	8.94	7.90	1.04	0.00	0.00	-	-	51 <sup>11</sup>	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-
MW-8	06/04/2001	8.94	9.21	-0.27	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/10/2001 <sup>27</sup>	8.94	8.68	0.26	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/03/2001 <sup>27</sup>	8.94	7.82	1.12	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/04/2002	8.94	7.68	1.26	0.00	0.00	-	-	82	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
MW-8	05/30/2002 <sup>26</sup>	8.94	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/03/2002 <sup>27</sup>	8.94	9.15	-0.21	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/09/2002 <sup>27</sup>	8.94	8.73	0.21	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/10/2003	8.94	8.39	0.55	0.00	0.00	-	-	110	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
MW-8	06/09/2003 <sup>27</sup>	8.94	8.97	-0.03	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/08/2003 <sup>27</sup>	8.94	8.42	0.52	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/08/2003 <sup>27</sup>	8.94	8.17	0.77	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/09/2004 <sup>18</sup>	8.94	7.91	1.03	0.00	0.00	-	-	300	-	<50	<0.5	<0.5	<0.5	<0.5	3	<50	-	-	-	-	-	-
MW-8	06/17/2004 <sup>27</sup>	8.94	8.93	0.01	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/15/2004 <sup>27</sup>	8.94	9.91	-0.97	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/23/2004 <sup>27</sup>	8.94	5.74	3.20	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/24/2005 <sup>18</sup>	8.94	8.44	0.50	0.00	0.00	-	-	240	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-8	06/16/2005 <sup>27</sup>	8.94	8.78	0.16	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/16/2005 <sup>27</sup>	8.94	8.68	0.26	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/21/2005 <sup>27</sup>	8.94	8.21	0.73	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/23/2006 <sup>18</sup>	8.94	7.91	1.03	0.00	0.00	-	-	120	-	<50	<0.5	<0.5	<0.5	<0.5	0.8	<50	-	-	-	-	-	-
MW-8	06/09/2006 <sup>27</sup>	8.94	8.91	0.03	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/05/2006 <sup>27</sup>	8.94	8.55	0.39	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/15/2006 <sup>27</sup>	8.94	8.26	0.68	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/01/2007 <sup>18</sup>	8.94	8.08	0.86	0.00	0.00	-	-	150	-	63	2	5	1	7	1	<50	-	-	-	-	-	-
MW-8	06/05/2007 <sup>27</sup>	8.94	8.35	0.59	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/05/2007 <sup>27</sup>	8.94	7.21	1.73	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/05/2007 <sup>27</sup>	8.94	7.17	1.77	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/03/2008 <sup>18</sup>	8.94	7.13	1.81	0.00	0.00	-	-	510	-	<50	<0.5	<0.5	<0.5	<0.5	0.9	<50	-	-	-	-	-	-
MW-8	06/02/2008 <sup>27</sup>	8.94	7.74	1.20	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/04/2008 <sup>27</sup>	8.94	7.88	1.06	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/04/2008 <sup>27</sup>	8.94	7.22	1.72	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	02/26/2009 <sup>18</sup>	8.94	6.44	2.50	0.00	0.00	-	-	580	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-

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**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-8	06/30/2009 <sup>27</sup>	8.94	7.62	1.32	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/29/2009 <sup>18,27</sup>	8.94	7.22	1.72	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/10/2010 <sup>18</sup>	8.94	5.18	3.76	0.00	0.00	-	-	460	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-
MW-8	09/15/2010 <sup>27</sup>	8.94	8.77	0.17	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/14/2011 <sup>29</sup>	8.94	7.75	1.19	0.00	0.00	<38	-	<33	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-8	09/26/2011 <sup>29</sup>	8.94	8.52	0.42	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/30/2012	8.94	7.56	1.38	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-8	09/22/2012 <sup>29</sup>	8.94	8.55	0.39	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/19/2013	8.94	8.01	0.93	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	0.7 J	<50	-	-	-	-	-	-
MW-8	09/25/2013	8.94	8.60	0.34	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-8	03/28/2014	8.94	7.49	1.45	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	0.6 J	<50	-	-	-	-	-	-
MW-8	09/25/2014 <sup>29</sup>	8.94	8.39	0.55	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/05/2015	8.94	7.70	1.24	0.00	0.00	-	-	230	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-8	09/25/2015	8.94	8.65	0.29	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/18/2016	8.94	6.18	2.76	0.00	0.00	-	-	-	<110	<100	<1	<1	<1	<1	<1	<250	-	-	-	-	-	-
MW-8	09/27/2016	8.94	8.79	0.15	0.00	0.00	-	-	<100	-	<100	<1	<1	<1	<1	0.5 J	<250	-	-	-	-	-	-
<b>MW-8</b>	<b>01/13/2017</b>	<b>14.46</b>	<b>4.73</b>	<b>9.73</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	<b>120</b>	<b>&lt;100</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;250</b>	-	-	-	-	-	-
MW-9	04/19/1999	5.87	3.16	2.71	0.00	0.00	-	-	2,600 <sup>2</sup>	-	3,900 <sup>5</sup>	14	6.9	14	24	140	-	-	-	-	-	-	-
MW-9	06/14/1999	5.87	4.81	1.06	0.00	0.00	-	-	2,800 <sup>2</sup>	-	2,880	12.6	<10	<10	<10	138	-	-	-	-	-	-	-
MW-9	09/17/1999	5.87	4.85	1.02	0.00	0.00	-	-	1,770 <sup>2</sup>	-	3,370	33.1	14.4	<5.0	<5.0	202	-	-	-	-	-	-	-
MW-9	12/20/1999	5.87	4.00	1.87	0.00	0.00	-	-	996 <sup>2</sup>	-	3,970	42.2	13.5	<10	<10	311	-	-	-	-	-	-	-
MW-9	03/20/2000	5.87	3.00	2.87	0.00	0.00	-	-	2,710 <sup>2</sup>	-	5,920	22.1	<5.0	6.8	<5.0	106.0	-	-	-	-	-	-	-
MW-9	06/24/2000	5.87	3.91	1.96	0.00	0.00	-	-	1,940 <sup>9</sup>	-	2,500 <sup>7</sup>	12	<10	11	<10	120	-	-	-	-	-	-	-
MW-9	09/07/2000	5.87	4.28	1.59	0.00	0.00	-	-	1,500 <sup>9</sup>	-	3,700 <sup>7</sup>	<25	<25	<25	<25	330	-	-	-	-	-	-	-
MW-9	12/05/2000	5.87	3.80	2.07	0.00	0.00	-	-	1,300 <sup>12</sup>	-	3,470 <sup>2</sup>	<5.00	7.64	<5.00	<5.00	177	-	-	-	-	-	-	-
MW-9	03/01/2001	5.87	2.68	3.19	0.00	0.00	-	-	960 <sup>9</sup>	-	2,400 <sup>7</sup>	11	18.0	<10	<10	250	-	-	-	-	-	-	-
MW-9	06/04/2001	5.87	3.91	1.96	0.00	0.00	-	-	1,200 <sup>9</sup>	-	3,200 <sup>7</sup>	45	17	6.1	8.9	300	-	-	-	-	-	-	-
MW-9	09/10/2001	5.87	4.69	1.18	0.00	0.00	-	-	2,000 <sup>17</sup>	-	2,300	5.7	7.3	10	<5.0	200	-	-	-	-	-	-	-
MW-9	12/03/2001	5.87	2.99	2.88	0.00	0.00	-	-	2,600	-	3,600	14	5.4	8.2	8.5	210	-	-	-	-	-	-	-
MW-9	03/04/2002	5.87	3.55	2.32	0.00	0.00	-	-	3,700	-	4,400	17	<5.0	9.2	6.4	79	-	-	-	-	-	-	-
MW-9	05/30/2002	5.87	3.65	2.22	0.00	0.00	-	-	4,600	-	4,300	15	3.7	5.8	6.1	110	-	-	-	-	-	-	-
MW-9	09/03/2002	5.87	4.56	1.31	0.00	0.00	-	-	2,500	-	3,200	5.8	2.6	3.5	5.6	84	-	-	-	-	-	-	-
MW-9	12/09/2002	5.87	4.36	1.51	0.00	0.00	-	-	2,600	-	3,000	6.3	3.2	3.9	6.1	110	-	-	-	-	-	-	-
MW-9	03/10/2003	5.87	3.61	2.26	0.00	0.00	-	-	1,500	-	3,300	11	3.7	5.4	<7.5	150	-	-	-	-	-	-	-
MW-9	06/09/2003 <sup>18</sup>	5.87	3.58	2.29	0.00	0.00	-	-	2,700	-	3,500	2	2	3	2	46	-	-	-	-	-	-	-

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Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-9	09/08/2003 <sup>18</sup>	5.87	4.44	1.43	0.00	0.00	-	-	3,000	-	3,000	3	2	2	3	120	<50	-	-	-	-	-	-
MW-9	12/08/2003 <sup>18</sup>	5.87	3.66	2.21	0.00	0.00	-	-	2,500	-	2,400	3	3	3	4	560	<50	-	-	-	-	-	-
MW-9	03/09/2004 <sup>18</sup>	5.87	3.18	2.69	0.00	0.00	-	-	2,500	-	3,700	2	1	2	2	120	<50	-	-	-	-	-	-
MW-9	06/17/2004 <sup>18</sup>	5.87	4.82	1.05	0.00	0.00	-	-	2,700	-	3,100	2	1	2	3	96	<50	-	-	-	-	-	-
MW-9	09/15/2004 <sup>18</sup>	5.87	9.03	-3.16	0.00	0.00	-	-	2,600	-	1,200	1	<0.5	<0.5	2	190	<50	-	-	-	-	-	-
MW-9	12/23/2004 <sup>18</sup>	5.87	4.49	1.38	0.00	0.00	-	-	3,400	-	2,900	4	4	4	4	93	<50	-	-	-	-	-	-
MW-9	03/24/2005 <sup>18</sup>	5.87	2.52	3.35	0.00	0.00	-	-	1,500	-	3,200	16	2	3	3	23	<50	-	-	-	-	-	-
MW-9	06/16/2005 <sup>18</sup>	5.87	3.62	2.25	0.00	0.00	-	-	1,600	-	2,300	30	2	2	3	28	<50	-	-	-	-	-	-
MW-9	09/16/2005 <sup>18</sup>	5.87	4.78	1.09	0.00	0.00	-	-	1,500	-	1,400	2	0.9	1	2	50	<50	-	-	-	-	-	-
MW-9	12/21/2005 <sup>18</sup>	5.87	2.90	2.97	0.00	0.00	-	-	1,400 <sup>22</sup>	-	2,300	2	2	3	3	40	<50	-	-	-	-	-	-
MW-9	03/23/2006 <sup>18</sup>	5.87	2.62	3.25	0.00	0.00	-	-	1,600	-	2,900	1	9	6	160	24	<50	-	-	-	-	-	-
MW-9	06/09/2006 <sup>18</sup>	5.87	3.81	2.06	0.00	0.00	-	-	1,500	-	1,900	5	1	1	34	32	<50	-	-	-	-	-	-
MW-9	09/05/2006 <sup>18</sup>	5.87	4.93	0.94	0.00	0.00	-	-	1,700	-	1,300	1	1	0.9	14	53	<50	-	-	-	-	-	-
MW-9	12/15/2006 <sup>18</sup>	5.87	3.19	2.68	0.00	0.00	-	-	2,000	-	2,300	1	1	1	5	43	<50	-	-	-	-	-	-
MW-9	03/01/2007 <sup>18</sup>	5.87	3.07	2.80	0.00	0.00	-	-	1,700	-	3,000	1	1	1	4	36	<50	-	-	-	-	-	-
MW-9	06/05/2007 <sup>18</sup>	5.87	3.85	2.02	0.00	0.00	-	-	1,200	-	1,900	1	0.6	0.8	2	35	<50	-	-	-	-	-	-
MW-9	09/05/2007 <sup>18</sup>	5.87	4.98	0.89	0.00	0.00	-	-	1,800	-	1,400	1	0.8	0.8	3	56	<50	-	-	-	-	-	-
MW-9	12/05/2007 <sup>18</sup>	5.87	4.05	1.82	0.00	0.00	-	-	1,800	-	2,100	1	0.8	1	3	65	93	-	-	-	-	-	-
MW-9	03/03/2008 <sup>18</sup>	5.87	3.59	2.28	0.00	0.00	-	-	1,000	-	2,500	0.6	0.6	1	2	26	<50	-	-	-	-	-	-
MW-9	06/02/2008 <sup>18</sup>	5.87	4.78	1.09	0.00	0.00	-	-	1,700	-	2,400	1	0.8	0.8	2	50	<50	-	-	-	-	-	-
MW-9	09/04/2008 <sup>18</sup>	5.87	5.10	0.77	0.00	0.00	-	-	1,400	-	2,000	2	1	0.5	3	92	<50	-	-	-	-	-	-
MW-9	12/04/2008 <sup>18</sup>	5.87	4.73	1.14	0.00	0.00	-	-	2,300	-	1,700	1	2	1	3	50	<50	-	-	-	-	-	-
MW-9	02/26/2009 <sup>18</sup>	5.87	2.57	3.30	0.00	0.00	-	-	3,000	-	3,100	0.9	1	1	2	29	<50	-	-	-	-	-	-
MW-9	06/30/2009	5.87	4.63	1.24	0.00	0.00	-	-	1,700	-	2,600	0.9 J	0.9 J	0.8 J	4	49	<50	-	-	-	-	-	-
MW-9	09/29/2009	5.87	5.20	0.67	0.00	0.00	-	-	2,300	-	3,100	2	1	0.9 J	3	52	<50	-	-	-	-	-	-
MW-9	03/10/2010	5.87	3.00	2.87	0.00	0.00	-	-	5,000	-	4,100	0.6 J	0.8 J	1	2	19	<50	-	-	-	-	-	-
MW-9	09/15/2010	5.87	5.12	0.75	0.00	0.00	-	-	1,900	-	1,700	<0.5	<0.5	<0.5	<0.5	69	<50	-	-	-	-	-	-
MW-9	03/14/2011	5.87	3.53	2.34	0.00	0.00	430	-	1,100	-	2,600	0.6 J	5	0.9 J	1	14	<50	-	-	-	-	-	-
MW-9	09/26/2011	5.87	5.00	0.87	0.00	0.00	-	120	-	400	1,100	<0.5	<0.5	<0.5	<0.5	84	<50	-	-	-	-	-	-
MW-9	03/30/2012	5.87	2.32	3.55	0.00	0.00	-	310	-	790	1,200	0.5 J	3	1 J	0.9 J	19	<50	-	-	-	-	-	-
MW-9	09/22/2012	5.87	5.09	0.78	0.00	0.00	-	160	-	490	950	<0.5	0.6 J	<0.5	<0.5	68	<50	-	-	-	-	-	-
MW-9	03/19/2013	5.87	4.47	1.40	0.00	0.00	-	<38	-	240	1,800	<0.5	0.8 J	<0.5	0.5 J	25	<50	-	-	-	-	-	-
MW-9	09/25/2013	5.87	5.13	0.74	0.00	0.00	-	-	2,000	-	920	<0.5	<0.5	<0.5	<0.5	62	<50	-	-	-	-	-	-
MW-9	03/28/2014	5.87	4.08	1.79	0.00	0.00	-	-	4,000	-	240	<0.5	<0.5	<0.5	<0.5	23	<50	-	-	-	-	-	-
MW-9	09/25/2014	5.87	3.98	1.89	0.00	0.00	-	-	-	250	<500	<0.5	<0.5	<0.5	<0.5	44	<50	-	-	-	-	-	-
MW-9	03/05/2015	5.87	4.42	1.45	0.00	0.00	-	-	2,600	-	660	<0.5	<0.5	<0.5	<0.5	20	<50	-	-	-	-	-	-

**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-9	09/25/2015	5.87	5.11	0.76	0.00	0.00	-	-	2,800	-	350	<0.5	<0.5	<0.5	<0.5	38	<50	-	-	-	-	-	-
MW-9	03/18/2016	5.87	2.07	3.80	0.00	0.00	-	-	-	<110	<100	<1	<1	<1	<1	2	<250	-	-	-	-	-	-
MW-9	09/27/2016 <sup>26</sup>	5.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>MW-9</b>	<b>01/13/2017</b>	<b>10.73</b>	<b>1.81</b>	<b>8.92</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	<b>390</b>	<b>&lt;100</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;250</b>	-	-	-	-	-	-
MW-10	12/16/2016 <sup>31</sup>	10.37	6.70	3.67	0.00	0.00	-	-	-	<100	<100	<1	<1	<1	<1	<1	<250	-	-	-	-	-	-
<b>MW-10</b>	<b>01/13/2017</b>	<b>10.37</b>	<b>5.61</b>	<b>4.76</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	<b>69 J</b>	<b>&lt;100</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;250</b>	-	-	-	-	-	-
SUMP	05/30/2007	-	-	-	0.00	0.00	-	-	830	-	1,300	1	1	2	4	28	130	-	-	-	-	-	-
SUMP	03/05/2009	-	-	-	0.00	0.00	-	-	670	-	1,100	2	1	1	2	23	<50	-	-	-	-	-	-
SUMP	07/13/2009	-	-	-	0.00	0.00	-	-	270	-	120	<0.5	<0.5	<0.5	<0.5	5	<50	-	-	-	-	-	-
SUMP	03/19/2010	-	-	-	0.00	0.00	-	-	5,200	-	3,200	7	3	3	5	35	<50	-	-	-	-	-	-
SUMP	09/15/2010 <sup>26</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUMP	03/14/2011	-	-	-	0.00	0.00	<38	-	610	-	990	1	2	1	2	16	<50	-	-	-	-	-	-
SUMP	09/26/2011	-	-	-	0.00	0.00	-	4,200	-	1,000	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
SUMP	03/30/2012	-	-	-	0.00	0.00	-	39 J	-	580	1,600	1	3	2	2	21	<50	-	-	-	-	-	-
SUMP	09/21/2012	-	-	-	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
SUMP	03/19/2013	-	-	-	0.00	0.00	-	<38	-	<50	120	<0.5	<0.5	<0.5	<0.5	6	<50	-	-	-	-	-	-
SUMP	09/25/2013 <sup>30</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUMP	03/28/2014	-	-	-	0.00	0.00	-	-	2,700	-	1,800	0.7 J	2	0.9 J	2	18	<50	-	-	-	-	-	-
SUMP	09/25/2014	-	-	-	0.00	0.00	-	-	-	<50	<250	<0.5	<0.5	<0.5	<0.5	0.7 J	<50	-	-	-	-	-	-
SUMP	03/05/2015 <sup>30</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUMP	09/25/2014 <sup>30</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUMP	03/18/2016 <sup>30</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUMP	09/27/2016 <sup>30</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>SUMP</b>	<b>01/13/2017</b>	-	-	-	<b>0.00</b>	<b>0.00</b>	-	-	-	<b>&lt;100</b>	<b>680</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>3</b>	<b>&lt;250</b>	-	-	-	-	-	-
QA	12/03/2001	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	03/04/2002	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	05/30/2002	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	09/03/2002	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	12/09/2002	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	03/10/2003	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	06/09/2003 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/08/2003 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	12/08/2003 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-

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**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
QA	03/09/2004 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	06/17/2004 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/15/2004 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	12/23/2004 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	03/24/2005 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	06/16/2005 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/16/2005 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	12/21/2005 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	03/23/2006 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	06/09/2006 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/05/2006 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	12/15/2006 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	03/01/2007 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	06/05/2007 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/05/2007 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	12/05/2007 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	03/03/2008 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	06/02/2008 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/04/2008 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	12/04/2008 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	02/26/2009 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	06/30/2009 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/29/2009 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	03/10/2010 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/15/2010	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-
QA	03/14/2011	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/26/2011	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	03/30/2012	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/21/2012	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	03/19/2013	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/25/2013	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	03/28/2014	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/25/2014	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	03/05/2015	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	09/25/2015	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
QA	03/18/2016	-	-	-	-	-	-	-	-	-	<100	<1	<1	<1	<1	<1	-	-	-	-	-	-



**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
QA	09/27/2016	-	-	-	-	-	-	-	-	-	<100	<1	<1	<1	<1	<1	-	-	-	-	-	-	-
QA	12/16/2016	-	-	-	-	-	-	-	-	-	<100	<1	<1	<1	<1	<1	-	-	-	-	-	-	-
<b>QA</b>	<b>01/13/2017</b>	-	-	-	-	-	-	-	-	-	<b>&lt;100</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	-	-	-	-	-	-	-
Trip Blank	09/21/1992	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	12/23/1992	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	03/25/1993	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	06/11/1993	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	09/29/1993	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	12/20/1993	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	03/07/1994	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	06/17/1994	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	09/12/1994	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	1.0	-	-	-	-	-	-	-	-
Trip Blank	11/30/1994	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	03/24/1995	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	06/27/1995	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	09/28/1995	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	12/19/1995	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	02/28/1996	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	06/25/1996	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	12/17/1996	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	03/31/1997	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	06/30/1997	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	09/12/1997	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	12/05/1997	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	02/16/1998	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	06/17/1998	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	08/31/1998	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	12/28/1998	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	03/04/1999	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0	-	-	-	-	-	-	-
Trip Blank	06/14/1999	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	09/17/1999	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	12/20/1999	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	03/20/2000	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
Trip Blank	06/24/2000	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-
Trip Blank	09/07/2000	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-

Table 1

**Groundwater Monitoring and Sampling Data  
Former Chevron Service Station 90121  
3026 Lakeshore Avenue  
Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Trip Blank	12/05/2000	-	-	-	-	-	-	-	-	-	<50	<0.500	<0.500	<0.500	<0.500	<2.5	-	-	-	-	-	-
Trip Blank	03/01/2001	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-
Trip Blank	06/04/2001	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-
Trip Blank	09/10/2001	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-

**Abbreviations and Notes:**

TOC = Top of casing

DTW = Depth to water

GWE = Groundwater elevation

LNAPLT = Light non-aqueous phase liquid thickness

(ft-amsl) = Feet above mean sea level

ft = Feet

µg/L = Micrograms per liter

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

VOCS = Volatile organic compounds

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes (Total)

MTBE = Methyl tert butyl ether

-- = Not available / not applicable

&lt;x = Not detected at or above laboratory method detection limit

J = Estimated value between method detection limit and laboratory reporting limit.

- 1 Chromatogram pattern indicates a non-diesel mix.
- 2 Chromatogram pattern indicates an unidentified hydrocarbon.
- 3 Chromatogram pattern indicates an unidentified hydrocarbon and weathered diesel.
- 4 Confirmation run.
- 5 ORC present in well.
- 6 Laboratory report indicates gasoline and unidentified hydrocarbons >10.
- 7 Laboratory report indicates gasoline C6-C12.
- 8 Laboratory report indicates this sample was analyzed outside of the EPA recommended holding time.
- 9 Laboratory report indicates unidentified hydrocarbons C9-C24.
- 10 Laboratory report indicates unidentified hydrocarbons C10-C24.
- 11 Laboratory report indicates unidentified hydrocarbons >C16.

**Table 1**  
**Groundwater Monitoring and Sampling Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW6260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
Units		ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L

- 12 Laboratory report indicates unidentified hydrocarbons C9-C40.
- 13 Laboratory report indicates diesel C9-C24 + unidentified hydrocarbons <C16.
- 14 Laboratory report indicates weathered gasoline C6-C12.
- 15 Laboratory report indicates unidentified hydrocarbons C6-C12.
- 16 Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
- 17 Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel. The pattern more closely resembles that of a heavier hydrocarbon mix.
- 18 BTEX and MTBE by EPA Method 8260.
- 19 Laboratory report indicates the observed sample pattern is not typical of diesel/#2 fuel oil.
- 20 ORC removed from well.
- 21 Laboratory report indicates the observed sample pattern is not typical of diesel/#2 fuel oil. It elutes in the DRO range later than #2 fuel and also has individual peaks eluting in the DRO range.
- 22 Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It contains two patterns in the DRO range, one earlier and one later than #2 fuel.
- 23 Laboratory report indicates the observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes later in the DRO range.
- 24 Laboratory report indicates the preservation requirements were not met. The vial submitted for volatile analysis did not have a pH <2 at the time of analysis. Due to the volital nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH=6
- 24 Laboratory report indicates reporting limits for the GC/MS volatile compounds were raised due to sample foaming.
- 25 Sampled semi-annually
- 26 Inaccessible
- 27 Sampled annually
- 28 Unable to locate
- 29 Well Not Sampled
- 30 Unable to collect sample - sump does not work
- 31 Initial sampling after well development

# Attachment A

## Monitoring Data Packages

## WELL GAUGING DATA

Project # 161205-GR1      Date 12/05/2016      Client GHD-Chevron

Site 3026 Lakeshore Ave. - 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-10	1430	1					6.70	19.04	TOC	

# WELL DEVELOPMENT DATA SHEET

Project #: 161205-GRI	Client: GHD- Chevron
Developer: GR	Date Developed: 12/05/2016
Well I.D. MW-10	Well Diameter: (circle one) 2 3 4 6 <u>1"</u>
Total Well Depth: Before 19.04 After 19.04	Depth to Water: Before 6.70 After Dewatered
Reason not developed:	If Free Product, thickness:
Additional Notations:	

Volume Conversion Factor (VCF):  $(12 \times (d^2/4) \times \pi) / 231$       Well dia.      VCF      1" = 0.04

2"	=	0.16
3"	=	0.37
4"	=	0.65
6"	=	1.47
10"	=	4.08
12"	=	6.87

where  
12 = in / foot  
d = diameter (in.)  
 $\pi = 3.1416$   
231 = in<sup>3</sup>/gal

<u>0.5</u>	X	<u>10</u>	=	<u>5.0</u>
1 Case Volume		Specified Volumes		gallons

Purging Device:       Bailer       masterflex       Electric Submersible  
 Suction Pump       Peristaltic pump       Positive Air Displacement

Type of Installed Pump none  
 Other equipment used 1/2 PET tubing

TIME	TEMP (F)	pH	Cond. (mS or $\mu$ S)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1443	Begin	purge	w/ masterflex pump.			dark grey - little silt
1444	65.2	5.24	24.43	>1000	0.5	Rotten egg odor
1446	65.1	5.63	36.63	>1000	1.0	on hard bottom. Dewatering
1449	64.7	6.25	36.92	>1000	1.5	
1455	62.4	6.48	37.04	>1000	2.0	well dewatered. TD = 19.04
1510	Resume	purge	w/ masterflex.			
1513	61.6	6.95	37.74	142	2.5	
1514	—	Well dewatered	@		2.6	
1523	Resume	purge	w/ masterflex			
1526	61.2	7.12	38.09	95	3.0	well dewatered.
1543	Resume	purge	w/ masterflex			
1545	61.0	7.19	38.14	89	3.5	
1546	—	well dewatered			3.6	
Did Well Dewater? <u>Yes</u>		If yes, note above.		Gallons Actually Evacuated:		<u>3.6</u>

## WELLHEAD INSPECTION CHECKLIST

Client GHD-Cherron Date 12/05/2016

Site Address 3026 Lakeshore Ave. - Oakland, CA

Job Number 161205-GR1 Technician GR

Well ID	Well Inspected - No Corrective Action Required	WELL IS SECURABLE BY DESIGN (12" or less)	WELL IS CLEARLY MARKED WITH THE WORDS "MONITORING WELL" (12" or less)	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-10	<del>X</del> (GR) X	X	X	X	X					

NOTES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_









January 5, 2017

Chevron Environmental Management Company  
Mark Horne  
6101 Bollinger Canyon Rd.  
San Ramon, CA 94583

Fourth Quarter 2016 Monitoring at  
Former Chevron Service Station 90121  
3026 Lakeshore Ave.  
Oakland, CA

Monitoring performed on December 16, 2016

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**Blaine Tech Services, Inc. Groundwater Monitoring Event 161216-MM2**

This submission covers the routine monitoring of groundwater wells conducted on December 16, 2016 at this location. One monitoring well was measured for depth to groundwater (DTW). One monitoring well was sampled. All sampling activities were performed in accordance with local, state and federal guidelines.

Water levels measurements were collected using an electronic slope indicator. All sampled wells were purged of three case volumes, depending on well recovery, or until water temperature, pH and conductivity stabilized. Purging was accomplished using electric submersible pumps, positive air displacement pumps, peristaltic pumps, or stainless steel, Teflon, or disposable bailers. Subsequent sample collection and sample handling was performed in accordance with EPA protocols. Alternately, where applicable, wells were sampled utilizing no-purge methodology. All reused equipment was decontaminated in an integrated stainless steel sink with de-ionized water supplied Hotsy pressure washer and Liquinox or equivalent.

Fourth Quarter Groundwater Monitoring at Chevron 90121, 3026 Lakeshore Ave., Oakland, CA

SAN JOSE

SACRAMENTO

LOS ANGELES

SAN DIEGO

1680 ROGERS AVENUE

SAN JOSE, CA 95112-1105

(408) 573-0555

FAX (408) 573-7771

LIC. 746684

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

Samples were delivered under chain-of-custody to Lancaster Laboratories of Lancaster, Pennsylvania, for analysis. Monitoring well purgewater and equipment rinsate water was collected and transported under bill-of-lading to Blaine Tech of San Jose, California.

Enclosed documentation from this event includes copies of the Well Gauging Sheet, Well Monitoring Data Sheets, and Chain-of-Custody.

Blaine Tech Services, Inc.'s activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrogeologic conditions or formulation of recommendations was performed.

Please call if you have any questions.

Sincerely,



Dustin Becker  
Blaine Tech Services, Inc.  
Senior Project Manager

attachments: SOP  
Well Gauging Sheet  
Individual Well Monitoring Data Sheets  
Wellhead Inspection Form  
Bill of Lading  
Calibration Log

cc: GHD  
Attn: Kiersten Hoey  
5900 Hollis St., Suite A  
Emeryville, CA 94608

Fourth Quarter Groundwater Monitoring at Chevron 90121, 3026 Lakeshore Ave., Oakland, CA

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www.blainetech.com

# BLAINE TECH SERVICES, INC. METHODS AND PROCEDURES FOR THE ROUTINE MONITORING OF GROUNDWATER WELLS AT CHEVRON SITES

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. We specialize in groundwater monitoring assignments and intentionally limit the scope of our services to those centered on the generation of objective information.

To avoid conflicts of interest, Blaine Tech Services, Inc. personnel do not evaluate or interpret the information we collect. As a state licensed contractor (C-57 well drilling –water – 746684) performing strictly technical services, we do not make any professional recommendations and perform no consulting of any kind.

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## **SAMPLING PROCEDURES OVERVIEW**

### **SAFETY**

All groundwater monitoring assignments performed for Chevron comply with Chevron's safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40-hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any Chevron site.

### **INSPECTION AND GAUGING**

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic water level indicators that are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of immiscibles. When free product is suspected, its presence is confirmed using an electronic interface probe (e.g. GeoTech). No samples are collected from a well containing product.

### **TRADITIONAL PURGING & SAMPLING**

#### **Evacuation**

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.

Well purging devices are selected on the basis of the well diameter and the total volume to be evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well.

### **Parameter Stabilization**

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

### **Sample Collection**

All samples are collected using disposable bailers.

### **Sample Containers**

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory that will analyze the samples. The transfer of sample material from the bailer to the sample container conforms to specifications contained in the USEPA T.E.G.D. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

### **Dewatered Wells**

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewateres and does not immediately recharge.

### **Measuring Recharge**

Upon completion of well purging, a depth to water measurement is collected and notated to ensure that the well has recharged to within 80% of its static, pre-purge level prior to sampling.

Wells that do not immediately show 80% recharge or dewatered wells will be allowed approximately 2 hours to recharge prior to sampling or will be sampled at site departure. All wells requiring off-site traffic control in the public right-of-way, the 80% recharge rule may be disregarded in the interests of Health and Safety. The sample may be collected as soon as there is sufficient water. The water level at time of sampling will be noted.

### **Dissolved Oxygen Measurements**

Dissolved Oxygen readings are taken pre- and/or post-purge using YSI meters (e.g. YSI Model 550) or HACH field test kits.

The YSI meters are able to collect accurate in-situ readings. The probe allows downhole measurements to be taken from wells with diameters as small as two inches. The probe and reel is decontaminated between wells as described above. The meter is calibrated

as per the instructions in the operating manual. The probe is lowered into the water column and the reading is allowed to stabilize prior to collection.

### **Oxidation Reduction Potential Measurements (ORP)**

All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual.

## **LOW FLOW SAMPLING USING SAMPLE-PRO BLADDER PUMP**

### **Calibration**

Calibrate YSI Flow Cell as per manufacturer's specifications. Thoroughly rinse probe and cup between parameters. Calibration order as follows:

1. pH (use 3-point calibration of 7, 4, 10)
2. Oxygen Reduction Potential (ORP)
3. Specific Conductance
4. Dissolved Oxygen (DO) (calibrate simulating 100% oxygen saturation)

### **Purging & Sampling Collection**

1. Insert new bladder into Sample-Pro pump housing.
2. Remove dedicated PE tubing from the well or start with new PE tubing cut to the required length.
3. Attach the PE tubing to the Sample-Pro Bladder Pump.
4. Gently lower the Sample-Pro Bladder Pump, and PE tubing into the well, placing the Sample-Pro Bladder Pump intake at the center of the screened interval. Take care to minimize disturbance to the water column.
5. Direct effluent line into YSI 556 Flow Cell.
6. Set Sample-Pro Bladder Pump speed at 100 - 500 ml/min.
7. Collect water quality parameter measurements for temperature, pH, conductivity, turbidity, DO and ORP every 3-5 minutes.
8. Monitor drawdown during purging with electronic water level meter. Record water level with each parameter measurement. **MAXIMUM DRAWDOWN IS 0.33 FEET.**
9. Collect parameter measurements until stability is achieved. Stability is defined as three consecutive measurements where:

Temp	± 1 ° Celsius
pH	± 0.1
Conductivity	± 3%
Turbidity	± 10% NTU
DO	± 0.3 mg/l
ORP	± 10 Mv

10. Sample may be collected once stability is achieved and at least one system volume of water removed from the well.
11. Disconnect effluent line from YSI 556 Flow Cell.
12. Sample through effluent line while maintaining constant flow rate.
13. Remove Sample-Pro Bladder Pump, and PE tubing from well.
14. Detach and reinstall dedicated PE tubing in well.

## **PURGEWATER CONTAINMENT**

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non-hazardous purgewater is transported under standard Bill of Lading or Non-Hazardous Waste Manifest to a Blaine Tech Services, Inc. facility before being transported to a Chevron approved disposal facility

## **TRIP BLANKS**

Trip Blanks, if requested, are taken to the site and kept inside the sample cooler for the duration of the event. They are turned over to the laboratory for analysis with the samples from that site.

## **DUPLICATES**

Duplicates, if requested, may be collected at a site.

## **SAMPLE STORAGE**

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the designated analytical laboratory. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

## **DOCUMENTATION CONVENTIONS**

A label must be affixed to all sample containers. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time and date of sample collection along with the initials of the person who collects the sample are handwritten onto the label. Field documentation is contemporaneous.

## **DECONTAMINATION**

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment such as hose reels, pumps and bailers is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is de-tuned to function as a hot pressure washer that is then operated with high quality deionized water that is produced at our facility and stored onboard our sampling vehicle. Cleaning is

facilitated by the use of proprietary fixtures and devices included in the patented workstation (U.S. Patent 5,535,775) that is incorporated in each sampling vehicle.

Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, water level indicator, etc.) that cannot be washed using the high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

## **FERROUS IRON MEASUREMENTS**

All field measurements are collected at time of sampling with a HACH test kit.





## CHEVRON WELL MONITORING DATA SHEET

Project #: <u>16/12/16-MM2</u>	Station #: <u>9-0121</u>
Sampler: <u>MM</u>	Date: <u>12-16-16</u>
Weather: <u>clear</u>	Ambient Air Temperature:
Well I.D.: <u>MW-10</u>	Well Diameter: 2 3 4 6 8 <u>(1)</u>
Total Well Depth: <u>18.98</u>	Depth to Water: <u>5.85</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>8.47</u>	

Purge Method:

- Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible  
 Water  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:

- Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: NEW TUBING

<u>0.5</u> (Gals.) X	<u>3</u>	= <u>1.5</u> Gals.
I 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 µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1129</u>	<u>64.0</u>	<u>7.12</u>	<u>22.52</u>	<u>38</u>	<u>0.5</u>	<u>odor, clear</u>
<u>1133</u>	<u>63.5</u>	<u>6.95</u>	<u>20.49</u>	<u>185</u>	<u>1.0</u>	<u>odor, cloudy</u>
<u>1138</u>	<u>62.7</u>	<u>7.18</u>	<u>21.58</u>	<u>275</u>	<u>1.5</u>	<u>↓ ↓</u>

Did well dewater? Yes  No Gallons actually evacuated: 1.5

Sampling Date: 12-16-16 Sampling Time: 1200 Depth to Water: 8.31

Sample I.D.: MW-10-W-16/16/12 Laboratory: Lancaster Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS Other: see col

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
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O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV
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SOURCE RECORD **BILL OF LADING**

FOR PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF CALIFORNIA. THE PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR AND HAULED TO THEIR FACILITY IN SAN JOSE, CALIFORNIA FOR TEMPORARILY HOLDING PENDING TRANSPORT BY OTHERS TO FINAL DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 1680 Rogers Ave. San Jose CA (408) 573-0555). BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

9-0/21  
CHEVRON # \_\_\_\_\_ Mark Hurre  
Chevron Engineer

3026 Lakeshore Ave Oakland CA  
street number street name city state

WELL I.D.	GALS.	WELL I.D.	GALS.
<u>MW-101</u>	<u>1.5</u>	<u>/</u>	<u>/</u>
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
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<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
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<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

added equip. \_\_\_\_\_  
rinse water 1 16

any other adjustments /

**TOTAL GALS. RECOVERED** 2.5

loaded onto BTS vehicle # 94

BTS event # 10/2/16-mm2 time \_\_\_\_\_ date 10/2/16

Transporter signature [Signature]

\*\*\*\*\*

**REC'D AT** \_\_\_\_\_ time \_\_\_\_\_ date 1 1

Unloaded/received by signature \_\_\_\_\_





January 16, 2017

Chevron Environmental Management Company  
Mark Horne  
6101 Bollinger Canyon Rd.  
San Ramon, CA 94583

First Quarter 2017 Monitoring at  
Former Chevron Service Station 90121  
3026 Lakeshore Ave.  
Oakland, CA

Monitoring performed on January 13, 2017

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**Blaine Tech Services, Inc. Groundwater Monitoring Event 170113-CK1**

This submission covers the routine monitoring of groundwater wells conducted on January 13, 2017 at this location. Nine monitoring wells were measured for depth to groundwater (DTW). Nine monitoring wells were sampled. A sump sample was also collected at the Oakland Catholic Diocese Office neighboring the site. All sampling activities were performed in accordance with local, state and federal guidelines.

Water levels measurements were collected using an electronic slope indicator. All sampled wells were purged of three case volumes, depending on well recovery, or until water temperature, pH and conductivity stabilized. Purging was accomplished using electric submersible pumps, positive air displacement pumps, disposable tubing with check valves, or stainless steel, Teflon, or disposable bailers. Subsequent sample collection and sample handling was performed in accordance with EPA protocols. Alternately, where applicable, wells were sampled utilizing no-purge methodology. All reused equipment was decontaminated in an integrated stainless steel sink with de-ionized water supplied Hotsy pressure washer and Liquinox or equivalent.

First Quarter Groundwater Monitoring at Chevron 90121, 3026 Lakeshore Ave., Oakland, CA

SAN JOSE

SACRAMENTO

LOS ANGELES

SAN DIEGO

1680 ROGERS AVENUE

SAN JOSE, CA 95112-1105

(408) 573-0555

FAX (408) 573-7771

LIC. 746684

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

Samples were delivered under chain-of-custody to Lancaster Laboratories of Lancaster, Pennsylvania, for analysis. Monitoring well purgewater and equipment rinsate water was collected and transported under bill-of-lading to Blaine Tech of San Jose, California.

Enclosed documentation from this event includes copies of the Well Gauging Sheet, Well Monitoring Data Sheets, and Chain-of-Custody.

Blaine Tech Services, Inc.'s activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrogeologic conditions or formulation of recommendations was performed.

Please call if you have any questions.

Sincerely,



Dustin Becker  
Blaine Tech Services, Inc.  
Senior Project Manager

attachments: SOP  
Well Gauging Sheet  
Individual Well Monitoring Data Sheets  
Wellhead Inspection Form  
Bill of Lading  
Calibration Log

cc: GHD  
Attn: Kiersten Hoey  
5900 Hollis St., Suite A  
Emeryville, CA 94608

First Quarter Groundwater Monitoring at Chevron 90121, 3026 Lakeshore Ave., Oakland, CA

SAN JOSE

SACRAMENTO

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LIC. 746684

www.blainetech.com



# BLAINE TECH SERVICES, INC. METHODS AND PROCEDURES FOR THE ROUTINE MONITORING OF GROUNDWATER WELLS AT CHEVRON SITES

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. We specialize in groundwater monitoring assignments and intentionally limit the scope of our services to those centered on the generation of objective information.

To avoid conflicts of interest, Blaine Tech Services, Inc. personnel do not evaluate or interpret the information we collect. As a state licensed contractor (C-57 well drilling –water – 746684) performing strictly technical services, we do not make any professional recommendations and perform no consulting of any kind.

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## **SAMPLING PROCEDURES OVERVIEW**

### **SAFETY**

All groundwater monitoring assignments performed for Chevron comply with Chevron's safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40-hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any Chevron site.

### **INSPECTION AND GAUGING**

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic water level indicators that are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of immiscibles. When free product is suspected, its presence is confirmed using an electronic interface probe (e.g. GeoTech). No samples are collected from a well containing product.

### **TRADITIONAL PURGING & SAMPLING**

#### **Evacuation**

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.

Well purging devices are selected on the basis of the well diameter and the total volume to be evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well.

### **Parameter Stabilization**

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

### **Sample Collection**

All samples are collected using disposable bailers.

### **Sample Containers**

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory that will analyze the samples. The transfer of sample material from the bailer to the sample container conforms to specifications contained in the USEPA T.E.G.D. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

### **Dewatered Wells**

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewateres and does not immediately recharge.

### **Measuring Recharge**

Upon completion of well purging, a depth to water measurement is collected and notated to ensure that the well has recharged to within 80% of its static, pre-purge level prior to sampling.

Wells that do not immediately show 80% recharge or dewatered wells will be allowed approximately 2 hours to recharge prior to sampling or will be sampled at site departure. All wells requiring off-site traffic control in the public right-of-way, the 80% recharge rule may be disregarded in the interests of Health and Safety. The sample may be collected as soon as there is sufficient water. The water level at time of sampling will be noted.

### **Dissolved Oxygen Measurements**

Dissolved Oxygen readings are taken pre- and/or post-purge using YSI meters (e.g. YSI Model 550) or HACH field test kits.

The YSI meters are able to collect accurate in-situ readings. The probe allows downhole measurements to be taken from wells with diameters as small as two inches. The probe and reel is decontaminated between wells as described above. The meter is calibrated

as per the instructions in the operating manual. The probe is lowered into the water column and the reading is allowed to stabilize prior to collection.

### **Oxidation Reduction Potential Measurements (ORP)**

All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual.

## **LOW FLOW SAMPLING USING SAMPLE-PRO BLADDER PUMP**

### **Calibration**

Calibrate YSI Flow Cell as per manufacturer's specifications. Thoroughly rinse probe and cup between parameters. Calibration order as follows:

1. pH (use 3-point calibration of 7, 4, 10)
2. Specific Conductance
3. Temperature

### **Purging & Sampling Collection**

1. Insert new bladder into Sample-Pro pump housing.
2. Remove dedicated PE tubing from the well or start with new PE tubing cut to the required length.
3. Attach the PE tubing to the Sample-Pro Bladder Pump.
4. Gently lower the Sample-Pro Bladder Pump, and PE tubing into the well, placing the Sample-Pro Bladder Pump intake at the specified screened interval. Take care to minimize disturbance to the water column.
5. Direct effluent line into YSI 556 Flow Cell.
6. Set Sample-Pro Bladder Pump speed at 100 - 500 ml/min.
7. Collect water quality parameter measurements for temperature, pH, conductivity, turbidity, DO and ORP every 3-5 minutes.
8. Monitor drawdown during purging with electronic water level meter. Record water level with each parameter measurement. **MAXIMUM DRAWDOWN IS 0.33 FEET.**
9. Collect parameter measurements until stability is achieved. Stability is defined as three consecutive measurements where:

Temp	± 1° Celsius
pH	± 0.1
Conductivity	± 3%

10. Sample may be collected once one system has been removed and stability readings have been achieved after the system volume has been removed.
11. Disconnect effluent line from YSI 556 Flow Cell.
12. Sample through effluent line while maintaining constant flow rate.
13. Remove Sample-Pro Bladder Pump, and PE tubing from well.
14. Detach and reinstall dedicated PE tubing in well.

## **PURGEWATER CONTAINMENT**

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non-hazardous purgewater is transported under standard Bill of Lading or Non-Hazardous Waste Manifest to a Blaine Tech Services, Inc. facility before being transported to a Chevron approved disposal facility

### **TRIP BLANKS**

Trip Blanks, if requested, are taken to the site and kept inside the sample cooler for the duration of the event. They are turned over to the laboratory for analysis with the samples from that site.

### **DUPLICATES**

Duplicates, if requested, may be collected at a site.

### **SAMPLE STORAGE**

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the designated analytical laboratory. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

### **DOCUMENTATION CONVENTIONS**

A label must be affixed to all sample containers. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time and date of sample collection along with the initials of the person who collects the sample are handwritten onto the label. Field documentation is contemporaneous.

### **DECONTAMINATION**

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment such as hose reels, pumps and bailers is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is de-tuned to function as a hot pressure washer that is then operated with high quality deionized water that is produced at our facility and stored onboard our sampling vehicle. Cleaning is facilitated by the use of proprietary fixtures and devices included in the patented workstation (U.S. Patent 5,535,775) that is incorporated in each sampling vehicle. Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, water level

indicator, etc.) that cannot be washed using the high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

### **FERROUS IRON MEASUREMENTS**

All field measurements are collected at time of sampling with a HACH test kit.

## WELL GAUGING DATA

Project # 170113-ck1 Date 1/13/17 Client GHD

Site 3026 LAKESHORE AVE, OAKLAND

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	1219	4					3.11	19.21	↓	
MW-2A	0912	2	—	—			3.78	16.58		
MW-3A	1215	2					4.11	17.96		BENT CASING 1.50'
MW-4A	1225	2					2.50	18.37		
MW-5	0848	2					10.54	32.70		
MW-6	0902	2					6.46	18.10		
MW-7	0842	2					4.73	24.96		
MW-8	1221	2					1.81	14.28		
MW-10	0854	1					5.61	18.98		

## CHEVRON WELL MONITORING DATA SHEET

Project #: 170113-CW1	Station #: 9-0121
Sampler: CW	Date: 1/13/17
Weather: CLEAR	Ambient Air Temperature: 70°F
Well I.D.: MW-1	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: 19.21	Depth to Water: 3.11
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <u>RVD</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.33	

Purge Method:

- Bailer
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other \_\_\_\_\_

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: \_\_\_\_\_

10.5	(Gals.) X	3	=	31.5	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

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

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1303	62.0	7.30	790	73	10.5	
1307	62.3	7.26	798	28	21.0	
1311	62.3	7.24	793	27	31.5	

Did well dewater? Yes  No  Gallons actually evacuated: 31.5

Sampling Date: 1/13/17 Sampling Time: 1315 Depth to Water: 3.20

Sample I.D.: MW-1-W-171301 Laboratory: Lancaster Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS Other: SEE COC

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS 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

## CHEVRON WELL MONITORING DATA SHEET

Project #: 170113-cu1	Station #: 9-0121
Sampler: cu	Date: 1/13/17
Weather: CLEAR	Ambient Air Temperature: 70 F
Well I.D.: MW-2A	Well Diameter: ② 3 4 6 8
Total Well Depth: 16.58	Depth to Water: 3.78
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]: 6.34	

Purge Method:

Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible  
 Waterra  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:

Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: \_\_\_\_\_

2.0	(Gals.) X	3	=	6.0	Gals.
I 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 μS)	Turbidity (NTUs)	Gals. Removed	Observations
1322	63.1	7.01	4596	128	2.0	below / odor
1324	63.5	6.96	4604	92	4.0	↓ ↓
1326	63.8	6.84	4611	89	6.0	↓ ↓

Did well dewater? Yes   No Gallons actually evacuated: 6.0

Sampling Date: 1/13/17 Sampling Time: 1335 Depth to Water: 6.01

Sample I.D.: MW-2A-W-171301 Laboratory: Lancaster Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS ~~Other~~ SEC COC

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS 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:



## CHEVRON WELL MONITORING DATA SHEET

Project #: 170113-ck1	Station #: 09-0121
Sampler: Cu	Date: 1/13/17
Weather: CLEAR	Ambient Air Temperature: 70 °F
Well I.D.: MW-3A	Well Diameter: (2) 3 4 6 8
Total Well Depth: 17.96	Depth to Water: 4.18
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]: 6.88	

Purge Method:

Sampling Method: Bailer

- Bailer
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other: CHECK VALVE

- Disposable Bailer
- Extraction Port
- Dedicated Tubing

Other: CHECK VALVE w/ NEW TUBING

\*BLWT CASING @ 21.50' w/ NEW TUBING

2.2 (Gals.) X	3	= 6.6 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1240	62.4	7.90	787	40	2.2	
1245	62.3	7.87	785	42	4.4	
1250	62.3	7.85	788	43	6.6	

Did well dewater? Yes  No  Gallons actually evacuated: 6.6

Sampling Date: 1/13/17 Sampling Time: 1252 Depth to Water: 5.13

Sample I.D.: MW-3A-W-171301 Laboratory: Lancaster Other: \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS Other: SEE COC

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS 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

## CHEVRON WELL MONITORING DATA SHEET

Project #: 170113-CW1	Station #: 9-0121
Sampler: CV	Date: 1/13/17
Weather: CLEAR	Ambient Air Temperature: 68°F
Well I.D.: MW. 4A	Well Diameter: (2) 3 4 6 8
Total Well Depth: 19.37	Depth to Water: 2.50
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]: 5.67	

Purge Method:

- Bailer
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Watterra
- Peristaltic
- Extraction Pump
- Other \_\_\_\_\_

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: \_\_\_\_\_

2.5	(Gals.) X	3	=	7.5	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

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

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
1405	58.2	7.62	518	~1000	2.5	(16+7) BROW
1410	58.5	7.60	523	~1000	5.0	↓ ↓
1415	58.5	7.59	526	~1000	2.5	↓ ↓

Did well dewater? Yes  No  Gallons actually evacuated: 7.5

Sampling Date: 1/13/17 Sampling Time: 1417 Depth to Water: 3.13

Sample I.D.: MW. 4A-W-171301 Laboratory: Lancaster Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS Other: SEC COC

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS 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

## CHEVRON WELL MONITORING DATA SHEET

Project #: 170113-CU1	Station #: 9-0121
Sampler: CW	Date: 1/13/17
Weather: CLEAR	Ambient Air Temperature: 64°F
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8
Total Well Depth: 32.70	Depth to Water: 10.54
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.97	

Purge Method:

Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible  
 Waterra  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:

Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: \_\_\_\_\_

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

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

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
1028	61.8	7.01	1133	98	3.5	
1030	62.7	6.94	1130	90	7.0	
1032	62.7	6.94	1126	86	10.5	

Did well dewater? Yes   No Gallons actually evacuated: 10.5

Sampling Date: 1/13/17 Sampling Time: 1040 Depth to Water: 12.13

Sample I.D.: MW-5-W-171301 Laboratory: Lancaster Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS Other: See CW

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS 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:

## CHEVRON WELL MONITORING DATA SHEET

Project #: 17 0113-cw	Station #: 9-0121
Sampler: cw	Date: 1/13/17
Weather: clear	Ambient Air Temperature: 65 F
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8
Total Well Depth: 18.10	Depth to Water: 6.46
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]: 8.79	

Purge Method:

- Bailer
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other \_\_\_\_\_

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing

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

1.9	(Gals.) X	3	= 5.7 Gals.
I 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 µS) <sup>cm</sup>	Turbidity (NTUs)	Gals. Removed	Observations
1148	65.6	6.90	12.20	71000	2.0	open
1158	66.0	6.84	12.17	71000	4.0	
1200	66.0	6.83	12.16	71000	6.0	

Did well dewater? Yes  No  Gallons actually evacuated: 6.0

Sampling Date: 1/13/17 Sampling Time: 1205 Depth to Water: 7.23

Sample I.D.: MW-6-W-171301 Laboratory: Lancaster Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS Other: see COC

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS 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
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## CHEVRON WELL MONITORING DATA SHEET

Project #: 170113-CW1	Station #: 9-0121
Sampler: CW	Date: 1/13/17
Weather: Clear	Ambient Air Temperature: 60.7°F
Well I.D.: MW-E	Well Diameter: 2 3 4 6 8
Total Well Depth: 24.96	Depth to Water: 4.73
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <u>PVE</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.78	

Purge Method:

- Bailer
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other \_\_\_\_\_

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: \_\_\_\_\_

3.2	(Gals.) X	3	=	9.6	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1000	59.6	7.04	1320	73	3.2	cloudy / roots
1002	60.2	7.02	1316	32	6.4	roots
1004	60.5	6.99	1312	30	9.6	↓

Did well dewater? Yes No Gallons actually evacuated: 9.6

Sampling Date: 1/13/17 Sampling Time: 1010 Depth to Water: 6.78

Sample I.D.: MW-B-W-171301 Laboratory: Lancaster Other: \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS Other: SEE COW

Duplicate I.D.: QA-T-171301 Analyzed for: TPH-G BTEX MTBE OXYS 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

## CHEVRON WELL MONITORING DATA SHEET

Project #: 170113-CK	Station #: 9-0121
Sampler: CK	Date: 1/13/17
Weather: CLEAR	Ambient Air Temperature: 70°F
Well I.D.: MW-9	Well Diameter: (2) 3 4 6 8
Total Well Depth: 14.28	Depth to Water: 1.81
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]: 4.30	

Purge Method:

- Bailer
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other \_\_\_\_\_

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: \_\_\_\_\_

2.0	(Gals.) X	3	=	6.0	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 µS)	Turbidity (NTUs)	Gals. Removed	Observations
1343	67.0	7.68	437	7100	2.0	Brown
1345	61.7	7.63	441	7100	4.0	
1347	61.7	7.60	445	7100	6.0	↓

Did well dewater? Yes  No  Gallons actually evacuated: 6.0

Sampling Date: 1/13/17 Sampling Time: 1350 Depth to Water: 3.11

Sample I.D.: MW-9-W-171301 Laboratory: Lancaster Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS Other: SEE COC

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS 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

## CHEVRON WELL MONITORING DATA SHEET

Project #: 170113-CW1	Station #: 9-0121
Sampler: CU	Date: 1/13/17
Weather: CLEAR	Ambient Air Temperature: 65°F
Well I.D.: MW-10	Well Diameter: 2 3 4 6 8 <u>①</u>
Total Well Depth: 18.98	Depth to Water: 5.61
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.28	

Purge Method:

Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible  
 Waterra  
 Peristaltic  
 Extraction Pump  
 Other: CHECK VALVE NEW TUBING

Sampling Method:

Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: CHECK VALVE w/ NEW TUBING

0.5 (Gals.) X	3	= 1.5 Gals.
I 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 μS) <sup>0</sup>	Turbidity (NTUs)	Gals. Removed	Observations
1058	62.2	6.80	14.50	7100	0.5	0.5 / 1.5
1104	62.2	6.77	14.48	7100	1.0	↓ ↓
1110	62.3	6.74	14.48	7100	1.5	↓ ↓

Did well dewater? Yes  No  Gallons actually evacuated: 1.5

Sampling Date: 1/13/17 Sampling Time: 1130 Depth to Water: 8.10

Sample I.D.: MW-10-W-171301 Laboratory: Lancaster Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS Other: SET LOC

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS 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

## CHEVRON WELL MONITORING DATA SHEET

Project #: 170113-CX1	Station #: 9-0121
Sampler: CX	Date: 1/13/17
Weather: CLEAR	Ambient Air Temperature: 60°F
Well I.D.: SUMP	Well Diameter: 2 3 4 6 8 <u>SUMP</u>
Total Well Depth: —	Depth to Water: —
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

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

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
0930	57.1	7.72	1171	71000	—	Cloudy Brown

Did well dewater?    Yes    No    Gallons actually evacuated: —

Sampling Date: 1/13/17    Sampling Time: 0930    Depth to Water: —

Sample I.D.: SUMP-W-171301    Laboratory: Lancaster    Other: \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE OXYS    Other: SEC COC

Duplicate I.D.:    Analyzed for: TPH-G BTEX MTBE OXYS    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



# CHAIN OF CUSTODY FORM

**Chevron Environmental Management Company ■ 6111 Bollinger Canyon Rd. ■ San Ramon, CA 94583**

**COC 1 of 2**

Chevron Site Number: ~~09076~~ 9-0121  
 Chevron Site Global ID: T0600100328  
 Chevron Site Address: 3026 Lakeshore Ave., Oakland, CA  
 Chevron PM: Mark Home  
 Chevron PM Phone No.: (925) 790-3964  
 Retail and Terminal Business Unit (RTBU) Job  
 Construction/Retail Job

Chevron Consultant: GHD  
 Address: 5900 Hollis St., Suite A, Emeryville, CA  
 Consultant Contact: Kiersten Hoey  
 Consultant Phone No. 510-420-3347  
 Consultant Project No. 170113-CK1  
 Sampling Company: Blaine Tech Services  
 Sampled By (Print): CORY KINGPATRICK  
 Sampler Signature: [Signature]

Charge Code: **NWRTB-0098247-0-OML**  
 NWRTB 00SITE NUMBER-0- WBS  
**(WBS ELEMENTS:**  
 SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L  
 SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L  
**THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.**

**Lancaster Laboratories**  
 Lancaster, PA Lab Contact: Amek Carter  
 2425 New Holland Pike, Lancaster, PA 17601  
 Phone No: (717)656-2300

Other Lab	Temp. Blank Check Time	Temp.

ANALYSES REQUIRED														Preservation Codes	
H	H/														H = HCL T= Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other
															Notes/Comments

SAMPLE ID				Sample Time	# of Containers	Container Type
Field Point Name	Matrix	Top Depth	Date (yymmdd)			
GA-T-171301	T	-	170113	0800	2	112L VOA'S
MW-1-W-171301	w	-	170113	1315	8	Mix
MW-2A-W-171301	w	-	170113	1335	8	Mix
MW-3A-W-171301	w	-	170113	1252	8	Mix
MW-4A-W-171301	w	-	170113	1417	8	Mix
MW-5-W-171301	w	-	170113	1040	8	Mix
MW-6-W-171301	w	-	170113	1205	8	Mix
MW-8-W-171301	w	-	170113	1010	8	Mix
MW-9-W-171301	w	-	170113	1350	8	Mix
MW-10-W-171301	w	-	170113	1130	8	Mix

Relinquished By: <u>[Signature]</u> Company: <u>BTS</u> Date/Time: <u>1/13/17 1545</u>	Relinquished To: <u>[Signature]</u> Company: <u>BTS (S.C.)</u> Date/Time: <u>1/13/17 1545</u>
Relinquished By: _____ Company: _____ Date/Time: _____	Relinquished To: _____ Company: _____ Date/Time: _____
Relinquished By: _____ Company: _____ Date/Time: _____	Relinquished To: _____ Company: _____ Date/Time: _____

Turnaround Time:  
 Standard  24 Hours  48 hours  72 Hours  Other   
 Sample integrity: (Check by lab on arrival)  
 Intact: \_\_\_\_\_ On Ice: \_\_\_\_\_ Temp: \_\_\_\_\_  
 COC # \_\_\_\_\_

**CHAIN OF CUSTODY FORM**

**Chevron Environmental Management Company ■ 6111 Bollinger Canyon Rd. ■ San Ramon, CA 94583**

COC 2 of 2

Chevron Site Number: 98876 9-0121  
 Chevron Site Global ID: T0600100328  
 Chevron Site Address: 3026 Lakeshore Ave., Oakland, CA  
 Chevron PM: Mark Home  
 Chevron PM Phone No.: (925) 790-3964  
 Retail and Terminal Business Unit (RTBU) Job  
 Construction/Retail Job

Chevron Consultant: GHD  
 Address: 5900 Hollis St., Suite A, Emeryville, CA  
 Consultant Contact: Kiersten Hoey  
 Consultant Phone No. 510-420-3347  
 Consultant Project No. 170113-001  
 Sampling Company: Blaine Tech Services  
 Sampled By (Print): Colin Klopptauer  
 Sampler Signature: [Signature]

ANALYSES REQUIRED												Preservation Codes
H	H											
												H = HCL T= Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other
												<b>Notes/Comments</b>

Charge Code: NWR TB-0098247-0-OML  
NWR TB 00SITE NUMBER-0- WBS  
**(WBS ELEMENTS:**  
 SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L  
 SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L  
**THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.**

**Lancaster Laboratories**  
 Lancaster, PA  
 Lab Contact: Amek Carter  
 2425 New Holland Pike,  
 Lancaster, PA 17601  
 Phone No:  
 (717)656-2300

Other-Lab	Temp. Blank Check Time	Temp.
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

SAMPLE ID				Sample Time	# of Containers	Container Type
Field Point Name	Matrix	Top Depth	Date (yyymmdd)			
<u>Group. W-171301</u>	<u>W</u>	<u>-</u>	<u>170113</u>	<u>0930</u>	<u>8</u>	<u>Mix</u>

Relinquished By <u>[Signature]</u> Company <u>BTS</u> Date/Time: <u>1/13/17 1545</u>	Relinquished To <u>[Signature]</u> Company <u>BTS (S.C.)</u> Date/Time: <u>1/13/17 1545</u>
Relinquished By _____ Company _____ Date/Time _____	Relinquished To _____ Company _____ Date/Time _____
Relinquished By _____ Company _____ Date/Time _____	Relinquished To _____ Company _____ Date/Time _____

Turnaround Time:  
 Standard  24 Hours  48 hours  72  
 Hours  Other   
 Sample Integrity: (Check by lab on arrival)  
 Intact: \_\_\_\_\_ On Ice: \_\_\_\_\_ Temp: \_\_\_\_\_  
 COC # \_\_\_\_\_







# Attachment B Laboratory Analytical Reports

## ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental  
2425 New Holland Pike  
Lancaster, PA 17601

Prepared for:

Chevron  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Report Date: December 30, 2016

### Project: 90121

Submittal Date: 12/17/2016  
Group Number: 1746101  
PO Number: 0015194749  
Release Number: HORNE  
State of Sample Origin: CA

#### Client Sample Description

MW-10-W-161216 NA Water  
QA-T-161216 NA Water

Lancaster Labs

(LL) #

8752114  
8752115

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GHD  
Electronic Copy To Chevron  
Electronic Copy To Blaine Tech Services, Inc.  
Electronic Copy To Chevron

Attn: Kiersten Hoey  
Attn: Anna Avina  
Attn: Dustin Becker  
Attn: Report Contact

Respectfully Submitted,



Amek Carter  
Specialist

(717) 556-7252

Sample Description: MW-10-W-161216 NA Water  
Facility #90121 BTST  
3026 Lakeshore Ave-Oakland T0600100328

LL Sample # WW 8752114  
LL Group # 1746101  
Account # 10991

Project Name: 90121

Collected: 12/16/2016 12:00 by MM

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 12/17/2016 11:10

Reported: 12/30/2016 20:20

LSO10

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethanol	64-17-5	N.D.	50	250	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.						
<b>GC Volatiles SW-846 8015B</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
<b>GC Petroleum SW-846 8015B</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	100	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	Z163642AA	12/29/2016 14:04	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z163642AA	12/29/2016 14:04	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	16355A20A	12/20/2016 20:14	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	16355A20A	12/20/2016 20:14	Brett W Kenyon	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	163570023A	12/29/2016 02:49	Thomas C Wildermuth	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	163570023A	12/23/2016 02:00	Denise L Trimby	1

\*=This limit was used in the evaluation of the final result



Sample Description: QA-T-161216 NA Water  
Facility #90121 BTST  
3026 Lakeshore Ave-Oakland T0600100328

LL Sample # WW 8752115  
LL Group # 1746101  
Account # 10991

Project Name: 90121

Collected: 12/16/2016 11:00

Chevron

Submitted: 12/17/2016 11:10

6001 Bollinger Canyon Rd L4310

Reported: 12/30/2016 20:20

San Ramon CA 94583

LSOQA

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10945	Benzene	71-43-2	N.D.	ug/l 0.5	ug/l 1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	ug/l 50	ug/l 100	1

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	F163581AA	12/23/2016 14:09	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F163581AA	12/23/2016 14:09	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	16355A20A	12/20/2016 12:40	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	16355A20A	12/20/2016 12:40	Brett W Kenyon	1

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: Chevron  
Reported: 12/30/2016 20:20

Group Number: 1746101

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

### Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Batch number: F163581AA	Sample number(s): 8752115		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: Z163642AA	Sample number(s): 8752114		
Benzene	N.D.	0.5	1
Ethanol	N.D.	50	250
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: 16355A20A	Sample number(s): 8752114-8752115		
TPH-GRO N. CA water C6-C12	N.D.	50	100
Batch number: 163570023A	Sample number(s): 8752114		
TPH-DRO CA C10-C28 w/ Si Gel	38	J 32	100

### LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: F163581AA	Sample number(s): 8752115								
Benzene	20	18.02			90		78-120		
Ethylbenzene	20	18.42			92		78-120		
Methyl Tertiary Butyl Ether	20	18.05			90		75-120		
Toluene	20	18.52			93		80-120		
Xylene (Total)	60	55.42			92		80-120		
Batch number: Z163642AA	Sample number(s): 8752114								
Benzene	20	17.79			89		78-120		
Ethanol	500	499.68			100		47-155		
Ethylbenzene	20	17.98			90		78-120		
Methyl Tertiary Butyl Ether	20	17.29			86		75-120		
Toluene	20	18.51			93		80-120		

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Chevron  
Reported: 12/30/2016 20:20

Group Number: 1746101

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Xylene (Total)	60	55.81			93		80-120		
Batch number: 16355A20A TPH-GRO N. CA water C6-C12	1100	995.94	1100	983.19	91	89	77-120	1	30
Batch number: 163570023A TPH-DRO CA C10-C28 w/ Si Gel	1600	784.65	1600	883.47	49	55	40-105	12	20

### MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: F163581AA	Sample number(s): 8752115 UNSPK: P751542									
Benzene	N.D.	20	20.11	20	19.68	101	98	78-120	2	30
Ethylbenzene	N.D.	20	20.19	20	19.8	101	99	78-120	2	30
Methyl Tertiary Butyl Ether	N.D.	20	18.75	20	18.69	94	93	75-120	0	30
Toluene	N.D.	20	20.61	20	20.16	103	101	80-120	2	30
Xylene (Total)	N.D.	60	61.43	60	60.27	102	100	80-120	2	30
Batch number: Z163642AA	Sample number(s): 8752114 UNSPK: 8752114									
Benzene	N.D.	20	19.71	20	19.65	99	98	78-120	0	30
Ethanol	N.D.	500	464.62	500	448.42	93	90	47-155	4	30
Ethylbenzene	N.D.	20	19.7	20	19.58	98	98	78-120	1	30
Methyl Tertiary Butyl Ether	N.D.	20	17.63	20	17.53	88	88	75-120	1	30
Toluene	N.D.	20	20.35	20	20.31	102	102	80-120	0	30
Xylene (Total)	N.D.	60	60.97	60	60.5	102	101	80-120	1	30

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Chevron  
Reported: 12/30/2016 20:20

Group Number: 1746101

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX/MTBE  
Batch number: F163581AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8752115	96	100	98	92
Blank	96	97	99	93
LCS	96	100	99	95
MS	97	100	100	95
MSD	94	100	99	94
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX/MTBE/ETOH Water  
Batch number: Z163642AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8752114	92	99	98	93
Blank	90	98	99	93
LCS	90	99	99	96
MS	92	100	99	96
MSD	91	100	99	96
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12  
Batch number: 16355A20A

	Trifluorotoluene-F
8752114	88
8752115	87
Blank	88
LCS	95
LCSD	95
Limits:	63-135

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel  
Batch number: 163570023A

	Orthoterphenyl
8752114	65
Blank	61
LCS	65
LCSD	65
Limits:	42-126

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



Client: Chevron

**Delivery and Receipt Information**

Delivery Method:	<u>UPS</u>	Arrival Timestamp:	<u>12/17/2016 11:10</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>

**Arrival Condition Summary**

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	4
Paperwork Enclosed:	Yes	Trip Blank Type:	N/A
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Porsha Hill (12046) at 11:39 on 12/17/2016

**Samples Chilled Details**

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT146	1.0	DT	Wet	Y	Bagged	N

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>BMQL</b>	Below Minimum Quantitation Level	<b>mg</b>	milligram(s)
<b>C</b>	degrees Celsius	<b>mL</b>	milliliter(s)
<b>cfu</b>	colony forming units	<b>MPN</b>	Most Probable Number
<b>CP Units</b>	cobalt-chloroplatinate units	<b>N.D.</b>	none detected
<b>F</b>	degrees Fahrenheit	<b>ng</b>	nanogram(s)
<b>g</b>	gram(s)	<b>NTU</b>	nephelometric turbidity units
<b>IU</b>	International Units	<b>pg/L</b>	picogram/liter
<b>kg</b>	kilogram(s)	<b>RL</b>	Reporting Limit
<b>L</b>	liter(s)	<b>TNTC</b>	Too Numerous To Count
<b>lb.</b>	pound(s)	<b>µg</b>	microgram(s)
<b>m3</b>	cubic meter(s)	<b>µL</b>	microliter(s)
<b>meq</b>	milliequivalents	<b>umhos/cm</b>	micromhos/cm
<b>&lt;</b>	less than		
<b>&gt;</b>	greater than		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

## Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value  $\geq$  the Method Detection Limit (MDL or DL) and  $<$  the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column  $>40\%$ . The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column  $>100\%$ . The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

## ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental  
2425 New Holland Pike  
Lancaster, PA 17601

Prepared for:

Chevron  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Report Date: February 14, 2017

**Project: 90121**

Submittal Date: 01/17/2017  
Group Number: 1755088  
PO Number: 0015235605  
Release Number: MACLEOD  
State of Sample Origin: CA

### Client Sample Description

	Lancaster Labs (LL) #
QA-T-170113 NA Water	8790536
MW-1-W-170113 NA Water	8790537
MW-2A-W-170113 NA Water	8790538
MW-3A-W-170113 NA Water	8790539
MW-4A-W-170113 NA Water	8790540
MW-5-W-170113 NA Water	8790541
MW-6-W-170113 NA Water	8790542
MW-8-W-170113 NA Water	8790543
MW-9-W-170113 NA Water	8790544
MW-10-W-170113 NA Water	8790545
SUMP-W-170113 NA Water	8790546

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	GHD	Attn: Kiersten Hoey
Electronic Copy To	Chevron	Attn: Anna Avina
Electronic Copy To	Blaine Tech Services, Inc.	Attn: Dustin Becker
Electronic Copy To	Chevron	Attn: Report Contact



Respectfully Submitted,



Amek Carter  
Specialist

(717) 556-7252

Sample Description: QA-T-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790536  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 08:00

Chevron

Submitted: 01/17/2017 09:45

6001 Bollinger Canyon Rd L4310

Reported: 02/14/2017 15:07

San Ramon CA 94583

LBOQA

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10945	Benzene	71-43-2	N.D.	ug/l 0.5	ug/l 1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	ug/l 50	ug/l 100	1

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	F170192AA	01/19/2017 11:36	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170192AA	01/19/2017 11:36	Brett W Kenyon	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 14:07	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 14:07	Jeremy C Giffin	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-1-W-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790537  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 13:15 by CK

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 01/17/2017 09:45

Reported: 02/14/2017 15:07

LBO01

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethanol	64-17-5	N.D.	50	250	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	4	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
<b>GC Petroleum SW-846 8015B</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	310	50	100	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	F170181AA	01/18/2017 11:17	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170181AA	01/18/2017 11:17	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 14:52	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 14:52	Jeremy C Giffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	2	170190011A	01/31/2017 23:13	Amy Lehr	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	170190011A	01/19/2017 21:05	Karen L Beyer	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-2A-W-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790538  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 13:35 by CK

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 01/17/2017 09:45

Reported: 02/14/2017 15:07

LBO02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10945	Benzene	71-43-2	11	ug/l 0.5	ug/l 1	1
10945	Ethanol	64-17-5	N.D.	50	250	1
10945	Ethylbenzene	100-41-4	0.6 J	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	39	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	1	0.5	1	1
<b>GC Volatiles SW-846 8015B</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	480	ug/l 50	ug/l 100	1
<b>GC Petroleum SW-846 8015B</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	120	ug/l 50	ug/l 100	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	Z170231AA	01/23/2017 23:59	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z170231AA	01/23/2017 23:59	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 15:15	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 15:15	Jeremy C Giffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	2	170190011A	01/31/2017 23:34	Amy Lehr	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	170190011A	01/19/2017 21:05	Karen L Beyer	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-3A-W-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790539  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 12:52 by CK

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 01/17/2017 09:45

Reported: 02/14/2017 15:07

LBO03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>						
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethanol	64-17-5	N.D.	50	250	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B ug/l</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
<b>GC Petroleum SW-846 8015B ug/l</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	100	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	Z170231AA	01/24/2017 00:23	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z170231AA	01/24/2017 00:23	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 15:37	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 15:37	Jeremy C Giffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	2	170190011A	01/31/2017 23:56	Amy Lehr	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	170190011A	01/19/2017 21:05	Karen L Beyer	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-4A-W-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790540  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 14:17 by CK

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 01/17/2017 09:45

Reported: 02/14/2017 15:07

LBO04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>						
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethanol	64-17-5	N.D.	50	250	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B ug/l</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
<b>GC Petroleum SW-846 8015B ug/l</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	100	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	Z170231AA	01/24/2017 00:48	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z170231AA	01/24/2017 00:48	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 16:00	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 16:00	Jeremy C Giffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	2	170190011A	02/01/2017 00:17	Amy Lehr	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	170190011A	01/19/2017 21:05	Karen L Beyer	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-5-W-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790541  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 10:40 by CK

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 01/17/2017 09:45

Reported: 02/14/2017 15:07

LBO05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>						
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethanol	64-17-5	N.D.	50	250	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B ug/l</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
<b>GC Petroleum SW-846 8015B ug/l</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	100	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	Z170231AA	01/24/2017 01:12	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z170231AA	01/24/2017 01:12	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 16:22	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 16:22	Jeremy C Giffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	2	170190011A	02/01/2017 00:38	Amy Lehr	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	170190011A	01/19/2017 21:05	Karen L Beyer	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-6-W-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790542  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 12:05 by CK

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 01/17/2017 09:45

Reported: 02/14/2017 15:07

LBO06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10945	Benzene	71-43-2	N.D.	5	10	10
10945	Ethanol	64-17-5	N.D.	500	2,500	10
10945	Ethylbenzene	100-41-4	N.D.	5	10	10
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	5	10	10
10945	Toluene	108-88-3	N.D.	5	10	10
10945	Xylene (Total)	1330-20-7	N.D.	5	10	10

A preserved vial was submitted for analysis. However, the pH at the time of analysis was 6.

Reporting limits were raised due to sample foaming.

<b>GC Volatiles SW-846 8015B</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	150	50	100	1

<b>GC Petroleum SW-846 8015B</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	97 J	50	110	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	Z170231AA	01/24/2017 01:36	Hu Yang	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z170231AA	01/24/2017 01:36	Hu Yang	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 16:44	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 16:44	Jeremy C Giffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	2	170190011A	02/01/2017 01:00	Amy Lehr	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	170190011A	01/19/2017 21:05	Karen L Beyer	1

\*=This limit was used in the evaluation of the final result



Sample Description: MW-8-W-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790543  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 10:10 by CK

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 01/17/2017 09:45

Reported: 02/14/2017 15:07

LBO08

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>						
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethanol	64-17-5	N.D.	50	250	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B ug/l</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
<b>GC Petroleum SW-846 8015B ug/l</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	120	50	100	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	Z170231AA	01/24/2017 02:00	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z170231AA	01/24/2017 02:00	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 17:07	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 17:07	Jeremy C Giffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	2	170190011A	02/01/2017 01:21	Amy Lehr	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	170190011A	01/19/2017 21:05	Karen L Beyer	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-9-W-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790544  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 13:50 by CK

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 01/17/2017 09:45

Reported: 02/14/2017 15:07

LBO09

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>						
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethanol	64-17-5	N.D.	50	250	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B ug/l</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
<b>GC Petroleum SW-846 8015B ug/l</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	390	50	110	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	Z170231AA	01/24/2017 02:24	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z170231AA	01/24/2017 02:24	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 17:29	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 17:29	Jeremy C Giffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	2	170190011A	02/01/2017 02:26	Amy Lehr	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	170190011A	01/19/2017 21:05	Karen L Beyer	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-10-W-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790545  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 11:30 by CK

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 01/17/2017 09:45

Reported: 02/14/2017 15:07

LBO10

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>						
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethanol	64-17-5	N.D.	50	250	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B ug/l</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
<b>GC Petroleum SW-846 8015B ug/l</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	69 J	50	100	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	Z170231AA	01/24/2017 02:48	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z170231AA	01/24/2017 02:48	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 18:14	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 18:14	Jeremy C Giffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	2	170190011A	02/01/2017 01:43	Amy Lehr	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	170190011A	01/19/2017 21:05	Karen L Beyer	1

\*=This limit was used in the evaluation of the final result

Sample Description: SUMP-W-170113 NA Water  
Facility# 90121 BTST  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8790546  
LL Group # 1755088  
Account # 10991

Project Name: 90121

Collected: 01/13/2017 09:30 by CK

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 01/17/2017 09:45

Reported: 02/14/2017 15:07

LBOSM

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>						
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethanol	64-17-5	N.D.	50	250	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	3	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B ug/l</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	680	50	100	1
<b>GC Petroleum SW-846 8015B ug/l</b>						
<b>Hydrocarbons w/Si</b>						
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	100	1
The reverse surrogate, capric acid, is present at <1%.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/ETOH Water	SW-846 8260B	1	Z170232AA	01/24/2017 03:49	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z170232AA	01/24/2017 03:49	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17019A20A	01/19/2017 18:36	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	17019A20A	01/19/2017 18:36	Jeremy C Giffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	2	170190011A	02/01/2017 02:04	Amy Lehr	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	170190011A	01/19/2017 21:05	Karen L Beyer	1

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: Chevron  
Reported: 02/14/2017 15:07

Group Number: 1755088

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

### Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Batch number: F170181AA	Sample number(s): 8790537		
Benzene	N.D.	0.5	1
Ethanol	N.D.	50	250
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: F170192AA	Sample number(s): 8790536		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: Z170231AA	Sample number(s): 8790538-8790545		
Benzene	N.D.	0.5	1
Ethanol	N.D.	50	250
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: Z170232AA	Sample number(s): 8790546		
Benzene	N.D.	0.5	1
Ethanol	N.D.	50	250
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: 17019A20A	Sample number(s): 8790536-8790546		
TPH-GRO N. CA water C6-C12	N.D.	50	100
Batch number: 170190011A	Sample number(s): 8790537-8790546		
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32	100

### LCS/LCSD

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Chevron  
Reported: 02/14/2017 15:07

Group Number: 1755088

### LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F170181AA Sample number(s): 8790537									
Benzene	20	19.81			99		78-120		
Ethanol	500	676.5			135		47-155		
Ethylbenzene	20	19.78			99		78-120		
Methyl Tertiary Butyl Ether	20	18.94			95		75-120		
Toluene	20	20.41			102		80-120		
Xylene (Total)	60	59.28			99		80-120		
Batch number: F170192AA Sample number(s): 8790536									
Benzene	20	18.38	20	18.91	92	95	78-120	3	30
Ethylbenzene	20	18.12	20	18.66	91	93	78-120	3	30
Methyl Tertiary Butyl Ether	20	18.75	20	18.93	94	95	75-120	1	30
Toluene	20	19.07	20	19.48	95	97	80-120	2	30
Xylene (Total)	60	55.19	60	57.24	92	95	80-120	4	30
Batch number: Z170231AA Sample number(s): 8790538-8790545									
Benzene	20	17.92	20	18.43	90	92	78-120	3	30
Ethanol	500	491.96	500	502.54	98	101	47-155	2	30
Ethylbenzene	20	17.96	20	18.36	90	92	78-120	2	30
Methyl Tertiary Butyl Ether	20	18.17	20	18.39	91	92	75-120	1	30
Toluene	20	18.67	20	19.03	93	95	80-120	2	30
Xylene (Total)	60	56.42	60	57.41	94	96	80-120	2	30
Batch number: Z170232AA Sample number(s): 8790546									
Benzene	20	17.98	20	18.44	90	92	78-120	3	30
Ethanol	500	490.61	500	497.27	98	99	47-155	1	30
Ethylbenzene	20	17.56	20	18.04	88	90	78-120	3	30
Methyl Tertiary Butyl Ether	20	18.25	20	18.5	91	92	75-120	1	30
Toluene	20	18.38	20	18.96	92	95	80-120	3	30
Xylene (Total)	60	54.48	60	56.37	91	94	80-120	3	30
Batch number: 17019A20A Sample number(s): 8790536-8790546									
TPH-GRO N. CA water C6-C12	1100	1071.55	1100	1102.52	97	100	77-120	3	30
Batch number: 170190011A Sample number(s): 8790537-8790546									
TPH-DRO CA C10-C28 w/ Si Gel	1600	1086.56	1600	1209.07	68	76	40-105	11	20

### MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc	MS Spike Added	MS Conc	MSD Spike Added	MSD Conc	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
---------------	---------------	----------------	---------	-----------------	----------	---------	----------	---------------	-----	---------

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Chevron  
Reported: 02/14/2017 15:07

Group Number: 1755088

### MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: F170181AA	Sample number(s): 8790537 UNSPK: 8790537									
Benzene	N.D.	20	20.16	20	20.44	101	102	78-120	1	30
Ethanol	N.D.	500	572.7	500	598.69	115	120	47-155	4	30
Ethylbenzene	N.D.	20	19.94	20	19.95	100	100	78-120	0	30
Methyl Tertiary Butyl Ether	3.73	20	22.2	20	22.72	92	95	75-120	2	30
Toluene	N.D.	20	20.77	20	20.45	104	102	80-120	2	30
Xylene (Total)	N.D.	60	60.04	60	60.5	100	101	80-120	1	30

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX/MTBE/ETOH Water  
Batch number: F170181AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8790537	95	97	99	92
Blank	96	97	101	93
LCS	95	101	100	95
MS	93	102	100	96
MSD	94	103	99	95
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX/MTBE  
Batch number: F170192AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8790536	94	101	100	91
Blank	95	102	101	92
LCS	95	101	99	93
LCSD	95	103	99	93
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX/MTBE/ETOH Water  
Batch number: Z170231AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8790538	93	97	99	95
8790539	95	100	99	92
8790540	95	100	98	92
8790541	96	100	98	92
8790542	95	100	99	92
8790543	96	100	98	93

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Chevron  
Reported: 02/14/2017 15:07

Group Number: 1755088

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX/MTBE/ETOH Water  
Batch number: Z170231AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8790544	95	98	99	91
8790545	96	99	100	92
Blank	95	98	100	94
LCS	94	99	100	97
LCSD	95	99	100	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX/MTBE/ETOH Water  
Batch number: Z170232AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8790546	98	97	98	95
Blank	95	99	99	93
LCS	94	100	98	96
LCSD	94	100	99	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12  
Batch number: 17019A20A

	Trifluorotoluene-F
8790536	89
8790537	90
8790538	108
8790539	90
8790540	90
8790541	90
8790542	88
8790543	90
8790544	89
8790545	93
8790546	98
Blank	90
LCS	97
LCSD	100
Limits:	63-135

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel  
Batch number: 170190011A

	Orthoterphenyl
8790537	72
8790538	87
8790539	81
8790540	81

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



## Quality Control Summary

Client Name: Chevron  
Reported: 02/14/2017 15:07

Group Number: 1755088

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel  
Batch number: 170190011A

	Orthoterphenyl
8790541	79
8790542	71
8790543	78
8790544	58
8790545	70
8790546	74
Blank	73
LCS	75
LCSD	86

Limits: 42-126

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

CHAIN OF CUSTODY FORM  
Chevron Environmental Management Company ■ 6111 Bollinger Canyon Rd. ■ San Ramon, CA 94583

COC 1 of 2

Chevron Site Number: ~~90076~~ 9-021  
Chevron Site Global ID: T0600100328  
Chevron Site Address: 3026 Lakeshore Ave., Oakland, CA  
Chevron PM: Mark Horne  
Chevron PM Phone No.: (925) 790-3964  
 Retail and Terminal Business Unit (RTBU) Job  
 Construction/Retail Job

Chevron Consultant: GHD  
Address: 5900 Hollis St., Suite A, Emeryville, CA  
Consultant Contact: Klersten Hoey  
Consultant Phone No. 510-420-3347  
Consultant Project No. 170113-xxx  
Sampling Company: Blaine Tech Services  
Sampled By (Print): COREY KEMPATRACH  
Sampler Signature: *[Signature]*

Charge Code: NWR TB-0098247-0-OML  
NWR TB 00SITE NUMBER-0-WBS  
(WBS ELEMENTS:  
SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L  
SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L  
**THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.**

**Lancaster Laboratories**  
 Lancaster, PA  
Lab Contact: Amek Carter  
2425 New Holland Pike,  
Lancaster, PA 17601  
Phone No:  
(717)656-2300

Other Lab	Temp. Blank	Check
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

ANALYSES REQUIRED												Preservation Codes					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	H = HCL T= Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other	
EPA 8260B/GC/MS TPH-G <input type="checkbox"/>	BTEX <input checked="" type="checkbox"/>	MTBE <input checked="" type="checkbox"/>	OXYGENATES <input type="checkbox"/>	HVOC <input type="checkbox"/>	EPA 8015B GRO <input checked="" type="checkbox"/>	DRO <input checked="" type="checkbox"/>	ORO <input type="checkbox"/>	HC SCREEN <input type="checkbox"/>	EPA 8021B BTEX <input type="checkbox"/>	MTBE <input type="checkbox"/>	EPA 6010 Ca, Fe, K, Mg, Mn, Na	EPA 6010/7000 TITLE 22 METALS <input type="checkbox"/>	TLC <input type="checkbox"/>	STLC <input type="checkbox"/>	EPA 310.1 ALKALINITY <input type="checkbox"/>	EPA 413.1 OIL & GREASE <input type="checkbox"/>	Special Instructions Must meet lowest detection limits possi. for 8260 compounds. Silica Gel Clean Up required for TPH-D and TPHmo using 10 gram method.
																	Notes/Comments

SAMPLE ID				Sample Time	# of Containers	Container Type
Field Point Name	Matrix	Top Depth	Date (yymmdd)			
QA-T-171301	T	-	170113	0800	2	HCL WASH
MW-1-W-171301	w	-	170113	1315	8	Mix
MW-2A-W-171301	w	-	170113	1335	8	Mix
MW-3A-W-171301	w	-	170113	1252	8	Mix
MW-4A-W-171301	w	-	170113	1417	8	Mix
MW-5-W-171301	w	-	170113	1040	8	Mix
MW-6-W-171301	w	-	170113	1205	8	Mix
MW-8-W-171301	w	-	170113	1010	8	Mix
MW-9-W-171301	w	-	170113	1350	8	Mix
MW-10-W-171301	w	-	170113	1130	8	Mix

Relinquished By: *[Signature]* Company: BTS Date/Time: 1/13/17 1545  
Relinquished To: *[Signature]* Company: BTS (S.C.) Date/Time: 1/13/17 1545

Relinquished By: *[Signature]* Company: BS Date/Time: 1/16/17 1500  
Relinquished To: *[Signature]* Company: *[Signature]* Date/Time: 1/17/20 0945

Turnaround Time:  
Standard  24 Hours  48 hours  72  
Hours  Other   
Sample Integrity: (Check by lab on arrival)  
Intact:  On Ice:  Temp: 0.6-1.3  
COC #

SHIPPED VIA UPS

10991/1755088/8790536-46

CHAIN OF CUSTODY FORM

Chevron Environmental Management Company ■ 6111 Bollinger Canyon Rd. ■ San Ramon, CA 94583

COC 2 of 2

Chevron Site Number: 90076-9-0121  
 Chevron Site Global ID: T0600100328  
 Chevron Site Address: 3026 Lakeshore Ave., Oakland, CA  
 Chevron PM: Mark Home  
 Chevron PM Phone No.: (925) 790-3964  
 Retail and Terminal Business Unit (RTBU) Job  
 Construction/Retail Job

Chevron Consultant: GHD  
 Address: 5900 Hollis St., Suite A, Emeryville, CA  
 Consultant Contact: Klersten Hoey  
 Consultant Phone No. 510-420-3347  
 Consultant Project No. 170113-001  
 Sampling Company: Blaine Tech Services  
 Sampled By (Print): Walter Klersten Hoey  
 Sampler Signature: [Signature]

Charge Code: NWRTB-0098247-0-OML  
NWRTB 00SITE NUMBER-0-WBS  
**(WBS ELEMENTS:**  
 SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L  
 SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L  
**THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.**

**Lancaster Laboratories**  
 Lancaster, PA  
 Lab Contact: Amek Carter  
 2425 New Holland Pike,  
 Lancaster, PA 17601  
 Phone No:  
 (717)656-2300

Other Lab	Temp. Blank Check Time	Temp.

ANALYSES REQUIRED															Preservation Codes
H	H														
															H = HCL T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other
															Notes/Comments

SAMPLE ID				Sample Time	# of Containers	Container Type
Field Point Name	Matrix	Top Depth	Date (yyymmdd)			
<u>Samp. W-171301</u>	<u>w</u>	<u>-</u>	<u>170113</u>	<u>0930</u>	<u>8</u>	<u>Mix</u>

Relinquished By <u>[Signature]</u> Company <u>BTS</u> Date/Time <u>1/31/17 1545</u>	Relinquished To <u>[Signature]</u> Company <u>BTS (S.C.)</u> Date/Time <u>1/31/17 1545</u>
Relinquished By <u>[Signature]</u> Company <u>BTS</u> Date/Time <u>1/16/17 1800</u>	Relinquished To <u>[Signature]</u> Company <u>[Signature]</u> Date/Time <u>1/17/17 0945</u>

Turnaround Time:  
 Standard  24 Hours  48 hours  72 Hours  Other   
 Sample Integrity: (Check by lab on arrival)  
 Intact:  On Ice:  Temp: 06-1.3  
 COC #

SHIPPED VIA UPS

Client: Chevron

**Delivery and Receipt Information**

Delivery Method:	<u>Fed Ex</u>	Arrival Timestamp:	<u>01/17/2017 9:45</u>
Number of Packages:	<u>3</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>CA</u>		

**Arrival Condition Summary**

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Karen Diem (3060) at 15:33 on 01/17/2017

**Samples Chilled Details**

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	0.6	DT	Wet	Y	Bagged	N
2	DT121	1.3	DT	Wet	Y	Bagged	N
3	DT121	0.7	DT	Wet	Y	Bagged	N

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>BMQL</b>	Below Minimum Quantitation Level	<b>mg</b>	milligram(s)
<b>C</b>	degrees Celsius	<b>mL</b>	milliliter(s)
<b>cfu</b>	colony forming units	<b>MPN</b>	Most Probable Number
<b>CP Units</b>	cobalt-chloroplatinate units	<b>N.D.</b>	none detected
<b>F</b>	degrees Fahrenheit	<b>ng</b>	nanogram(s)
<b>g</b>	gram(s)	<b>NTU</b>	nephelometric turbidity units
<b>IU</b>	International Units	<b>pg/L</b>	picogram/liter
<b>kg</b>	kilogram(s)	<b>RL</b>	Reporting Limit
<b>L</b>	liter(s)	<b>TNTC</b>	Too Numerous To Count
<b>lb.</b>	pound(s)	<b>µg</b>	microgram(s)
<b>m3</b>	cubic meter(s)	<b>µL</b>	microliter(s)
<b>meq</b>	milliequivalents	<b>umhos/cm</b>	micromhos/cm
<b>&lt;</b>	less than		
<b>&gt;</b>	greater than		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

## Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value  $\geq$  the Method Detection Limit (MDL or DL) and  $<$  the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column  $>40\%$ . The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column  $>100\%$ . The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

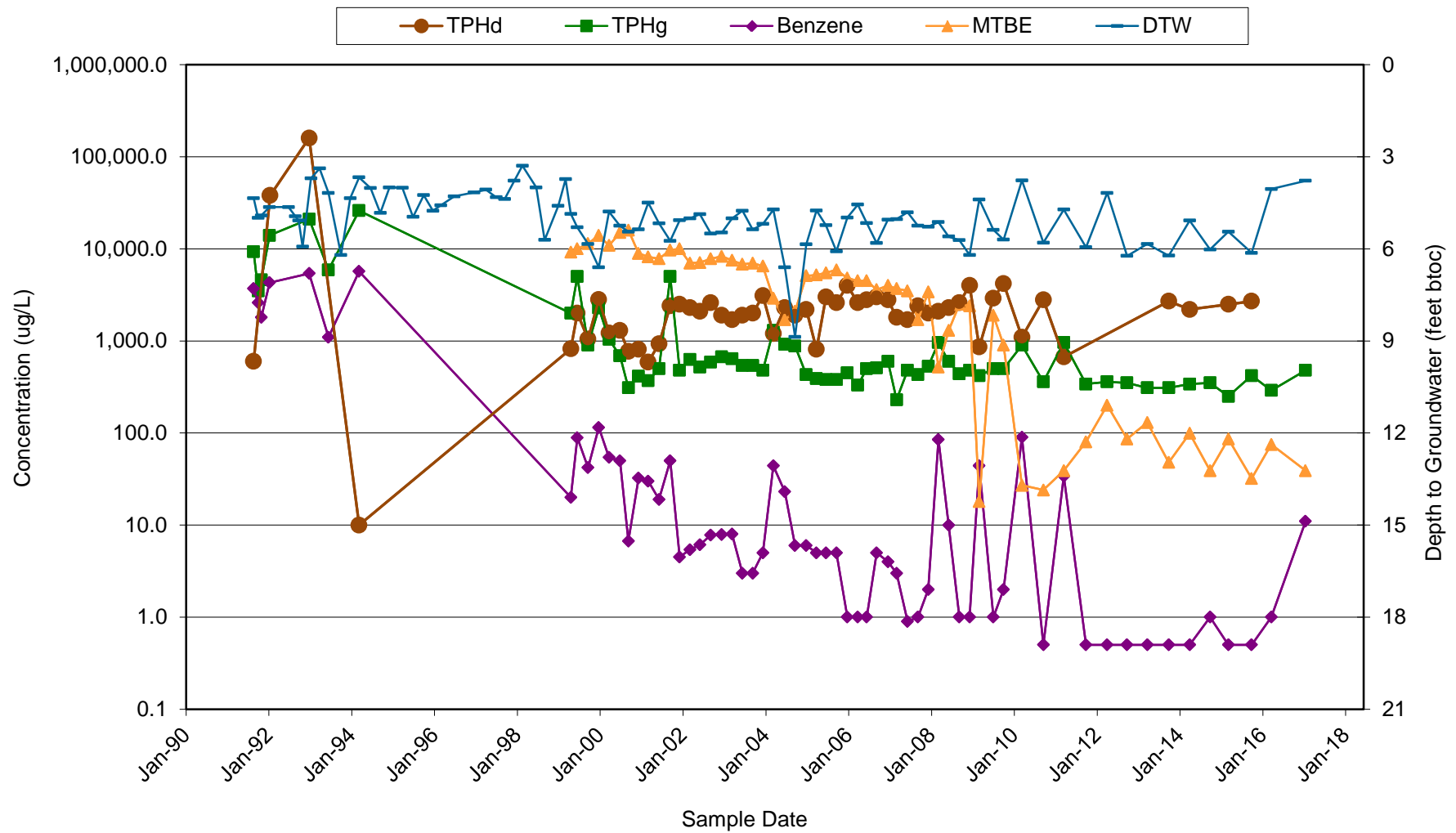
Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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# Attachment C Trend Graph



Former Chevron Service Station 90121  
 3026 Lakeshore Avenue  
 Oakland, California

MW-2/2A: TPHd, TPHg, Benzene, and MTBE  
 Concentrations with Depth to Groundwater  
 versus Time