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## **GROUNDWATER MONITORING REPORT - FOURTH QUARTER 2008**

**FORMER ARCO SERVICE STATION  
706 HARRISON STREET  
OAKLAND, CALIFORNIA**

**AGENCY CASE NO.      RO0484**

**JANUARY 15, 2009  
REF. NO. 231116 (2)**

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## 1.0 INTRODUCTION

On behalf of Mr. Bo K. Gin, Conestoga-Rovers & Associates (CRA) is submitting this *Groundwater Monitoring Report – Fourth Quarter 2008* for the subject site. Presented are the fourth quarter 2008 groundwater monitoring activities and results and the anticipated first quarter 2009 activities.

Figure 1 is a vicinity map. Figure 2 is a groundwater elevation contour and hydrocarbon concentration map. Table 1 lists well construction details. Table 2 provides recent and historic groundwater level measurements, elevations, and hydro-chemical data. Appendix A contains CRA's standard field procedures. Appendix B presents the recent laboratory analytical reports for this site. Appendix C contains field data sheets for the recent monitoring event. Appendix D includes time-series plots with benzene and methyl tertiary butyl ether (MTBE) concentrations, and groundwater elevations. Appendix E provides groundwater monitoring elevations and analytical data for the neighboring former Shell Station (Mr. Peter Yee's property) located at 726 Harrison Street, Oakland, CA. The former Unocal/ConocoPhillips site located at 800 Harrison Street, Oakland, CA was not monitored during the fourth quarter 2008.

### 1.1 SITE INFORMATION

<b>Site Address</b>	706 Harrison Street, Oakland
<b>Site Use</b>	Vacant
<b>Client and Contact</b>	Bo K. Gin
<b>Consultant and Contact Person</b>	CRA, Mark Jonas, P.G.
<b>Lead Agency and Contact Person</b>	Alameda County Environmental Health, Mr. Steven Plunkett

## **2.0 SITE ACTIVITIES AND RESULTS**

### **2.1 CURRENT QUARTER'S ACTIVITIES**

#### **2.1.1 FIELD ACTIVITIES**

On December 5, 2008, Muskan Environmental Sampling (MES) conducted quarterly monitoring and sampling activities. MES measured well water levels in all wells and collected groundwater samples in monitoring wells MW-1, MW-2, and MW-4. (Figure 2). Groundwater depth measurements have been submitted to the GeoTracker database.

Prior to groundwater sampling, groundwater levels were measured in all monitoring wells. MES purged at least three well-casing volumes of groundwater from monitor wells MW-1, MW-2, and MW-4 prior to sampling. Field measurements of pH, conductivity, and temperature of purged groundwater were measured after the extraction of each successive casing volume. Well purging continued until consecutive pH, specific conductance, and temperature measurements appeared to stabilize. Field measurements, purge volumes, and sample collection data were recorded on field sampling data forms, provided in Appendix C.

Groundwater samples were collected using new disposable bailers, decanted into appropriate sampling containers supplied by the analytical laboratory. Samples were labeled, placed in protective foam sleeves, stored on crushed, water-based ice at or below 4 degrees Celsius and transported under a chain-of-custody (COC) to the laboratory. The COC used for this monitoring event is provided within the laboratory analytical report in Appendix B.

#### **2.1.2 SAMPLE ANALYSES**

Groundwater samples were analyzed by McCampbell Analytical, Inc. of Pittsburg, California, a California-certified laboratory (DHS License No. 1644). All groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified United States Environmental Protection Agency (EPA) Method SW8015C; benzene, toluene, ethylbenzene, and total xylenes (BTEX) and MTBE by EPA Method SW8021B; and MTBE by EPA Method SW8260B. The laboratory analytical report is included in Appendix B. Groundwater analytical results are provided on Table 2 and summarized on Figure 2. Groundwater analytical results have been submitted to the GeoTracker database.

## 2.2 CURRENT QUARTER'S RESULTS

**Groundwater Flow Direction** South-southwest

**Hydraulic Gradient** 0.018

**Range of Measured Water Depth  
from Top of Casing in Monitoring Wells** 16.94 to 19.07 feet

**Were Measureable Separate Phase  
Hydrocarbons Observed** No

### 2.2.1 GROUNDWATER FLOW DIRECTION AND GRADIENT

Based on depth-to-water measurements collected during the monitoring event on December 5, 2008, groundwater appears to flow towards the south-southwest with an apparent gradient of 0.018 feet per foot in the vicinity of the former UST pit and fuel pump island (Figure 2). The gradient and flow direction are consistent with historical data. Depth-to-water and groundwater elevation data for the site are in Table 2. Joint groundwater monitoring data provided by Aqua Science Engineers on behalf of the Yee property (former Shell Station) is included on Figure 2. Note that the Yee property wells were measured on October 29, 2008.

### 2.2.2 HYDROCARBON DISTRIBUTION IN GROUNDWATER

Hydrocarbons were detected in down-gradient wells MW-1 and well MW-2, and up-gradient well MW-4 during this sampling event (Figure 2 and Table 2). The highest TPHg and BTEX concentrations were detected in monitoring well MW-2 at 74,000 micrograms per liter ( $\mu\text{g/L}$ ), 2,200  $\mu\text{g/L}$ , 12,000  $\mu\text{g/L}$ , 1,700  $\mu\text{g/L}$ , and 7,500  $\mu\text{g/L}$ , respectively. TPHg and BTEX concentrations were detected in well MW-1 at 1,000  $\mu\text{g/L}$ , 150  $\mu\text{g/L}$ , 2.1  $\mu\text{g/L}$ , 4.1  $\mu\text{g/L}$ , and 15  $\mu\text{g/L}$ , respectively.

With the exception of ethylbenzene, petroleum hydrocarbon concentrations in up-gradient well MW-4 were slightly lower than the previous quarter. The concentrations for TPHg and BTEX in well MW-4 were 2,400  $\mu\text{g/L}$ , 310  $\mu\text{g/L}$ , 30  $\mu\text{g/L}$ , 41  $\mu\text{g/L}$ , and 67  $\mu\text{g/L}$ , respectively. Analytical results are presented in Figure 2, Table 2,

and Appendix B. BTEX concentrations detected in the adjacent property wells located up-gradient of the site are higher than the BTEX concentrations detected on site (Figure 2 and Appendix E).

### **2.2.3 MTBE DISTRIBUTION IN GROUNDWATER**

MTBE was detected in the three wells sampled this quarter. The highest MTBE concentration was detected in well MW-2, at 1,900 µg/L. MTBE concentrations in wells MW-1 and MW-4 were 140 µg/L and 1,700 µg/L, respectively. Significantly higher concentrations of MTBE were identified in the wells located up-gradient on the adjacent property. On the adjacent property, the highest MTBE concentration was detected in monitoring well MW-5, at 27,000 µg/L (Figure 2).

### **3.0 PROPOSED ACTIVITIES FOR NEXT QUARTER**

#### **3.1 MONITORING ACTIVITIES**

During the first quarter 2009, CRA will measure water levels and collect groundwater samples from all site wells MW-1 through MW-7. Pursuant to Alameda County Environmental Health's letter dated February 25, 2003, the well sampling schedule was revised so that wells MW-1, MW-2, and MW-4 are sampled on a quarterly basis and wells MW-3, MW-5, MW-6, and MW-7 are sampled on a semi-annual basis, during the first and third quarters. Groundwater samples will be analyzed for TPHg by EPA Method SW8015C, BTEX by EPA Method SW8021B, and MTBE by EPA Method SW8021B and by EPA Method SW8260B. CRA will prepare a groundwater monitoring report summarizing the monitoring activities and results.

#### **3.2 ONSITE CHARACTERIZATION & COMMINGLED PLUME PROGRAM**

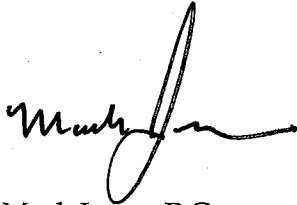
On October 5, 2007 an *Onsite Characterization Work Plan* was submitted to Alameda County Environmental Health (ACEH). Currently, up-gradient sources at 726 Harrison (Mr. Peter Yee) and 800 Harrison (Unocal/ConocoPhillips) have joined with Mr. Bo Gin to attempt to agree on a commingled plume application. Currently ConocoPhillips is attempting to formulate a position that is acceptable to ConocoPhillips, and also Mr. Yee, and Mr. Gin. Mr. Plunkett has asked that implementation of the Work Plan be put on-hold pending resolution issues associated with the commingled plume.



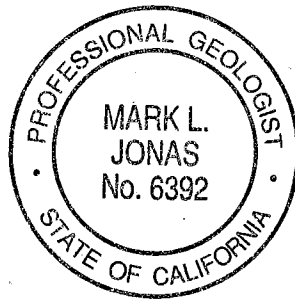
All of Which is Respectfully Submitted,  
CONESTOGA-ROVERS & ASSOCIATES



Michael Werner



Mark Jonas, P.G.



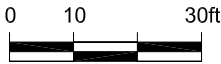
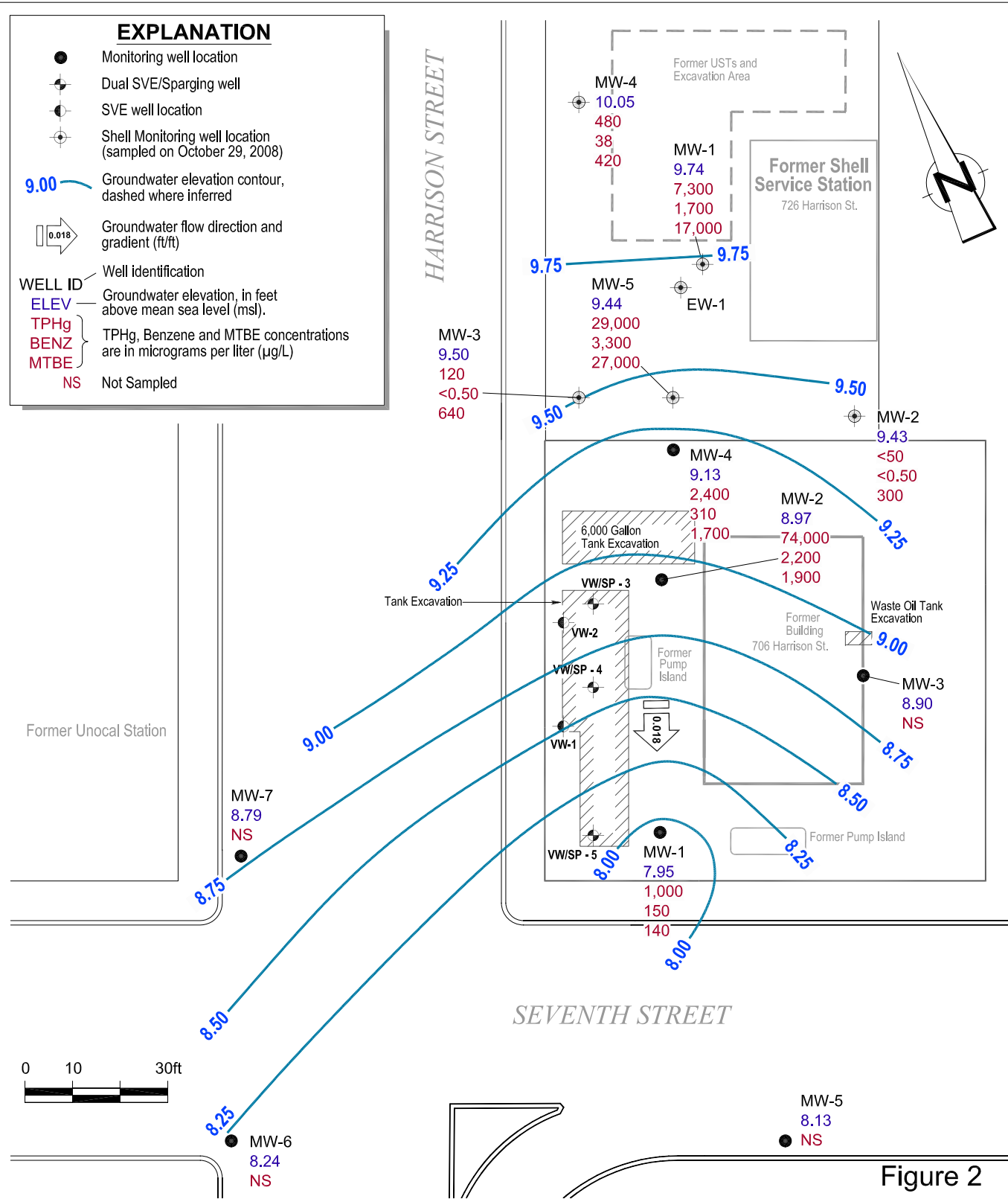
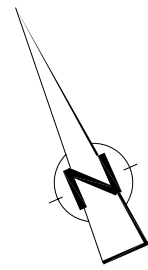
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## FIGURES



**EXPLANATION**

- Monitoring well location
- ⊕ Dual SVE/Sparging well
- ⊖ SVE well location
- ⊙ Shell Monitoring well location (sampled on October 29, 2008)
- 9.00 Groundwater elevation contour, dashed where inferred
- Groundwater flow direction and gradient (ft/ft)
- WELL ID Well identification
- ELEV Groundwater elevation, in feet above mean sea level (msl).
- TPHg, BENZ, MTBE } TPHg, Benzene and MTBE concentrations are in micrograms per liter (µg/L)
- NS Not Sampled



**Figure 2**  
**GROUNDWATER ELEVATION CONTOUR AND**  
**HYDROCARBON CONCENTRATION MAP**  
**FORMER ARCO STATION**  
**706 HARRISON STREET**  
*Oakland, California*  
*December 5, 2008*



## TABLES

**WELL CONSTRUCTION DETAILS  
FORMER ARCO STATION  
706 HARRISON STREET  
OAKLAND, CALIFORNIA**

<i>Well ID</i>	<i>Date Installed</i>	<i>Borehole Depth (ft)</i>	<i>Borehole Diameter (in)</i>	<i>Casing Diameter (in)</i>	<i>Screen Interval (ft bgs)</i>	<i>Screen Size (in)</i>	<i>Filter Pack (ft bgs)</i>	<i>Bentonite Seal (ft bgs)</i>	<i>Cement Seal (ft bgs)</i>	<i>TOC Elevation (ft msl)</i>
MW-1	July 22, 1993	28.0	8	2	18 - 28	0.020	16 - 28	15 - 16	0 - 15	26.17
MW-2	July 23, 1993	28.0	8	2	18 - 28	0.020	16 - 28	15 - 16	0 - 15	27.53
MW-3	July 22, 1993	28.0	8	2	18 - 28	0.020	16 - 28	15 - 16	0 - 15	26.79
MW-4	Nov. 28, 1994	31.5	NA	2	9.5 - 29.5	0.010	8.5 - 31.5	6.5 - 8.5	0 - 6.5	28.20
MW-5	Nov. 30, 1994	30.0	NA	2	14.5 - 29.0	0.010	13 - 30	11 - 13	0 - 11	25.07
MW-6	Dec. 1, 1994	27.5	NA	2	11.5 - 26.5	0.010	10.5 - 27.5	8.5 - 10.5	0 - 8.5	26.13
MW-7	Dec. 2, 1994	29.0	NA	2	13 - 28	0.010	12 - 29	10 - 12	0 - 10	26.70
VW-1	July 23, 1993	20.0	8	2	15 - 20	0.020	13 - 20	12 - 13	0 - 12	NA
VW-2	July 22, 1993	20.0	8	2	15 - 20	0.020	13 - 20	12 - 13	0 - 12	NA
VW-3 (Dual)	Nov. 28, 1994	29.5	NA	2" / 1"	2": 8 - 18 1": 27 - 28	0.010	2": 6 - 18 1": 25.5 - 29.5	5 - 6 23.5 - 25.5	0 - 5	NA
VW-4 (Dual)	Nov. 29, 1994	29.5	NA	2" / 1"	2": 8 - 18 1": 28.5 - 29.5	0.010	2": 7 - 18 1": 26.5 - 29.5	5 - 7 18 - 26.5	0 - 5	NA
VW-5 (Dual)	Nov. 30, 1994	30.0	NA	2" / 1"	2": 7 - 17 1": 28.5 - 29.5	0.010	2": 6 - 17 1": 26 - 30	5 - 6 17 - 26	0 - 5	NA

**Abbreviations / Notes**

ft = feet

in = inches

ft bgs = feet below grade surface

ft msl = feet above mean sea level

TOC = top of casing

NA = Not Available

**GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER ARCO STATION  
706 HARRISON STREET  
OAKLAND, CALIFORNIA**

<i>Well ID/ Sample ID TOC</i>	<i>Date Sampled</i>	<i>TOC Depth to Water (ft)</i>	<i>Groundwater Elevation (ft-msl)</i>	<i>TPHg (µg/L)</i>	<i>Benzene (µg/L)</i>	<i>Toluene (µg/L)</i>	<i>Ethylbenzene (µg/L)</i>	<i>Xylenes (µg/L)</i>	<i>MTBE by 8021B (µg/L)</i>	<i>MTBE by 8260B (µg/L)</i>	<i>Notes</i>
MW-1	8/13/1993	17.40	11.75	20,000	8,500	640	280	440	-	-	
29.15	12/14/1993	17.27	11.88	17,000	9,200	1,200	4,400	540	-	-	
	4/15/1994	17.00	12.15	9,500	3,600	530	160	280	-	-	
	12/29/1994	16.40	12.75	-	-	-	-	-	-	-	
	7/19/1996	15.83	13.32	17,000	5,200	1,100	330	530	-	-	sheen/odor
	1/27/1997	13.58	15.57	30,000	9,800	1,300	790	880	400	-	b,sheen/odor
	6/18/1997	16.11	13.04	19,000	5,600	1,400	510	770	1,200	800	a,b
	9/18/1997	16.62	12.53	48,000	18,000	4,400	1,000	1,700	ND<640	-	b
	12/10/1997	15.93	13.22	22,000	4,900	1,300	580	650	460	260	a,b,odor
	2/18/1998	11.56	17.59	16,000	5,000	750	400	780	1,800	-	b
	5/12/1998	13.53	15.62	19,000	4,600	810	450	770	5,500	-	b,c
	8/18/1998	15.19	13.96	12,000	3,600	1,300	300	570	5,100	3,700	a,b
	11/24/1998	15.67	13.48	13,000	3,600	890	330	380	6,100	-	b
	2/4/1999	15.31	13.84	20,000	5,900	830	450	500	4,900	-	b
	5/18/1999	14.95	14.20	23,000	7,000	1,600	520	830	6,100	-	b
	8/27/1999	15.84	13.31	19,000	5,800	1,700	410	710	1,800	2,100	a,b
	11/18/1999	16.39	12.76	20,000	4,900	630	410	580	4,900	3,600	b
	2/29/2000	13.43	15.72	12,000	2,800	24	290	170	3,100	3,400	a
	5/25/2000	15.08	14.07	12,000	2,200	120	330	260	9,100	12,000	a,b
	8/9/2000	16.09	13.06	13,000	2,500	44	310	140	16,000	-	b
	11/9/2000	15.90	13.25	11,000	2,500	140	380	150	11,000	12,000	b
	1/29/2001	16.05	13.10	9,600	3,100	100	77	200	2,600	2,400	b
	4/16/2001	16.90	12.25	3,300	1,200	4.4	2.7	28	900	940	b
	8/14/2001	17.13	12.02	2,000	500	3.4	24	7.8	68	53	a
	10/22/2001	16.11	13.04	220	83	0.63	2.8	ND<0.5	ND<10	5.7	a
	2/1/2002	16.93	12.22	640	220	1.7	4.7	0.57	ND<10	-	a
	5/10/2002	15.09	14.06	230	26	0.97	ND<0.5	ND<0.5	ND<5.0	-	a
	7/8/2002	15.20	13.95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	
	10/2/2002	15.70	13.45	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	1/23/2003	15.09	14.06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/29/2003	13.02	16.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
26.17	7/18/2003	14.50	11.67	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/9/2003	13.81	12.36	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	1/28/2004	13.09	13.08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/7/2004	14.97	11.20	180	60	0.56	1.9	ND<0.5	ND<5.0	-	a
	7/23/2004	14.15	12.02	130	36	ND<0.5	0.65	ND<0.5	ND<5.0	-	a
	10/12/2004	16.30	9.87	ND<50	2.5	1.5	ND<0.5	0.86	ND<5.0	-	
	2/14/2005	13.85	12.32	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/27/2005	13.35	12.82	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	7/19/2005	14.68	11.49	4,500	1,400	6.5	160	58	630	-	a
	10/18/2005	15.15	11.02	1,700	340	ND<5.0	28	ND<5.0	8,000	7,200	a
	1/23/2006	13.27	12.90	3,100	790	6.5	79	32	4,200	5,100	a
	4/12/2006	12.33	13.84	7,200	2,600	110	350	320	5,600	4,000	a
	7/10/2006	14.93	11.24	2,700	550	4.2	77	47	5,500	8,300	a
	10/16/2006	16.51	9.66	2,000	470	6.4	38	13	6,300	6,400	a
	1/26/2007	16.87	9.30	3,300	600	36	34	27	6,200	5,900	a
	4/18/2007	16.77	9.40	5,400	1,400	170	210	350	3,600	4,700	a,i
	8/2/2007	17.21	8.96	6,100	1,200	130	140	240	5,300	5,400	a



**GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER ARCO STATION  
706 HARRISON STREET  
OAKLAND, CALIFORNIA**

<i>Well ID/ Sample ID TOC</i>	<i>Date Sampled</i>	<i>TOC Depth to Water (ft)</i>	<i>Groundwater Elevation (ft-msl)</i>	<i>TPHg (µg/L)</i>	<i>Benzene (µg/L)</i>	<i>Toluene (µg/L)</i>	<i>Ethylbenzene (µg/L)</i>	<i>Xylenes (µg/L)</i>	<i>MTBE by 8021B (µg/L)</i>	<i>MTBE by 8260B (µg/L)</i>	<i>Notes</i>
MW-1 (cont.)	10/23/2007	17.67	8.50	2,600	740	53	60	110	5,800	6,900	a,h,Sheen <sup>Lab</sup>
	1/30/2008	16.66	9.51	1,900	380	2.6	15	20	2,400	2,800	a
	4/18/2008	17.14	9.03	1,500	320	4.5	13	25	2,900	2,900	a
	7/28/2008	17.70	8.47	1,100	240	3.6	6.9	15	1,600	1,800	a
	<b>12/5/2008</b>	<b>18.22</b>	<b>7.95</b>	<b>1,000</b>	<b>150</b>	<b>2.1</b>	<b>4.1</b>	<b>15</b>	<b>150</b>	<b>140</b>	<b>a</b>
MW-2 30.51	8/13/1993	17.05	13.46	34,000	6,800	10,000	740	3,900	-	-	
	12/14/1993	18.28	12.23	16,000	3,200	4,200	500	1,700	-	-	
	4/15/1994	18.10	12.41	23,000	2,500	4,200	470	1,800	-	-	
	12/29/1994	17.40	13.11	-	-	-	-	-	-	-	
	7/19/1996	16.72	13.79	90,000	7,300	14,000	1,600	7,300	-	-	odor
	1/27/1997	14.89	15.62	63,000	7,100	13,000	1,600	7,100	500	-	b,odor
	6/18/1997	17.12	13.39	52,000	5,100	10,000	1,400	6,000	ND<200	-	b
	9/18/1997	17.63	12.88	110,000	9,400	23,000	2,600	13,000	ND<890	-	b, sheen/odor
	12/10/1997	16.98	13.53	39,000	2,600	5,300	940	3,900	780	320	b,odor
	2/18/1998	12.61	17.90	85,000	9,000	19,000	2,300	11,000	2,400	-	b
	5/12/1998	14.45	16.06	110,000	9,500	21,000	2,500	12,000	ND<1,200	-	b
	8/18/1998	16.14	14.37	64,000	6,000	13,000	1,700	7,800	2,000	1,300	a, b
	11/24/1998	16.70	13.81	78,000	5,300	14,000	2,300	11,000	ND<2,000	-	b,h,Sheen <sup>Lab</sup>
	2/4/1999	18.39	12.12	66,000	5,800	16,000	2,600	12,000	3,000	-	b,h,Sheen <sup>Lab</sup>
	5/18/1999	15.90	14.61	78,000	6,700	17,000	2,400	10,000	4,300	-	b
	8/27/1999	16.79	13.72	91,000	7,400	17,000	2,300	11,000	1,200	1,000	a, b
	11/18/1999	17.32	13.19	180,000	7,000	20,000	3,300	16,000	ND<6,000	1,700	b,h,Sheen <sup>Lab</sup>
	2/29/2000	14.37	16.14	86,000	5,500	13,000	2,000	9,500	3,500	4,700	a
	5/25/2000	16.01	14.50	110,000	6,300	14,000	2,400	10,000	7,500	6,500	a,b,h,Sheen <sup>Lab</sup>
	8/9/2000	17.02	13.49	77,000	5,000	13,000	2,000	8,600	5,900	-	b
	11/9/2000	17.00	13.51	70,000	4,800	12,000	1,900	8,000	9,400	8,300	b
	1/29/2001	18.31	12.20	110,000	8,200	21,000	2,800	13,000	2,500	1,900	b,h,Sheen <sup>Lab</sup>
4/16/2001	18.59	11.92	97,000	7,400	15,000	2,500	12,000	ND<3,000	ND<50	b,h,Sheen <sup>Lab</sup>	
8/14/2001	18.74	11.77	97,000	6,200	14,000	2,400	13,000	ND<250	ND<50	a,j	
10/22/2001	18.27	12.24	71,000	5,900	15,000	2,400	12,000	ND<1,400	150	a	
2/1/2002	18.05	12.46	1,400	11	88	44	210	ND<5.0	-	a	
5/10/2002	17.15	13.36	97,000	4,500	15,000	2,500	12,000	ND<3,000	-	a,h,Sheen <sup>Lab</sup>	
7/8/2002	15.30	15.21	42,000	2,100	6,500	2,200	8,800	ND<1,000	65	a	
10/2/2002	15.89	14.62	70,000	1,700	5,700	1,900	8,300	ND<1,700	-	a	
1/23/2003	17.51	13.00	40,000	1,900	7,800	1,200	5,600	ND<1,000	-	a	
4/29/2003	15.31	15.20	82,000	2,500	11,000	2,200	9,400	ND<2,000	-	a	
7/18/2003	16.84	10.69	57,000	2,100	8,700	2,200	10,000	-	ND<50	a	
27.53	10/9/2003	16.05	11.48	49,000	1,800	7,000	1,700	7,600	ND<1,500	26	a
	1/28/2004	15.39	12.14	550	21	33	3.0	61	ND<100	-	a
	4/7/2004	16.01	11.52	41,000	2,500	11,000	1,900	8,000	ND<2,000	-	a
	7/23/2004	15.30	12.23	81,000	2,000	12,000	2,500	12,000	ND<2,000	-	a,h,Sheen <sup>Field &amp; Lab</sup>
	10/12/2004	17.87	9.66	75,000	2,600	13,000	2,300	11,000	ND<1,300	-	a
	2/14/2005	14.80	12.73	75,000	2,600	12,000	2,400	10,000	ND<1,800	-	a,h,Sheen <sup>Lab</sup>
	4/27/2005	14.63	12.90	61,000	2,800	11,000	1,600	7,000	ND<2,700	-	a
	7/19/2005	15.60	11.93	90,000	3,700	14,000	2,600	10,000	ND<7,000	-	a



**GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER ARCO STATION  
706 HARRISON STREET  
OAKLAND, CALIFORNIA**

<i>Well ID/ Sample ID TOC</i>	<i>Date Sampled</i>	<i>TOC Depth to Water (ft)</i>	<i>Groundwater Elevation (ft-msl)</i>	<i>TPHg (µg/L)</i>	<i>Benzene (µg/L)</i>	<i>Toluene (µg/L)</i>	<i>Ethylbenzene (µg/L)</i>	<i>Xylenes (µg/L)</i>	<i>MTBE by 8021B (µg/L)</i>	<i>MTBE by 8260B (µg/L)</i>	<i>Notes</i>
MW-2 (cont.)	10/18/2005	16.08	11.45	77,000	3,300	14,000	2,400	11,000	7,900	6,400	a
	1/23/2006	14.20	13.33	54,000	1,600	8,000	1,600	6,700	6,600	7,000	a
	4/12/2006	12.51	15.02	43,000	1,800	7,800	1,300	5,200	6,400	4,900	a
	7/10/2006	14.76	12.77	86,000	2,800	11,000	2,100	9,600	ND<6,500	400	a,h,Sheen <sup>Lab</sup>
	10/16/2006	16.74	10.79	110,000	3,600	16,000	2,400	12,000	ND<6,000	2,700	a,h,Sheen <sup>Lab</sup>
	1/26/2007	17.10	10.43	120,000	3,900	16,000	2,300	10,000	ND<5,000	3,000	a,h,i,Sheen <sup>Lab</sup>
	4/18/2007	17.02	10.51	100,000	3,500	18,000	2,500	12,000	5,200	3,400	a,h,i,Sheen <sup>Lab</sup>
	8/2/2007	17.47	10.06	61,000	2,700	11,000	1,800	7,600	6,400	4,600	a,h,Sheen <sup>Lab</sup>
	10/23/2007	17.94	9.59	56,000	3,100	13,000	1,800	8,100	4,500	4,300	a
	1/30/2008	16.99	10.54	52,000	2,700	11,000	1,700	7,300	5,300	4,700	a
	4/18/2008	17.41	10.12	64,000	3,400	13,000	1,800	8,100	ND<4,000	2,200	a,h,i,Sheen <sup>Lab</sup>
	7/28/2008	17.99	9.54	51,000	2,000	6,200	1,300	2,700	ND<2,600	1,500	a,i,Sheen <sup>Field</sup>
		<b>12/5/2008</b>	<b>18.56</b>	<b>8.97</b>	<b>74,000</b>	<b>2,200</b>	<b>12,000</b>	<b>1,700</b>	<b>7,500</b>	<b>2,500</b>	<b>1,900</b>
MW-3 29.77	8/13/1993	17.05	12.72	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	-	-	No SVOCs.
	12/14/1993	17.70	12.07	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	-	-	
	4/15/1994	17.40	12.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-	
	12/29/1994	16.80	12.97	-	-	-	-	-	-	-	
	7/19/1996	16.28	13.49	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-	
	1/27/1997	13.83	15.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	6/18/1997	16.53	13.24	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	9/18/1997	17.07	12.70	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	12/10/1997	16.15	13.62	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	2/18/1998	11.80	17.97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/12/1998	13.85	15.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	8/18/1998	15.57	14.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/24/1998	16.04	13.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	2/4/1999	17.80	11.97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/18/1999	15.29	14.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	8/27/1999	16.15	13.62	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/18/1999	16.77	13.00	-	-	-	-	-	-	-	
	2/29/2000	13.71	16.06	ND<50	2	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/25/2000	15.46	14.31	-	-	-	-	-	-	-	
	8/9/2000	16.46	13.31	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/9/2000	16.25	13.52	-	-	-	-	-	-	-	
	1/29/2001	16.52	13.25	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/16/2001	16.95	12.82	-	-	-	-	-	-	-	
	8/14/2001	17.11	12.66	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/22/2001	16.50	13.27	-	-	-	-	-	-	-	
	2/1/2002	16.90	12.87	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/10/2002	15.03	14.74	-	-	-	-	-	-	-	
	7/8/2002	14.45	15.32	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/2/2002	15.03	14.74	-	-	-	-	-	-	-	
	1/23/2003	15.48	14.29	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/29/2003	12.49	17.28	-	-	-	-	-	-	-	
26.79	7/18/2003	14.80	11.99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/9/2003	14.13	12.66	-	-	-	-	-	-	-	

**GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER ARCO STATION  
706 HARRISON STREET  
OAKLAND, CALIFORNIA**

<i>Well ID/ Sample ID TOC</i>	<i>Date Sampled</i>	<i>TOC Depth to Water (ft)</i>	<i>Groundwater Elevation (ft-msl)</i>	<i>TPHg (µg/L)</i>	<i>Benzene (µg/L)</i>	<i>Toluene (µg/L)</i>	<i>Ethylbenzene (µg/L)</i>	<i>Xylenes (µg/L)</i>	<i>MTBE by 8021B (µg/L)</i>	<i>MTBE by 8260B (µg/L)</i>	<i>Notes</i>
MW-3 (cont.)	1/28/2004	13.47	13.32	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/7/2004	15.41	11.38	-	-	-	-	-	-	-	
	7/23/2004	14.54	12.25	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/12/2004	16.58	10.21	-	-	-	-	-	-	-	
	2/14/2005	14.19	12.60	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/27/2005	13.68	13.11	-	-	-	-	-	-	-	
	7/19/2005	15.15	11.64	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/18/2005	15.60	11.19	-	-	-	-	-	-	-	
	1/23/2006	13.65	13.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	270	260	
	4/12/2006	11.94	14.85	-	-	-	-	-	-	-	
	7/10/2006	14.48	12.31	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1,100	1,600	
	10/16/2006	16.19	10.60	-	-	-	-	-	-	-	
	1/26/2007	16.56	10.23	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2,500	3,400	
	4/18/2007	16.45	10.34	-	-	-	-	-	-	-	
	8/2/2007	16.92	9.87	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	3,300	3,500	
	10/23/2007	17.42	9.37	-	-	-	-	-	-	-	
	1/30/2008	16.45	10.34	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	8,400	10,000	1
4/18/2008	16.87	9.92	-	-	-	-	-	-	-		
7/28/2008	17.41	9.38	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	6,400	6,900	1	
<b>12/5/2008</b>	<b>17.89</b>	<b>8.90</b>	-	-	-	-	-	-	-		
MW-4 31.18	12/16/1994	18.10	13.08	2,500	32	6.5	4.5	17	-	-	
	12/29/1994	17.95	13.23	-	-	-	-	-	-	-	
	7/19/1996	17.38	13.80	3,300	520	39	67	60	-	-	
	1/27/1997	15.25	15.93	4,500	860	55	100	91	1,100	-	b
	6/18/1997	17.61	13.57	2,700	700	52	81	76	2,200	2,300	a,b
	9/18/1997	18.01	13.17	3,900	760	38	56	64	ND<170	-	b
	12/10/1997	17.45	13.73	12,000	1,800	120	210	210	2,900	2,600	a,b
	2/18/1998	13.09	18.09	1,700	210	8	6.7	16	200	-	b
	5/12/1998	14.78	16.40	2,100	300	15	36	34	920	-	b,c
	8/18/1998	16.59	14.59	4,700	1,000	130	110	150	5,200	4,900	a,b
	11/24/1998	17.18	14.00	3,000	810	44	76	94	4,800	-	b
	2/4/1999	18.90	12.28	2,800	770	50	69	69	3,100	-	b
	5/18/1999	16.30	14.88	4,000	780	57	7.7	79	4,800	-	b
	8/27/1999	17.21	13.97	4,100	870	51	74	99	3,300	4,100	a,b
	11/18/1999	17.77	13.41	3,000	760	43	67	65	5,100	5,400	b
	2/29/2000	14.85	16.33	4,600	1,000	64	94	170	4,100	4,600	a
	5/25/2000	16.45	14.73	2,600	540	39	59	41	3,500	5,300	b
	8/9/2000	17.47	13.71	4,400	930	66	98	79	9,400	-	b
11/9/2000	17.45	13.73	4,200	630	34	54	44	7,800	9,400	b	
1/29/2001	18.90	12.28	3,100	710	34	66	51	9,400	8,000	b	
4/16/2001	19.17	12.01	160	1.2	1.3	ND<0.5	12	22	20	b	
8/14/2001	19.20	11.98	1,700	190	11	35	13	300	250	b	
10/22/2001	18.95	12.23	1,100	120	3.7	29	7.9	ND<25	16	a	
2/1/2002	19.05	12.13	2,600	25	43	21	280	ND<5.0	-	a	
5/10/2002	17.69	13.49	490	3.5	2.0	2.1	2.2	ND<5.0	-	a	
7/8/2002	15.75	15.43	170	0.51	0.62	1.6	1.2	ND<5.0	2.0	m	

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28.20	10/2/2002	16.30	14.88	240	1.7	2.0	2.2	0.88	ND<5.0	-	a
	1/23/2003	17.74	13.44	ND<50	0.52	4.1	ND<0.5	1.9	ND<5.0	-	
	4/29/2003	15.47	15.71	1,300	75	4.8	21	7.3	130	120	a
	7/18/2003	17.08	11.12	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	0.74	a
	10/9/2003	16.25	11.95	210	4.7	0.57	1.6	1.1	ND<10	10	a
	1/28/2004	15.65	12.55	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	a
	4/7/2004	16.49	11.71	-	-	-	-	-	-	-	
MW-4 (cont.)	4/12/2004	-	-	770	56	3.2	7.0	6.5	120	160	a
	7/23/2004	15.86	12.34	1,100	130	11	17	17	790	800	a
	10/12/2004	18.05	10.15	150	0.86	ND<0.5	ND<0.5	0.97	ND<10	-	a
	2/14/2005	15.30	12.90	1,500	200	16	30	31	420	550	a
	4/27/2005	14.20	14.00	3,000	520	100	27	86	600	480	a
	7/19/2005	16.08	12.12	1,800	310	16	36	25	1,000	1,100	a
	10/18/2005	16.55	11.65	2,500	450	28	47	51	3,800	4,500	a
	1/23/2006	14.66	13.54	1,300	170	13	14	14	2,500	3,300	a
	4/12/2006	12.92	15.28	940	150	12	7.6	12	3,400	3,300	a
	7/10/2006	15.38	12.82	1,700	260	14	26	20	4,300	5,900	a
	10/16/2006	17.21	10.99	3,200	440	26	34	63	7,800	7,500	a
	1/26/2007	17.58	10.62	2,000	290	20	28	42	8,300	8,300	a
	4/18/2007	17.46	10.74	2,300	350	28	38	42	5,900	7,800	a,i
	8/2/2007	17.95	10.25	3,600	480	33	47	72	7,500	9,000	a
10/23/2007	18.41	9.79	1,700	280	13	27	25	7,000	8,800	a	
1/30/2008	17.49	10.71	1,300	130	4.9	13	12	6,500	8,200	a	
4/18/2008	17.90	10.30	2,300	240	14	25	27	6,900	6,400	a	
7/28/2008	18.49	9.71	3,400	390	100	33	100	4,600	5,000	a	
	<b>12/5/2008</b>	<b>19.07</b>	<b>9.13</b>	<b>2,400</b>	<b>310</b>	<b>30</b>	<b>41</b>	<b>67</b>	<b>2,100</b>	<b>1,700</b>	<b>a,i</b>
MW-5 28.04	12/16/1994	16.07	11.97	ND<50	1.1	ND<0.5	ND<0.5	2.4	-	-	
	12/29/1994	16.10	11.94	-	-	-	-	-	-	-	
	7/19/1996	15.49	12.55	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-	
	1/27/1997	13.60	14.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	6/18/1997	15.55	12.49	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	9/18/1997	16.16	11.88	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	12/10/1997	15.41	12.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	2/18/1998	10.93	17.11	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/12/1998	13.25	14.79	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	8/18/1998	14.75	13.29	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/24/1998	15.15	12.89	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	2/4/1999	14.61	13.43	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/18/1999	14.15	13.89	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	8/27/1999	15.43	12.61	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/18/1999	15.97	12.07	-	-	-	-	-	-	-	
	2/29/2000	13.16	14.88	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/25/2000	14.72	13.32	-	-	-	-	-	-	-	
8/9/2000	15.68	12.36	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-		
11/9/2000	15.39	12.65	-	-	-	-	-	-	-		
1/29/2001	15.97	12.07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-		

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<i>Well ID/ Sample ID TOC</i>	<i>Date Sampled</i>	<i>TOC Depth to Water (ft)</i>	<i>Groundwater Elevation (ft-msl)</i>	<i>TPHg (µg/L)</i>	<i>Benzene (µg/L)</i>	<i>Toluene (µg/L)</i>	<i>Ethylbenzene (µg/L)</i>	<i>Xylenes (µg/L)</i>	<i>MTBE by 8021B (µg/L)</i>	<i>MTBE by 8260B (µg/L)</i>	<i>Notes</i>
	4/16/2001	16.24	11.80	-	-	-	-	-	-	-	
	8/14/2001	17.39	10.65	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/22/2001	15.90	12.14	-	-	-	-	-	-	-	
	2/1/2002	16.55	11.49	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/10/2002	15.12	12.92	-	-	-	-	-	-	-	
	7/8/2002	15.92	12.12	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/2/2002	16.42	11.62	-	-	-	-	-	-	-	
	1/23/2003	14.90	13.14	ND<50	20	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/29/2003	12.05	15.99	-	-	-	-	-	-	-	
25.07	7/18/2003	14.28	10.79	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/9/2003	13.36	11.71	-	-	-	-	-	-	-	
MW-5 (cont.)	1/28/2004	12.68	12.39	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/7/2004	14.71	10.36	-	-	-	-	-	-	-	
	7/23/2004	13.49	11.58	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	i
	10/12/2004	15.88	9.19	-	-	-	-	-	-	-	
	2/14/2005	13.22	11.85	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	i
	4/27/2005	13.40	11.67	-	-	-	-	-	-	-	
	7/19/2005	14.21	10.86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	i
	10/18/2005	14.79	10.28	-	-	-	-	-	-	-	
	1/23/2006	13.12	11.95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	i
	4/12/2006	11.39	13.68	-	-	-	-	-	-	-	
	7/10/2006	14.40	10.67	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	25	-	i
	10/16/2006	15.44	9.63	-	-	-	-	-	-	-	
	1/26/2007	15.76	9.31	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	490	-	
	4/18/2007	15.61	9.46	-	-	-	-	-	-	-	
	8/2/2007	16.04	9.03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	660	760	
	10/23/2007	16.89	8.18	-	-	-	-	-	-	-	
	1/30/2008	15.61	9.46	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	250	280	
	4/18/2008	15.99	9.08	-	-	-	-	-	-	-	
	7/28/2008	16.45	8.62	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	640	670	
	<b>12/5/2008</b>	<b>16.94</b>	<b>8.13</b>	-	-	-	-	-	-	-	
MW-6 29.10	12/16/1994	17.74	11.36	-	-	-	-	-	-	-	
	12/29/1994	17.40	11.70	-	-	-	-	-	-	-	
	7/19/1996	16.60	12.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-	
	1/27/1997	14.88	14.22	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	6/18/1997	16.73	12.37	51	22	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	c
	9/18/1997	17.24	11.86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	12/10/1997	16.56	12.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	2/18/1998	12.93	16.17	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/12/1998	14.35	14.75	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	8/18/1998	15.94	13.16	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/24/1998	16.46	12.64	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	2/4/1999	18.25	10.85	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/18/1999	15.73	13.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	8/27/1999	15.64	13.46	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/18/1999	17.04	12.06	-	-	-	-	-	-	-	
	2/29/2000	14.55	14.55	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	

**GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER ARCO STATION  
706 HARRISON STREET  
OAKLAND, CALIFORNIA**

<i>Well ID/ Sample ID TOC</i>	<i>Date Sampled</i>	<i>TOC Depth to Water (ft)</i>	<i>Groundwater Elevation (ft-msl)</i>	<i>TPHg (µg/L)</i>	<i>Benzene (µg/L)</i>	<i>Toluene (µg/L)</i>	<i>Ethylbenzene (µg/L)</i>	<i>Xylenes (µg/L)</i>	<i>MTBE by 8021B (µg/L)</i>	<i>MTBE by 8260B (µg/L)</i>	<i>Notes</i>
	5/25/2000	15.86	13.24	-	-	-	-	-	-	-	
	8/9/2000	16.80	12.30	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/9/2000	16.60	12.50	-	-	-	-	-	-	-	
	1/29/2001	17.00	12.10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/16/2001	17.15	11.95	-	-	-	-	-	-	-	
	8/14/2001	17.30	11.80	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/22/2001	17.13	11.97	-	-	-	-	-	-	-	
	2/1/2002	16.57	12.53	70	37	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	a
	5/10/2002	15.25	13.85	-	-	-	-	-	-	-	
	7/8/2002	15.79	13.31	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/2/2002	16.38	12.72	-	-	-	-	-	-	-	
	1/23/2003	16.03	13.07	ND<50	21	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/29/2003	14.19	14.91	-	-	-	-	-	-	-	
26.13	7/18/2003	15.47	10.66	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
MW-6	10/9/2003	14.73	11.40	-	-	-	-	-	-	-	
(cont.)	1/28/2004	14.05	12.08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/7/2004	14.41	11.72	-	-	-	-	-	-	-	
	7/23/2004	15.15	10.98	3,300	1,300	ND<5.0	52	9.7	ND<50	-	a
	10/12/2004	17.29	8.84	-	-	-	-	-	-	-	
	2/14/2005	14.60	11.53	350	160	ND<0.5	ND<0.5	ND<0.5	ND<25	2.0	a,i
	4/27/2005	14.10	12.03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	
	7/19/2005	15.18	10.95	110	15	ND<0.5	0.62	ND<0.5	ND<5.0	1.7	a,i
	10/18/2005	15.65	10.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	0.87	i
	1/23/2006	14.02	12.11	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	0.50	i
	4/12/2006	12.66	13.47	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	
	7/10/2006	14.64	11.49	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	
	10/16/2006	16.50	9.63	-	-	-	-	-	-	-	
	1/26/2007	16.83	9.30	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	
	4/18/2007	16.72	9.41	-	-	-	-	-	-	-	
	8/2/2007	17.13	9.00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	
	10/23/2007	17.71	8.42	-	-	-	-	-	-	-	
	1/30/2008	16.54	9.59	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	
	4/18/2008	17.02	9.11	-	-	-	-	-	-	-	
	7/28/2008	17.50	8.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	
	<b>12/5/2008</b>	<b>17.89</b>	<b>8.24</b>	-	-	-	-	-	-	-	
MW-7	12/16/1994	17.07	12.60	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
29.67	12/29/1994	17.65	12.02	-	-	-	-	-	-	-	
	7/19/1996	16.44	13.23	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	1/27/1997	15.09	14.58	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	6/18/1997	16.59	13.08	73	ND<0.5	0.55	ND<0.5	ND<0.5	ND<5.0	-	d
	9/18/1997	17.06	12.61	94	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	b,f
	12/10/1997	16.58	13.09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	2/18/1998	12.60	17.07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/12/1998	14.81	14.86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	8/18/1998	15.67	14.00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/24/1998	16.30	13.37	200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	d
	2/4/1999	15.99	13.68	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	

**GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER ARCO STATION  
706 HARRISON STREET  
OAKLAND, CALIFORNIA**

<i>Well ID/ Sample ID TOC</i>	<i>Date Sampled</i>	<i>TOC Depth to Water (ft)</i>	<i>Groundwater Elevation (ft-msl)</i>	<i>TPHg (µg/L)</i>	<i>Benzene (µg/L)</i>	<i>Toluene (µg/L)</i>	<i>Ethylbenzene (µg/L)</i>	<i>Xylenes (µg/L)</i>	<i>MTBE by 8021B (µg/L)</i>	<i>MTBE by 8260B (µg/L)</i>	<i>Notes</i>
	5/18/1999	15.42	14.25	200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	d
	8/27/1999	16.35	13.32	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/18/1999	16.81	12.86	--	--	--	--	--	--	-	
	2/29/2000	14.16	15.51	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	f
	5/25/2000	15.54	14.13	--	--	--	--	--	--	-	
	8/9/2000	16.56	13.11	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	11/9/2000	16.45	13.22	-	-	-	-	-	-	-	
	1/29/2001	16.92	12.75	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/16/2001	17.03	12.64	-	-	-	-	-	-	-	
	8/14/2001	17.27	12.40	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/22/2001	16.95	12.72	-	-	-	-	-	-	-	
26.70	2/1/2002	16.14	13.53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	5/10/2002	15.30	14.37	-	-	-	-	-	-	-	
	7/8/2002	15.73	13.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/2/2002	16.24	13.43	-	-	-	-	-	-	-	
MW-7 (cont.)	1/23/2003	15.70	13.97	ND<50	23	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/29/2003	12.68	16.99	-	-	-	-	-	-	-	
	7/18/2003	15.19	11.51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	10/9/2003	14.45	12.25	-	-	-	-	-	-	-	
	1/28/2004	13.88	12.82	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	4/7/2004	15.71	10.99	-	-	-	-	-	-	-	
	7/23/2004	14.85	11.85	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	130	120	
	10/12/2004	16.90	9.80	-	-	-	-	-	-	-	
	2/14/2005	14.42	12.28	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	190	200	
	4/27/2005	13.75	12.95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	1.3	
	7/19/2005	14.91	11.79	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	65	66	
	10/18/2005	15.40	11.30	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12	15	
	1/23/2006	13.99	12.71	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	2.2	
	4/12/2006	12.32	14.38	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	2.0	
	7/10/2006	14.31	12.39	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	1.5	
	10/16/2006	16.23	10.47	-	-	-	-	-	-	-	
	1/26/2007	16.61	10.09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	
	4/18/2007	16.54	10.16	-	-	-	-	-	-	-	
	8/2/2007	16.93	9.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	2.2	
	10/23/2007	17.36	9.34	-	-	-	-	-	-	-	
	1/30/2008	16.36	10.34	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	
	4/18/2008	16.85	9.85	-	-	-	-	-	-	-	
	7/28/2008	17.43	9.27	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	1.1	i
	<b>12/5/2008</b>	<b>17.91</b>	<b>8.79</b>	-	-	-	-	-	-	-	
VW-3	3/6/2003	-	-	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	i
	3/25/2003	-	-	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	i
VW-4	3/6/2003	-	-	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
	3/25/2003	-	-	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	
Trip Blank	11/9/2000	-	-	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	

**GROUNDWATER ELEVATION AND ANALYTICAL DATA  
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<i>Well ID/ Sample ID</i>	<i>Date</i>	<i>TOC Depth to Water</i>	<i>Groundwater Elevation</i>	<i>TPHg (µg/L)</i>	<i>Benzene (µg/L)</i>	<i>Toluene (µg/L)</i>	<i>Ethylbenzene (µg/L)</i>	<i>Xylenes (µg/L)</i>	<i>MTBE by 8021B (µg/L)</i>	<i>MTBE by 8260B (µg/L)</i>	<i>Notes</i>
	2/14/2005	-	-	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	-	

**Abbreviations and Analyses:**

µg/L = Micrograms per liter  
 ND<0.5 = Not Detected (ND) above laboratory detection limit.  
 - = Not sampled; not analyzed; not applicable; or no SPH measured or observed.  
 TOC = Top of casing elevation, measured in feet, relative to mean sea level  
 ft = Measured in feet  
 ft-msl = Elevation in feet relative to mean sea level  
 TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method SW8015C  
 Benzene, ethylbenzene, toluene and xylenes by EPA Method SW8021B.  
 MTBE = Methyl tertiary butyl ether by EPA Method SW8021B and/or SW8260B.  
 SVOCs = Semi-Volatile Organic Compounds (EPA Method 8270)  
 Wells were re-surveyed on October 27, 2003 to City of Oakland Benchmark 25A.  
 TOC Depth to Water = Groundwater depth measured in feet below TOC.  
 Sheen = A sheen was observed on the water's surface.  
 Field = Observed in the field  
 Lab = Observed in analytical laboratory

**Analytical Laboratory Notes:**

a = "unmodified or weakly modified gasoline is significant"  
 b = "heavier gasoline range compounds are significant"  
 c = "lighter gasoline range compounds are significant"  
 d = "isolated peaks are present"  
 f = "hydrocarbons with no recognizable patterns are present"  
 h = "lighter than water immiscible sheen/product is present"  
 i = "sample contains greater than ~1 vol. % sediment"  
 j = "sample was diluted due to high organic content"  
 l = "reporting limit raised due to high MTBE content"  
 m = "no recognizable pattern"

APPENDIX A

STANDARD FIELD PROCEDURES FOR  
GROUNDWATER MONITORING AND SAMPLING



# Conestoga–Rovers & Associates

## STANDARD FIELD PROCEDURES FOR GROUNDWATER MONITORING AND SAMPLING

This document presents standard field methods for groundwater monitoring, purging and sampling, and well development. These procedures are designed to comply with Federal, State and local regulatory guidelines. Cambria's specific field procedures are summarized below.

### Groundwater Elevation Monitoring

Prior to performing monitoring activities, the historical monitoring and analytical data of each monitoring well shall be reviewed to determine if any of the wells are likely to contain non-aqueous phase liquid (NAPL) and to determine the order in which the wells will be monitored (i.e. cleanest to dirtiest). Groundwater monitoring should not be performed when the potential exists for surface water to enter the well (i.e. flooding during a rainstorm).

Prior to monitoring, each well shall be opened and the well cap removed to allow water levels to stabilize and equilibrate. The condition of the well box and well cap shall be observed and recommended repairs noted. Any surface water that may have entered and flooded the well box should be evacuated prior to removing the well cap. In wells with no history of NAPL, the static water level and total well depth shall be measured to the nearest 0.01 foot with an electronic water level meter. Wells with the highest contaminant concentrations shall be measured last. In wells with a history of NAPL, the NAPL level/thickness and static water level shall be measured to the nearest 0.01 foot using an electronic interface probe. The water level meter and/or interface probe shall be thoroughly cleaned and decontaminated at the beginning of the monitoring event and between each well. Monitoring equipment shall be washed using soapy water consisting of Liqui-nox™ or Alconox™ followed by one rinse of clean tap water and then two rinses of distilled water.

### Groundwater Purging and Sampling

Prior to groundwater purging and sampling, the historical analytical data of each monitoring well shall be reviewed to determine the order in which the wells should be purged and sampled (i.e. cleanest to dirtiest). No purging or groundwater sampling shall be performed on wells with a measurable thickness of NAPL or floating NAPL globules. If a sheen is observed, the well should be purged and a groundwater sample collected only if no NAPL is present. Wells shall be purged either by hand using a disposal or PVC bailer or by using an aboveground pump (e.g. peristaltic or Wattera™) or down-hole pump (e.g. Grundfos™ or DC Purger pump).

Groundwater wells shall be purged approximately three to ten well-casing volumes (depending on the regulatory agency requirements) or until groundwater parameters of temperature, pH, and conductivity have stabilized to within 10% for three consecutive readings. Temperature, pH, and conductivity shall be measured and recorded at least once per well casing volume removed. The total volume of groundwater removed shall be recorded along with any other notable physical characteristic such as color and odor. If required, field parameters such as turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) shall also be measured prior to collection of each groundwater sample.

Groundwater samples shall be collected after the well has been purged. If the well is slow to recharge, a sample shall be collected after the water column is allowed to recharge to 80% of the pre-purging static water level. If the well does not recover to 80% in 2 hours, a sample shall be collected once there is enough groundwater in the well. Groundwater samples shall be collected using clean disposable bailers or pumps (if an operating remediation system exists on site and the project manager approves of its use for sampling) and shall be decanted into clean containers supplied by the analytical laboratory. New latex gloves and disposable tubing or bailers shall be

# Conestoga-Rovers & Associates

used for sampling each well. If a PVC bailer or down-hole pump is used for groundwater purging, it shall be decontaminated before purging each well by using soapy water consisting of Liqui-nox™ or Alconox™ followed by one rinse of clean tap water and then two rinses of distilled water. If a submersible pump with non-dedicated discharge tubing is used for groundwater purging, both the inside and outside of pump and discharge tubing shall be decontaminated as described above.

## **Sample Handling**

Except for samples that will be tested in the field, or that require special handling or preservation, samples shall be stored in coolers chilled to 4° C for shipment to the analytical laboratory. Samples shall be labeled, placed in protective foam sleeves or bubble wrap as needed, stored on crushed ice at or below 4° C, and submitted under chain-of-custody (COC) to the laboratory. The laboratory shall be notified of the sample shipment schedule and arrival time. Samples shall be shipped to the laboratory within a time frame to allow for extraction and analysis to be performed within the standard sample holding times.

Sample labels shall be filled out using indelible ink and must contain the site name; field identification number; the date, time, and location of sample collection; notation of the type of sample; identification of preservatives used; remarks; and the signature of the sampler. Field identification must be sufficient to allow easy cross-reference with the field datasheet.

All samples submitted to the laboratory shall be accompanied by a COC record to ensure adequate documentation. A copy of the COC shall be retained in the project file. Information on the COC shall consist of the project name and number; project location; sample numbers; sampler/recorder's signature; date and time of collection of each sample; sample type; analyses requested; name of person receiving the sample; and date of receipt of sample.

Laboratory-supplied trip blanks shall accompany the samples and be analyzed to check for cross-contamination, if requested by the project manager.

## **Waste Handling and Disposal**

Groundwater extracted during sampling shall be stored onsite in sealed U.S. DOT H17 55-gallon drums and shall be labeled with the contents, date of generation, generator identification, and consultant contact. Extracted groundwater may be disposed offsite by a licensed waste handler or may be treated and discharged via an operating onsite groundwater extraction/treatment system.

APPENDIX B

CERTIFIED ANALYTICAL REPORTS AND  
CHAIN-OF-CUSTODY DOCUMENTATION



## McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: [www.mcccampbell.com](http://www.mcccampbell.com) E-mail: [main@mcccampbell.com](mailto:main@mcccampbell.com)  
Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #231116; Bogin, 706 Harrison St, Oakland	Date Sampled: 12/05/08
		Date Received: 12/05/08
	Client Contact: Mark Jonas	Date Reported: 12/12/08
	Client P.O.:	Date Completed: 12/10/08

**WorkOrder: 0812196**

December 12, 2008

Dear Mark:

Enclosed within are:

- 1) The results of the **3** analyzed samples from your project **#231116; Bogin, 706 Harrison St, O**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
Laboratory Manager  
McC Campbell Analytical, Inc.



# McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD  
PITTSBURG, CA 94565-1701

Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
Telephone: (877) 252-9262 Fax: (925) 252-9269

0812196

## CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH  24 HR  48 HR  72 HR  5 DAY

GeoTracker EDF  PDF  Excel  Write On (DW)

Check if sample is effluent and "J" flag is required

Report To: Mark Jonas Bill To: Conestoga-Rovers & Associates

Company: Conestoga-Rovers & Associates  
5900 Holpis St., Ste. A  
Emeryville, CA

Tele: (510) 420-3307 E-Mail: mberner@craworld.com  
rnjones@craworld.com

Project #: 23116 Project Name: Bogin

Project Location: 706 Harrison St, Oakland, CA

Sampler Signature: Muskan Environmental Sampling

### Analysis Request

### Other

### Comments

SAMPLE ID	LOCATION: Field Point Name	SAMPLING		Containers		MATRIX					METHOD PRESERVED				Analysis Request	Other	Comments		
		Date	Time	# Containers	Type Containers	Water	Soil	Air	Sludge	Other	ICE	HCL	HNO <sub>3</sub>	Other					
MW-1		12-5-08	8:00	4	VOA	X					X	X							Filter Samples for Metals analysis: Yes / No
MW-2			8:50																
MW-4			8:25			X					X	X							

+5  
H

MTBE by 8260

ICE/# 26 COMMENTS:  
 GOOD CONDITION \_\_\_\_\_  
 HEAD SPACE ABSENT \_\_\_\_\_  
 DECHLORINATED IN LAB \_\_\_\_\_  
 APPROPRIATE CONTAINERS \_\_\_\_\_  
 PRESERVED IN LAB \_\_\_\_\_  
 VOAS O&G METALS OTHER  
 PRESERVATION pH<2

**McC Campbell Analytical, Inc.**



1534 Willow Pass Rd  
 Pittsburg, CA 94565-1701  
 (925) 252-9262

**CHAIN-OF-CUSTODY RECORD**

**WorkOrder: 0812196**

**ClientCode: CETE**

WriteOn   
  EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**  
 Mark Jonas  
 Conestoga-Rovers & Associates  
 5900 Hollis St, Suite A  
 Emeryville, CA 94608  
 (510) 420-0700    FAX (510) 420-9170

**Email:** mjonas@CRAworld.com  
**cc:**  
**PO:**  
**ProjectNo:** #23116; Bogin, 706 Harrison St,  
 Oakland

**Bill to:**  
 Accounts Payable  
 Conestoga-Rovers & Associates  
 5900 Hollis St, Ste. A  
 Emeryville, CA 94608

**Requested TAT: 5 days**  
**Date Received: 12/05/2008**  
**Date Printed: 12/05/2008**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0812196-001	MW-1	Water	12/5/2008 8:00	<input type="checkbox"/>	B	A	A									
0812196-002	MW-2	Water	12/5/2008 8:50	<input type="checkbox"/>	B	A										
0812196-003	MW-4	Water	12/5/2008 8:25	<input type="checkbox"/>	B	A										

**Test Legend:**

1	G-MBTEX_W	2	MTBE_W	3	PREDF REPORT	4		5	
6		7		8		9		10	
11		12							

**Prepared by: Ana Venegas**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
 Hazardous samples will be returned to client or disposed of at client expense.



### Sample Receipt Checklist

Client Name: **Conestoga-Rovers & Associates**  
Project Name: **#23116; Bogin, 706 Harrison St, Oakland**  
WorkOrder N°: **0812196** Matrix Water

Date and Time Received: **12/5/2008 6:37:05 PM**  
Checklist completed and reviewed by: **Ana Venegas**  
Carrier: Client Drop-In

#### Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

#### Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 2.6°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE )

\* NOTE: If the "No" box is checked, see comments below.

-----

Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Contacted by: \_\_\_\_\_

Comments:









### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 40120

WorkOrder 0812196

EPA Method SW8260B		Extraction SW5030B							Spiked Sample ID: 0812201-001b			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Methyl-t-butyl ether (MTBE)	ND	10	104	106	2.24	96.8	105	8.08	70 - 130	30	70 - 130	30
%SS1:	105	25	109	108	0.869	83	84	1.23	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 40120 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0812196-001A	12/05/08 8:00 AM	12/08/08	12/08/08 11:54 PM	0812196-002A	12/05/08 8:50 AM	12/09/08	12/09/08 12:38 AM
0812196-003A	12/05/08 8:25 AM	12/09/08	12/09/08 4:19 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



**QC SUMMARY REPORT FOR SW8021B/8015Cm**

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 40121

WorkOrder 0812196

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B						Spiked Sample ID: 0812198-006A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	60	93.5	94.2	0.807	90.5	108	18.1	70 - 130	20	70 - 130	20
MTBE	ND	10	81.7	89.1	8.60	94.4	82.6	13.3	70 - 130	20	70 - 130	20
Benzene	ND	10	94.6	92.3	2.40	115	107	6.83	70 - 130	20	70 - 130	20
Toluene	ND	10	94.2	92	2.42	126	120	4.93	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	98.8	96.2	2.66	123	117	4.98	70 - 130	20	70 - 130	20
Xylenes	ND	30	109	106	3.01	126	126	0	70 - 130	20	70 - 130	20
%SS:	95	10	93	95	1.31	122	109	11.4	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

BATCH 40121 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0812196-001B	12/05/08 8:00 AM	12/09/08	12/09/08 10:10 PM	0812196-002B	12/05/08 8:50 AM	12/09/08	12/09/08 4:10 AM
0812196-003B	12/05/08 8:25 AM	12/09/08	12/09/08 3:09 AM	0812196-003B	12/05/08 8:25 AM	12/09/08	12/09/08 8:39 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.


NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

APPENDIX C

FIELD DATA SHEETS



## WELL GAUGING SHEET

<b>Client:</b> Conestoga-Rovers and Associates						
<b>Site</b> <b>Address:</b> 706 Harrison Street, Oakland, CA						
<b>Date:</b> 12/5/2008			<b>Signature:</b> 			
Well ID	Time	Depth to SPH	Depth to Water	SPH Thickness	Depth to Bottom	Comments
MW-1	6:35		18.22		24.45	
MW-2	6:45		18.56		25.80	
MW-3	6:30		17.89		27.75	
MW-4	6:40		19.07		25.60	
MW-5	7:10		16.94		27.85	
MW-6	7:00		17.89		25.90	
MW-7	7:05		17.91		27.74	





## WELL SAMPLING FORM

<b>Date:</b>		12/5/2008				
<b>Client:</b>		Conestoga-Rovers and Associates				
<b>Site Address:</b>		706 Harrison Street, Oakland, CA				
<b>Well ID:</b>		MW-2				
<b>Well Diameter:</b>		2"				
<b>Purging Device:</b>		Disposable Bailer				
<b>Sampling Method:</b>		Disposable Bailer				
<b>Total Well Depth:</b>		25.80	<b>Fe=</b> <b>mg/L</b>			
<b>Depth to Water:</b>		18.56	<b>ORP=</b> <b>mV</b>			
<b>Water Column Height:</b>		7.24	<b>DO=</b> <b>mg/L</b>			
<b>Gallons/ft:</b>		0.16				
<b>1 Casing Volume (gal):</b>		1.16	<b>COMMENTS:</b> very turbid, silty light sheen			
<b>3 Casing Volumes (gal):</b>		3.48				
<b>TIME:</b>	<b>CASING VOLUME (gal)</b>	<b>TEMP (Celsius)</b>			<b>pH</b>	<b>COND. (µS)</b>
8:40	1.2	18.1			7.04	869
8:42	2.3	18.1			7.06	891
8:45	3.5	18.1	7.01	874		
<b>Sample ID:</b>	<b>Sample Date:</b>	<b>Sample Time:</b>	<b>Container Type</b>	<b>Preservative</b>	<b>Analytes</b>	<b>Method</b>
MW-2	12/5/2008	8:50	40 ml VOA	HCL, ICE	TPHg BTEX MTBE	8015, 8021, 8260
<b>Signature:</b>						



## WELL SAMPLING FORM

<b>Date:</b> 12/5/2008						
<b>Client:</b> Conestoga-Rovers and Associates						
<b>Site Address:</b> 706 Harrison Street, Oakland, CA						
<b>Well ID:</b> MW-4						
<b>Well Diameter:</b> 2"						
<b>Purging Device:</b> Disposable Bailer						
<b>Sampling Method:</b> Disposable Bailer						
<b>Total Well Depth:</b> 25.60	<b>Fe=</b> mg/L					
<b>Depth to Water:</b> 19.07	<b>ORP=</b> mV					
<b>Water Column Height:</b> 6.53	<b>DO=</b> mg/L					
<b>Gallons/ft:</b> 0.16						
<b>1 Casing Volume (gal):</b> 1.04	<b>COMMENTS:</b> very turbid					
<b>3 Casing Volumes (gal):</b> 3.13						
<b>CASING VOLUME</b> (gal)						
<b>TEMP</b> (Celsius)						
<b>pH</b>						
<b>COND.</b> (µS)						
<b>TIME:</b> 8:15	739					
8:17	740					
8:20	728					
<b>Sample ID:</b> MW-4	<b>Sample Date:</b> 12/5/2008	<b>Sample Time:</b> 8:25	<b>Container Type:</b> 40 ml VOA	<b>Preservative:</b> HCl, ICE	<b>Analytes:</b> TPHg BTEX MTBE	<b>Method:</b> 8015, 8021, 8260
					<b>Signature:</b>	



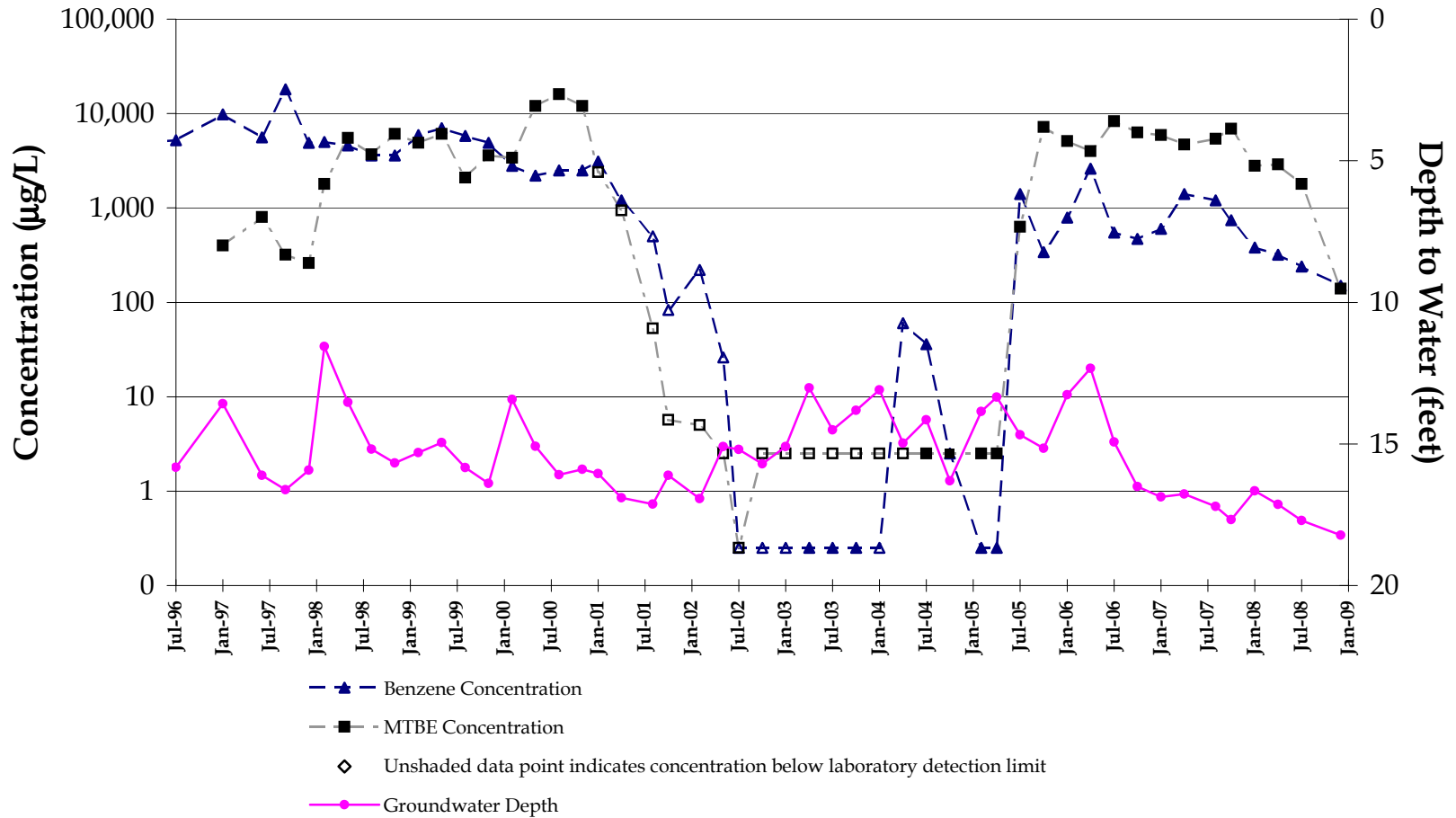
APPENDIX D

BENZENE AND MTBE CONCENTRATION GRAPHS

# Monitoring Well MW-1

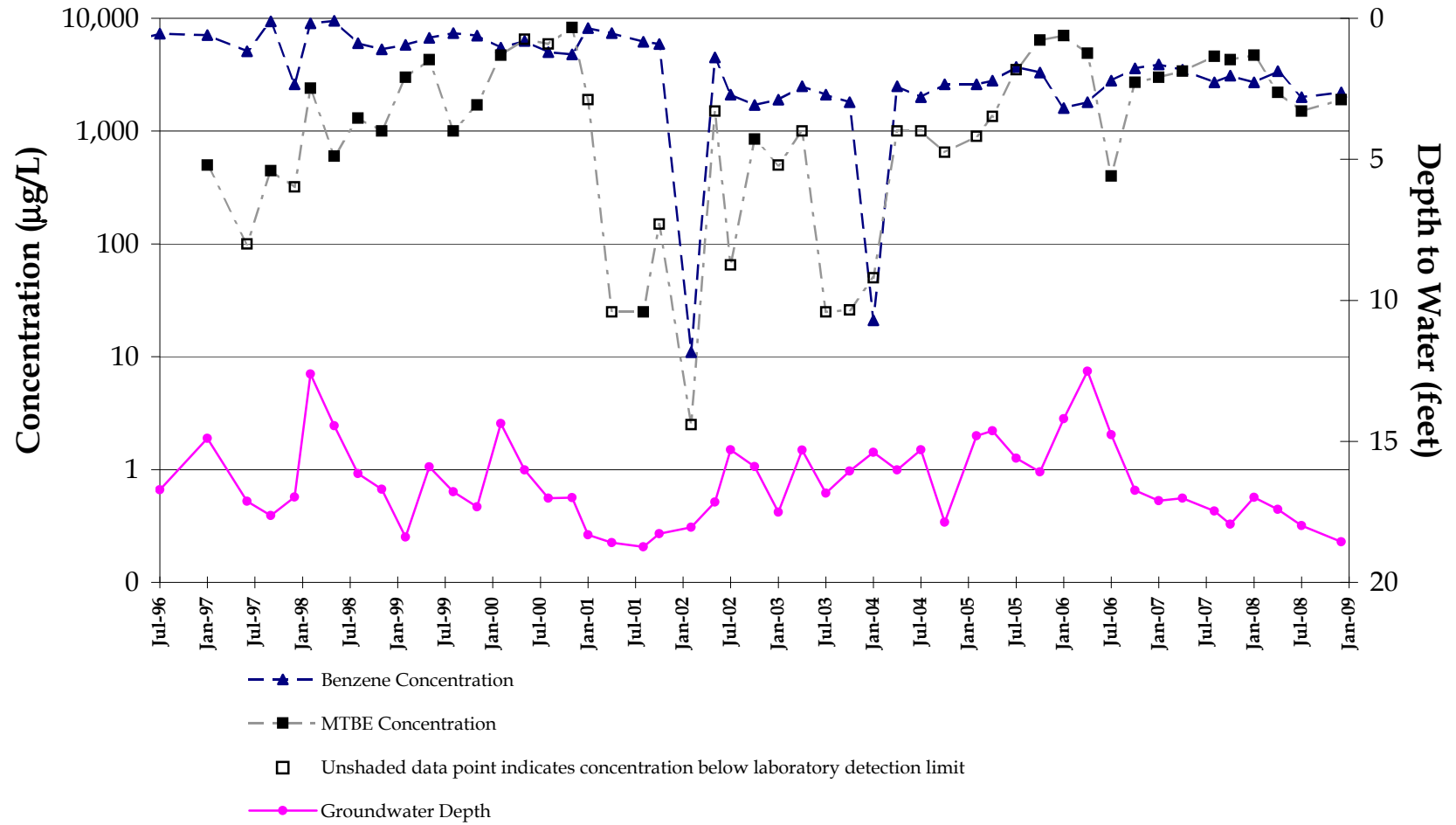
## Benzene and MTBE Concentration Trends

Former ARCO Station, 706 Harrison Street, Oakland, CA



## Monitoring Well MW-2 Benzene and MTBE Concentration Trends

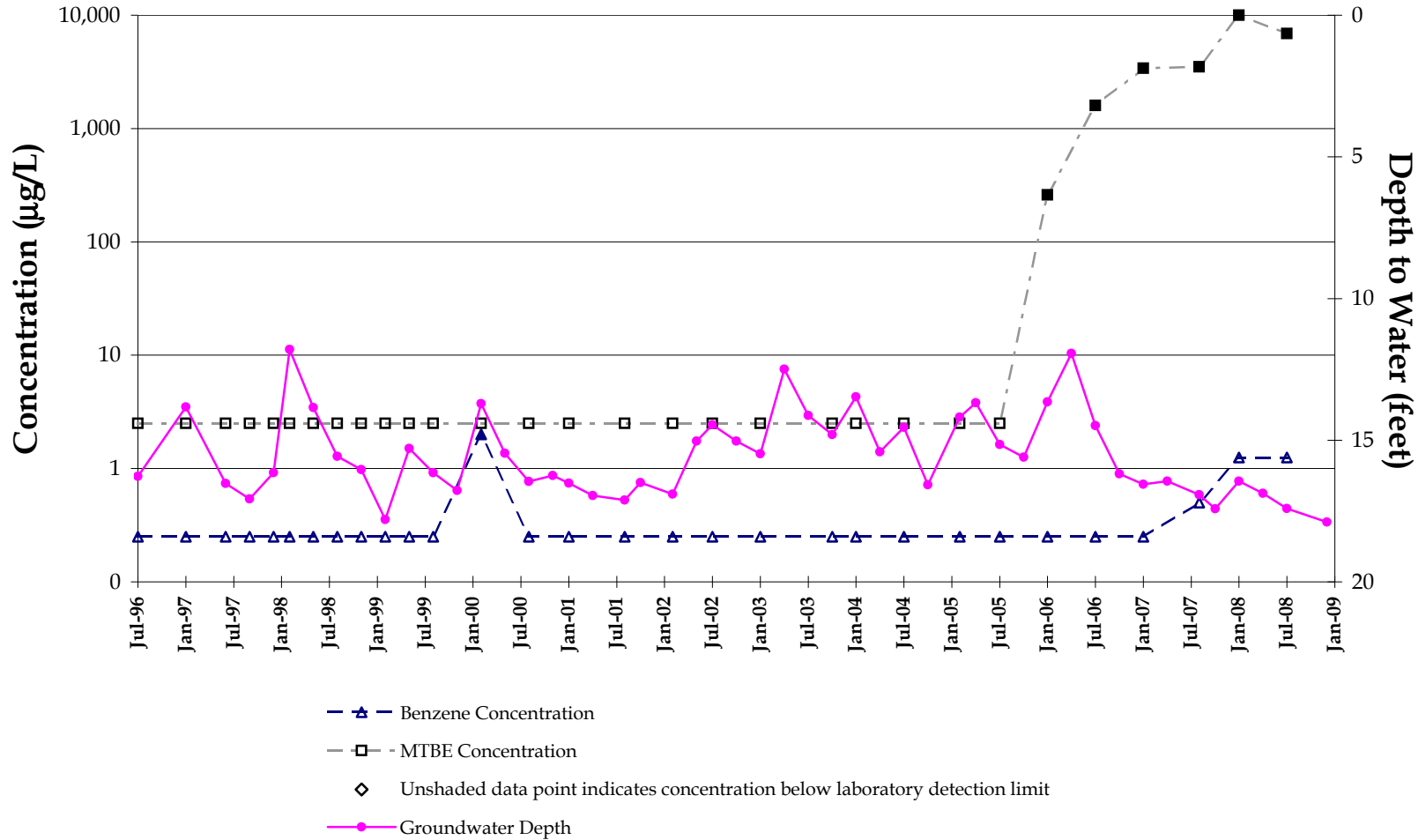
Former ARCO Station, 706 Harrison Street, Oakland, CA



# Monitoring Well MW-3

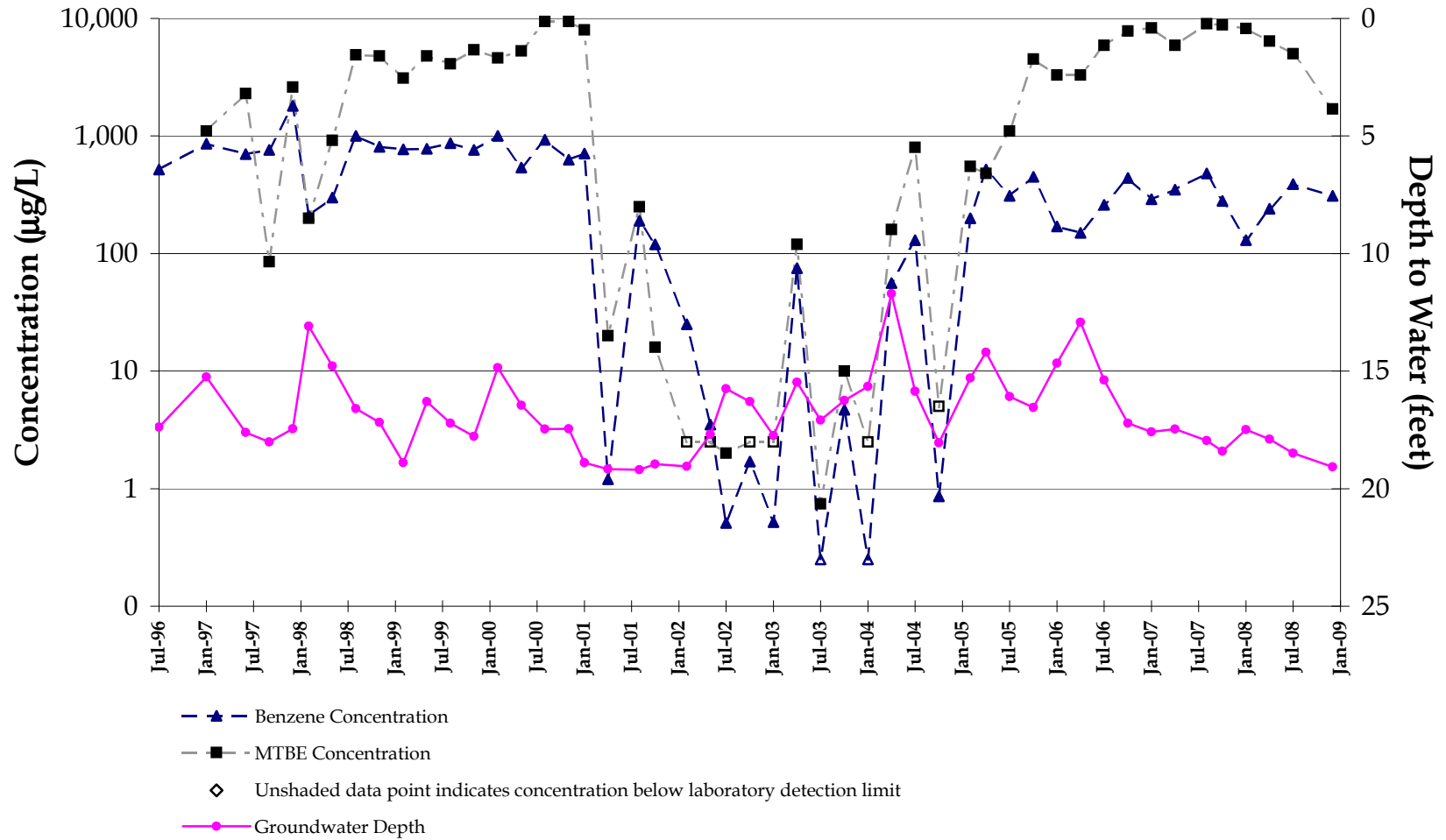
## Benzene and MTBE Concentration Trends

Former ARCO Station, 706 Harrison Street, Oakland, CA



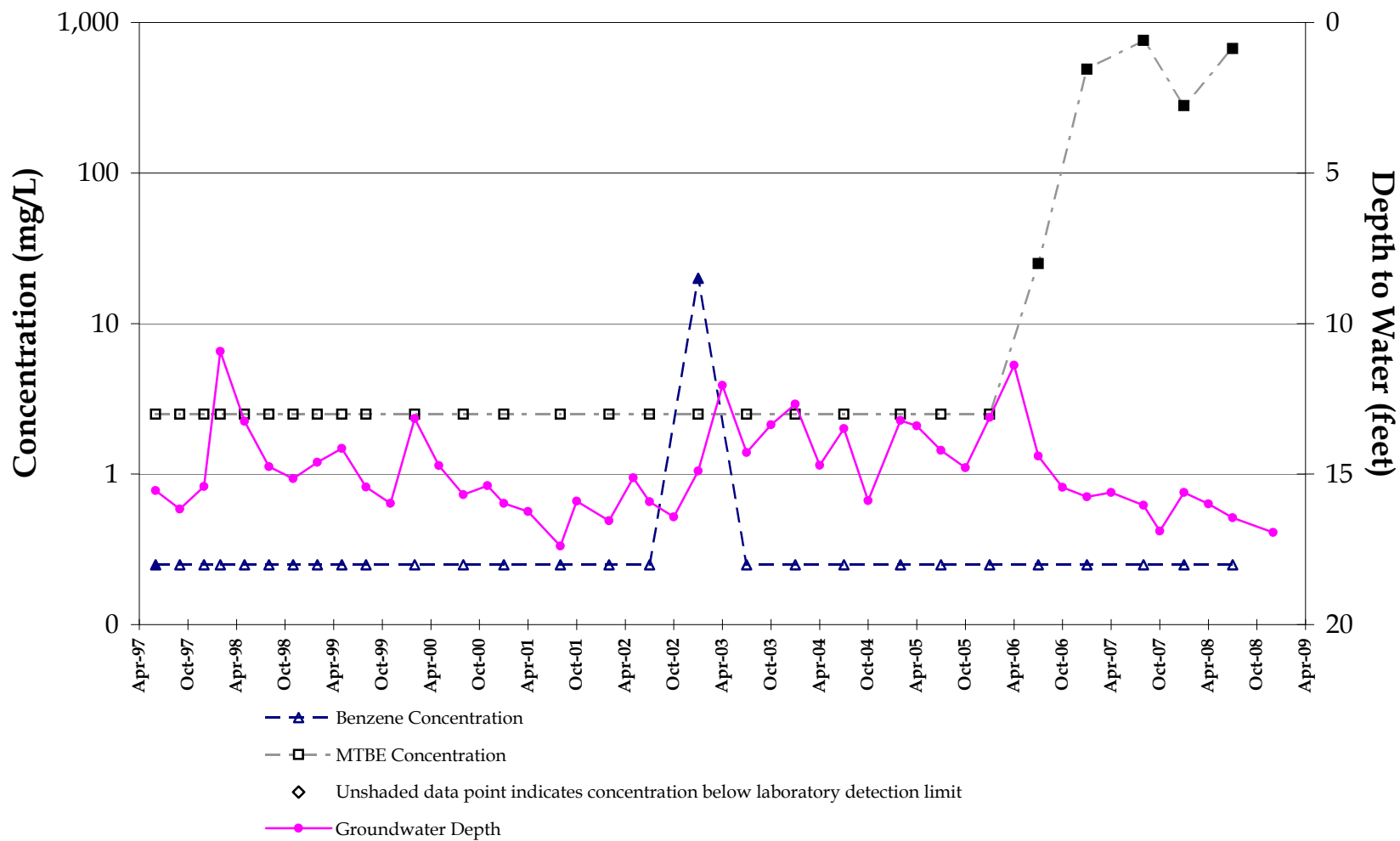
## Monitoring Well MW-4 Benzene and MTBE Concentration Trends

Former ARCO Station, 706 Harrison Street, Oakland, CA



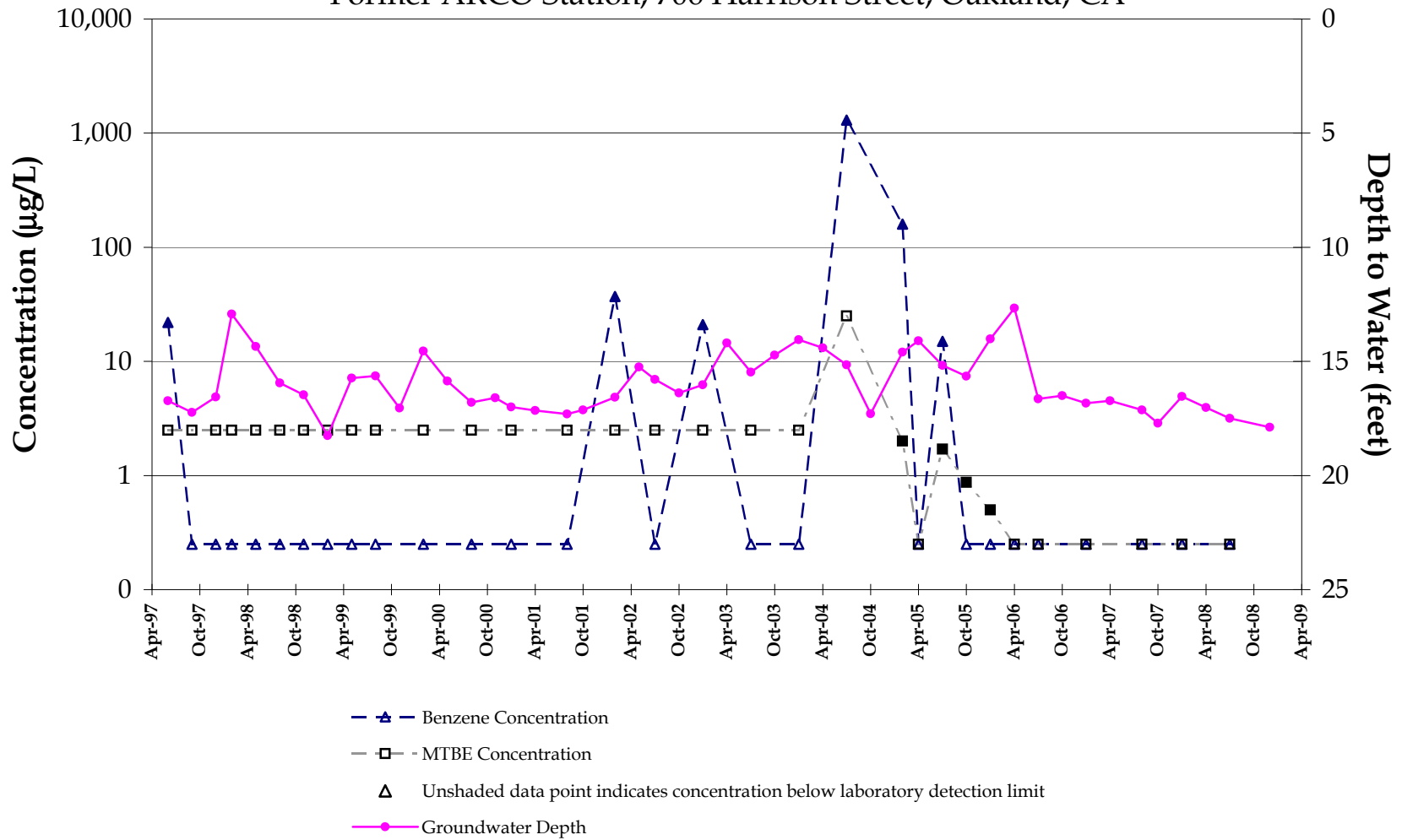
## Monitoring Well MW-5 Benzene and MTBE Concentration Trends

Former ARCO Station, 706 Harrison Street, Oakland, CA



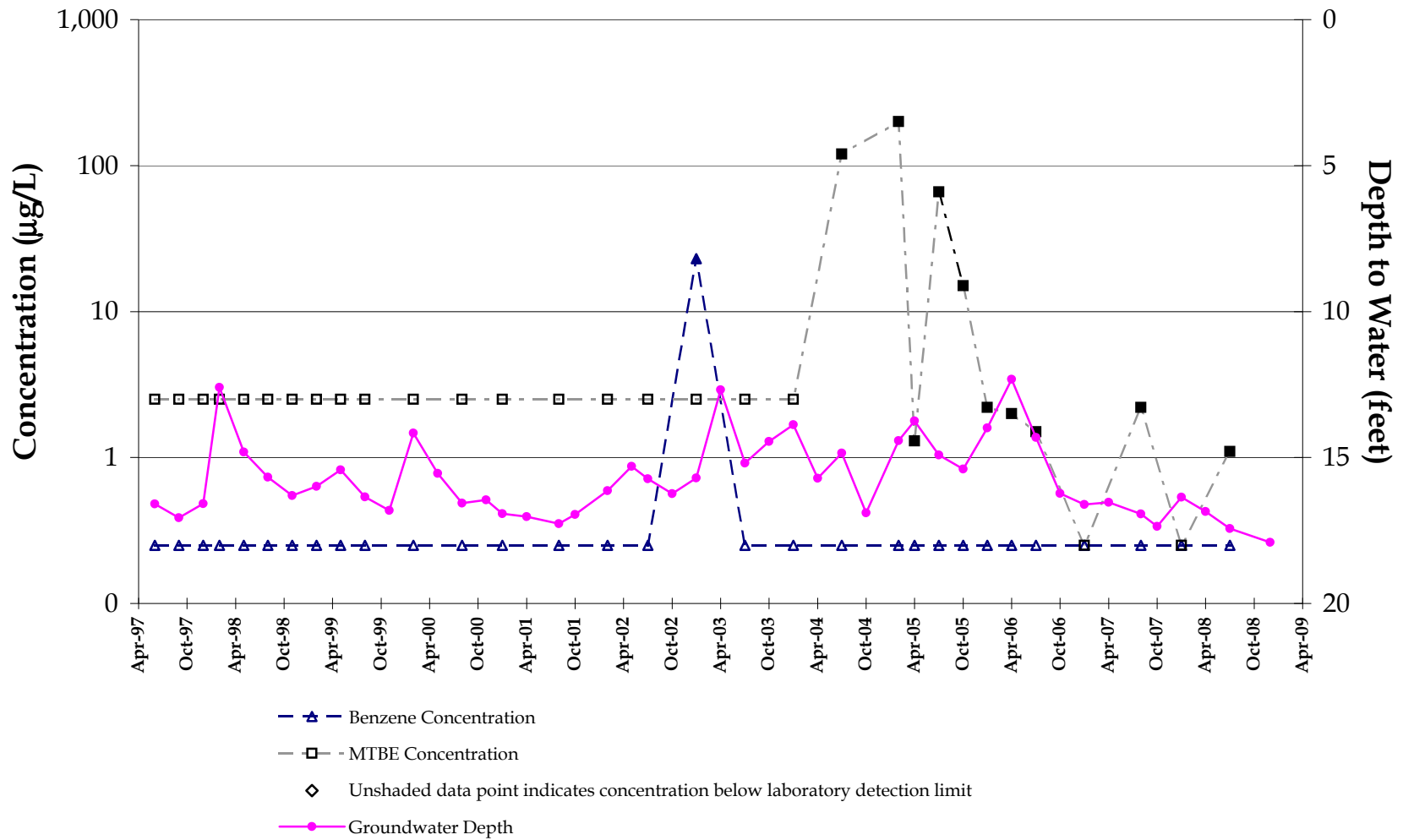
## Monitoring Well MW-6 Benzene and MTBE Concentration Trends

Former ARCO Station, 706 Harrison Street, Oakland, CA



## Monitoring Well MW-7 Benzene and MTBE Concentration Trends

Former ARCO Station, 706 Harrison Street, Oakland, CA





APPENDIX E

FORMER SHELL JOINT  
GROUNDWATER MONITORING AND ANALYTICAL RESULTS

**TABLE ONE**  
**Groundwater Elevation Data**  
**Yee Property**  
**726 Harrison St., Oakland, CA**

Well ID	Date of Measurement	Top of Casing Elevation (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
<b>MW-1</b>	12/15/98	31.95*	17.32	14.63
	3/4/99		15.52	16.43
	6/17/99		16.9	15.05
	8/27/99		17.39	14.56
	12/9/99		18.03	13.92
	3/7/00		15.11	16.84
	6/7/00		16.66	15.29
	10/11/00		18.08	13.87
	1/18/01		17.96	13.99
	4/5/01		16.35	15.60
	7/17/01		16.94	15.01
	10/5/01	28.98	17.35	11.63
	1/18/02		15.40	13.58
	4/11/02		15.76	13.22
	7/18/02		16.17	12.81
	10/9/02		16.72	12.26
	1/29/03		16.26	12.72
	4/11/03		16.56	12.42
	7/18/03		16.42	12.56
	10/9/03		16.88	12.10
	1/28/04		16.10	12.88
	4/7/04		15.43	13.55
	7/23/04		16.41	12.57
	10/12/04		17.73	11.25
	1/29/05		15.02	13.96
	4/28/05		14.99	13.99
	7/19/05		16.36	12.62
	10/18/05		17.82	11.16
	1/23/06		15.80	13.18
	4/12/06		13.24	15.74
	7/10/06		15.64	13.34
	10/16/06		17.51	11.47
	1/26/07		18.36	10.62
	4/18/07		17.79	11.19
	8/2/07		18.20	10.78
	10/23/07		18.75	10.23
	1/30/08		17.90	11.08
	4/18/08		18.21	10.77
	7/28/08		18.85	10.13
	<b>10/29/08</b>			<b>19.24</b>

**TABLE ONE**  
**Groundwater Elevation Data**  
**Yee Property**  
**726 Harrison St., Oakland, CA**

Well ID	Date of Measurement	Top of Casing Elevation (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
<b>MW-2</b>	12/15/98	32.40*	18.03	14.37
	3/4/99		16.11	16.29
	6/17/99		17.72	14.68
	8/27/99		Inaccessible	
	12/9/99		Inaccessible	
	3/7/00		Inaccessible	
	6/7/00		17.67	14.73
	10/11/00		18.91	13.49
	1/18/01		18.66	13.74
	4/5/01		16.97	15.43
	7/17/01		17.54	14.86
	10/5/01		29.44	17.98
	1/18/02	15.87		13.57
	4/11/02	16.36		13.08
	7/18/02	16.72		12.72
	10/9/02	17.33		12.11
	1/29/03	16.82		12.62
	4/11/03	17.15		12.29
	7/18/03	17.05		12.39
	10/9/03	17.52		11.92
	1/28/04	16.70		12.74
	4/7/04	16.02		13.42
	7/23/04	Inaccessible		
	10/12/04	17.31		12.13
	1/29/05	15.46		13.98
	4/28/05	15.79	13.65	
	7/19/05	17.25	12.19	
	10/18/05	17.72	11.72	
	1/23/05	15.65	13.79	
	4/12/06	12.33	17.11	
	7/10/06	16.58	12.86	
	10/16/06	18.33	11.11	
	1/26/07	19.21	10.23	
	4/18/07	18.58	10.86	
	8/2/07	19.02	10.42	
	10/23/07	Inaccessible		
1/30/08	18.63	10.81		
4/18/08	19.04	10.40		
7/28/08	Inaccessible			
<b>10/29/08</b>		<b>20.01</b>	<b>9.43</b>	

**TABLE ONE**  
**Groundwater Elevation Data**  
**Yee Property**  
**726 Harrison St., Oakland, CA**

Well ID	Date of Measurement	Top of Casing Elevation (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)	
<b>MW-3</b>	12/15/98	31.61*	17.26	14.35	
	3/4/99		15.47	16.14	
	6/17/99		16.92	14.69	
	8/27/99		17.40	14.21	
	12/9/99		18.01	13.60	
	3/7/00		16.15	15.46	
	6/7/00		16.85	14.76	
	10/11/00		18.07	13.54	
	1/18/01		17.89	13.72	
	4/5/01		16.21	15.40	
	7/17/01		16.90	14.71	
	10/5/01		28.64	17.32	11.32
	1/18/02			15.35	13.29
	4/11/02			15.82	12.82
	7/18/02	16.15		12.49	
	10/9/02	16.67		11.97	
	1/29/03	16.19		12.45	
	4/11/03	16.49		12.15	
	7/18/03	16.42		12.22	
	10/9/03	16.80		11.84	
	1/28/03	15.94		12.70	
	4/7/04	15.28		13.36	
	7/23/04	16.15		12.49	
	10/12/04	16.63	12.01		
	1/29/05	16.15	12.49		
	4/28/05	14.94	13.70		
	7/19/05	16.25	12.39		
	10/18/05	16.76	11.88		
	1/23/06	15.81	12.83		
	4/12/06	13.22	15.42		
	7/10/06	15.49	13.15		
	10/16/06	17.46	11.18		
	1/26/07	18.02	10.62		
	4/18/07	17.75	10.89		
	8/2/07	18.38	10.26		
	10/23/07	19.61	9.03		
1/30/08	17.65	10.99			
4/18/08	18.08	10.56			
7/28/08	18.77	9.87			
<b>10/29/08</b>		<b>19.14</b>	<b>9.50</b>		

**TABLE ONE**  
**Groundwater Elevation Data**  
**Yee Property**  
**726 Harrison St., Oakland, CA**

Well ID	Date of Measurement	Top of Casing Elevation (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
<b>MW-4</b>	12/15/98	32.53*	17.59	14.94
	3/4/99		15.88	16.65
	6/17/99		17.14	15.39
	8/27/99		17.65	14.88
	12/9/99		18.28	14.25
	3/7/00		15.41	17.12
	6/7/00		17.09	15.44
	10/11/00		18.33	14.20
	1/18/01		18.23	14.30
	4/5/01		16.69	15.84
	7/17/01	17.32	15.21	
	10/5/01	29.58	17.71	11.87
	1/18/02		15.85	13.73
	4/11/02		16.14	13.44
	7/18/02		16.56	13.02
	10/9/02		17.09	12.49
	1/29/03		16.65	12.93
	4/11/03		16.93	12.65
	7/18/03		16.78	12.80
	10/9/03		17.26	12.32
	1/28/04		16.38	13.20
	4/7/04	15.64	13.94	
	7/23/04	16.58	13.00	
	10/12/04		Inaccessible	
	1/29/05		14.90	14.68
	4/28/05		15.18	14.40
	7/19/05		16.48	13.10
	10/18/05		16.99	12.59
	1/23/06		15.09	14.49
	4/12/06		13.49	16.09
	7/10/06		14.99	14.59
	10/16/06		17.29	12.29
	1/26/07		18.17	11.41
4/18/07		18.06	11.52	
8/2/07		18.45	11.13	
10/23/07		18.99	10.59	
1/30/08		18.14	11.44	
4/18/08		18.49	11.09	
7/28/08		19.15	10.43	
<b>10/29/08</b>			<b>19.53</b>	<b>10.05</b>

**TABLE ONE**  
**Groundwater Elevation Data**  
**Yee Property**  
**726 Harrison St., Oakland, CA**

Well ID	Date of Measurement	Top of Casing Elevation (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
<b>MW-5</b>	8/29/01	29.06	17.42	11.64
	1/18/02		15.68	13.38
	4/11/02		16.17	12.89
	7/8/02		16.51	12.55
	10/9/02		17.10	11.96
	1/29/03		16.58	12.48
	4/11/03		16.87	12.19
	7/18/03		16.77	12.29
	10/9/03		17.21	11.85
	1/28/04		16.34	12.72
	4/7/04		15.38	13.68
	7/23/04		16.55	12.51
	10/12/04		17.02	12.04
	1/29/05		15.23	13.83
	4/28/05		15.41	13.65
	7/19/05		16.79	12.27
	10/18/05		17.28	11.78
	1/23/06		15.28	13.78
	4/12/06		13.66	15.40
	7/10/06		16.14	12.92
	10/16/06		19.33	9.73
	1/26/07		18.94	10.12
	4/18/07		18.21	10.85
	8/2/07		19.00	10.06
	10/23/07		19.15	9.91
	1/30/08		18.21	10.85
	4/18/08		18.61	10.45
7/28/08		19.23	9.83	
<b>10/29/08</b>			<b>19.62</b>	<b>9.44</b>

\* Top of casing elevation relative to arbitrary project datum

**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-1</b>						
7/3/97	18,000	2,700	350	450	900	7,400
12/5/98	18,000	1,500	270	260	560	14,000
3/4/99	44,000	2,800	400	440	960	43,000
6/17/99	33,000	2,200	250	460	660	25,000
8/27/99	6,000	1,000	97	190	230	14,000/ 16,000*
12/9/99	15,000	1,500	160	220	420	17,000
3/7/00	9,300	1,500	210	66	530	12,000
6/7/00	26,000**	1,700	< 250	360	580	30,000
10/11/00	13,000**	1,600	< 100	140	160	19,000
1/18/01	14,000**	450	< 100	110	230	9,600
4/5/01	38,000	2,200	180	290	590	35,000
7/17/01	35,000**	1,800	< 100	300	170	35,000
10/5/01	17,000	1,500	210	420	790	27,000
1/18/02	18,000	1,500	120	160	220	22,000
4/11/02	41,000	2,700	210	340	380	30,000
7/8/02	36,000	2,800	140	360	300	31,000
10/9/02	30,000	1,700	310	< 100	< 100	19,000
1/29/03	26,000	2,400	< 100	310	520	20,000
4/11/03	22,000	1,700	< 100	270	580	16,000
7/18/03	40,000	3,200	290	480	830	39,000
10/9/03	54,000**	3,300	< 130	350	310	49,000
1/28/04	26,000***	3,000	310	420	800	31,000
4/7/04	33,000***	2,800	130	310	310	39,000
7/23/04	56,000***	4,500	< 250	390	< 500	53,000
10/12/04	25,000***	1,400	< 250	< 250	< 500	25,000
1/29/05	24,000	1,600	< 100	160	< 200	19,000
4/28/05	< 10,000	2,000	< 100	160	100	34,000
7/19/05	37,000	2,100	83	210	230	28,000
10/18/05	37,000	1,300	< 250	< 250	< 250	23,000
1/24/06	23,000	780	< 100	160	260	11,000
4/12/06	11,000	1,500	87	360	670	17,000
7/10/06	72,000	4,700	< 250	350	< 500	66,000
10/16/06	26,000	1,600	< 250	330	< 500	22,000
1/26/07	7,200	1,500	< 70	140	96	34,000
4/18/07	5,400	1,100	< 50	200	120	21,000
8/2/07	6,600	1,500	64	240	190	32,000
10/23/07	5,900	1,300	52	200	180	28,000
1/30/08	2,700	300	21	64	90	5,200
4/18/08	3,800	930	41	110	130	15,000
7/28/08	6,000	900	52	140	160	10,000
<b>10/29/08</b>	<b>7,300</b>	<b>1,700</b>	<b>74</b>	<b>140</b>	<b>220</b>	<b>17,000</b>

**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-2</b>						
12/5/98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
3/4/99	Inaccessible due to car parked over well					
6/17/99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
8/27/99	Inaccessible due to car parked over well					
12/9/99	Inaccessible due to car parked over well					
3/7/00	Inaccessible due to car parked over well					
6/7/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
10/11/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
1/18/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
4/5/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
7/17/01	No longer sampled					
7/10/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	4.5
10/16/07	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.5
1/26/07	< 50	0.55	1.0	< 0.50	1.4	0.97
4/18/07	< 50	1.5	2.6	0.93	3.2	0.64
8/2/07	< 50	< 0.50	< 0.50	< 0.50	< 0.50	2.2
10/23/07	Inaccessible due to car parked over well					
1/30/08	< 50	< 0.50	< 0.50	< 0.50	< 0.50	300
4/18/08	< 50	< 0.50	< 0.50	< 0.50	< 0.50	40
7/28/08	Inaccessible due to car parked over well					
<b>10/29/08</b>	<b>&lt; 50</b>	<b>&lt; 0.50</b>	<b>&lt; 0.50</b>	<b>&lt; 0.50</b>	<b>&lt; 0.50</b>	<b>300</b>



**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-3</b>						
12/5/98	6,500	< 50	50	60	502	3,900
3/4/99	2,800	< 25	< 25	< 25	< 25	1,600
6/17/99	1,000	< 10	< 10	< 10	< 10	1,400
8/27/99	230	< 0.5	0.51	0.5	1	1,500/ 1,600*
12/9/99	870**	< 0.5	< 0.5	< 0.5	< 0.5	2,100
3/7/00	150**	4	< 0.5	< 0.5	< 0.5	830
6/7/00	140**	< 0.5	< 0.5	< 0.5	< 0.5	1,100
10/11/00	620**	< 5.0	< 5.0	< 5.0	< 5.0	1,500
1/18/01	1,200**	< 5.0	< 5.0	< 5.0	< 5.0	1,000
4/5/01	1,700**	< 5.0	< 5.0	< 5.0	< 5.0	1,900
7/17/01	1,400**	< 10	< 10	< 10	< 10	1,700
10/5/01	< 1,000	< 10	< 10	< 10	< 10	1,700
1/18/02	1,600	26	20	16	54	2,100
4/11/02	2,600	21	16	< 10	21	2,300
7/8/02	2,800	< 10	< 10	< 10	< 10	3,800
10/9/02	6,000	< 50	< 50	< 50	< 50	4,900
1/29/03	1,800	< 10	< 10	< 10	< 10	2,300
4/11/03	2,900	< 25	< 25	< 25	< 25	3,100
7/18/03	3,400	< 10	< 10	< 10	< 10	3,200
10/9/03	2,300	< 10	< 10	< 10	< 10	2,700
1/28/03	1,700**	< 10	< 10	< 10	< 10	2,900
4/7/04	2,700**	< 10	< 10	< 10	< 20	3,600
7/23/04	4,200**	< 25	< 25	< 25	< 50	4,900
10/12/04	5,000**	< 50	< 50	< 50	< 100	5,900
1/29/05	< 1,000	< 10	< 10	< 10	< 20	3,100
4/28/05	< 200	< 2.0	< 2.0	< 2.0	< 2.0	1,300
7/19/05	4,400	< 20	< 20	< 20	< 40	3,000
10/18/05	18,000	< 50	< 50	< 50	< 50	6,800
1/24/06	17,000	< 100	< 100	< 100	< 200	7,000
4/12/06	< 200	< 2.0	< 2.0	< 2.0	< 2.0	7,800
7/10/06	11,000	< 100	< 100	< 100	< 200	12,000
10/16/06	< 10,000	< 100	< 100	< 100	< 100	17,000
1/26/07	< 200	< 2.0	< 2.0	< 2.0	< 2.0	4,000
4/18/07	< 900	< 9.0	< 9.0	< 9.0	< 9.0	11,000
8/2/07	110	< 0.80	< 0.80	< 0.80	2.0	410
10/23/07	< 80	< 0.80	< 0.80	< 0.80	< 0.80	480
1/30/08	< 80	< 0.80	< 0.80	< 0.80	< 0.80	430
4/18/08	< 50	< 0.50	< 0.50	< 0.50	< 0.50	350
7/28/08	61	< 0.50	< 0.50	< 0.50	< 0.50	140
<b>10/29/08</b>	<b>120</b>	<b>&lt; 0.50</b>	<b>&lt; 0.50</b>	<b>&lt; 0.50</b>	<b>&lt; 0.50</b>	<b>640</b>

**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-4</b>						
12/5/98	880	3	< 0.5	< 0.5	< 0.5	950
3/4/99	3,800	< 25	< 25	< 25	< 25	3,700
6/17/99	2,700	< 25	< 25	< 25	< 25	2,700
8/27/99	440	4.7	1.1	0.58	1.3	1,600/ 1,700*
12/9/99	1,100**	< 2.5	< 2.5	< 2.5	< 2.5	1,700
3/7/00	< 250	< 2.5	< 2.5	< 2.5	< 2.5	1,700
6/7/00	530**	8.8	< 2.5	< 2.5	< 2.5	440
10/11/00	700**	3.9	< 2.5	< 2.5	< 2.5	680
1/18/01	2,000**	< 2.5	< 2.5	< 2.5	< 2.5	780
4/5/01	810**	< 2.5	< 2.5	< 2.5	< 2.5	620
7/17/01	880**	< 2.5	< 2.5	< 2.5	< 2.5	570
10/5/01	550**	< 2.5	< 2.5	< 2.5	< 2.5	710
1/18/02	960**	< 5.0	< 5.0	< 5.0	< 5.0	1,300
4/11/02	1,100**	< 5.0	< 5.0	< 5.0	< 5.0	550
7/8/02	1,200**	< 5.0	< 5.0	< 5.0	< 5.0	890
10/9/02	1,300**	< 5.0	< 5.0	< 5.0	< 5.0	880
1/29/03	530**	< 1.0	< 1.0	< 1.0	< 1.0	190
4/11/03	690**	< 2.5	< 2.5	< 2.5	< 2.5	310
7/18/03	1,600**	< 10	< 10	< 10	< 10	1,300
10/9/03	1500**	< 10	< 10	< 10	< 10	1,400
1/28/04	1,200**	< 10	< 10	< 10	< 10	1,900
4/7/04	1,900**	< 10	< 10	< 10	< 20	2,200
7/23/04	1,800**	< 10	< 10	< 10	< 20	1,600
10/12/04	Inaccessible due to car parked over well					
1/29/05	< 1,300	< 13	< 13	< 13	< 25	3,900
4/28/05	510	< 1.5	< 1.5	< 1.5	< 1.5	510
7/19/05	5,400	< 50	< 50	< 50	< 100	2,700
10/18/05	10,000	< 50	< 50	< 50	< 50	9,000
1/24/06	10,000	< 100	< 100	< 100	< 200	8,300
4/12/06	1,900	< 10	< 10	< 10	< 20	2,200
7/10/06	750	5.4	< 5.0	< 5.0	< 10	790
10/16/06	2,400	< 10	< 10	< 10	< 10	2,200
1/26/07	250	< 1.5	< 1.5	< 1.5	< 1.5	7,000
4/18/07	< 400	< 4.0	< 4.0	< 4.0	< 4.0	2,300
8/2/07	400	< 4.0	< 4.0	< 4.0	< 4.0	4,500
10/23/07	< 500	< 5.0	< 5.0	< 5.0	< 5.0	3,400
1/30/08	580	89	1.5	< 0.90	2.5	500
4/18/08	660	13	0.58	0.51	0.94	180
7/28/08	520	19	0.97	1.4	2.6	71
<b>10/29/08</b>	<b>480</b>	<b>38</b>	<b>1.8</b>	<b>4.5</b>	<b>4.3</b>	<b>420</b>

**TABLE THREE**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Yee Property**  
**726 Harrison St., Oakland, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-5</b>						
8/29/01	14,000	1,300	470	230	800	14,000
1/18/02	24,000	3,200	1,300	390	1,500	5,700
4/11/02	23,000	2,700	980	38	950	4,300
7/8/02	19,000	3,300	25	360	1,100	2,100
10/9/02	24,000	2,800	990	360	820	2,400
1/29/03	17,000	2,100	1,400	380	1,400	< 250
4/11/03	26,000	2,900	2,200	590	2,200	630
7/18/03	26,000	3,500	1,700	480	1,300	1,300
10/9/03	27,000	3,800	1,900	510	1,700	1,200
1/28/04	29,000	4,800	2,900	770	2,300	3,300
4/7/04	23,000	4,400	2,700	720	2,200	1,700
7/23/04	29,000	5,200	2,200	810	1,400	2,200
10/12/04	26,000	4,300	2,000	670	1,300	2,200
7/18/03	8,200	650	77	99	140	4,300
10/9/03	5,700**	500	28	53	35	3,600
1/28/04	17,000***	1,600	90	250	280	9,700
4/7/04			No longer sampled			
1/24/06	21,000	1,800	1,200	270	820	13,000
7/10/06	45,000	3,700	2,600	650	1,800	23,000
10/16/06	66,000	4,200	3,300	800	2,100	35,000
1/26/07	30,000	3,200	2,600	610	2,400	38,000
4/18/07	30,000	4,300	3,300	800	2,600	27,000
8/2/07	26,000	3,700	2,800	690	1,900	32,000
10/23/07	34,000	4,400	3,700	860	3,200	34,000
1/30/08	28,000	3,900	2,800	750	2,300	26,000
4/18/08	30,000	4,300	3,200	810	2,000	32,000
7/28/08	34,000	3,700	3,000	740	2,900	28,000
<b>10/29/08</b>	<b>29,000</b>	<b>3,300</b>	<b>2,900</b>	<b>680</b>	<b>2,800</b>	<b>27,000</b>
ESL	100	1	40	30	20	5

Notes:

\* EPA Method 8020/EPA Method 8260 (MTBE confirmation)

\*\* Hydrocarbon reported in the gasoline range does not match the laboratory gasoline standard

\*\*\* Sample contains a discrete peak in addition to gasoline

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (May 2007)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

Most current data is in **Bold**

Non-detectable concentrations noted by the less than sign (<) followed by the laboratory method reporting limit.

TABLE THREE  
Summary of Analytical Results for GROUNDWATER Samples  
Yee Property  
726 Harrison St., Oakland, CA  
All results are in parts per billion (ppb)

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
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