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By Alameda County Environmental Health at 4:26 pm, Jul 31, 2013



Timothy L. Bishop
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6463
TimBishop@chevron.com

July 30, 2013

Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Unocal No. 6129 (351639)**
3420 35th Avenue, Oakland, California
ACEH Fuel Leak Case No. Fuel Leak Case RO0000058
GeoTracker Global ID T0600101465

I have reviewed the attached report dated July 29, 2013.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by AECOM, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13257(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

A handwritten signature in blue ink, appearing to read "T. Bishop".

Tim Bishop
Project Manager

Attachment: First Semi-Annual 2013 Groundwater Monitoring Report by AECOM

July 30, 2013

Mr. Keith Nowell
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: **First Semi-Annual 2013 Groundwater Monitoring Report**
Unocal No. 6129 (351639)
3420 35th Avenue, Oakland, California
Fuel Leak Case RO0000058

Dear Mr. Nowell,

On behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California (hereinafter "EMC"), AECOM has been authorized to prepare the first semi-annual 2013 groundwater monitoring report for the site located at 3420 35th Avenue in Oakland, California (site) (**Figure 1**). The locations of former and current site features are illustrated on **Figure 2**. The first semi-annual 2013 groundwater monitoring event was conducted to evaluate the distribution of petroleum hydrocarbon constituents in groundwater beneath the site. Groundwater sampling was performed by Gettler-Ryan Inc. (Gettler-Ryan) of Dublin, California. This report summarizes sample results of the first semi-annual sampling event in May 2013.

Groundwater Monitoring Field Data

The depth to groundwater was measured in three monitoring wells (MW-1 through MW-3) at the site on May 2, 2013, and these depths were converted to groundwater elevations (**Table 1**). Copies of the groundwater gauging logs are included in **Attachment A**. The groundwater flow direction was calculated to flow to the west/southwest with an average hydraulic gradient of approximately 0.02 feet per foot (**Figure 2**). The depth to groundwater at the site ranged from 26.98 to 28.30 feet below the top of well casings (161.60 to 163.66 feet above mean sea level).

Groundwater Sampling and Analytical Results

Groundwater samples were collected from monitoring wells MW-1 through MW-3 on May 2, 2013 after first purging a minimum of three well volumes at each well. Temperature, pH, and electrical conductivity readings were recorded during purging, and copies of those purge logs are presented in **Attachment A**. Laboratory analysis of the groundwater samples was performed by BC Laboratories, Inc. (BC Labs) of Bakersfield, California. The BC Labs analytical report dated May 9, 2013 is included as **Attachment B**. Groundwater samples were analyzed for the following, based on historical trends at each monitoring well:

- Total petroleum hydrocarbons as gasoline (TPH-g), by Method Luft-GC/MS (TPH-g is noted as total purgeable petroleum hydrocarbons [TPPH] by the laboratory);
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by USEPA Method 8260B; and
- Fuel oxygenates, including methyl t-butyl ether (MTBE), t-amyl methyl ether (TAME), t-butyl alcohol (TBA), diisopropyl ether (DIPE), ethyl t-butyl ether (ETBE), ethanol, 1,2-dibromoethane (EDB), and 1,2-dichloroethane (EDC) by USEPA Method 8260B.

Analytical results for this semi-annual groundwater monitoring event are consistent with previous reporting periods (**Table 1**, **Table 2**, and **Figure 3**). The following presents a brief summary of the analytical sample results.

- TBA, ETBE, TAME, EDB, EDC, BTEX, and ethanol were not detected in any of the samples analyzed.
- MTBE was detected in samples from all three wells MW-1 (270 micrograms per liter [$\mu\text{g/L}$]), MW-2 (460 $\mu\text{g/L}$), and MW-3 (220 $\mu\text{g/L}$), and all concentrations are within the historical range.
- DIPE was detected for MW-2 at 6.2 $\mu\text{g/L}$.
- TPPH/TPH-g was detected in samples from all three wells MW-1 (150 $\mu\text{g/L}$), MW-2 (290 $\mu\text{g/L}$), and MW-3 (130 $\mu\text{g/L}$). The laboratory report narrative (**Attachment B**) states that the TPPH/TPH-g detections in samples from all three wells do not exhibit a “gasoline” pattern, and that TPPH/TPH-g is entirely due to MTBE.

A summary of historical groundwater analytical data through May 2013 is presented in **Tables 3 and 4**. Data from the upgradient former Exxon service station are included in **Attachment C**.

Approximately 23 gallons of purge water was generated during the first semi-annual 2013 groundwater monitoring event. The purge water and decontamination water generated during sampling activities was transported by Clean Harbors Environmental Services to Evergreen Oil located in Newark, California.

Conclusions and Recommendations

The sample results from the groundwater monitoring activities at the site indicate the following:

- No BTEX was detected.
- Detected TPH-g, MTBE, and oxygenate concentrations fluctuate seasonally, but are generally stable or declining.
- Concentrations of TPH-g and MTBE are generally higher at the upgradient former Exxon service station.

AECOM recommends the continuation of semi-annual groundwater monitoring and sampling coordinated with the former Exxon service station.

Future Activities

Groundwater Monitoring

AECOM will coordinate monitoring and sampling activities as per the established schedule. AECOM will submit semi-annual (second and fourth quarter) groundwater monitoring and sampling reports.

Additional Activity

Conestoga-Rovers and Associates (CRA) submitted the *Conceptual Site Model and Well Installation Work Plan* on May 3, 2012. AECOM will initiate the Work Plan submitted by CRA following Alameda County Environmental Health concurrence/approval.

Remarks/Signatures

The interpretations in this report represent AECOM's professional opinions and are based, in part, on the information supplied by Gettler-Ryan and BC labs. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

If you have any questions regarding this project, please contact James Harms at (916) 361-6412.

Sincerely,



James Harms
Project Manager



Robert Perez, PG #8684
Project Geologist



cc: Mr. Tim Bishop, EMC (via electronic copy)
Son Nguyen & Le Pham, Nguyen/Pham Family Trust, property owner (via paper copy)

Enclosures:

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Figures

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| Figure 1 | Site Location Map |
| Figure 2 | Groundwater Elevation Map, First Semi-Annual 2013 |
| Figure 3 | Groundwater Concentration Map, First Semi-Annual 2013 |

Attachments

- | | |
|--------------|--|
| Attachment A | May 2, 2013 Groundwater Data Field Sheets |
| Attachment B | BC Laboratories Analytical Report #1309301 |
| Attachment C | Former Exxon Service Station Data Tables |

Tables

Table 1
Current Groundwater Monitoring Data and Analytical Results
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL (ft)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
MW-1	190.79	5/2/2013	28.30	162.49	0	150 ¹	<0.50	<0.50	<0.50	<1.0	
MW-2	190.80	5/2/2013	27.14	163.66	0	290 ¹	<0.50	<0.50	<0.50	<1.0	
MW-3	188.58	5/2/2013	26.98	161.60	0	130 ¹	<0.50	<0.50	<0.50	<1.0	

NOTES:

* TOC and GWE are in feet above mean sea level.

<# = Analyte not detected at or above indicated laboratory detection limit

BTEX compounds analyzed by United States Environmental Protection Agency Method 8260B

TPH-g analyzed by Luft-GC/MS method.

ID = Identification

TOC = Top of casing

ft = Feet

DTW = Depth to water

GWE = Groundwater elevation

µg/L = Micrograms per liter

LNAPL = Light Non-Aqueous Phase Liquid

B = Benzene

T = Toluene

E = Ethylbenzene

X = Total Xylenes

TPH-g = Total Petroleum Hydrocarbons as Gasoline

¹ = TPH-g does not exhibit a "gasoline" pattern. TPH-g is entirely due to MTBE.

TPH-g reported as TPPH (total purgeable petroleum hydrocarbons) on some

Table 2
Current Groundwater Analytical Results - Oxygenate Compounds
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	DATE	MTBE ($\mu\text{g}/\text{L}$)	TBA ($\mu\text{g}/\text{L}$)	ETHANOL ($\mu\text{g}/\text{L}$)	ETBE ($\mu\text{g}/\text{L}$)	DIPE ($\mu\text{g}/\text{L}$)	TAME ($\mu\text{g}/\text{L}$)	EDB ($\mu\text{g}/\text{L}$)	EDC ($\mu\text{g}/\text{L}$)
MW-1	5/2/2013	270	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
MW-2	5/2/2013	460	<10	<250	<0.50	6.2	<0.50	<0.50	<0.50
MW-3	5/2/2013	220	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50

NOTES:

Oxygenate compounds analyzed by United States Environmental Protection Agency Method 8260B

<# = Analyte not detected at or above indicated laboratory detection limit

ID = Identification

$\mu\text{g}/\text{L}$ = Micrograms per liter

MTBE = Methyl t-butyl ether

TBA = T-butyl alcohol

DIPE = Diisopropyl ether

ETBE = Ethyl t-butyl ether

TAME = T-amyl methyl ether

EDB = 1,2-Dibromoethane

EDC = 1,2-Dichloroethane

Table 3
Historical Groundwater Monitoring Data and Analytical Results
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL	TPH-G	B	T	E	X	Comments
	(ft)		(ft)	(ft)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-1	--	1/5/1990	--	--	--	ND	ND	ND	ND	ND	
	--	5/11/1990	--	--	--	ND	ND	7.10	ND	ND	
	--	8/9/1990	--	--	--	ND	ND	ND	ND	ND	
	--	11/14/1990	--	--	--	ND	ND	ND	ND	ND	
	--	2/12/1991	--	--	--	ND	0.32	ND	ND	ND	
	--	5/9/1991	--	--	--	ND	ND	ND	ND	ND	
	--	11/13/2003	--	--	--	180	<1.0	<1.0	<1.0	<2.0	
190.79	8/27/2004	30.65	71.59	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	11/23/2004	29.35	72.89	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	2/9/2005	26.89	75.35	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	5/17/2005	26.56	75.68	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	7/27/2005	27.33	74.91	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	12/6/2005	29.59	72.65	0	<50	<0.50	0.93	<0.50	1.80		
190.79	2/21/2006	28.27	73.97	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	6/8/2006	26.07	76.17	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	9/15/2006	28.86	73.38	0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	
190.79	12/14/2006	29.49	72.75	0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	
190.79	3/28/2007	27.24	75.00	0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	
190.79	6/25/2007	28.30	73.94	0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	
190.79	9/22/2007	30.61	71.63	0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	
190.79	12/14/2007	30.30	71.94	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	3/17/2008	27.22	75.02	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	6/20/2008	30.10	72.14	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	9/11/2008	31.04	71.20	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	11/25/2008	30.88	71.36	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	3/9/2009	27.50	74.74	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	5/28/2009	28.25	73.99	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	12/11/2009	30.60	160.19	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	5/7/2010	26.06	164.73	0	67	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	11/1/2010	30.18	160.61	0	<50	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	5/27/2011	26.87	163.92	0	110	<0.50	<0.50	<0.50	<0.50	<1.0	
190.79	11/23/2011	29.14	161.65	0	1,101	<0.50	<0.50	<0.50	<0.50	<1.0	

Table 3
Historical Groundwater Monitoring Data and Analytical Results
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL	TPH-G	B	T	E	X	Comments
	(ft)		(ft)	(ft)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-1 cont.	190.79	5/24/2012	26.58	164.21	0	140	<0.50	<0.50	<0.50	<1.0	
	190.79	10/23/2012	30.51	160.28	0	130	<0.50	<0.50	<0.50	<1.0	
	190.79	5/2/2013	28.30	162.49	0	150¹	<0.50	<0.50	<0.50	<1.0	
MW-2	--	1/5/1990	--	--	--	ND	ND	ND	ND	ND	
	--	5/11/1990	--	--	--	ND	ND	ND	ND	ND	
	--	8/9/1990	--	--	--	ND	ND	ND	ND	ND	
	--	11/14/1990	--	--	--	ND	ND	ND	ND	ND	
	--	2/12/1991	--	--	--	ND	ND	0.42	ND	0.51	
	--	5/9/1991	--	--	--	ND	ND	ND	ND	ND	
	--	11/13/2003	--	--	--	<2,000	<20	<20	<20	<40	
	190.80	8/27/2004	30.28	71.88	0	950	<5.0	<5.0	<5.0	<10	
	190.80	11/23/2004	28.75	73.41	0	53	<0.50	<0.50	<0.50	<1.0	
	190.80	2/9/2005	26.08	76.08	0	<500	<0.50	<0.50	<0.50	<1.0	
	190.80	5/17/2005	24.53	77.63	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.80	7/27/2005	27.51	74.65	0	<500	<5.0	<5.0	<5.0	<10	
	190.80	12/6/2005	29.13	73.03	0	340	<0.50	<0.50	<0.50	<1.0	
	190.80	2/21/2006	29.23	72.93	0	190	<0.50	<0.50	<0.50	<1.0	
	190.80	6/8/2006	25.76	76.40	0	<500	<5.0	<5.0	<5.0	<10	
	190.80	9/15/2006	29.17	72.99	0	<500	<5.0	<5.0	<5.0	<5.0	
	190.80	12/14/2006	29.11	73.05	0	520	<0.50	<0.50	<0.50	<0.50	
	190.80	3/28/2007	26.68	75.48	0	290	<0.50	<0.50	<0.50	<0.50	
	190.80	6/25/2007	25.91	76.25	0	<50	<0.50	<0.50	<0.50	<0.50	
	190.80	9/22/2007	30.18	71.98	0	400	<0.50	<0.50	<0.50	<0.50	
	190.80	12/14/2007	29.96	72.20	0	400	<0.50	<0.50	<0.50	<1.0	
	190.80	3/17/2008	26.74	75.42	0	570	<5.0	<5.0	<5.0	<10	
	190.80	6/20/2008	29.78	72.38	0	580	<0.50	<0.50	<0.50	<1.0	
	190.80	9/11/2008	30.62	71.54	0	220	<0.50	<0.50	<0.50	<1.0	
	190.80	11/25/2008	30.48	71.68	0	500	<0.50	<0.50	<0.50	<1.0	
	190.80	3/9/2009	25.75	76.41	0	910	<5.0	<5.0	<5.0	<10	
	190.80	5/28/2009	27.71	74.45	0	460	<0.50	<0.50	<0.50	<1.0	
	190.80	12/11/2009	29.80	161.00	0	640	<5.0	<5.0	<5.0	<10	

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Historical Groundwater Monitoring Data and Analytical Results
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL	TPH-G	B	T	E	X	Comments
	(ft)		(ft)	(ft)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-2 cont.	190.80	5/7/2010	25.11	165.69	0	600	<1.0	<1.0	<1.0	<2.0	
	190.80	11/1/2010	29.90	160.90	0	140	<0.50	<0.50	<0.50	<1.0	
	190.80	5/27/2011	26.44	164.36	0	560	<0.50	<0.50	<0.50	<1.0	
	190.80	11/23/2011	28.53	162.27	0	830	<0.50	<0.50	<0.50	<1.0	
	190.80	5/24/2012	25.97	164.83	0	1,000	<0.50	<0.50	<0.50	<1.0	
	190.80	10/23/2012	30.14	160.66	0	750	<0.50	<0.50	<0.50	<1.0	
	190.80	5/2/2013	27.14	163.66	0	290¹	<0.50	<0.50	<0.50	<1.0	
MW-3	--	1/5/1990	--	--	--	ND	ND	ND	ND	ND	
	--	5/11/1990	--	--	--	ND	ND	ND	ND	ND	
	--	8/9/1990	--	--	--	ND	ND	ND	ND	ND	
	--	11/14/1990	--	--	--	ND	ND	ND	ND	ND	
	--	2/12/1991	--	--	--	ND	ND	ND	ND	ND	
	--	5/9/1991	--	--	--	ND	ND	ND	ND	ND	
	--	11/13/2003	--	--	--	2,600	<20	<20	<20	<40	
	188.58	8/27/2004	29.61	70.39	0	1,700	<10	<10	<10	<20	
	188.58	11/23/2004	28.48	71.52	0	1,500	<10	<10	<10	<20	
	188.58	2/9/2005	26.45	73.55	0	<1,000	<0.50	<0.50	<0.50	<1.0	
	188.58	5/17/2005	25.61	74.39	0	<1,000	<0.50	<0.50	<0.50	<1.0	
	188.58	7/27/2005	27.35	72.65	0	<1,000	<10	<10	<10	<20	
	188.58	12/6/2005	28.78	71.22	0	430	<0.50	1.6	<0.50	3.6	
	188.58	2/21/2006	28.91	71.09	0	420	<0.50	<0.50	<0.50	<1.0	
	188.58	6/8/2006	25.97	74.03	0	<1,200	<12	<12	<12	<25	
	188.58	9/15/2006	28.73	71.27	0	<1,200	<12	<12	<12	<12	
	188.58	12/14/2006	28.62	71.38	0	<1,000	<10	<10	<10	<10	
	188.58	3/28/2007	26.69	73.31	0	500	<1.0	<1.0	<1.0	<1.0	
	188.58	6/25/2007	26.74	73.26	0	270	<0.50	<0.50	<0.50	<0.50	
	188.58	9/22/2007	29.57	70.43	0	500	<0.50	<0.50	<0.50	<0.50	
	188.58	12/14/2007	29.30	70.70	0	270	<0.50	<0.50	<0.50	<1.0	
	188.58	3/17/2008	26.82	73.18	0	220	<0.50	<0.50	<0.50	<1.0	
	188.58	6/20/2008	29.10	70.90	0	490	<0.50	<0.50	<0.50	<1.0	
	188.58	9/11/2008	29.89	70.11	0	630	<5.0	<5.0	<5.0	<10	

Table 3
Historical Groundwater Monitoring Data and Analytical Results
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL	TPH-G	B	T	E	X	Comments
	(ft)		(ft)	(ft)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-3 cont.	188.58	11/25/2008	29.74	70.26	0	380	<0.50	<0.50	<0.50	<1.0	
	188.58	3/9/2009	25.56	74.44	0	310	<0.50	<0.50	<0.50	<1.0	
	188.58	5/28/2009	27.55	72.45	0	410	<0.50	<0.50	<0.50	<1.0	
	188.58	12/11/2009	29.10	159.48	0	220	<0.50	<0.50	<0.50	<1.0	
	188.58	5/7/2010	25.72	162.86	0	360	<0.50	<0.50	<0.50	<1.0	
	188.58	11/1/2010	29.29	159.29	0	120	<0.50	<0.50	<0.50	<1.0	
	188.58	5/27/2011	26.53	162.05	0	340	<0.50	<0.50	<0.50	<1.0	
	188.58	5/24/2012	25.95	162.63	0	660	<0.50	<0.50	<0.50	<1.0	
	188.58	10/23/2012	29.39	159.19	0	480	<0.50	<0.50	<0.50	<1.0	
	188.58	5/2/2013	26.98	161.60	0	130¹	<0.50	<0.50	<0.50	<1.0	

NOTES:

* TOC and GWE are in feet above mean sea level.

<# = Analyte not detected at or above indicated laboratory detection limit

BTEX compounds analyzed by United States Environmental Protection Agency Method 8260B

TPH-g analyzed by Luft-GC/MS method.

ID = Identification

TOC = Top of casing

ft = Feet

fbg = feet below grade

DTW = Depth to water

GWE = Groundwater elevation

-- = Not available/Not analyzed

µg/L = Micrograms per liter

LNAPL = Light Non-Aqueous Phase Liquid

B = Benzene

T = Toluene

E = Ethylbenzene

X = Total Xylenes

TPH-g = Total Petroleum Hydrocarbons as Gasoline

¹ = TPH-g does not exhibit a "gasoline" pattern. TPH-g is entirely due to MTBE.

TPH-g reported as TPPH (total purgeable petroleum hydrocarbons) on some laboratory reports

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	DATE	MTBE (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)
MW-1	1/5/1990	--	--	--	--	--	--	--	--
	5/11/1990	--	--	--	--	--	--	--	--
	8/9/1990	--	--	--	--	--	--	--	--
	11/14/1990	--	--	--	--	--	--	--	--
	2/12/1991	--	--	--	--	--	--	--	--
	5/9/1991	--	--	--	--	--	--	--	--
	11/13/2003	240	<200	<1,000	<4.0	<4.0	<4.0	<4.0	<4.0
	8/27/2004	<0.50	<5.0	<50	<0.50	<1.0	<0.50	<0.50	<0.50
	11/23/2004	<0.50	<5.0	<50	<0.50	<1.0	<0.50	<0.50	<0.50
	2/9/2005	9.3	<5.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	5/17/2005	1.9	<5.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	7/27/2005	<0.50	<5.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/6/2005	<0.50	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	2/21/2006	2.6	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	6/8/2006	11	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	9/15/2006	1.4	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	12/14/2006	3.5	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	3/28/2007	0.64	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	6/25/2007	<0.50	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	9/22/2007	4.10	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	12/14/2007	0.65	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	3/17/2008	14	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	6/20/2008	11	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	9/11/2008	1.3	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/25/2008	5.8	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2009	25	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/28/2009	17	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	12/11/2009	18	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/7/2010	64	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/1/2010	92	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
MW-1 cont.	5/27/2011	220	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	DATE	MTBE (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)
	11/23/2011	150	41	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/24/2012	190	66	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	10/23/2012	140	47	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/2/2013	270	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
MW-2	1/5/1990	--	--	--	--	--	--	--	--
	5/11/1990	--	--	--	--	--	--	--	--
	8/9/1990	--	--	--	--	--	--	--	--
	11/14/1990	--	--	--	--	--	--	--	--
	2/12/1991	--	--	--	--	--	--	--	--
	5/9/1991	--	--	--	--	--	--	--	--
	11/13/2003	2,100	<4,000	<20,000	<80	<80	<80	<80	<80
	8/27/2004	1,400	<5.0	<500	<5.0	24	<5.0	<5.0	<5.0
	11/23/2004	4.2	<5.0	<50	<0.50	18	<0.50	<0.50	<0.50
	2/9/2005	400	<5.0	<500	<5.0	19	<5.0	<5.0	<5.0
	5/17/2005	330	<5.0	<50	<0.50	12	<0.50	<0.50	<0.50
	7/27/2005	580	140	<500	<5.0	16	<5.0	<5.0	<5.0
	12/6/2005	780	61	<250	<0.50	15	<0.50	<0.50	<0.50
	2/21/2006	340	<10	<250	<0.50	18	<0.50	<0.50	<0.50
	6/8/2006	440	<100	<2,500	<5.0	14	<5.0	<5.0	<5.0
	9/15/2006	570	<100	<2,500	<5.0	17	<5.0	<5.0	<5.0
	12/14/2006	770	27	<250	<0.50	20	<0.50	<0.50	<0.50
	3/28/2007	460	260	<250	<0.50	23	<0.50	<0.50	<0.50
	6/25/2007	1.2	<10	<250	<0.50	23	<0.50	<0.50	<0.50
	9/22/2007	530	<10	<250	<0.50	35	<0.50	<0.50	<0.50
	12/14/2007	930	48	<250	<0.50	24	<0.50	<0.50	<0.50
	3/17/2008	630	<100	<2,500	<5.0	18	<5.0	<5.0	<5.0
	6/20/2008	1,200	<10	<250	<0.50	16	<0.50	<0.50	<0.50
	9/11/2008	29	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	DATE	MTBE (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)
MW-2 cont.	11/25/2008	1,500	<10	<250	<0.50	19	<0.50	<0.50	<0.50
	3/9/2009	1,400	<100	<2,500	<5.0	15	<5.0	<5.0	<5.0
	5/28/2009	740	<10	<250	<0.50	20	<0.50	<0.50	<0.50
	12/11/2009	1,300	<100	<2,500	<5.0	19	<5.0	<5.0	<5.0
	5/7/2010	940	<20	<500	<1.0	14	<1.0	<1.0	<1.0
	11/1/2010	730	<10	<250	<0.50	28	<0.50	<0.50	<0.50
	5/27/2011	1,100	210.00	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/23/2011	1,500	400.00	<250	<0.50	9.00	<0.50	<0.50	<0.50
	5/24/2012	1,200	430	<250	<0.50	8.8	<0.50	<0.50	<0.50
	10/23/2012	1,300	420	<250	<0.50	14	<0.50	<0.50	<0.50
MW-3	5/2/2013	460	<10	<250	6.2	<0.50	<0.50	<0.50	<0.50
	1/5/1990	--	--	--	--	--	--	--	--
	5/11/1990	--	--	--	--	--	--	--	--
	8/9/1990	--	--	--	--	--	--	--	--
	11/14/1990	--	--	--	--	--	--	--	--
	2/12/1991	--	--	--	--	--	--	--	--
	5/9/1991	--	--	--	--	--	--	--	--
	11/13/2003	3,700	<4,000	<20,000	<80	<80	<80	<80	<80
	8/27/2004	2,600	<100	<1,000	<10	<20	<10	<10	<10
	11/23/2004	1,800	<100	<1,000	<10	<20	<10	<10	<10
	2/9/2005	2,100	130	<1,000	<10	<10	<10	<10	<10
	5/17/2005	1,200	<100	<1,000	<10	<10	<10	<10	<10
	7/27/2005	1,400	360	<1,000	<10	<10	<10	<10	<10
	12/6/2005	1,800	160	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	2/21/2006	1,100	88	<250	<0.50	<0.50	0.58	<0.50	<0.50
	6/8/2006	1,000	<250	<6,200	<12	<12	<12	<12	<12
	9/15/2006	1,200	<250	<6,200	<12	<12	<12	<12	<12
	12/14/2006	1,300	<200	<5,000	<10	<10	<10	<10	<10
	3/28/2007	860	500	<500	<1.0	<1.0	<1.0	<1.0	<1.0
MW-3 cont.	6/25/2007	570	11	<250	<0.50	<0.50	<0.50	<0.50	0.65

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	DATE	MTBE (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)
	9/22/2007	980	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	12/14/2007	570	26	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	3/17/2008	520	<10	<250	<0.50	<0.50	<0.50	<0.50	0.65
	6/20/2008	1,300	49	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	9/11/2008	1,200	<100	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0
	11/25/2008	870	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2009	720	15	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/28/2009	750	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	12/11/2009	620	63	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/7/2010	660	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/1/2010	490	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/27/2011	890	73	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/24/2012	1,100	300	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	10/23/2012	500	160	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/2/2013	220	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50

NOTES:

Oxygenate compounds analyzed by United States Environmental Protection Agency Method 8260B

<# = Analyte not detected at or above indicated laboratory detection limit

ID = Identification

-- = Not available/Not Analyzed

µg/L = Micrograms per liter

MTBE = Methyl t-butyl ether

TBA = T-butyl alcohol

DIPE = Diisopropyl ether

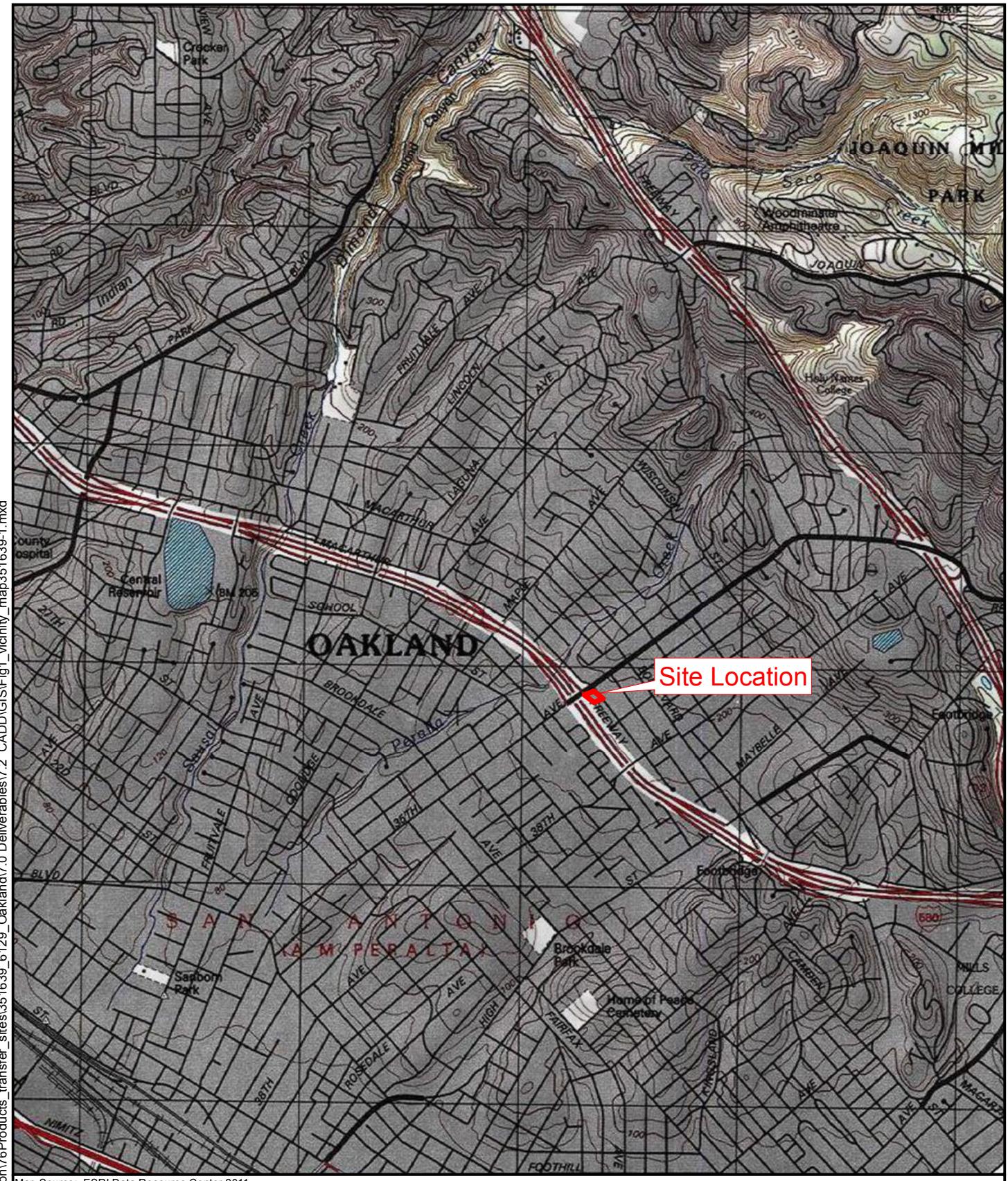
ETBE = Ethyl t-butyl ether

TAME = T-amyl methyl ether

EDB = 1,2-Dibromoethane

EDC = 1,2-Dichloroethane

Figures



Map Source: ESRI Data Resource Center 2011.

AECOM

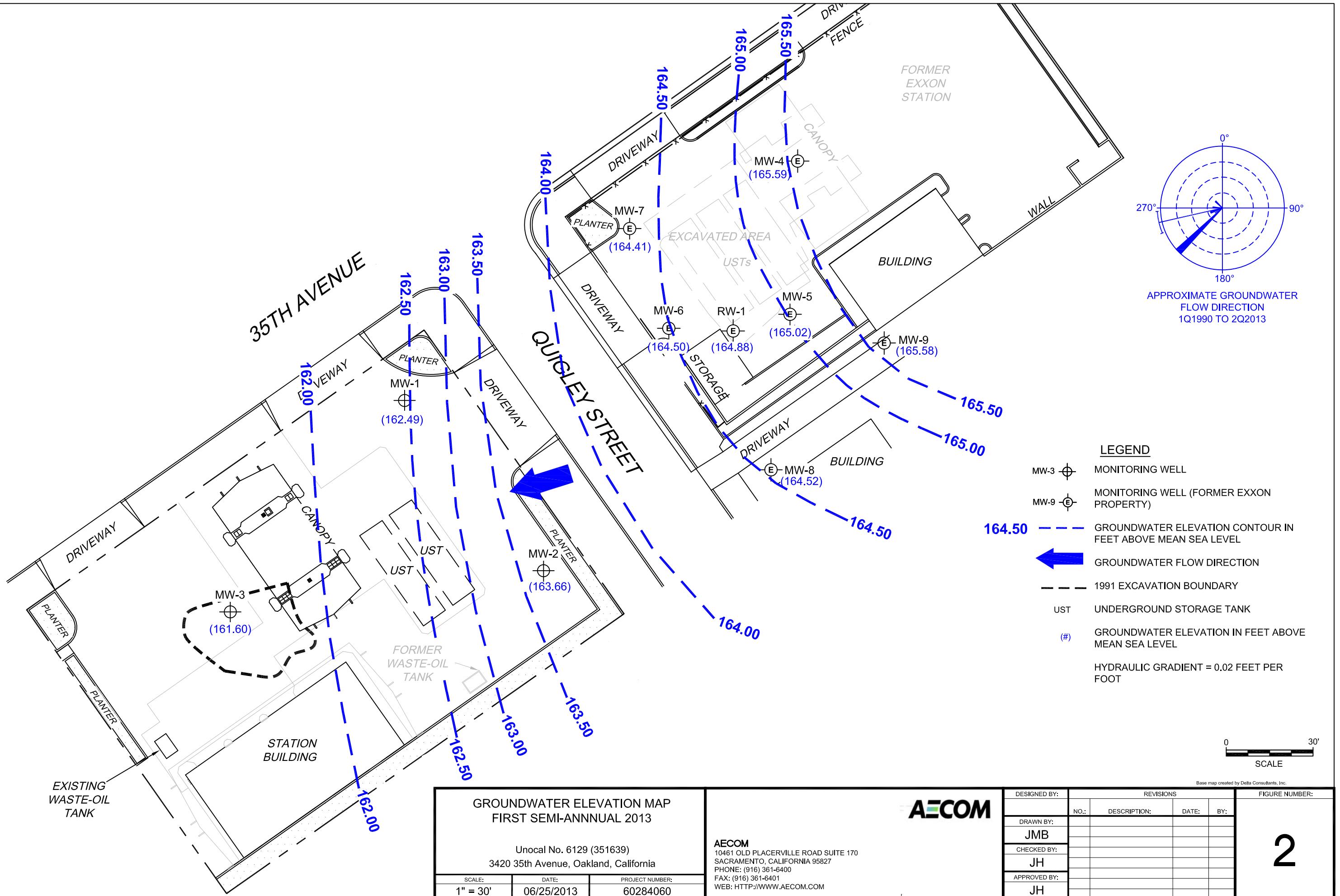
AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827
916.361.6400

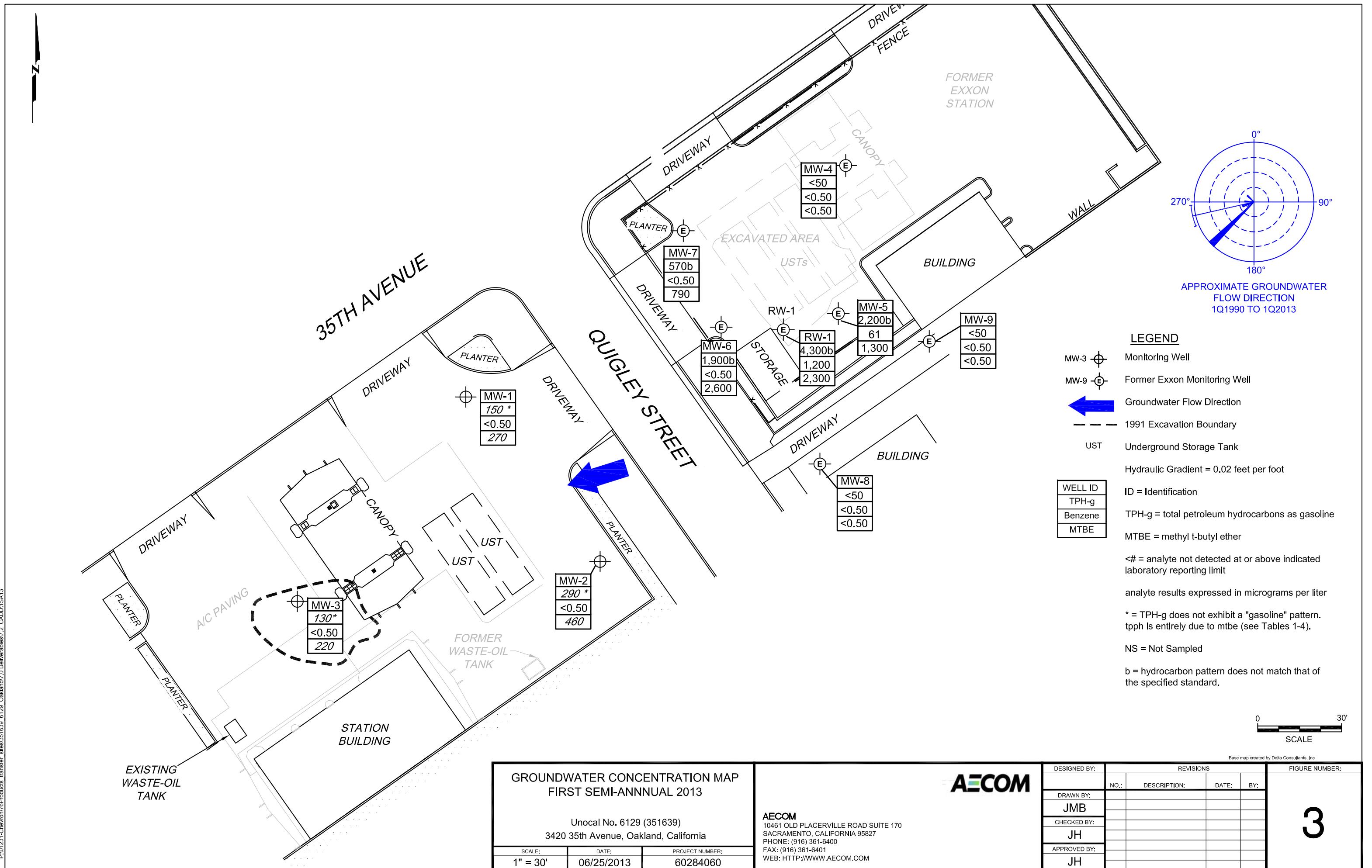


0 0.25 0.5 Miles

Figure 1: Site Location Map

UNOCAL NO. 6129 (351639)
3420 35th AVENUE
OAKLAND, CALIFORNIA





Attachment A

**May 2, 2013 Groundwater Data
Field Sheets**



GETTLER-RYAN INC.



TRANSMITTAL

May 8, 2013
G-R #385640

TO: Mr. Jim Harms
AECOM
10461 Old Placerville Road #170
Sacramento, California 95827

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

RE: **Chevron Facility**
#351639/6129
3420 35th Avenue
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package First Semi-Annual Event of May 2, 2013

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/351639 6129

WELL CONDITION STATUS SHEET

**Client/
Facility #:**

Chevron #351639 / 6129

Site Address: 3420 35Th Avenue

City: **Oakland, CA**

Job #: 385640

Event Date:

5/2/13

三

Comments _____

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by Clean Harbors Environmental Services to Evergreen Oil located in Newark, California.



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351639 / 6129
 Site Address: 3420 35Th Avenue
 City: Oakland, CA

Job Number: 385640
 Event Date: 5/2/13 (inclusive)
 Sampler: JH

Well ID MW- 1
 Well Diameter 2 in.
 Total Depth 43.46 ft.
 Depth to Water 28.30 ft.
15.46 xVF .17 = 2.57 x3 case volume = Estimated Purge Volume: 7.73 gal.

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 31.33

Purge Equipment:
 Disposable Bailer
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:
 Disposable Bailer
 Pressure Bailer _____
 Metal Filters _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Completed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: _____ ft
 Visual Confirmation/Description:
 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Water Removed: _____

Start Time (purge): 0830
 Sample Time/Date: 0910 / 5/2/13
 Approx. Flow Rate: _____ gpm.
 Did well de-water? no If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 31.02

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μmhos/cm - μS)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)
-	- 8 -	-	-	-	PRE: 1.0	PRE: 174
0836	2.5	7.39	892	21.2	1.0	165
0842	5.0	7.30	865	21.0	.9	161
0850	8.0	7.17	857	21.0	.9	168

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 1	3 x voa vial	YES	HCL	BC LABS	TPH-GRO GC/MS/BTEX+MTBE(8260)/8 OXYS(8260)

COMMENTS: 12" emco

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351639 / 6129**

Site Address: **3420 35Th Avenue**

City: **Oakland, CA**

Job Number: **385640**

Event Date: **5/2/13** (inclusive)

Sampler: **JH**

Well ID **MW- 2**

Date Monitored: **5/2/13**

Well Diameter **2** in.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Total Depth **43.60** ft.

Depth to Water **27.14** ft.

Check if water column is less than 0.50 ft.
16.46 xVF **.17** = **2.79** x3 case volume = Estimated Purge Volume: **8.39** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **30.43**

Purge Equipment:

Disposable Bailer _____

Stainless Steel Bailer _____

Stack Pump

Suction Pump _____

Grundfos _____

Peristaltic Pump _____

QED Bladder Pump _____

Other: _____

Sampling Equipment:

Disposable Bailer

Pressure Bailer _____

Metal Filters _____

Peristaltic Pump _____

QED Bladder Pump _____

Other: _____

Time Started: _____ (2400 hrs)

Time Completed: _____ (2400 hrs)

Depth to Product: _____ ft

Depth to Water: _____ ft

Hydrocarbon Thickness: _____ ft

Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)

Amt Removed from Skimmer: _____ gal

Amt Removed from Well: _____ gal

Water Removed: _____

Start Time (purge): **0635**

Weather Conditions: **Clean**

Sample Time/Date: **0705 / 5/2/13**

Water Color: **cloudy** Odor: **Y/N**

Approx. Flow Rate: **1** gpm.

Sediment Description: **L-915**

Did well de-water? **No** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **28.92**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μ mhos/cm - 15)	Temperature ($^{\circ}$ F)	D.O. (mg/L)	ORP (mV)
-	-	-	-	-	PRE: 1.0	PRE: 176
0638	3	6.85	987	21.4	1.0	168
0641	6	6.82	965	21.3	.9	165
0644	8.5	6.73	960	21.3	.8	155

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 2	3 x voa vial	YES	HCL	BC LABS	TPH-GRO GC/MS/BTEX+MTBE(8260)/8 OXYS(8260)

COMMENTS: **12" emcu**

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351639 / 6129 Job Number: 385640
 Site Address: 3420 35Th Avenue Event Date: 5/21/13 (inclusive)
 City: Oakland, CA Sampler: JH

Well ID	<u>MW- 3</u>	Date Monitored:	<u>5/21/13</u>	
Well Diameter	<u>2</u> in.	Volume Factor (VF)		
Total Depth	<u>39.48</u> ft.	3/4"= 0.02	1"= 0.04	2"= 0.17
Depth to Water	<u>26.98</u> ft.	4"= 0.66	5"= 1.02	3"= 0.38
	<u>12.50</u>	x VF <u>.17</u>	= <u>2.12</u>	x3 case volume = Estimated Purge Volume: <u>6.37</u> gal.
Check if water column is less than 0.50 ft.				
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>29.48</u>				
Purge Equipment:	Sampling Equipment:			
Disposable Bailer	<input checked="" type="checkbox"/>	Disposable Bailer	<input checked="" type="checkbox"/>	
Stainless Steel Bailer	<input type="checkbox"/>	Pressure Bailer	<input type="checkbox"/>	
Stack Pump	<input type="checkbox"/>	Metal Filters	<input type="checkbox"/>	
Suction Pump	<input type="checkbox"/>	Peristaltic Pump	<input type="checkbox"/>	
Grundfos	<input type="checkbox"/>	QED Bladder Pump	<input type="checkbox"/>	
Peristaltic Pump	<input type="checkbox"/>	Other:	<input type="checkbox"/>	
QED Bladder Pump	<input type="checkbox"/>			
Other:	<input type="checkbox"/>			

Time Started: _____ (2400 hrs)
 Time Completed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: _____ ft
 Visual Confirmation/Description:

 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Water Removed: _____

Start Time (purge): 0725 Weather Conditions: clear
 Sample Time/Date: 0810 / 5/21/13 Water Color: cloudy Odor: Y / N
 Approx. Flow Rate: - gpm. Sediment Description: L.s h/s
 Did well de-water? No If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 28.17

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm <u>US</u>)	Temperature (<u>°C</u> / <u>°F</u>)	D.O. (mg/L)	ORP (mV)
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>PRE: 1.3</u>	<u>PRE: 232</u>
<u>0730</u>	<u>2</u>	<u>7.59</u>	<u>592</u>	<u>21.6</u>	<u>1.2</u>	<u>227</u>
<u>0735</u>	<u>4</u>	<u>7.50</u>	<u>565</u>	<u>21.5</u>	<u>1.2</u>	<u>220</u>
<u>0741</u>	<u>6.5</u>	<u>7.37</u>	<u>659</u>	<u>21.4</u>	<u>1.1</u>	<u>214</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW- 3</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPH-GRO GC/MS/BTEX+MTBE(8260)/8 OXYS(8260)</u>

COMMENTS: 12" emco

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____

CHAIN OF CUSTODY FORM

Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

COC 1 of 1

Union Oil Site ID: <u>6129</u> Site Global ID: <u>70600101165</u> Site Address: <u>3120 35th Ave Oakland CA</u> Union Oil PM: <u>Roya Kambin</u> Union Oil PM Phone No.:				Union Oil Consultant: <u>Aeroan</u> Consultant Contact: <u>Jim Harms</u> Consultant Phone No.: <u>916-361-6712</u> Sampling Company: <u>Gettler P.</u> Sampled By (PRINT): <u>Jim Harms</u>	ANALYSES REQUIRED						Turnaround Time (TAT): Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>					
Charge Code: NWRTB-0 <u>351639</u> -LAB <i>This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.</i>				Sampler Signature: 	BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911						Special Instructions					
										TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/O by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	8/24/13 1445	
SAMPLE ID				Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time	# of Containers	Notes / Comments						
GA	W-S-A		130502						2	X	X					
MW-1	W-S-A						0910		3	X	X					
MW-2	W-S-A						0705			X	X					
MW-3	W-S-A						0810		4	X	X					
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
Relinquished By <u>Gettler P.</u> Date / Time: <u>5-6-13 1400</u>				Relinquished By <u>Gettler P.</u> Date / Time: <u>05-06-13 1445</u>				Relinquished By <u>Gettler P.</u> Date / Time: <u>05-06-13 1445</u>								
Received By <u>GETTLER-RYAN FRIGG</u> Date / Time: <u>05-03-13 0300</u>				Received By <u>Gettler P.</u> Date / Time: <u>05-06-13 1445</u>				Received By <u>Gettler P.</u> Date / Time: <u>05-06-13 1445</u>								

Attachment B

**BC Laboratories Analytical Report
#1309301**



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Date of Report: 05/09/2013

Jim Harms

AECOM

10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Project: 6129
BC Work Order: 1309301
Invoice ID: B145703

Enclosed are the results of analyses for samples received by the laboratory on 5/6/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Contact Person: Molly Meyers
Client Service Rep



Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com



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CHAIN OF CUSTODY FORM						
Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583			ANALYSES REQUIRED		COC <u>1</u> of <u>1</u>	
Union Oil Site ID: <u>6129</u>	Union Oil Consultant: <u>Aeron</u>	Consultant Contact: <u>Jim Horner</u>	Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/>	Turnaround Time (TAT):		
Site Global ID: <u>T0600101965</u>		Consultant Phone No.: <u>916-361-6412</u>	<input type="checkbox"/> 48 Hours <input checked="" type="checkbox"/> 72 Hours <input type="checkbox"/>	Special Instructions		
Site Address: <u>3620 35th Ave</u>		Sampling Company: <u>Gettier Boren</u>				
Union Oil PM: <u>Roya Kamban</u>		Sampled By (PRINT): <u>Jim Horner</u>				
Union Oil PM Phone No.:		Sampler Signature: <u>Jim Horner</u>				
charge Code: NWRTB-0351639-0-LAB						
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.						
TPH - Diesel by EPA 8015						
TPH - G by GC/MS						
BTEX/TB/E/G by EPA 8260B						
Ethanol by EPA 8260B						
EPA 8260B Full List with OXYS						
8 6x5 8260B						
BC Laboratories, Inc.						
Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911						
SAMPLE ID						
Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time	# of Containers	Notes / Comments
-1 GA	W-SA		030502	0910	2	X X
-2 Mu-1	W-SA			0705	3	X X
-3 Mu-2	W-SA			0810	1	X X
-4 Mu-3	W-SA				1	X X
	W-SA					
	W-SA					
	W-SA					
	W-SA					
	W-SA					
	W-SA					
Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time:	Company
<u>Gettier Boren</u>	5/21/13 1400	<u>Gettier Boren</u> 05-06-13	<u>Gettier Boren</u>	1445	<u>Gettier Boren</u> 05-06-13	<u>Gettier Boren</u>
Received By	Company	Date / Time:	Received By	Company	Date / Time:	Company
GETTER-RYAN TRIDGE 05-03-2010						
Hany Boren 5-6-13 1445						
Hany Boren 5-6-13 1445						
REC-KOR 5-6-13 0250						
REL-BBO 5-6-13 22150						
REC-KOR 5-6-13 0250						
REL-BBO 5-6-13 1830						

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All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, or distribution.



Chain of Custody and Cooler Receipt Form for 1309301 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 13	08/17/12	Page 1 Of 1				
Submission #: 1309301										
SHIPPING INFORMATION			SHIPPING CONTAINER							
Federal Express <input type="checkbox"/>	UPS <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____					
BC Lab Field Service <input checked="" type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____	Box <input type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____							
Refrigerant: Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	None <input type="checkbox"/>	Other <input type="checkbox"/>	Comments:						
Custody Seals	Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/>	Comments:						
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: 0.95	Container: VOA	Thermometer ID: 207	Date/Time 5/6/13 2300						
	Temperature: (A) 1.2 °C / (C) 1.1 °C			Analyst Init SAS						
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
20Z. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A(2)									
40ml VOA VIAL		A-3	A-3	A-3	()	()	()	()	()	()
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Comments:										
Sample Numbering Completed By: RYR	Date/Time: 5/7/13 @ 0800									
A = Actual / C = Corrected										

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AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 05/09/2013 14:36
Project: 6129
Project Number: 351639
Project Manager: Jim Harms

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1309301-01	COC Number: --- Project Number: 6129 Sampling Location: --- Sampling Point: QA-W-130502 Sampled By: GRD	Receive Date: 05/06/2013 18:30 Sampling Date: 05/06/2013 00:00 Sample Depth: --- Lab Matrix: Water Sample Type: Blank Water Delivery Work Order: Global ID: T0600101465 Location ID (FieldPoint): QA Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1309301-02	COC Number: --- Project Number: 6129 Sampling Location: --- Sampling Point: MW-1-W-130502 Sampled By: GRD	Receive Date: 05/06/2013 18:30 Sampling Date: 05/02/2013 09:10 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101465 Location ID (FieldPoint): MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1309301-03	COC Number: --- Project Number: 6129 Sampling Location: --- Sampling Point: MW-2-W-130502 Sampled By: GRD	Receive Date: 05/06/2013 18:30 Sampling Date: 05/02/2013 07:05 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101465 Location ID (FieldPoint): MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 05/09/2013 14:36
Project: 6129
Project Number: 351639
Project Manager: Jim Harms

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1309301-04	COC Number: --- Project Number: 6129 Sampling Location: --- Sampling Point: MW-3-W-130502 Sampled By: GRD	Receive Date: 05/06/2013 18:30 Sampling Date: 05/02/2013 08:10 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101465 Location ID (FieldPoint): MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:



AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 05/09/2013 14:36
Project: 6129
Project Number: 351639
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1309301-01	Client Sample Name:	6129, QA-W-130502, 5/6/2013 12:00:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	88.5	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/07/13	05/07/13 23:08	JCC	MS-V14	1	BWE0459



AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 05/09/2013 14:36
Project: 6129
Project Number: 351639
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1309301-02	Client Sample Name:	6129, MW-1-W-130502, 5/2/2013 9:10:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	270	ug/L	2.5	EPA-8260B	ND	A01	2
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	150	ug/L	50	Luft-GC/MS	ND	A90	1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)	EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)	EPA-8260B			2
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)	EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	89.0	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	87.1	%	80 - 120 (LCL - UCL)	EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	05/07/13	05/08/13	01:43	JCC	MS-V14	1	BWE0459
2	EPA-8260B	05/07/13	05/08/13	17:19	JCC	MS-V14	5	BWE0459



AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 05/09/2013 14:36
Project: 6129
Project Number: 351639
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1309301-03	Client Sample Name:	6129, MW-2-W-130502, 5/2/2013 7:05:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	460	ug/L	12	EPA-8260B	ND	A01	2
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	6.2	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	290	ug/L	50	Luft-GC/MS	ND	A90	1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)	EPA-8260B			2
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)	EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	86.9	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	86.9	%	80 - 120 (LCL - UCL)	EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	05/07/13	05/08/13	02:05	JCC	MS-V14	1	BWE0459
2	EPA-8260B	05/07/13	05/08/13	17:41	JCC	MS-V14	25	BWE0459



AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 05/09/2013 14:36
Project: 6129
Project Number: 351639
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1309301-04	Client Sample Name:	6129, MW-3-W-130502, 5/2/2013 8:10:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	220	ug/L	5.0	EPA-8260B	ND	A01	2
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	130	ug/L	50	Luft-GC/MS	ND	A90	1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)	EPA-8260B			2
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	106	%	80 - 120 (LCL - UCL)	EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	87.3	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	86.3	%	80 - 120 (LCL - UCL)	EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	05/07/13	05/08/13	02:27	JCC	MS-V14	1	BWE0459
2	EPA-8260B	05/07/13	05/08/13	18:03	JCC	MS-V14	10	BWE0459



AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 05/09/2013 14:36
Project: 6129
Project Number: 351639
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWE0459						
Benzene	BWE0459-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BWE0459-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BWE0459-BLK1	ND	ug/L	0.50		
Ethylbenzene	BWE0459-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BWE0459-BLK1	ND	ug/L	0.50		
Toluene	BWE0459-BLK1	ND	ug/L	0.50		
Total Xylenes	BWE0459-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BWE0459-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BWE0459-BLK1	ND	ug/L	10		
Diisopropyl ether	BWE0459-BLK1	ND	ug/L	0.50		
Ethanol	BWE0459-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BWE0459-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons	BWE0459-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BWE0459-BLK1	105	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWE0459-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWE0459-BLK1	88.7	%	80 - 120 (LCL - UCL)		



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10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 05/09/2013 14:36
Project: 6129
Project Number: 351639
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: BWE0459										
Benzene	BWE0459-BS1	LCS	22.340	25.000	ug/L	89.4		70 - 130		
Toluene	BWE0459-BS1	LCS	21.800	25.000	ug/L	87.2		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWE0459-BS1	LCS	10.300	10.000	ug/L	103		75 - 125		
Toluene-d8 (Surrogate)	BWE0459-BS1	LCS	10.360	10.000	ug/L	104		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWE0459-BS1	LCS	9.1000	10.000	ug/L	91.0		80 - 120		



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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: BWE0459			Used client sample: N							
Benzene	MS	1308130-54	ND	23.530	25.000	ug/L		94.1		70 - 130
	MSD	1308130-54	ND	22.050	25.000	ug/L	6.5	88.2	20	70 - 130
Toluene	MS	1308130-54	ND	23.400	25.000	ug/L		93.6		70 - 130
	MSD	1308130-54	ND	22.360	25.000	ug/L	4.5	89.4	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1308130-54	ND	10.310	10.000	ug/L		103		75 - 125
	MSD	1308130-54	ND	10.040	10.000	ug/L	2.7	100		75 - 125
Toluene-d8 (Surrogate)	MS	1308130-54	ND	10.410	10.000	ug/L		104		80 - 120
	MSD	1308130-54	ND	10.190	10.000	ug/L	2.1	102		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1308130-54	ND	9.3500	10.000	ug/L		93.5		80 - 120
	MSD	1308130-54	ND	9.3200	10.000	ug/L	0.3	93.2		80 - 120



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Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A90	TPPH does not exhibit a "gasoline" pattern. TPPH is entirely due to MTBE.

Attachment C

**Former Exxon Service Station Data
Tables**

TABLE 1 WELL CONSTRUCTION DETAILS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date Installed	Date Destroyed	Elevation TOC (feet)	Borehole Diameter (inches)	Total Depth of Boring (feet bgs)	Well Depth (feet bgs)	Casing Diameter (inches)	Casing Material	Screened Interval (feet bgs)	Slot Size (inches)	Filter Pack Interval (feet bgs)	Filter Pack Material
MW1	07/15/92	Jun-00	192.00	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW2	07/15/92	Jun-00	194.85	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW3	07/15/92	Jun-00	196.90	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW4	03/02/09	---	197.62	8	45	45	2	Schedule 40 PVC	35-45	0.020	33-45	#3 Sand
MW5	03/06/09	---	196.35	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
MW6	03/09/09	---	192.41	8	40	39	2	Schedule 40 PVC	29-39	0.020	27-39	#3 Sand
MW7	03/09/09	---	194.34	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
MW8	03/04/09	---	192.96	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
MW9	03/05/09	---	195.16	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
RW1	12/22/11	---	195.15	10	40	40	4	Stainless Steel	25-39.5	0.020	23-40	#2/12 Sand

Notes: Data prior to 2013 provided by Cardno ERI.

TOC Top of well casing elevation; datum is mean sea level.

PVC Polyvinyl chloride.

feet bgs Feet below ground surface.

--- Not applicable.

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration ($\mu\text{g/L}$)					Total Pb ($\mu\text{g/L}$)	Organic Pb (mg/L)	
							TPH-g	MTBE 8260B	B	T	E	X		
Monitoring Well Samples														
MW1	07/15/92	---	---	33.02	158.98	No	67	---	6.6	6.9	2.0	4.5	17	---
MW1	07/17/92	---	192.00	33.02	158.98	No	<50	---	2.9	<0.5	<0.5	<0.5	16	---
MW1	10/22/92	---	192.00	34.07	157.93	No	<50	---	0.8	<0.5	<0.5	<0.5	4	---
MW1	02/04/93	---	192.00	29.43	162.57	No	<50	---	2.8	7.2	2.2	22	40	---
MW1	05/03/93	---	192.00	29.72	162.28	No	71	---	<0.5	<0.5	<0.5	<0.5	5	---
MW1	07/30/93	---	192.00	32.95	159.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	12	---
MW1	10/19/93	---	192.00	34.34	157.66	No	<50	---	<0.5	<0.5	<0.5	<0.5	4	---
MW1	02/23/94	---	192.00	31.72	160.28	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW1	06/06/94	---	192.00	31.77	160.23	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW1	08/18/94	---	192.00	33.76	158.24	No	<50	---	<0.5	<0.5	<0.5	<0.5	130	---
MW1	11/15/94	---	192.00	34.08	157.92	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW1	02/06/95	---	192.00	28.50	163.50	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW1	05/10/95	---	192.00	29.30	162.70	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW1	09/20/99	---	192.00	33.30	158.70	No	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<50
MW1	---	Well destroyed in June 2000.												
MW2	07/15/92	---	---	34.65	160.20	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	07/17/92	---	194.85	35.64	159.21	No	<50	---	<0.5	<0.5	<0.5	<0.5	--	---
MW2	10/22/92	---	194.85	31.13	163.72	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	02/04/93	---	194.85	31.08	163.77	No	<50	---	<0.5	<0.5	<0.5	<0.5	3	---
MW2	05/03/93	---	194.85	34.34	160.51	No	<50	---	<0.5	<0.5	<0.5	<0.5	14	---
MW2	07/30/93	---	194.85	36.00	158.85	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	10/19/93	---	194.85	33.92	160.93	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	02/23/94	---	194.85	33.50	161.35	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	06/06/94	---	194.85	35.38	159.47	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	08/18/94	---	194.85	35.93	158.92	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	---
MW2	11/15/94	---	194.85	30.38	164.47	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW2	02/06/95	---	194.85	30.77	164.08	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW2	05/10/95	---	194.85	35.15	159.70	No	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<0.5
MW2	---	Well destroyed in June 2000.												

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration ($\mu\text{g/L}$)					Total Pb ($\mu\text{g/L}$)	Organic Pb (mg/L)	
							TPH-g	MTBE 8260B	B	T	E	X		
MW3	07/15/92	---	---	Well installed.										
MW3	07/17/92	---	196.90	37.24	159.66	No	<50	---	<0.5	<0.5	<0.5	<0.5	50	---
MW3	10/22/92	---	196.90	35.95	160.95	No	<50	---	<0.5	<0.5	<0.5	<0.5	9	---
MW3	02/04/93	---	196.90	29.85	167.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW3	05/03/93	---	196.90	29.87	167.03	No	<50	---	<0.5	<0.5	<0.5	<0.5	3	---
MW3	07/30/93	---	196.90	33.85	163.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	22	---
MW3	10/19/93	---	196.90	35.89	161.01	No	<50	---	<0.5	<0.5	<0.5	<0.5	12	---
MW3	02/23/94	---	196.90	32.88	164.02	No	<50	---	<0.5	<0.5	<0.5	<0.5	25	---
MW3	06/06/94	---	196.90	32.40	164.50	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW3	08/18/94	---	196.90	35.07	161.83	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	---
MW3	11/15/94	---	196.90	35.97	160.93	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW3	02/06/95	---	196.90	28.39	168.51	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW3	05/10/95	---	196.90	28.90	168.00	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW3	09/20/99	---	196.90	34.68	162.22	No	75.0	1.87	<0.5	11.5	1.8	18.0	<75	<0.5
MW3	---	Well destroyed in June 2000.												
MW4	03/02/09	---	---	Well installed.										
MW4	03/30/09	---	197.62	30.94	166.68	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	04/02/09	---	197.62	Well surveyed.										
MW4	05/28/09	---	197.62	32.00	165.62	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	08/31/09	---	197.62	35.43	162.19	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	12/11/09	---	197.62	35.01	162.61	No	<50	<0.50	<0.50	0.83	<0.50	1.1	---	---
MW4	05/07/10	---	197.62	29.11	168.51	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW4	11/01/10	---	197.62	34.95	162.67	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW4	05/27/11	d	---	197.62	30.65	166.97	No	---	---	---	---	---	---	---
MW4	11/23/11	---	197.62	33.49	164.13	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW4	05/24/12	---	197.62	30.02	167.60	No	58	<0.50	0.84	4.4	0.64c	3.5	---	---
MW4	10/31/12	---	197.62	35.14	162.48	No	110	<0.50	5.3	45	4.2	21	---	---
MW4	05/02/13	e	---	197.62	32.03	165.59	No	<50	<0.50	<0.50	<0.50	<0.50	---	---
MW5	03/06/09	---	---	Well installed.										
MW5	03/30/09	---	196.35	30.05	166.30	No	4,200	1,900	540	140	<12	310	---	---
MW5	04/02/09	---	196.35	Well surveyed.										
MW5	05/28/09	---	196.35	31.45	164.90	No	5,300	3,600	890	150	<25	140	---	---

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration (µg/L)						Total Pb (µg/L)	Organic Pb (mg/L)
							TPH-g	MTBE 8260B	B	T	E	X		
MW5	08/31/09	---	196.35	34.70	161.65	No	5,800	3,500	550	<100	<100	<100	---	---
MW5	12/11/09	---	196.35	34.52	161.83	No	4,000b	3,800	230	<100	<100	<100	---	---
MW5	05/07/10	---	196.35	30.84	165.51	No	2,700b	1,700	73	5.3	3.6	6.5	---	---
MW5	11/01/10	---	196.35	33.93	162.42	No	2,400b	3,400	320	71	21	40	---	---
MW5	05/27/11 d	---	196.35	31.65	164.70	No	---	---	---	---	---	---	---	---
MW5	11/23/11	---	196.35	32.58	163.77	No	1,900b	3,200	72	2.7	3.1	8.1	---	---
MW5	05/24/12	---	196.35	30.26	166.09	No	2,900b	1,700	54	31	5.2	17	---	---
MW5	10/31/12	---	196.35	33.94	162.41	No	2,200b	2,700	220	72	8.7	47	---	---
MW5	05/02/13 e	---	196.35	31.33	165.02	No	2,200b	1,300	61	<0.50	3.8	7.9	---	---
MW6	03/09/09	---	---	Well installed.										
MW6	03/30/09	---	192.41	26.94	165.47	No	2,800	4,800	0.91	<0.50	<0.50	<0.50	---	---
MW6	04/02/09	---	192.41	Well surveyed.										
MW6	05/28/09	---	192.41	28.04	164.37	No	2,800	6,000	<100	<100	<100	<100	---	---
MW6	08/31/09	---	192.41	30.57	161.84	No	4,900	6,600	<100	<100	<100	<100	---	---
MW6	12/11/09	---	192.41	30.78	161.63	No	4,900b	6,200	<100	<100	<100	<100	---	---
MW6	05/07/10	---	192.41	25.42	166.99	No	2,900b	3,700	2.7	<0.50	0.74c	<1.0	---	---
MW6	11/01/10	---	192.41	30.68	161.73	No	850b	6,100	2.1	<0.50	<0.50	<1.0	---	---
MW6	05/27/11 d	---	192.41	27.07	165.34	No	---	---	---	---	---	---	---	---
MW6	11/23/11	---	192.41	29.25	163.16	No	1,600b	6,400	<0.50	<0.50	<0.50	<1.0	---	---
MW6	05/24/12	---	192.41	26.36	166.05	No	2,000b	3,400	1.3c	9.7	0.97c	5.5	---	---
MW6	10/31/12	---	192.41	30.74	161.67	No	1,400b	5,400	3.8	28	2.2	11	---	---
MW6	05/02/13	---	192.41	27.91	164.50	No	1,900b	2,600	<0.50	<0.50	<0.50	<0.50	---	---
MW7	03/09/09	---	---	Well installed.										
MW7	03/30/09	---	194.34	29.15	165.19	No	55	66	<0.50	<0.50	<0.50	<0.50	---	---
MW7	04/02/09	---	194.34	Well surveyed.										
MW7	05/28/09	---	194.34	30.16	164.18	No	50	67	<1.0	<1.0	<1.0	<1.0	---	---
MW7	08/31/09	---	194.34	33.31	161.03	No	<50	12	<0.50	0.60	<0.50	<0.50	---	---
MW7	12/11/09	---	194.34	32.71	161.63	No	<50	31	0.78	1.7	0.62	2.4	---	---
MW7	05/07/10	---	194.34	27.54	166.80	No	510b	700	<0.50	<0.50	<0.50	<1.0	---	---
MW7	11/01/10	---	194.34	32.82	161.52	No	68b	140	<0.50	<0.50	<0.50	<1.0	---	---
MW7	05/27/11 d	---	194.34	28.85	165.49	No	---	---	---	---	---	---	---	---
MW7	11/23/11	---	194.34	31.39	162.95	No	190b	300	<0.50	<0.50	<0.50	<1.0	---	---

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration ($\mu\text{g/L}$)						Total Pb ($\mu\text{g/L}$)	Organic Pb (mg/L)
							TPH-g	MTBE 8260B	B	T	E	X		
MW7	05/24/12	d	---	194.34	28.31	166.03	No	---	---	---	---	---	---	---
MW7	10/31/12	---	194.34	32.86	161.48	No	230b	290	2.9	21	1.8	9.2	---	---
MW7	05/02/13	---	194.34	29.93	164.41	No	570b	790	<0.50	<0.50	<0.50	<0.50	<0.50	---
MW8	03/04/09	---	---	Well installed.										---
MW8	03/30/09	---	192.96	27.35	165.61	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
MW8	04/02/09	---	192.96	Well surveyed.										---
MW8	05/28/09	---	192.96	28.72	164.24	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
MW8	08/31/09	---	192.96	31.93	161.03	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
MW8	12/11/09	---	192.96	31.24	161.72	No	<50	<0.50	0.74	1.6	0.59	2.3	---	---
MW8	05/07/10	---	192.96	25.68	167.28	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	---
MW8	11/01/10	---	192.96	31.18	161.78	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	---
MW8	05/27/11	---	192.96	27.55	165.41	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	---
MW8	11/23/11	---	192.96	29.74	163.22	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	---
MW8	05/24/12	---	192.96	26.93	166.03	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	---
MW8	10/31/12	---	192.96	31.35	161.61	No	75	<0.50	2.5	19	1.7	8.7	---	---
MW8	05/02/13	---	192.96	28.44	164.52	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
MW9	03/05/09	---	---	Well installed.										---
MW9	03/30/09	---	195.16	28.31	166.85	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
MW9	04/02/09	---	195.16	Well surveyed.										---
MW9	05/28/09	---	195.16	29.69	165.47	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
MW9	08/31/09	---	195.16	33.20	161.96	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
MW9	12/11/09	---	195.16	32.62	162.54	No	<50	<0.50	0.73	1.7	0.54	2.2	---	---
MW9	05/07/10	---	195.16	26.59	168.57	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	---
MW9	11/01/10	---	195.16	32.45	162.71	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	---
MW9	05/27/11	---	195.16	29.62	165.54	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	---
MW9	11/23/11	---	195.16	30.56	164.60	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	---
MW9	05/24/12	---	195.16	27.94	167.22	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	---
MW9	10/31/12	---	195.16	32.66	162.50	No	140	<0.50	6.9	38	2.7	13	---	---
MW9	05/02/13	---	195.16	29.58	165.58	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
RW1	12/22/11	---	---	Well installed.										---
RW1	12/30/11	---	195.15	Well surveyed.										---

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration (µg/L)						Total Pb (µg/L)	Organic Pb (mg/L)
							TPH-g	MTBE 8260B	B	T	E	X		
RW1	05/24/12	---	195.15	28.55	166.60	No	5,500b	2,500	920	5.9c	51	14	---	---
RW1	10/31/12	d	195.15	---	---	---	---	---	---	---	---	---	---	---
RW1	05/02/13	e	195.15	30.27	164.88	No	4,300b	2,300	1,200	<2.5	41	14	---	---
Grab Groundwater Samples														
Pit Water	06/14/02	11.5a	---	---	---	---	5,600	12,000	140	840	100	530	---	---
UST Pit	06/19/02	13.5a	---	---	---	---	680	640	2.7	36	18	130	---	---
W-38-B11	11/14/07	38	---	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
W-15-B12	11/13/07	15	---	---	---	---	8,400	78	67	<5.0	140	150	---	---
W-40-B13	11/12/07	40	---	---	---	---	<50	0.53	<0.50	<0.50	<0.50	<0.50	---	---
W-15-B14	11/13/07	15	---	---	---	---	2,500	16	1.7	3.0	26	13	---	---
W-38-B15	11/15/07	38	---	---	---	---	18,000	12,000	3,400	2,500	330	2,000	---	---
W-40-B16	11/15/07	40	---	---	---	---	<50	7.7	<0.50	<0.50	<0.50	<0.50	---	---
W-37-B17	11/13/07	37	---	---	---	---	630	2,200	1.8	<0.50	4.1	1.4	---	---
W-38-B18	11/12/07	38	---	---	---	---	4,300	1,400	52	<12	56	96	---	---
W-35-B19	03/03/09	35	---	---	---	---	4,400	7,100	<0.50	<0.50	<0.50	<1.0	---	---
W-35-B20	03/03/09	35	---	---	---	---	640	440	<0.50	<0.50	<0.50	<1.0	---	---
W-35-B21	03/03/09	35	---	---	---	---	<50	1.4	<0.50	<0.50	<0.50	<1.0	---	---

Notes: Data prior to first quarter 1999 provided by EA Engineering, Science, and Technology. Data prior to first quarter 2013 provided by Cardno ERI.

TOC Elev. Top of well casing elevation; datum is NAVD88.

DTW Depth to water.

GW Elev. Groundwater elevation; datum is NAVD88.

NAPL Non-aqueous phase liquid.

TPH-g Total Petroleum Hydrocarbons as gasoline analyzed using EPA Method 8015B.

MTBE Methyl tertiary butyl ether analyzed using EPA Method 8260B.

BTEX Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B; from April 2009 to October 2010, analyzed using EPA Method 8260B.

Total Pb Total lead analyzed using EPA Method 6010.

Organic Pb Organic lead analyzed using CA DHS LUFT method.

EDB 1,2-dibromoethane analyzed using EPA Method 8260B.

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration ($\mu\text{g/L}$)				Total Pb ($\mu\text{g/L}$)	Organic Pb (mg/L)	
							MTBE	8260B	B	T	E		
1,2-DCA	1,2-dichloroethane analyzed using EPA Method 8260B.												
TBA	Tertiary butyl alcohol analyzed using EPA Method 8260B.												
TAME	Tertiary amyl methyl ether analyzed using EPA Method 8260B.												
ETBE	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.												
DIPE	Di-isopropyl ether analyzed using EPA Method 8260B.												
Ethanol	Ethanol analyzed using EPA Method 8260B.												
$\mu\text{g/L}$	Micrograms per liter.												
mg/L	Milligrams per liter.												
<	Less than the stated laboratory reporting limit.												
---	Not sampled/Not analyzed/Not measured/Not applicable.												
a	Approximate depth to groundwater surface at time of sampling.												
b	Hydrocarbon pattern does not match that of the specified standard.												
c	Analyte presence was not confirmed by second column or GC/MS analysis.												
d	Well inaccessible.												
e	Well sampled the following day.												

TABLE 3 ADDITIONAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	Concentration ($\mu\text{g/L}$)						
			EDB	1,2-DCA	TAME	TBA	ETBE	DIPE	Ethanol
MW1	07/17/92 - 09/20/99								
MW1			Not analyzed for these analytes.						
MW1			Well destroyed in June 2000.						
MW2	07/17/92 - 09/20/99								
MW2			Not analyzed for these analytes.						
MW2			Well destroyed in June 2000.						
MW3	07/17/92 - 09/20/99								
MW3			Not analyzed for these analytes.						
MW3			Well destroyed in June 2000.						
MW4	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/27/11 d	---	---	---	---	---	---	---	---
MW4	11/23/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/24/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	10/31/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/03/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW5	03/30/09	---	<12	17	<12	450	<12	<12	---
MW5	05/28/09	---	<25	<25	<25	530	<25	<25	---
MW5	08/31/09	---	<100	<100	<100	<1,000	<100	<100	---
MW5	12/11/09	---	<100	<100	<100	2,000	<100	<100	---
MW5	05/07/10	---	<25	<25	<25	400	<25	<25	---
MW5	11/01/10	---	<50	<50	<50	1,500	<50	<50	---
MW5	05/27/11 d	---	---	---	---	---	---	---	---
MW5	11/23/11	---	<50	<50	<50	<500	<50	<50	---
MW5	05/24/12	---	<50	<50	<50	1,400	<50	<50	---
MW5	10/31/12	---	<50	<50	<50	730	<50	<50	---
MW5	05/03/13	---	<20	<20	<20	590	<20	<20	---
MW6	03/30/09	---	<0.50	<0.50	1.3	410	<0.50	0.82	---
MW6	05/28/09	---	<100	<100	<100	<1,000	<100	<100	---
MW6	08/31/09	---	<100	<100	<100	1,100	<100	<100	---
MW6	12/11/09	---	<100	<100	<100	2,600	<100	<100	---
MW6	05/07/10	---	<100	<100	<100	<1,000	<100	<100	---
MW6	11/01/10	---	<50	<50	<50	2,400	<50	<50	---
MW6	05/27/11 d	---	---	---	---	---	---	---	---
MW6	11/23/11	---	<100	<100	<100	<1,000	<100	<100	---
MW6	05/24/12	---	<100	<100	<100	2,700	<100	<100	---
MW6	10/31/12	---	<100	<100	<100	<1,000	<100	<100	---
MW6	05/02/13	---	<40	<40	<40	570	<40	<40	---

TABLE 3 ADDITIONAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	Concentration ($\mu\text{g/L}$)						
			EDB	1,2-DCA	TAME	TBA	ETBE	DIPE	Ethanol
MW7	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW7	05/28/09	---	<1.0	<1.0	<1.0	<10	<1.0	<1.0	---
MW7	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW7	12/11/09	---	<0.50	<0.50	<0.50	12	<0.50	<0.50	---
MW7	05/07/10	---	<0.50	<0.50	<0.50	130	<0.50	<0.50	---
MW7	11/01/10	---	<2.5	<2.5	<2.5	27	<2.5	<2.5	---
MW7	05/27/11 d	---	---	---	---	---	---	---	---
MW7	11/23/11	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---
MW7	05/24/12 d	---	---	---	---	---	---	---	---
MW7	10/31/12	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---
MW7	05/02/13	---	<5.0	<5.0	<5.0	57	<5.0	<5.0	---
MW8	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/27/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	11/23/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/24/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	10/31/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/02/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/27/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	11/23/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/24/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	10/31/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/02/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
RW1	05/24/12	---	<50	<50	<50	1,900	<50	<50	---
RW1	10/31/12 d	---	---	---	---	---	---	---	---
RW1	05/03/13	---	<40	<40	<40	880	<40	<40	---

Grab Groundwater Samples

Pit Water	06/14/02	11.5a	---	---	---	---	---	---	---
UST Pit	06/19/02	13.5a	---	---	---	---	---	---	---

TABLE 3 ADDITIONAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	Concentration (µg/L)						
			EDB	1,2-DCA	TAME	TBA	ETBE	DIPE	Ethanol
W-38-B11	11/14/07	38	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<50
W-15-B12	11/13/07	15	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<500
W-40-B13	11/12/07	40	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<50
W-15-B14	11/13/07	15	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<100
W-38-B15	11/15/07	38	<25	<25	<25	1,900	<25	<25	<2,500
W-40-B16	11/15/07	40	<0.50	<0.50	<0.50	<10	<0.50	<0.50	85
W-37-B17	11/13/07	37	<0.50	<0.50	<0.50	58	<0.50	<0.50	<50
W-38-B18	11/12/07	38	<12	<12	<12	<250	<12	<12	<1,200
W-35-B19	03/03/09	35	<50	<50	<50	<500	<50	<50	<5,000
W-35-B20	03/03/09	35	<0.50	<0.50	<0.50	12	<0.50	<0.50	<50
W-35-B21	03/03/09	35	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50

Notes: Data prior to 1999 provided by EA Engineering, Science, and Technology.

Data prior to 2013 provided by Cardno ERI.

TOC Elev. Top of well casing elevation; datum is NAVD88.

DTW Depth to water.

GW Elev. Groundwater elevation; datum is NAVD88.

NAPL Non-aqueous phase liquid.

TPH-g Total Petroleum Hydrocarbons as gasoline analyzed using EPA Method 8015B.

MTBE Methyl tertiary butyl ether analyzed using EPA Method 8260B.

BTEX Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B; from April 2009 to October 2010, analyzed using EPA Method 8260B.

Total Pb Total lead analyzed using EPA Method 6010.

Organic Pb Organic lead analyzed using CA DHS LUFT method.

EDB 1,2-dibromoethane analyzed using EPA Method 8260B.

1,2-DCA 1,2-dichloroethane analyzed using EPA Method 8260B.

TBA Tertiary butyl alcohol analyzed using EPA Method 8260B.

TAME Tertiary amyl methyl ether analyzed using EPA Method 8260B.

ETBE Ethyl tertiary butyl ether analyzed using EPA Method 8260B.

DIPE Di-isopropyl ether analyzed using EPA Method 8260B.

Ethanol Ethanol analyzed using EPA Method 8260B.

µg/L Micrograms per liter.

mg/L Milligrams per liter.

< Less than the stated laboratory reporting limit.

--- Not sampled/Not analyzed/Not measured/Not applicable.

a Approximate depth to groundwater surface at time of sampling.

b Hydrocarbon pattern does not match that of the specified standard.

c Analyte presence was not confirmed by second column or GC/MS analysis.

d Well inaccessible.