

C A M B R I A

Ro 484

July 1, 2005

Mr. Don Hwang  
Alameda County Environmental Health Services  
UST Local Oversight Program  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Alameda County  
JUL 08 2005  
Environmental Health

Re: **Second Quarter 2005 Monitoring Report**  
Former ARCO Service Station  
706 Harrison Street  
Oakland, California  
STID 3749  
Fuel Leak Case RO0000484  
Cambria Project #230-0116



Dear Mr. Hwang:

On behalf of Mr. Bo K. Gin, Cambria Environmental Technology, Inc. is submitting this *Second Quarter 2005 Monitoring Report* for the subject site. The report describes the second quarter 2005 activities and results as well as the anticipated third quarter 2005 activities.

If you have any questions or comments regarding this report, please call me at (510) 420-3314.

Sincerely,  
**Cambria Environmental Technology, Inc.**

Matthew A. Meyers  
Project Geologist

Attachments: *Second Quarter 2005 Monitoring Report*

cc: Mr. Bo K. Gin, 342 Lester Avenue, Oakland, California 94606  
Mr. Robert Kitay, Aqua Science Engineering, 208 W. Pintado Road, Danville, California 94526

**Cambria  
Environmental  
Technology, Inc.**

5900 Hollis Street  
Suite A  
Emeryville, CA 94608  
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SECOND QUARTER 2005 MONITORING REPORT

Former ARCO Service Station  
706 Harrison Street  
Oakland, California  
STID 3749  
Fuel Leak Case RO0000484

July 1, 2005

*Prepared for:*


Mr. Bo K. Gin  
342 Lester Avenue  
Oakland, California 94606

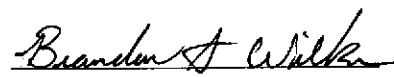
*Prepared by:*

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5900 Hollis Street, Suite A  
Emeryville, California 94608

*Written by:*



  
Matthew A. Meyers  
Project Geologist

  
Brandon S. Wilken, P.G.  
Project Geologist

Alameda County  
JUL 08 2005  
Environmental Health



## SECOND QUARTER 2005 MONITORING REPORT

Former ARCO Service Station  
706 Harrison Street  
Oakland, California  
STID 3749  
Fuel Leak Case RO0000484  
Cambria Project #230-0116

July 1, 2005

## INTRODUCTION



On behalf of Mr. Bo K. Gin, Cambria Environmental Technology, Inc. (Cambria) is submitting this *Second Quarter 2005 Monitoring Report* for the subject site. Presented below are the second quarter 2005 groundwater monitoring activities and results and the anticipated third quarter 2005 activities.

Figure 1 displays the groundwater elevation data and summarizes the hydrochemical data. Table 1 presents current and historical groundwater level measurements, calculated groundwater elevation data, and hydrochemical data. Appendix A contains the field data sheets for this monitoring event. Appendix B contains the laboratory analytical report. Appendix C contains benzene and MTBE concentration and groundwater elevation versus time graphs. Appendix D contains the GeoTracker electronic delivery confirmation documentation. Appendix E contains the joint monitoring groundwater elevation and analytical data for the neighboring former Shell Station.

## SECOND QUARTER 2005 ACTIVITIES

**Monitoring Activities**

*Field Activities:* On April 27, 2005, Muskan Environmental Sampling (MES) conducted quarterly monitoring and sampling activities. MES gauged water levels and collected groundwater samples from monitoring wells MW-1 through MW-7 (Figure 1) pursuant to the well sampling schedule. The groundwater depth measurements have been submitted to the GeoTracker database (Appendix D).

Prior to sampling, groundwater levels were gauged in the wells to evaluate groundwater elevation and flow patterns at the site. To facilitate groundwater sampling, MES purged approximately three well-casing volumes of groundwater prior to sampling. MES recorded groundwater pH, conductivity, temperature, and evaluated reading stabilization. Groundwater samples were collected using clean, disposable bailers and were decanted into the appropriate containers supplied by the analytical laboratory. Samples were labeled, placed in protective foam sleeves, stored on crushed ice at or below 4 degrees Celsius and transported under chain-of-custody protocol to the laboratory. Field data sheets are presented as Appendix A.

**Sample Analyses:** Groundwater samples from wells MW-1, MW-2, MW-4, MW-6, and MW-7 were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified United States Environmental Protection Agency (EPA) Method SW8015C; and benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) by EPA Method SW8021B. Samples from wells MW-4, MW-6, and MW-7 were analyzed for MTBE by EPA Method SW8260B to confirm detections by EPA Method SW8021B, particularly, anomalous detections in wells MW-6 and MW-7. The analytical laboratory report is included as Appendix B. Groundwater analytical results are shown on Table 1 and summarized on Figure 1. The groundwater analytical results have been submitted to the GeoTracker database (Appendix D).



### Monitoring Results

**Groundwater Gradient:** Based on depth-to-water measurements collected during the monitoring event on April 27, 2005, groundwater generally flows towards the south-southwest with a gradient of 0.012 feet per foot (Figure 1). The gradient and flow direction is consistent with historical data. Depth-to-water and groundwater elevation data for the site are presented in Table 1.

**Hydrocarbon Distribution in Groundwater:** Hydrocarbons were detected in wells MW-2 and MW-4 during this sampling event (Table 1). The highest TPHg and BTEX concentrations were detected in well MW-2 at 61,000 micrograms per liter ( $\mu\text{g/L}$ ), 2,800  $\mu\text{g/L}$ , 11,000  $\mu\text{g/L}$ , 1,600  $\mu\text{g/L}$ , and 7,000  $\mu\text{g/L}$ , respectively.

Hydrocarbon concentrations in onsite well MW-1, downgradient well MW-6, and crossgradient well MW-7 remained at or near laboratory detection limits. Hydrocarbon concentrations in source area well MW-2 continued to decline. Hydrocarbon concentrations in upgradient well MW-4 (TPHg at 3,000  $\mu\text{g/L}$ ; benzene at 520  $\mu\text{g/L}$ ; toluene at 100  $\mu\text{g/L}$ ; xylenes at 86  $\mu\text{g/L}$ ) are increasing (Table 1 and Appendix C).

**MTBE Distribution in Groundwater:** MTBE was detected in upgradient well MW-4 and crossgradient well MW-7 during this sampling event. The highest MTBE concentration was detected in upgradient well MW-4 at 480  $\mu\text{g/L}$ .

MTBE concentrations in upgradient well MW-4 remained stable. Crossgradient well MW-7 contained 1.3  $\mu\text{g/L}$  MTBE, which is the third quarter out of the last four quarters that MTBE has been detected in this well. However, no MTBE was detected in well MW-6 this quarter (Table 1 and Appendix C).

## CONCLUSIONS AND RECOMMENDATIONS

No anomalous hydrocarbon concentrations were detected in down/crossgradient well MW-6 during this sampling event. MTBE concentrations were detected in crossgradient well MW-7 in three out of the last four quarters. No MTBE has been observed in these wells since sampling began in 1994. Due to the present and historic groundwater flow directions, proximity of these wells to the former Unocal Station, and previous analytical results, it is Cambria's opinion that the hydrocarbons detected recently in wells MW-6 and MW-7 may be due to an offsite source. Cambria recommends continued groundwater monitoring to establish concentration trends.



The subject site's former underground storage tanks (USTs) were used from 1963 to 1985 and removed in 1991. Since the USTs were removed prior to the addition of MTBE to gasoline (1988), the concentrations of MTBE observed in site wells are likely from an offsite source. Since initiating joint monitoring with the adjacent former Shell Service Station, groundwater flow directions have consistently been toward the south-southwest. It is Cambria's opinion that the neighboring property's hydrocarbon and MTBE plume is migrating on to the subject site, as seen in well MW-4 laboratory results. Cambria understands that the neighboring property has undergone a transfer of ownership, which has postponed the initiation of remedial work. Cambria also understands that the transfer of ownership is now complete and that the property now has a functioning business operating on it. Several letters (dated December 11, 2003, April 6, 2004, July 26, 2004, and March 21, 2005) have been issued by the Alameda County Health Care Services Agency (ACHCSA) to the neighboring site requesting further remedial action. It is Cambria's opinion that these continued delays are directly impacting the subject site. Thus it is strongly requested that prompt remedial action be initiated on the neighboring upgradient property. If no action is taken, Cambria will pursue closure with ACHCSA and/or the State Water Resources Control Board (SWRCB).

## ANTICIPATED THIRD QUARTER 2005 ACTIVITIES

### Monitoring Activities

Cambria will gauge water levels in wells MW-1 through MW-7 and collect groundwater samples from wells MW-1 through MW-7. Pursuant to ACHCSA'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. However, due to recent detections of hydrocarbons and/or MTBE in wells MW-6 and MW-7, Cambria will resume quarterly sampling of these wells. Groundwater samples will be analyzed for TPHg by EPA Method SW8015C, and BTEX and MTBE by EPA Method SW8021B. Groundwater samples from wells MW-6 and MW-7 will be analyzed for MTBE by EPA Method SW8260B. Should MTBE be detected in other samples by EPA Method SW8021C, the detection

will be confirmed using EPA Method SW8260B. Cambria will prepare a groundwater monitoring report summarizing the monitoring activities and results.

## **Assessment Activities**

Cambria plans to submit a work plan that will propose the collection of post-remediation soil and groundwater samples from the former 6,000-gallon UST cavity and from the vicinity of MW-2.



## **ATTACHMENTS**

Figure 1 – Groundwater Elevation Contour and Hydrocarbon Concentration Map

Table 1 – Groundwater Elevations and Analytical Data

Appendix A – Groundwater Monitoring Field Data Sheets

Appendix B – Laboratory Analytical Report

Appendix C – Benzene and MTBE Concentration Graphs

Appendix D – GeoTracker Electronic Delivery Confirmations

Appendix E – Former Shell Station Groundwater Monitoring and Analytical Results

### EXPLANATION

- ◆ Monitoring well location
- ◆ Dual SVE/Sparging well
- SVE well location
- ◆ Shell Monitoring well location

14.00 Groundwater elevation contour, dashed where inferred

→ Groundwater flow direction and gradient (ft/ft)

Well ID  
ELEV  
TPHg  
Benzene  
MTBE

Well identification.  
Groundwater elevation, in feet above mean sea level (msl).  
TPHg, Benzene and MTBE concentrations are in micrograms per liter (µg/L)

NS Not sampled

NM Not measured

\* Anomalous data, not used in contouring

Shell Monitoring well locations were measured and sampled on April 28, 2005.

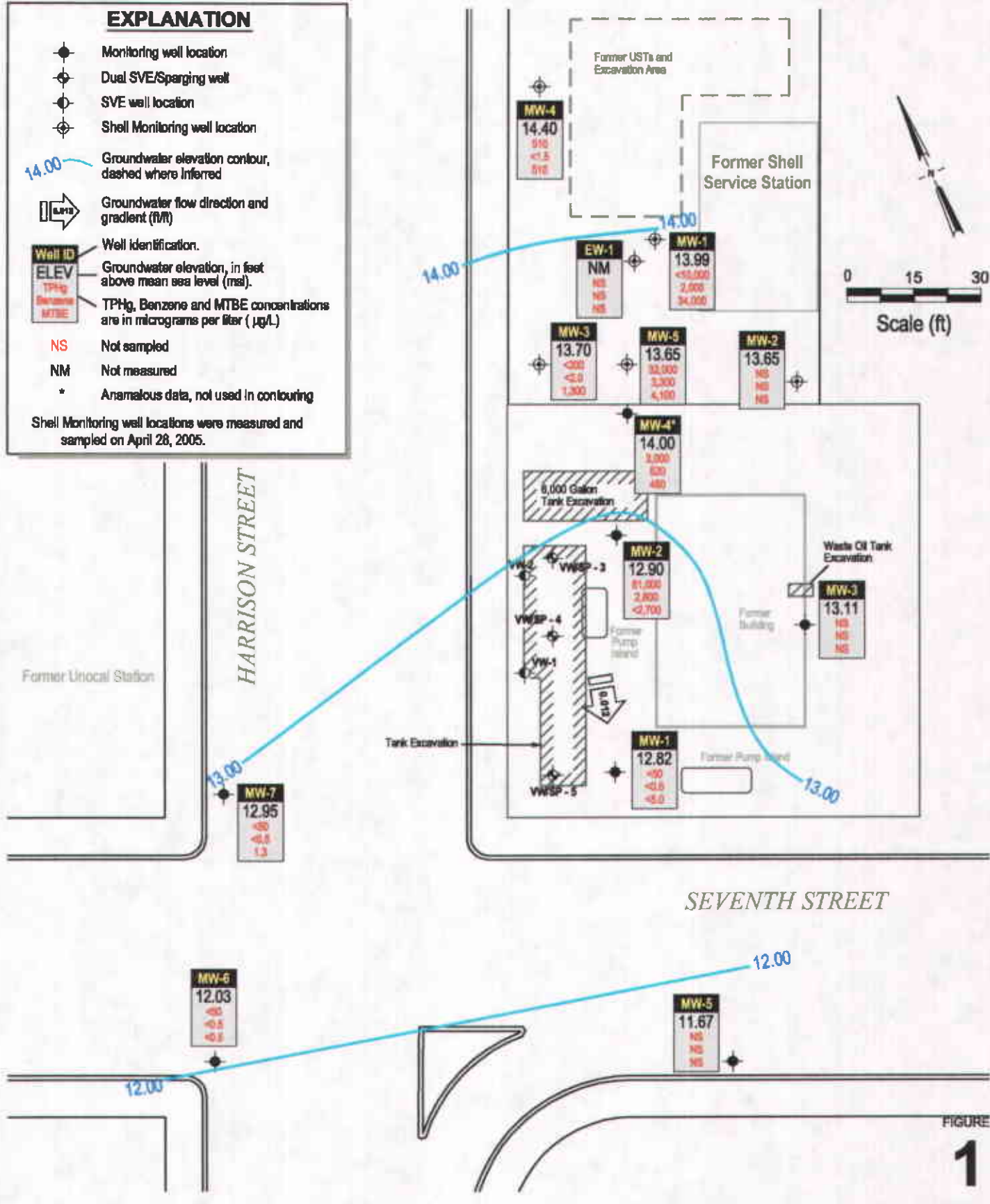


FIGURE 1

**Former Arco Station**  
706 Harrison Street  
Oakland, California



**Groundwater Elevation Contour and  
Hydrocarbon Concentration Map**

C A M B R I A

April 27, 2005

# CAMBRIA

**Table 1. Groundwater Elevations and Analytical Data:** Former ARCO Station - 706 Harrison Street, Oakland, California

Well ID	TOC	Depth to Water	Groundwater Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE by 8021C	MTBE by 8260B	Notes
Frequency	Date Sampled	(ft)	(ft-msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
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	-	-	
Quarterly	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	<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	<0.5	<10	5.7	a
	2/1/2002	16.93	12.22	640	220	1.7	4.7	0.57	<10	-	a
	5/10/2002	15.09	14.06	230	26	0.97	<0.5	<0.5	<5.0	-	a
	7/8/2002	15.20	13.95	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	
	10/2/2002	15.70	13.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	1/23/2003	15.09	14.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/29/2003	13.02	16.13	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
26.17	7/18/2003	14.50	11.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/9/2003	13.81	12.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	1/28/2004	13.09	13.08	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/7/2004	14.97	11.20	180	60	0.56	1.9	<0.5	<5.0	-	a
	7/23/2004	14.15	12.02	130	36	<0.5	0.65	<0.5	<5.0	-	a
	10/12/2004	16.30	9.87	<50	2.5	1.5	<0.5	0.86	<5.0	-	
	2/14/2005	13.85	12.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/27/2005	13.35	12.82	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	



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**Table 1. Groundwater Elevations and Analytical Data: Former ARCO Station - 706 Harrison Street, Oakland, California**

Well ID	TOC	Depth to	Groundwater						MTBE by	MTBE by	
Sampling		Water	Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	8021C	8260B	Notes
Frequency	Date Sampled	(ft)	(ft-msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-2	8/13/1993	17.05	13.46	34,000	6,800	10,000	740	3,900	-	-	
30.51	12/14/1993	18.28	12.23	16,000	3,200	4,200	500	1,700	-	-	
Quarterly	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	<200	-	b
	9/18/1997	17.63	12.88	110,000	9,400	23,000	2,600	13,000	<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	<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	<2,000	-	b, g
	2/4/1999	18.39	12.12	66,000	5,800	16,000	2,600	12,000	3,000	-	b, g
	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	<6,000	1,700	b, g
	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, g
	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, g
	4/16/2001	18.59	11.92	97,000	7,400	15,000	2,500	12,000	<3,000	<50	b, g
	8/14/2001	18.74	11.77	97,000	6,200	14,000	2,400	13,000	<250	<50	a, j
	10/22/2001	18.27	12.24	71,000	5,900	15,000	2,400	12,000	<1,400	150	a
	2/1/2002	18.05	12.46	1,400	11	88	44	210	<5.0	-	a
	5/10/2002	17.15	13.36	97,000	4,500	15,000	2,500	12,000	<3,000	-	a, g
	7/8/2002	15.30	15.21	42,000	2,100	6,500	2,200	8,800	<1,000	65	a
	10/2/2002	15.89	14.62	70,000	1,700	5,700	1,900	8,300	<1,700	-	a
	1/23/2003	17.51	13.00	40,000	1,900	7,800	1,200	5,600	<1,000	-	a
	4/29/2003	15.31	15.20	82,000	2,500	11,000	2,200	9,400	<2,000	-	a
27.53	7/18/2003	16.84	10.69	57,000	2,100	8,700	2,200	10,000	-	<50	a
	10/9/2003	16.05	11.48	49,000	1,800	7,000	1,700	7,600	<1,500	26	a
	1/28/2004	15.39	12.14	550	21	33	3.0	61	<100	-	a
	4/7/2004	16.01	11.52	41,000	2,500	11,000	1,900	8,000	<2,000	-	a
	7/23/2004	15.30	12.23	81,000	2,000	12,000	2,500	12,000	<2,000	-	a, h
	10/12/2004	17.87	9.66	75,000	2,600	13,000	2,300	11,000	<1,300	-	a
	2/14/2005	14.80	12.73	75,000	2,600	12,000	2,400	10,000	<1,800	-	a, h
	4/27/2005	14.63	12.90	61,000	2,800	11,000	1,600	7,000	<2,700	-	a

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**Table 1. Groundwater Elevations and Analytical Data:** Former ARCO Station - 706 Harrison Street, Oakland, California

Well ID	TOC	Depth to	Groundwater	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE by	MTBE by	Notes
Sampling	Date Sampled	Water	Elevation	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	8021C	8260B	
Frequency		(ft)	(ft-msl)						(µg/L)	(µg/L)	
MW-3	8/13/1993	17.05	12.72	<50	<0.50	<0.50	<0.50	<1.5	-	-	
29.77	12/14/1993	17.70	12.07	<50	<0.50	<0.50	<0.50	<1.5	-	-	
Semi-annually	4/15/1994	17.40	12.37	<50	<0.5	<0.5	<0.5	<0.5	-	-	
	12/29/1994	16.80	12.97	-	-	-	-	-	-	-	
	7/19/1996	16.28	13.49	<50	<0.5	<0.5	<0.5	<0.5	-	-	
	1/27/1997	13.83	15.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	6/18/1997	16.53	13.24	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	9/18/1997	17.07	12.70	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	12/10/1997	16.15	13.62	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	2/18/1998	11.80	17.97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/12/1998	13.85	15.92	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	8/18/1998	15.57	14.20	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/24/1998	16.04	13.73	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	2/4/1999	17.80	11.97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/18/1999	15.29	14.48	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	8/27/1999	16.15	13.62	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/18/1999	16.77	13.00	-	-	-	-	-	-	-	
	2/29/2000	13.71	16.06	<50	2	<0.5	<0.5	<0.5	<5.0	-	
	5/25/2000	15.46	14.31	-	-	-	-	-	-	-	
	8/9/2000	16.46	13.31	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/9/2000	16.25	13.52	-	-	-	-	-	-	-	
	1/29/2001	16.52	13.25	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/16/2001	16.95	12.82	-	-	-	-	-	-	-	
	8/14/2001	17.11	12.66	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/22/2001	16.50	13.27	-	-	-	-	-	-	-	
	2/1/2002	16.90	12.87	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/10/2002	15.03	14.74	-	-	-	-	-	-	-	
	7/8/2002	14.45	15.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/2/2002	15.03	14.74	-	-	-	-	-	-	-	
	1/23/2003	15.48	14.29	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/29/2003	12.49	17.28	-	-	-	-	-	-	-	
26.79	7/18/2003	14.80	11.99	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/9/2003	14.13	12.66	-	-	-	-	-	-	-	
	1/28/2004	13.47	13.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/7/2004	15.41	11.38	-	-	-	-	-	-	-	
	7/23/2004	14.54	12.25	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/12/2004	16.58	10.21	-	-	-	-	-	-	-	
	2/14/2005	14.19	12.60	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/27/2005	13.68	13.11	-	-	-	-	-	-	-	

# CAMBRIA

**Table 1. Groundwater Elevations and Analytical Data:** Former ARCO Station - 706 Harrison Street, Oakland, California

Well ID	TOC	Depth to	Groundwater	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE by	MTBE by	Notes
Sampling	Date Sampled	Water	Elevation	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	8021C	8260B	
Frequency		(ft)	(ft-msl)						(µg/L)	(µg/L)	
MW-4	12/16/1994	18.10	13.08	2,500	32	6.5	4.5	17	-	-	
31.18	12/29/1994	17.95	13.23	-	-	-	-	-	-	-	
Quarterly	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	<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	<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	<25	16	a
	2/1/2002	19.05	12.13	2,600	25	43	21	280	<5.0	-	a
	5/10/2002	17.69	13.49	490	3.5	2.0	2.1	2.2	<5.0	-	a
	7/8/2002	15.75	15.43	170	0.51	0.62	1.6	1.2	<5.0	2.0	m
	10/2/2002	16.30	14.88	240	1.7	2.0	2.2	0.88	<5.0	-	a
	1/23/2003	17.74	13.44	<50	0.52	4.1	<0.5	1.9	<5.0	-	
	4/29/2003	15.47	15.71	1,300	75	4.8	21	7.3	130	120	a
28.20	7/18/2003	17.08	11.12	<50	<0.5	<0.5	<0.5	<0.5	-	0.74	a
	10/9/2003	16.25	11.95	210	4.7	0.57	1.6	1.1	<10	10	a
	1/28/2004	15.65	12.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	a
	4/7/2004	16.49	11.71	-	-	-	-	-	-	-	
	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	<0.5	<0.5	0.97	<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

# CAMBRIA

**Table 1. Groundwater Elevations and Analytical Data:** Former ARCO Station - 706 Harrison Street, Oakland, California

Well ID	TOC	Depth to Water	Groundwater Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE by 8021C	MTBE by 8260B	Notes
Frequency	Date Sampled	(ft)	(ft-msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-5	12/16/1994	16.07	11.97	<50	1.1	<0.5	<0.5	2.4	-	-	
28.04	12/29/1994	16.10	11.94	-	-	-	-	-	-	-	
Semi-annually	7/19/1996	15.49	12.55	<50	<0.5	<0.5	<0.5	<0.5	-	-	
	1/27/1997	13.60	14.44	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	6/18/1997	15.55	12.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	9/18/1997	16.16	11.88	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	12/10/1997	15.41	12.63	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	2/18/1998	10.93	17.11	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/12/1998	13.25	14.79	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	8/18/1998	14.75	13.29	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/24/1998	15.15	12.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	2/4/1999	14.61	13.43	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/18/1999	14.15	13.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	8/27/1999	15.43	12.61	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/18/1999	15.97	12.07	-	-	-	-	-	-	-	
	2/29/2000	13.16	14.88	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/25/2000	14.72	13.32	-	-	-	-	-	-	-	
	8/9/2000	15.68	12.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/9/2000	15.39	12.65	-	-	-	-	-	-	-	
	1/29/2001	15.97	12.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/16/2001	16.24	11.80	-	-	-	-	-	-	-	
	8/14/2001	17.39	10.65	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/22/2001	15.90	12.14	-	-	-	-	-	-	-	
	2/1/2002	16.55	11.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/10/2002	15.12	12.92	-	-	-	-	-	-	-	
	7/8/2002	15.92	12.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/2/2002	16.42	11.62	-	-	-	-	-	-	-	
	1/23/2003	14.90	13.14	<50	20	<0.5	<0.5	<0.5	<5.0	-	
	4/29/2003	12.05	15.99	-	-	-	-	-	-	-	
25.07	7/18/2003	14.28	10.79	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/9/2003	13.36	11.71	-	-	-	-	-	-	-	
	1/28/2004	12.68	12.39	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/7/2004	14.71	10.36	-	-	-	-	-	-	-	
	7/23/2004	13.49	11.58	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	i
	10/12/2004	15.88	9.19	-	-	-	-	-	-	-	
	2/14/2005	13.22	11.85	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	i
	4/27/2005	13.40	11.67	-	-	-	-	-	-	-	

# CAMBRIA

**Table 1. Groundwater Elevations and Analytical Data:** Former ARCO Station - 706 Harrison Street, Oakland, California

Well ID	TOC	Depth to Water	Groundwater Elevation	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE by 8021C	MTBE by 8260B	Notes
Frequency	Date Sampled	(ft)	(ft-msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-6	12/16/1994	17.74	11.36	-	-	-	-	-	-	-	
29.10	12/29/1994	17.40	11.70	-	-	-	-	-	-	-	
Semi-annually	7/19/1996	16.60	12.50	<50	<0.5	<0.5	<0.5	<0.5	-	-	
	1/27/1997	14.88	14.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	6/18/1997	16.73	12.37	51	22	<0.5	<0.5	<0.5	<5.0	-	c
	9/18/1997	17.24	11.86	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	12/10/1997	16.56	12.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	2/18/1998	12.93	16.17	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/12/1998	14.35	14.75	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	8/18/1998	15.94	13.16	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/24/1998	16.46	12.64	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	2/4/1999	18.25	10.85	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/18/1999	15.73	13.37	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	8/27/1999	15.64	13.46	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/18/1999	17.04	12.06	-	-	-	-	-	-	-	
	2/29/2000	14.55	14.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/25/2000	15.86	13.24	-	-	-	-	-	-	-	
	8/9/2000	16.80	12.30	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/9/2000	16.60	12.50	-	-	-	-	-	-	-	
	1/29/2001	17.00	12.10	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/16/2001	17.15	11.95	-	-	-	-	-	-	-	
	8/14/2001	17.30	11.80	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/22/2001	17.13	11.97	-	-	-	-	-	-	-	
	2/1/2002	16.57	12.53	70	37	<0.5	<0.5	<0.5	<5.0	-	a
	5/10/2002	15.25	13.85	-	-	-	-	-	-	-	
	7/8/2002	15.79	13.31	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/2/2002	16.38	12.72	-	-	-	-	-	-	-	
	1/23/2003	16.03	13.07	<50	21	<0.5	<0.5	<0.5	<5.0	-	
	4/29/2003	14.19	14.91	-	-	-	-	-	-	-	
26.13	7/18/2003	15.47	10.66	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/9/2003	14.73	11.40	-	-	-	-	-	-	-	
	1/28/2004	14.05	12.08	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/7/2004	14.41	11.72	-	-	-	-	-	-	-	
	7/23/2004	15.15	10.98	3,300	1,300	<5.0	52	9.7	<50	-	a
	10/12/2004	17.29	8.84	-	-	-	-	-	-	-	
	2/14/2005	14.60	11.53	350	160	<0.5	<0.5	<0.5	<25	2.0	a,j
	4/27/2005	14.10	12.03	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	

# CAMBRIA

**Table 1. Groundwater Elevations and Analytical Data: Former ARCO Station - 706 Harrison Street, Oakland, California**

Well ID	TOC	Depth to	Groundwater	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE by	MTBE by	Notes
Sampling	Date Sampled	Water	Elevation	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	8021C	8260B	
Frequency		(ft)	(ft-msl)						(µg/L)	(µg/L)	
MW-7	12/16/1994	17.07	12.60	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
29.67	12/29/1994	17.65	12.02	-	-	-	-	-	-	-	
Semi-annually	7/19/1996	16.44	13.23	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	1/27/1997	15.09	14.58	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	6/18/1997	16.59	13.08	73	<0.5	0.55	<0.5	<0.5	<5.0	-	d
	9/18/1997	17.06	12.61	94	<0.5	<0.5	<0.5	<0.5	<5.0	-	b, f
	12/10/1997	16.58	13.09	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	2/18/1998	12.60	17.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/12/1998	14.81	14.86	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	8/18/1998	15.67	14.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/24/1998	16.30	13.37	200	<0.5	<0.5	<0.5	<0.5	<5.0	-	d
	2/4/1999	15.99	13.68	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/18/1999	15.42	14.25	200	<0.5	<0.5	<0.5	<0.5	<5.0	-	d
	8/27/1999	16.35	13.32	140	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/18/1999	16.81	12.86	--	--	--	--	--	--	--	
	2/29/2000	14.16	15.51	100	<0.5	<0.5	<0.5	<0.5	<5.0	-	f
	5/25/2000	15.54	14.13	--	--	--	--	--	--	--	
	8/9/2000	16.56	13.11	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	11/9/2000	16.45	13.22	-	-	-	-	-	-	-	
	1/29/2001	16.92	12.75	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/16/2001	17.03	12.64	-	-	-	-	-	-	-	
	8/14/2001	17.27	12.40	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/22/2001	16.95	12.72	-	-	-	-	-	-	-	
	2/1/2002	16.14	13.53	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	5/10/2002	15.30	14.37	-	-	-	-	-	-	-	
	7/8/2002	15.73	13.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/2/2002	16.24	13.43	-	-	-	-	-	-	-	
	1/23/2003	15.70	13.97	<50	23	<0.5	<0.5	<0.5	<5.0	-	
	4/29/2003	12.68	16.99	-	-	-	-	-	-	-	
26.70	7/18/2003	15.19	11.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	10/9/2003	14.45	12.25	-	-	-	-	-	-	-	
	1/28/2004	13.88	12.82	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	4/7/2004	15.71	10.99	-	-	-	-	-	-	-	
	7/23/2004	14.85	11.85	<50	<0.5	<0.5	<0.5	<0.5	130	120	
	10/12/2004	16.90	9.80	-	-	-	-	-	-	-	
	2/14/2005	14.42	12.28	<50	<0.5	<0.5	<0.5	<0.5	190	200	
	4/27/2005	13.75	12.95	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.3	

# CAMBRIA

**Table 1. Groundwater Elevations and Analytical Data:** Former ARCO Station - 706 Harrison Street, Oakland, California

Well ID	TOC Sampling Frequency	Date Sampled	Depth to Water (ft)	Groundwater Elevation (ft-msl)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE by 8021C (µg/L)	MTBE by 8260B (µg/L)	Notes
VW-3	-	3/6/2003	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	i
		3/25/2003	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	i
VW-4	-	3/6/2003	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
		3/25/2003	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
Trip Blank	-	11/9/2000	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
		2/14/2005	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	

**Abbreviations and Analyses:**

TOC = Top of casing elevation, measured in feet, relative to mean sea level  
 ft = Measured in feet  
 ft-msl = Measured in feet relative to mean sea level  
 TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015C  
 Benzene, ethylbenzene, toluene and xylenes by EPA Method 8021B.  
 MTBE = Methyl tertiary butyl ether by EPA Method 8021B and/or 8260B.  
 µg/L = Micrograms per liter  
 - = Not sampled, not analyzed, or not applicable  
 Data prior to 12/16/94 provided by previous consultant.  
 Wells were re-surveyed on October 27, 2003 to City of Oakland benchmark 25A.

**Notes**

a = Analytical laboratory notes that unmodified or weakly modified gasoline is significant.  
 b = Analytical laboratory notes that heavier gasoline range compounds are significant.  
 c = Analytical laboratory notes that lighter gasoline range compounds are significant.  
 d = Analytical laboratory notes that isolated peaks are present.  
 f = Analytical laboratory notes hydrocarbons with no recognizable patterns are present.  
 g = Analytical laboratory notes lighter than water immiscible sheen is present.  
 h = Analytical laboratory notes lighter than water immiscible sheen/product is present  
 j = Analytical laboratory notes that sample was diluted due to high organic content.  
 i = Analytical laboratory notes that sample contains greater than ~1-2 vol. % sediment.

# **APPENDIX A**

Groundwater Monitoring Field Data Sheets





## WELL GAUGING SHEET

Client: Cambria Environmental Technology

Site

Address: 706 Harrison Street Oakland, CA


Date: 4/27/2005

Signature: 

Well ID	Time	Depth to SPH	Depth to Water	SPH Thickness	Depth to Bottom	Comments
MW-1	1:20		13.35		24.46	
MW-2	1:30		14.63		25.39	
MW-3	1:15		13.68		27.72	
MW-4	1:25		14.20		25.61	
MW-5	1:10		13.40		27.89	
MW-6	1:00		14.10		25.93	
MW-7	1:05		13.75		27.74	

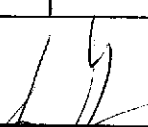


## WELL SAMPLING FORM

<b>Date:</b>		4/27/2005							
<b>Client:</b>		Cambria Environmental Technology							
<b>Site Address:</b>		706 Harrisons Street Oakland, CA							
<b>Well ID:</b>		MW-1							
<b>Well Diameter:</b>		2"							
<b>Purging Device:</b>		Disposable Bailer							
<b>Sampling Method:</b>		Disposable Bailer							
<b>Total Well Depth:</b>		24.46		<b>Fe=</b>		mg/L			
<b>Depth to Water:</b>		13.35		<b>ORP=</b>		mV			
<b>Water Column Height:</b>		11.11		<b>DO=</b>		mg/L			
<b>Gallons/ft:</b>		0.16		<b>COMMENTS:</b> Turbid					
<b>1 Casing Volume (gal):</b>		1.78							
<b>3 Casing Volumes (gal):</b>		5.33							
<b>TIME:</b>	<b>CASING VOLUME (gal)</b>	<b>TEMP (Celsius)</b>	<b>pH</b>						
4:05	1.8	21.3	7.09	1091					
4:10	3.6	21.6	7.03	975					
4:15	5.3	21.5	7.06	982					
<b>Sample ID:</b>	<b>Date:</b>	<b>Time</b>	<b>Container Type</b>	<b>Preservative</b>	<b>Analytes</b>	<b>Method</b>			
MW-1	4/27/2005	4:20	VOA	HCl, ICE	TPHg, BTEX, MTBE	8015, 8020			
				<b>Signature:</b>					



## WELL SAMPLING FORM

<b>Date:</b>		4/27/2005				
<b>Client:</b>		Cambria Environmental Technology				
<b>Site Address:</b>		706 Harrisons 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>		25.39		<b>Fe=</b> mg/L		
<b>Depth to Water:</b>		14.63		<b>ORP=</b> mV		
<b>Water Column Height:</b>		10.76		<b>DO=</b> mg/L		
<b>Gallons/ft:</b>		0.16				
<b>1 Casing Volume (gal):</b>		1.72		<b>COMMENTS:</b> Very turbid, black silt		
<b>3 Casing Volumes (gal):</b>		5.16				
<b>TIME:</b>	<b>CASING VOLUME (gal)</b>	<b>TEMP (Celsius)</b>	<b>pH</b>			<b>COND. (µS)</b>
5:25	1.7	22.6	6.99			741
5:30	3.4	22.6	7.02			729
5:35	5.2	22.5	7.00	713		
<b>Sample ID:</b>	<b>Date:</b>	<b>Time</b>	<b>Container Type</b>	<b>Preservative</b>	<b>Analytes</b>	<b>Method</b>
MW-2	4/27/2005	5:40	VOA	HCl, ICE	TPHg, BTEX, MTBE	8015, 8020
				<b>Signature:</b>		

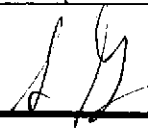


## WELL SAMPLING FORM

<b>Date:</b>		4/27/2005				
<b>Client:</b>		Cambria Environmental Technology				
<b>Site Address:</b>		706 Harrison's 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>		25.61	<b>Fe=</b> mg/L			
<b>Depth to Water:</b>		14.20	<b>ORP=</b> mV			
<b>Water Column Height:</b>		11.41	<b>DO=</b> mg/L			
<b>Gallons/ft:</b>		0.16				
<b>1 Casing Volume (gal):</b>		1.83	<b>COMMENTS:</b> Turbid			
<b>3 Casing Volumes (gal):</b>		5.48				
<b>TIME:</b>	<b>CASING VOLUME (gal)</b>	<b>TEMP (Celsius)</b>			<b>pH</b>	<b>COND. (µS)</b>
4:40	1.8	22.9			7.03	638
4:50	3.7	22.6	7.07	671		
4:55	5.5	22.4	7.05	651		
<b>Sample ID:</b>	<b>Date:</b>	<b>Time</b>	<b>Container Type</b>	<b>Preservative</b>	<b>Analytes</b>	<b>Method</b>
MW-4	4/27/2005	5:00	VOA	HCl, ICE	TPHg, BTEX, MTBE	8015, 8020, 8260
				<b>Signature:</b>		



## WELL SAMPLING FORM

Date:	4/27/2005					
Client:	Cambria Environmental Technology					
Site Address:	706 Harrisons Street Oakland, CA					
Well ID:	MW-6					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	25.93	Fe=	mg/L			
Depth to Water:	14.10	ORP=	mV			
Water Column Height:	11.83	DO=	mg/L			
Gallons/ft:	0.16					
1 Casing Volume (gal):	1.89	<b>COMMENTS:</b> Turbid				
3 Casing Volumes (gal):	5.68					
TIME:	CASING VOLUME (gal)		TEMP (Celsius)	pH	COND. (µS)	
2:15	1.9		22.8	7.14	1130	
2:20	3.8	22.9	7.19	1075		
2:25	5.7	22.9	7.16	1092		
Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-6	4/27/2005	2:30	VOA	HCl, ICE	TPHg, BTEX, MTBE	8015, 8020, 8260
						Signature: 



## WELL SAMPLING FORM

<b>Date:</b> 4/27/2005						
<b>Client:</b> Cambria Environmental Technology						
<b>Site Address:</b> 706 Harrisons Street Oakland, CA						
<b>Well ID:</b> MW-7						
<b>Well Diameter:</b> 2"						
<b>Purging Device:</b> Disposable Bailer						
<b>Sampling Method:</b> Disposable Bailer						
<b>Total Well Depth:</b>	27.74					
<b>Depth to Water:</b>	13.75					
<b>Water Column Height:</b>	13.99					
<b>Gallons/ft:</b>	0.16					
<b>1 Casing Volume (gal):</b>	2.24					
<b>3 Casing Volumes (gal):</b>	6.72					
<b>Fe=</b> mg/L						
<b>ORP=</b> mV						
<b>DO=</b> mg/L						
<b>COMMENTS:</b> Turbid						
<b>TIME:</b>	<b>CASING VOLUME (gal)</b>	<b>TEMP (Celsius)</b>	<b>pH</b>	<b>COND. (µS)</b>		
3:25	2.2	22.6	7.29	633		
3:30	4.5	22.9	7.24	679		
3:35	6.7	22.8	7.21	674		
<b>Sample ID:</b>	<b>Date:</b>	<b>Time</b>	<b>Container Type</b>	<b>Preservative</b>	<b>Analytes</b>	<b>Method</b>
MW-7	4/27/2005	3:40	VOA	HCl, ICE	TPHg, BTEX, MTBE	8015, 8020, 8260
				<b>Signature:</b>		

## **APPENDIX B**

Laboratory Analytical Report



# McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560  
Telephone : 925-798-1620 Fax : 925-798-1622  
Website: www.mccampbell.com E-mail: main@mccampbell.com

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #230-0116; Bo Gin	Date Sampled: 04/27/05
		Date Received: 04/28/05
	Client Contact: Matt Meyers	Date Reported: 05/03/05
	Client P.O.:	Date Completed: 05/03/05

**WorkOrder: 0504419**

May 03, 2005

Dear Matt:

Enclosed are:

- 1). the results of 5 analyzed samples from your #230-0116; Bo Gin project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill 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 please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager





# McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560  
 Telephone : 925-798-1620 Fax : 925-798-1622  
 Website: www.mccampbell.com E-mail: main@mccampbell.com

Cambria Env. Technology  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #230-0116; Bo Gin	Date Sampled: 04/27/05
		Date Received: 04/28/05
	Client Contact: Matt Meyers	Date Extracted: 04/29/05
	Client P.O.:	Date Analyzed: 04/29/05

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0504419

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	ND	ND	ND	ND	ND	ND	1	95
002A	MW-2	W	61,000,a	ND<2700	2800	11,000	1600	7000	50	105
003A	MW-4	W	3000,a	600	520	100	27	86	10	106
004A	MW-6	W	ND	ND	ND	ND	ND	ND	1	95
005A	MW-7	W	ND	ND	ND	ND	ND	ND	1	98

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	NA	1	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.

*O.C.R.* Angela Rydelius, Lab Manager



# McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560  
Telephone : 925-798-1620 Fax : 925-798-1622  
Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Cambria Env. Technology  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #230-0116; Bo Gin	Date Sampled: 04/27/05
		Date Received: 04/28/05
	Client Contact: Matt Meyers	Date Extracted: 04/29/05
	Client P.O.:	Date Analyzed: 04/29/05

### Methyl tert-Butyl Ether\*

Extraction method: SW5030B

Analytical methods: SW8260B

Work Order: 0504419

Lab ID	Client ID	Matrix	Methyl-t-butyl ether (MTBE)	DF	% SS
003B	MW-4	W	480	20	92
004B	MW-6	W	ND	1	95
005B	MW-7	W	1.3	1	95

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	0.5	µg/L
	S	NA	NA

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0504419

EPA Method: SW8021B/8015Cm		Extraction: SW5030B			BatchID: 16016			Spiked Sample ID: 0504413-007A		
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	LCS / LCSD
TPH(btex) <sup>£</sup>	ND	60	100	101	0.476	95.6	93.8	1.87	70 - 130	70 - 130
MTBE	ND	10	96.3	91.8	4.74	94.5	88	7.08	70 - 130	70 - 130
Benzene	ND	10	98.6	100	1.50	101	96.5	4.94	70 - 130	70 - 130
Toluene	ND	10	106	105	0.840	100	95.4	5.24	70 - 130	70 - 130
Ethylbenzene	ND	10	112	115	2.55	107	102	4.92	70 - 130	70 - 130
Xylenes	ND	30	100	100	0	95.3	90.7	5.02	70 - 130	70 - 130
%SS:	97	10	110	106	3.57	108	110	1.84	70 - 130	70 - 130

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

BATCH 16016 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0504419-001A	4/27/05 4:20 PM	4/29/05	4/29/05 1:34 AM	0504419-002A	4/27/05 5:40 PM	4/29/05	4/29/05 3:44 AM
0504419-003A	4/27/05 5:00 PM	4/29/05	4/29/05 5:21 AM	0504419-004A	4/27/05 2:30 PM	4/29/05	4/29/05 4:16 AM
0504419-005A	4/27/05 3:40 PM	4/29/05	4/29/05 4:49 AM				

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 applicable or 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.



**QC SUMMARY REPORT FOR SW8260B**

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0504419

EPA Method: SW8260B		Extraction: SW5030B			BatchID: 16017			Spiked Sample ID: 0504403-002A		
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	LCS / LCSD
Methyl-t-butyl ether (MTBE)	ND	10	119	119	0	107	116	8.07	70 - 130	70 - 130
%SS1:	107	10	102	101	0.708	102	102	0	70 - 130	70 - 130

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

**BATCH 16017 SUMMARY**

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0504419-003B	4/27/05 5:00 PM	4/29/05	4/29/05 3:40 PM	0504419-004B	4/27/05 2:30 PM	4/29/05	4/29/05 2:15 PM
0504419-005B	4/27/05 3:40 PM	4/29/05	4/29/05 2:57 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.

**McCampbell Analytical, Inc.**



110 Second Avenue South, #D7  
Pacheco, CA 94553-5560  
(925) 798-1620

# CHAIN-OF-CUSTODY RECORD

**WorkOrder:** 0504419

**ClientID:** CETE

**Report to:**

Matt Meyers  
Cambria Env. Technology  
5900 Hollis St, Suite A  
Emeryville, CA 94608

TEL: (510) 420-0700  
FAX: (510) 420-9170  
ProjectNo: #230-0116; Bo Gin  
PO:

**Bill to:**

Accounts Payable  
Cambria Env. Technology  
5900 Hollis St, Ste. A  
Emeryville, CA 94608

**Requested TAT:**

**5 days**

**Date Received:** 04/28/2005

**Date Printed:** 04/28/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
0504419-001	MW-1	Water	4/27/05 4:20:00 PM	<input type="checkbox"/>		A		A												
0504419-002	MW-2	Water	4/27/05 5:40:00 PM	<input type="checkbox"/>		A														
0504419-003	MW-4	Water	4/27/05 5:00:00 PM	<input type="checkbox"/>		A	B													
0504419-004	MW-6	Water	4/27/05 2:30:00 PM	<input type="checkbox"/>		A	B													
0504419-005	MW-7	Water	4/27/05 3:40:00 PM	<input type="checkbox"/>		A	B													

**Test Legend:**

1	G-MBTEX_W	2	MTBE_W	3	PREDF REPORT	4		5	
6		7		8		9		10	
11		12		13		14		15	

**Prepared by:** Melissa Valles

**Comments:**

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

cete

050449

### McCAMPBELL ANALYTICAL, INC.

110 2<sup>nd</sup> AVENUE SOUTH, #D7  
PACHECO, CA 94553-5560

Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)

Telephone: (925) 798-1620

Fax: (925) 798-1622

### CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH  24 HR  48 HR  72 HR  5 DA

EDF Required?  Yes  No

Report To: Matt Meyers Bill To: Cambria Environmental Tech.

Company: Cambria Environmental Technology

5900 Hollis Street

Emeryville, CA 94608

E-Mail: mmeyers@cambria-env.com

Tele: 510-420-3314

Fax: 510-420-9170

Project #: 230-0116

Project Name: BaGrin

Project Location: 706 Harrison Street Oakland, CA

Sampler Signature: J. Muskan Environmental Sampling

#### Analysis Request

Other

Comment

MTBE / BTEX & TPH as Gas (802 / 8021 + 8015)	
MTBE / BTEX ONLY (EPA 602 / 8021)	
TPH as Diesel / Motor Oil (8015)	
Total Petroleum Oil & Grease (1664 / 5530 E/B&F)	
Total Petroleum Hydrocarbons (418.1)	
EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	
EPA 505 / 608 / 8081 (CI Pesticides)	
EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	
EPA 507 / 8141 (NP Pesticides)	
EPA 515 / 8151 (Acidic CI Herbicides)	
EPA 524.2 / 624 / 8260 (VOCs)	
Fuel Additives (MTBE, ETBE, FAME, DIPE, TBA, 1,2 - DCA, 1,2 - EDB, ethanol) by 8260B	
<u>MTBE by 8260</u>	

Filter Samples for Metals analysis: Yes / No

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED					
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO <sub>3</sub>	Other		
MW-1		4/27/05	4:20	3	VOL	X					X	X				
MW-2			5:40	3							X					
MW-4			5:00	3							X					
MW-6			2:30	3							X					
MW-7			3:40	3							X					
TR		X		1	X	X										

Hold

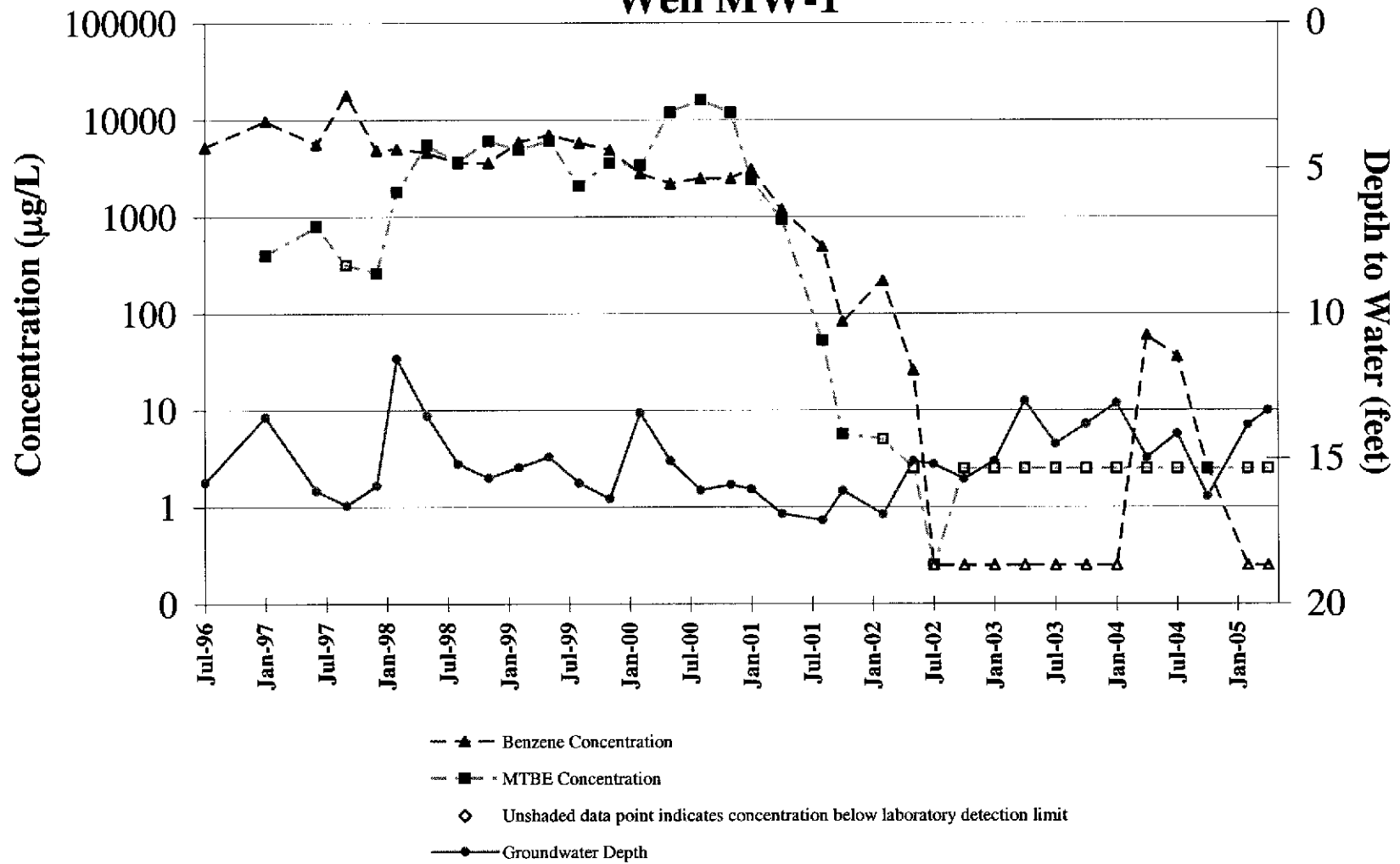
ICB/GOOD CONDITION   
 HEAD SPACE ABSENT   
 DECHLORINATED IN LAB   
 PRESERVATION  VOCs  O&G  METALS  OTHER

Relinquished By: <u>[Signature]</u>	Date: <u>1050</u>	Time: <u>0428</u>	Received By: <u>[Signature]</u>
Relinquished By:	Date:	Time:	Received By:

## **APPENDIX C**

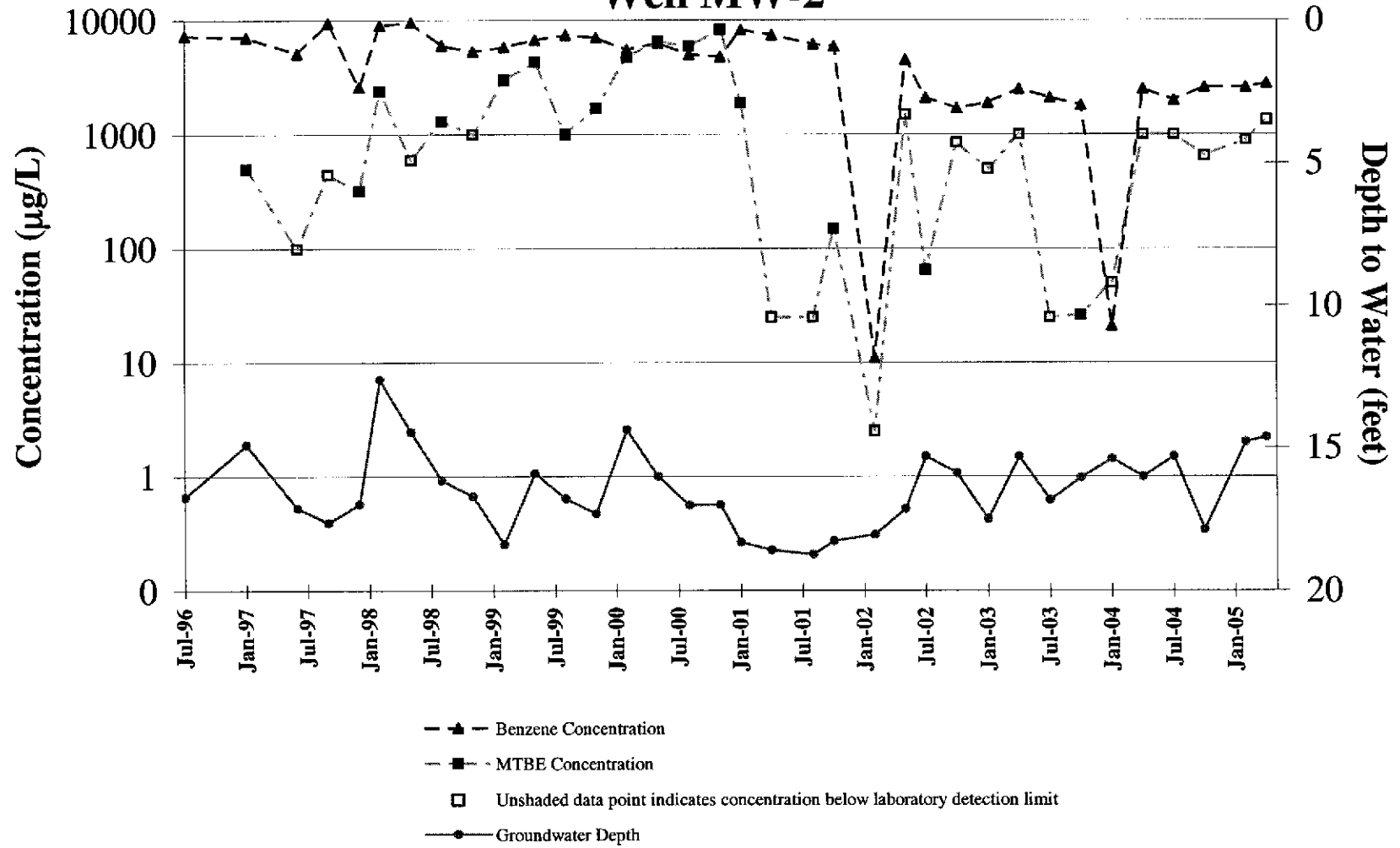
Benzene and MTBE Concentration Graphs

## Benzene and MTBE Concentration Trends Well MW-1

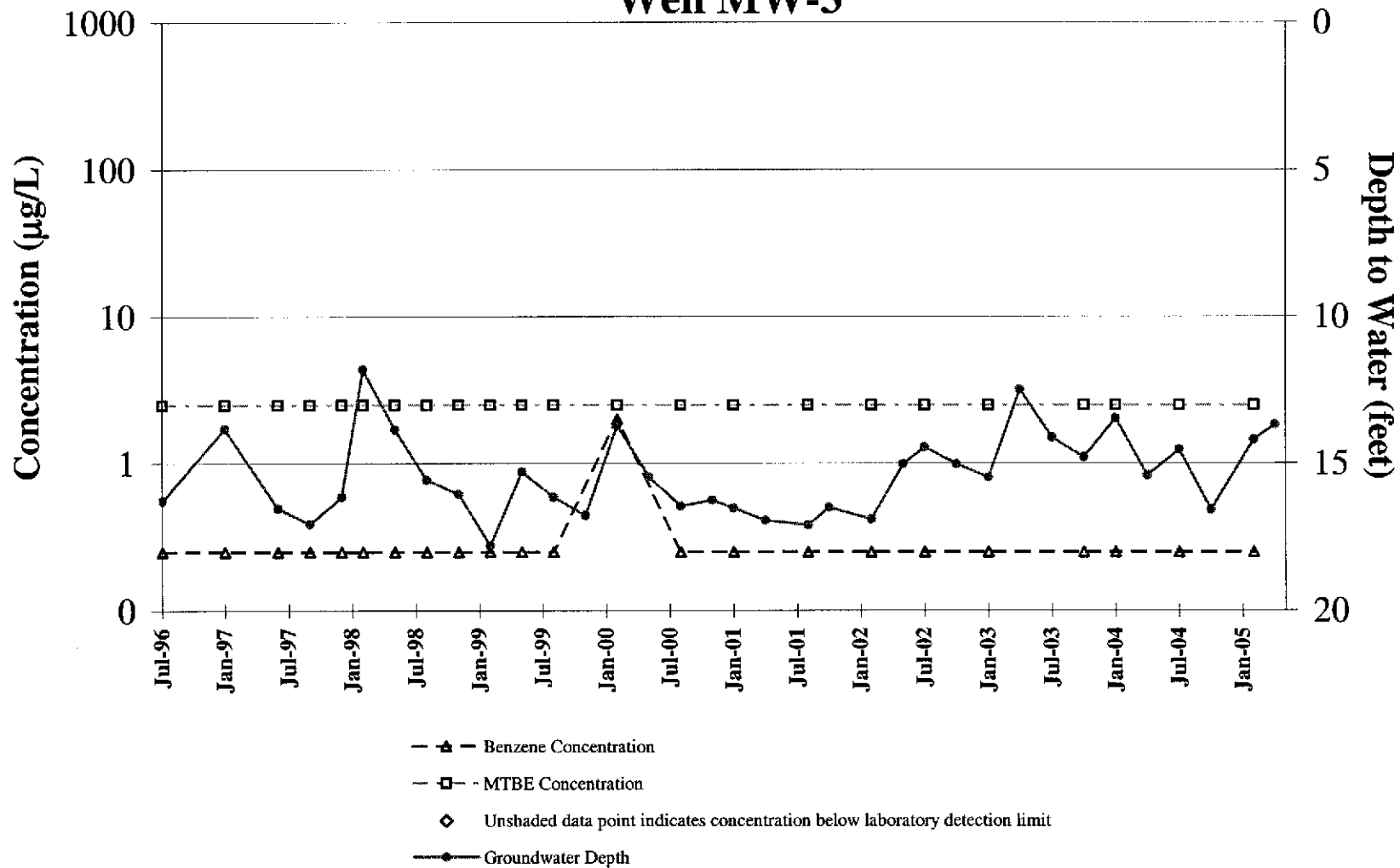




## Benzene and MTBE Concentration Trends Well MW-2

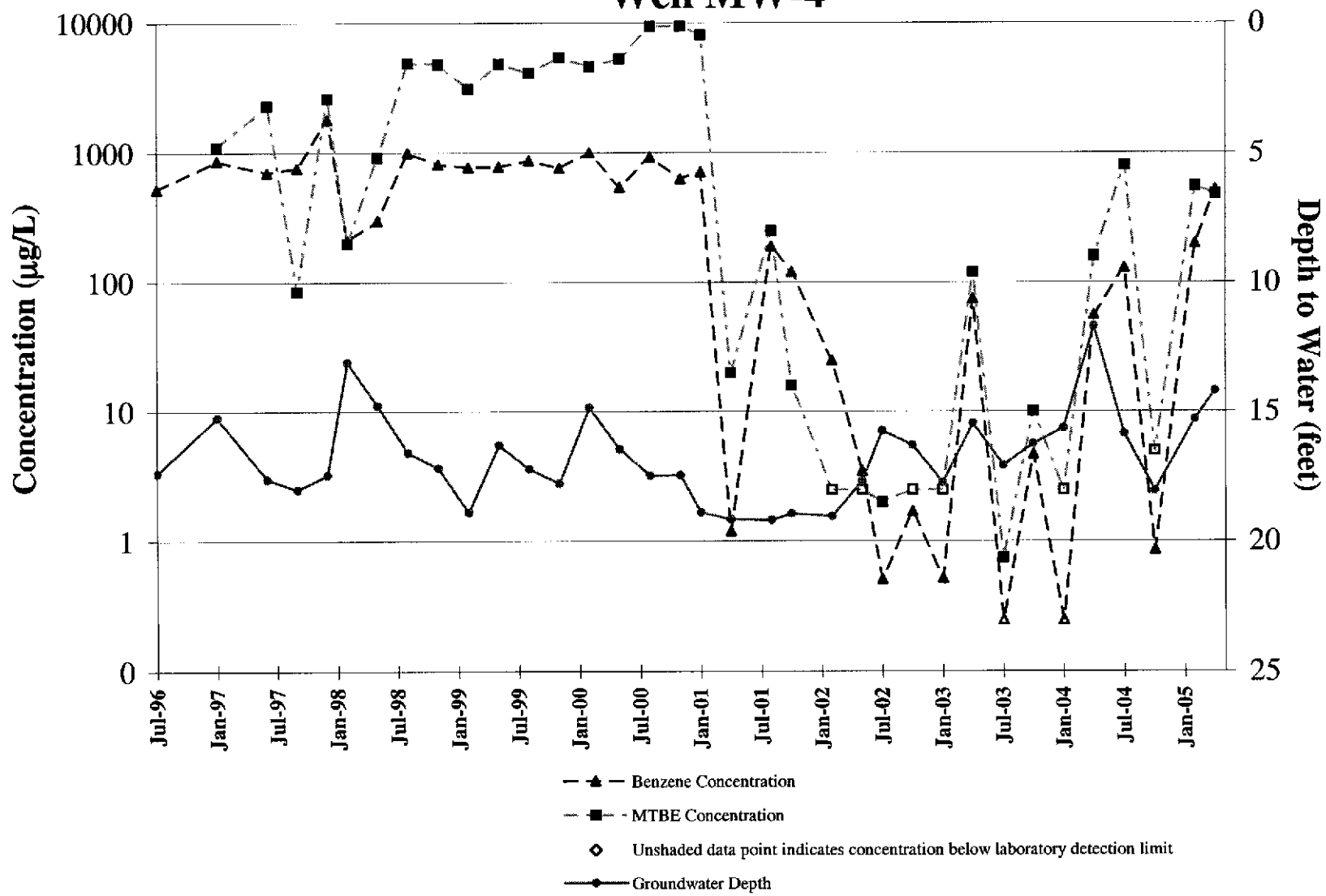


## Benzene and MTBE Concentration Trends Well MW-3

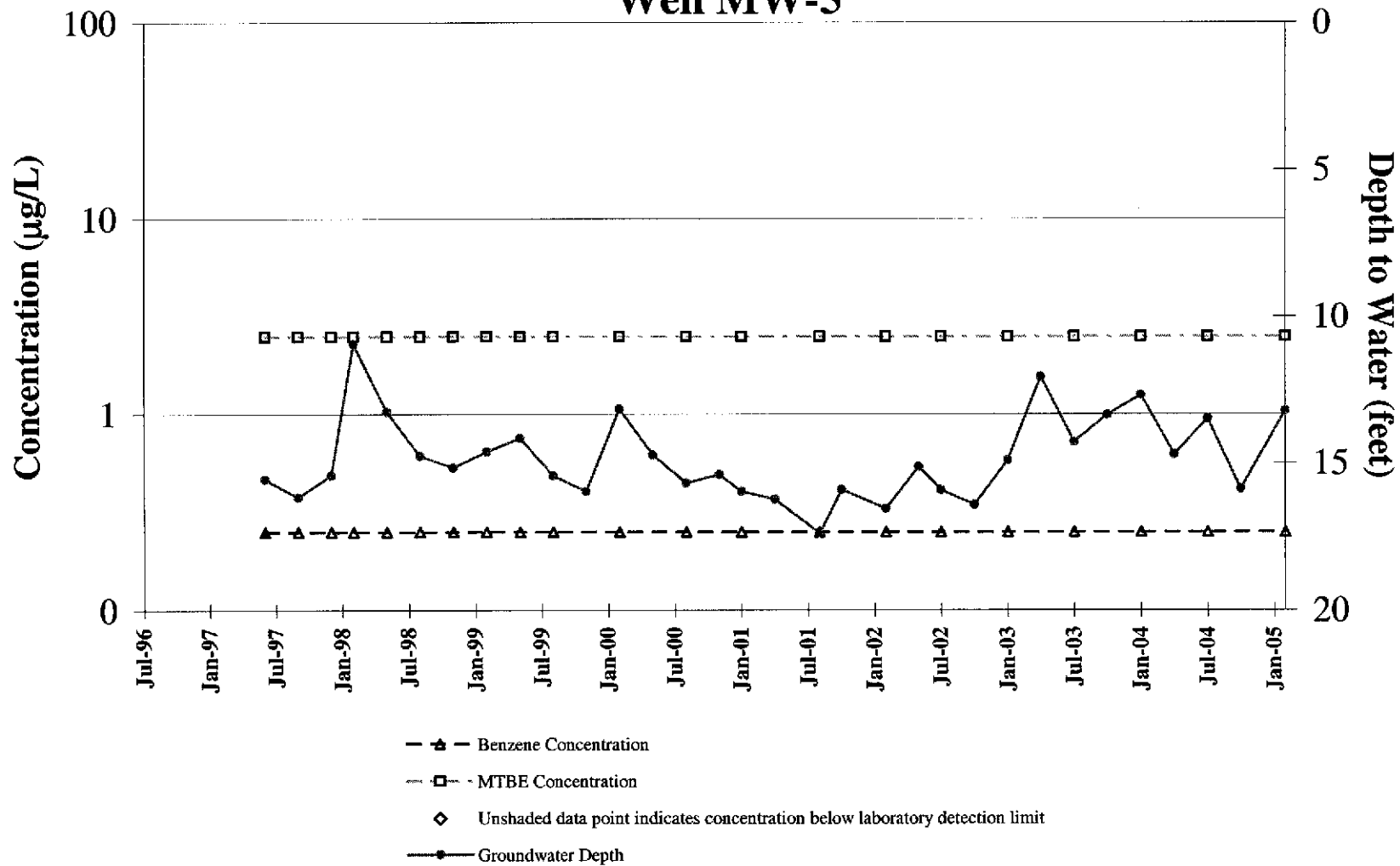


# Benzene and MTBE Concentration Trends

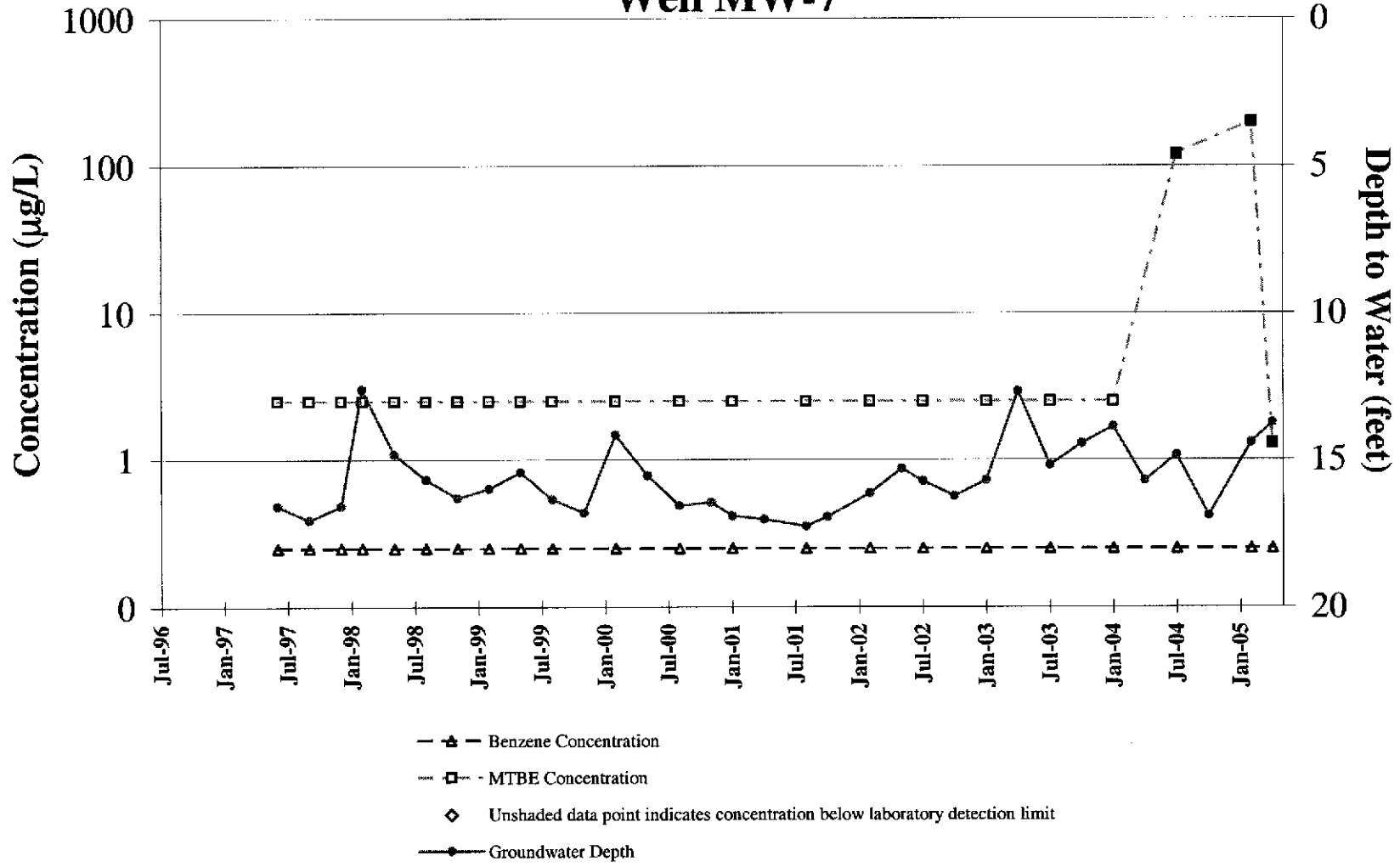
## Well MW-4



## Benzene and MTBE Concentration Trends Well MW-5



## Benzene and MTBE Concentration Trends Well MW-7



## **APPENDIX D**

GeoTracker Electronic Delivery Confirmations

## Electronic Submittal Information

Main Menu | View/Add Facilities | Upload EDD | Check EDD

Your EDF file has been successfully uploaded!

**Confirmation Number:** 9047117888  
**Date/Time of Submittal:** 6/27/2005 6:36:30 PM  
**Facility Global ID:** T0600100985  
**Facility Name:** OAKLAND AUTO PARTS  
**Submittal Title:** 2nd Qtr 2005 GW Analytical Data  
**Submittal Type:** GW Monitoring Report

Click here to view the detections report for this upload.

<b>OAKLAND AUTO PARTS</b> 706 HARRISON ST OAKLAND, CA 94607	<b>Regional Board - Case #: 01-1068</b> SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) <b>Local Agency</b> UNKNOWN - (DH)
---	---

CONF #	TITLE	QUARTER
9047117888	2nd Qtr 2005 GW Analytical Data	Q2 2005
SUBMITTED BY	SUBMIT DATE	STATUS
Matt Meyers	6/27/2005	PENDING REVIEW

**SAMPLE DETECTIONS REPORT**

# FIELD POINTS SAMPLED	5
# FIELD POINTS WITH DETECTIONS	3
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	2
SAMPLE MATRIX TYPES	WATER

**METHOD QA/QC REPORT**

METHODS USED	SW8021F,SW8260B
TESTED FOR REQUIRED ANALYTES?	Y
LAB NOTE DATA QUALIFIERS	N

**QA/QC FOR 8021/8260 SERIES SAMPLES**

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	Y
- MATRIX SPIKE DUPLICATE	Y
- BLANK SPIKE	Y
- SURROGATE SPIKE - NON-STANDARD SURROGATE USED	Y

**WATER SAMPLES FOR 8021/8260 SERIES**

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	Y
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

**SOIL SAMPLES FOR 8021/8260 SERIES**

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	n/a
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

**FIELD QC SAMPLES**

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS &gt; REPD</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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<b>Facility Name:</b>	<b>OAKLAND AUTO PARTS</b>
<b>Global ID:</b>	<b>T0600100985</b>
<b>Title:</b>	<b>Second Quarter 2005 Monitoring Report</b>
<b>Document Type:</b>	<b>Monitoring Report - Quarterly</b>
<b>Submittal Type:</b>	<b>GEO_REPORT</b>
<b>Submittal Date/Time:</b>	<b>7/1/2005 3:54:38 PM</b>
<b>Confirmation Number:</b>	<b>7225095450</b>

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## **APPENDIX E**

**Former Shell Station 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
	7/8/02		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
	<b>4/28/05</b>		<b>14.99</b>	<b>13.99</b>
<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	11.46
	1/18/02		15.87	13.57
	4/11/02		16.36	13.08
	7/8/02		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
	<b>4/28/05</b>		<b>15.79</b>	<b>13.65</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)
MW-3	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
	7/8/02		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		
	<b>4/28/05</b>		<b>14.94</b>	<b>13.70</b>
MW-4	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
	7/8/02		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	
		<b>4/28/05</b>	<b>15.18</b>	<b>14.40</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 date)
<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
	<b>4/28/05</b>		<b>15.41</b>	<b>13.65</b>
	<b>EW-1</b>		1/18/02	28.89
4/11/02		15.73	13.16	
7/8/02		16.13	12.76	
10/9/02		16.70	12.19	
1/29/03		16.20	12.69	
4/11/03		16.52	12.37	
7/18/03		16.38	12.51	
10/9/03		16.84	12.05	
1/28/04		15.94	12.95	
4/7/04		15.02	13.87	
7/23/04		16.01	12.88	
10/12/04		16.46	12.43	
1/29/05		14.91	13.98	
<b>4/28/05</b>		<b>Not measured</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
<b>4/28/05</b>	<b>&lt; 10,000</b>	<b>2,000</b>	<b>&lt; 100</b>	<b>160</b>	<b>100</b>	<b>34,000</b>
<b>MW-2</b>						
12/5/98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
3/4/99		Inaccessible due to car parked over well				
6/17/99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
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				
<b>MW-3</b>						
12/5/98	6,500***	< 50	50	60	50	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
<b>4/28/05</b>	<b>&lt; 200</b>	<b>&lt; 2.0</b>	<b>&lt; 2.0</b>	<b>&lt; 2.0</b>	<b>&lt; 2.0</b>	<b>1,300</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-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	1,500***	<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
<b>4/28/05</b>	<b>510</b>	<b>&lt;1.5</b>	<b>&lt;1.5</b>	<b>&lt;1.5</b>	<b>&lt;1.5</b>	<b>510</b>
<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	<230
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
1/29/05	29,000	4,600	2,500	750	1,400	2,200
<b>4/28/05</b>	<b>32,000</b>	<b>3,300</b>	<b>2,300</b>	<b>530</b>	<b>2,100</b>	<b>4,100</b>
<b>EW-1</b>						
1/18/02	11,000	1,000	<100	220	350	6,700
4/11/02	17,000	1,000	<100	120	140	9,700
7/8/02	21,000	1,300	<100	<100	200	12,000
10/9/02	12,000	900	<25	<25	200	9,200
1/29/03	12,000	860	73	130	500	4,500
4/11/03	8,700	890	<25	<25	82	5,400
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	17,800***	1,600	90	250	280	9,700
4/7/04			No longer sampled			
<b>ESL</b>	<b>400</b>	<b>46</b>	<b>130</b>	<b>290</b>	<b>13</b>	<b>1,800</b>

**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 (July 2003)" 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.