

R0516

CAMBRIA

March 22, 2005

Mr. Don Hwang
Alameda County Department of Environmental Health
UST Local Oversight Program
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Alameda County
MAR 28 2005
Environmental Health

Re: **Groundwater Monitoring Report - First Quarter 2005**
Hooshi's Auto Service
1499 MacArthur Boulevard
Oakland, California 94602
Cambria Project No. 129-0741



Dear Mr. Hwang:

On behalf of Ms. Naomi Gatzke, Cambria Environmental Technology, Inc. has prepared this *Groundwater Monitoring Report - First Quarter 2005* for the above-referenced site. Presented in the report is a summary of the first quarter 2005 activities and results, site closure activities, and a description of the anticipated second 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: *Groundwater Monitoring Report - First Quarter 2005*

cc: Ms. Naomi Gatzke, 1545 Scenic View Drive, San Leandro, California 94577

**Cambria
Environmental
Technology, Inc.**

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

CAMBRIA

GROUNDWATER MONITORING REPORT - FIRST QUARTER 2005

Hooshi's Auto Service
1499 MacArthur Boulevard
Oakland, California 94602
Cambria Project No. 129-0741

March 22, 2005

Alameda County
MAR 23 2005
Environmental Health



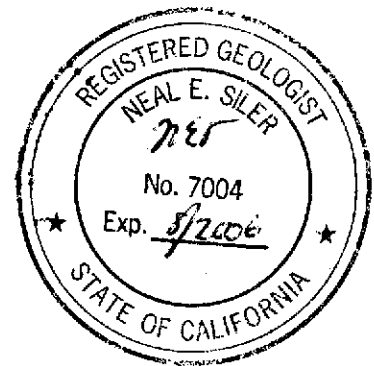
Prepared for:

Ms. Naomi Gatzke
1545 Scenic View Drive
San Leandro, California 94577

Prepared by:

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, California 94608

Written by:



[Signature] for:

Rowan Fennell
Senior Staff Scientist

[Signature]

Neal E. Siler, P.G., R.E.A.
Senior Project Geologist

GROUNDWATER MONITORING REPORT - FIRST QUARTER 2005

Hooshi's Auto Service
1499 MacArthur Boulevard
Oakland, California 94602
Cambria Project No. 129-0741

March 22, 2005



INTRODUCTION

On behalf of Ms. Naomi Gatzke, Cambria Environmental Technology, Inc. (Cambria) has prepared this *Groundwater Monitoring Report – First Quarter 2005* for the above-referenced site (Figure 1). Presented in this report is a summary of the first quarter 2005 groundwater monitoring activities and results, closure activities, and a description of the anticipated second quarter 2005 activities.

In addition to the information presented in this report, four appendices present supporting information and data. Appendix A contains groundwater monitoring field data sheets for this monitoring event. Appendix B contains the analytical laboratory reports for the samples collected and submitted by Muskan Environmental Sampling (MES). Appendix C contains graphs of hydrocarbon concentrations versus time. Appendix D contains GeoTracker delivery confirmation documentation.

FIRST QUARTER 2005 ACTIVITIES

Monitoring Activities

Field Activities: On January 27, 2005, MES gauged water levels in the site wells (MW-1 through MW-6) and sampled groundwater in monitoring wells MW-1, MW-2, and MW-5 in accordance with the sampling schedule. Field data sheets are presented as Appendix A. The well gauging data has been submitted to the GeoTracker database (Appendix D).

MES followed Cambria's monitoring procedures and protocols, which consisted of the following. Prior to purging, groundwater levels were gauged in the wells to evaluate groundwater elevation and flow patterns at the site. To facilitate groundwater sampling, MES purged three well-casing volumes prior to sampling. MES recorded groundwater pH, conductivity, and 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, water-based ice at or below 4 degrees Celsius and transported under chain-of-custody to the laboratory.

C A M B R I A

Sample Analyses: Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified United States Environmental Protection Agency (EPA) method 8015C; and benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) by EPA method 8021B. The groundwater analytical results are summarized in Table 1. The laboratory analytical report is included as Appendix B. The groundwater analytical results have been submitted to the GeoTracker database (Appendix D).

Monitoring Results

Groundwater Flow Direction and Gradient: Based on field measurements collected on January 27, 2005, groundwater beneath the site generally flows towards the southwest (Figure 1). The groundwater gradient is relatively flat onsite and increases to 0.084 feet/foot towards the southwest corner of the site. Depth to water and groundwater elevation data are presented in Table 1.

Hydrocarbon Distribution in Groundwater: Hydrocarbons were detected in two of the three wells sampled. The maximum concentration of TPHg was detected in well MW-2 at 37,000 micrograms per liter ($\mu\text{g/L}$). The maximum concentrations of BTEX were also detected in well MW-2 at 1,200 $\mu\text{g/L}$, 1,400 $\mu\text{g/L}$, 1,300 $\mu\text{g/L}$, and 5,200 $\mu\text{g/L}$, respectively. No MTBE was detected above laboratory detection limits in the sampled monitoring wells. Hydrocarbon concentrations increased compared to the previous quarter but continue to display an overall decreasing trend (Appendix C).

SITE CLOSURE ACTIVITIES

Based on the decreasing concentrations and the stable plume confirmation, Cambria prepared *Closure Request* dated July 21, 2004 and *Clarifications Regarding Closure Request* dated October 6, 2004 for this low risk groundwater site. Although the Alameda County Department of Environmental Health (ACDEH) has not provided a letter commenting on these documents, during phone discussions between Mr. Don Hwang of ACDEH and Matt Meyers of Cambria, Mr. Hwang recommended continuing quarterly monitoring. As a result, Cambria will continue monitoring activities according to the approved monitoring schedule through 2005 pending the ACDEH's review of the above mentioned documents.

C A M B R I A**ANTICIPATED SECOND QUARTER 2005 ACTIVITIES****Monitoring Activities**

Cambria will gauge water levels in wells MW-1 through MW-6 and collect groundwater samples from wells MW-1, MW-2, and MW-5. Wells MW-1, MW-2, and MW-5 are sampled on a quarterly basis and wells MW-3, MW-4, and MW-6 are sampled on an annual basis (during the fourth quarter). Groundwater samples will be analyzed for TPHg by modified EPA method 8015C and BTEX and MTBE by EPA method 8021B. Detected MTBE concentrations will be confirmed by EPA method 8260. Cambria will prepare a groundwater monitoring report summarizing the monitoring activities and results.

**Site Closure Activities**

Cambria requests a meeting with the ACDEH as soon as possible, to facilitate regulatory closure for the site.

ATTACHMENTS

- Figure 1 – Groundwater Elevation Contour and Hydrocarbon Concentration Map
- Table 1 – Groundwater Elevation and Analytical Data
- Appendix A – Groundwater Monitoring Field Data Sheets
- Appendix B – Analytical Results for Groundwater Sampling
- Appendix C – TPHg and Benzene Concentration Graphs
- Appendix D – Electronic Delivery Confirmations

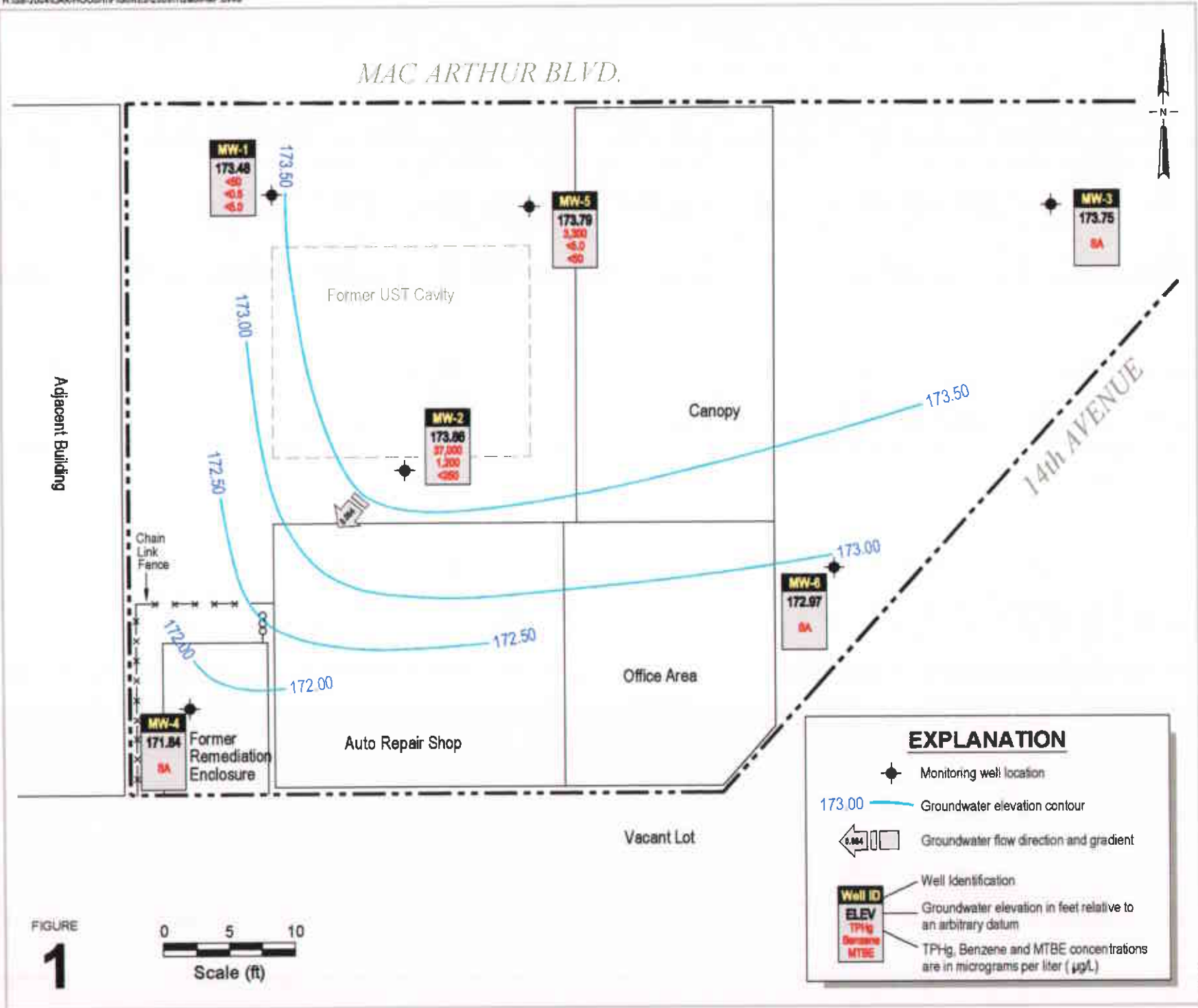
Hoosh's Auto Service
 1499 MacArthur Boulevard
 Oakland, California

C A M B R I A



**Groundwater Elevation Contour
 and Hydrocarbon Concentration Map**

January 27, 2005



CAMBRIA

Table 1. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID <i>TOC (ft*)</i>	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	SPH Thickness (ft)	TPHg	(µg/L)					Notes
						Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-1	1/4/93	--	--	--	539	130	12	22	13	--	
181.00	4/22/93	--	--	--	1,130	75	8.0	38	11	--	
	12/27/94	--	--	--	770	22	6.6	14	21	--	
	6/27/96	14.11	166.89	--	3,300	260	34	59	170	80	
	12/10/96	13.71	167.29	--	1,500	84	11	22	32	34	
	5/8/98	13.85	167.15	--	3,200	300	12	62	36	<120	a
	8/17/98	14.11	166.89	--	1,700	160	18	32	27	39	a
	11/4/98	14.28	166.72	--	1,100	11	4.3	3.6	6.5	<50	a
	2/17/99	13.41	167.59	--	320	200	47	72	75	57	a
	5/27/99	14.16	166.84	--	2,500	81	12	29	41	<80	a
	8/19/99	14.18	166.82	--	780	19	<0.5	5.7	4.5	28	a
180.83	11/23/99	14.43	166.40	--	1,300	24	0.64	1.8	3.3	<100	a
	2/17/00	13.85	166.98	--	1,300	60	9.1	22	19	22 (16)	a,b
	5/9/00	14.01	166.82	--	2,700	55	13	19	25	34 (29)	a
	8/15/00	14.24	166.59	--	--	--	--	--	--	--	
	12/1/00	8.75	172.08	--	480	6.4	5.9	1.1	3.9	18 (21)	a
180.63	2/8/01	8.49	172.14	--	64	<0.5	<0.5	<0.5	<0.5	6.1 (5.6)	a,c
	4/9/01	8.71	171.92	--	--	--	--	--	--	--	
	4/24/01	7.90	172.73	--	77	<0.5	<0.5	<0.5	<0.5	5.6 (3.7)	c
	8/6/01	8.83	171.80	--	140	1.7	0.55	<0.5	0.63	5.8 (4.0)	a
	10/22/01	8.91	171.72	--	120	0.92	<0.5	<0.5	0.59	11(10)	a
	2/1/02	8.15	172.48	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/19/02	8.63	172.00	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/16/02	8.79	171.84	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/3/02	8.90	171.73	--	110	<0.5	<0.5	<0.5	<0.5	<5.0	f
	1/10/03	7.93	172.70	--	<50	<0.5	0.74	<0.5	<0.5	<5.0	
4/21/03	8.17	172.46	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		

CAMBRIA

Table 1. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID <i>TOC (ft*)</i>	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	SPH Thickness (ft)	TPHg ←	→ (µg/L)					Notes	
						Benzene	Toluene	Ethylbenzene	Xylenes	MTBE		
<i>MW-1 cont'd</i>	7/9/03	8.92	171.71	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	10/7/03	9.13	171.50	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	1/22/04	8.20	172.43	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	4/2/04	7.09	173.54	--	110	0.52	<0.5	<0.5	<0.5	<5.0	a	
	12/29/04	6.15	174.48	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	1/27/05	7.15	173.48	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
<i>MW-2 180.45</i>	1/4/93	--	--	--	149,000	21,700	25,000	ND	7,760	--		
	4/22/93	--	--	--	136,300	9,900	15,870	15,300	2,190	--		
	12/27/94	--	--	--	94,000	11,000	18,000	2,700	16,000	--		
	6/27/96	12.61	168.64	1.00	--	--	--	--	--	--		
	12/10/96	11.10	169.55	0.25	--	--	--	--	--	--		
	5/8/98	10.81	169.66	0.03	--	--	--	--	--	--		
	8/17/98	12.16	168.31	0.02	--	--	--	--	--	--		
	11/4/98	12.61	167.86	0.02	--	--	--	--	--	--		
	2/17/99	9.82	170.66	0.04	--	--	--	--	--	--		
	5/27/99	11.07	169.48	0.13	--	--	--	--	--	--		
	8/19/99	12.79	167.68	0.02	--	--	--	--	--	--		
	<i>180.24</i>	11/23/99	12.14	168.20	0.12	--	--	--	--	--	--	
		2/17/00	10.01	170.37	0.18	--	--	--	--	--	--	
		5/9/00	10.88	169.38	0.03	--	--	--	--	--	--	
8/15/00		12.28	167.97	0.01	--	--	--	--	--	--		
12/1/00		8.03	172.21	--	260,000	1,100	5,000	1,900	17,000	<100	a	
2/8/01		7.86	172.38	--	2,900	1.7	14	5.0	140	<5.0	c,d	
4/9/01		7.95	172.29	--	--	--	--	--	--	--		
4/24/01		6.90	173.34	--	56,000	360	980	1,000	4,700	<5.0	a,b	
8/6/01	8.15	172.09	--	54,000	680	1,900	1,500	7,800	<200 (<10)	a,b,j		
10/22/01	8.22	172.02	--	32,000	420	770	1,100	4,100	<250	a,b		
2/1/02	8.07	172.17	--	26,000	310	490	920	1,600	<1,000	a		
4/19/02	8.60	171.64	--	16,000	300	240	1,000	990	<100	a		

CAMBRIA

Table 1. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID <i>TOC (ft*)</i>	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	SPH Thickness (ft)	TPHg	<div style="display: flex; align-items: center; justify-content: center;"> ← → </div> Benzene Toluene Ethylbenzene Xylenes MTBE					Notes
						(µg/L)					
<i>MW-2 cont'd</i>	7/16/02	8.21	172.03	--	5,700	120	18	340	15	<50	a
	10/3/02	8.14	172.10	--	4,400	44	16	68	20	<25	a
	1/10/03	6.98	173.26	--	16,000	300	320	580	830	<100	a,b
	4/21/03	7.25	172.99	--	12,000	350	260	610	380	<50	a
	7/9/03	7.99	172.25	--	3,300	51	7.4	47	2.8	<17	a
	10/7/03	8.21	172.03	--	2,400	93	11	34	22	<50	a
	1/22/04	7.24	173.00	--	5,900	240	130	350	200	<50	a
	4/2/04	6.29	173.95	--	37,000	840	1,500	1,300	5,900	<500	a
	12/29/04	5.37	174.87	--	9,300	240	230	330	880	<50	a
	1/27/05	6.38	173.86	--	37,000	1,200	1,400	1,300	5,200	<250	a
MW-3	1/4/93	--	--	--	1,610	772	14	11	ND	--	
<i>179.94</i>	4/22/93	--	--	--	3,040	980	34	19	16	--	
	12/27/94	--	--	--	2,600	180	9.0	7.2	13	--	
	6/27/96	13.20	166.74	--	2,000	22	2.9	11	7.4	56	
	12/10/96	13.13	166.81	--	970	<0.5	<0.5	<0.5	<0.5	24	
	5/8/98	13.03	166.91	--	780	3.7	2.1	1.1	2.4	<32	a
	8/17/98	13.22	166.72	--	870	2.8	<0.5	<0.5	3.7	<5.0	b,c
	11/4/98	13.31	166.63	--	770	1.6	4.4	2.0	6.9	<30	c
	2/17/99	12.89	167.05	--	650	6.2	3.4	1.5	2.6	<5.0	b,c
	5/27/99	12.32	167.62	--	570	1.5	1.2	0.72	1.1	<20	a
	8/19/99	13.19	166.75	--	830	<0.5	1.9	<0.5	1.3	<20	c,d
<i>179.55</i>	11/23/99	13.26	166.29	--	900	<0.5	1.8	0.56	1.4	<20	c,d
	2/17/00	12.78	166.77	--	250	<0.5	1.5	<0.5	0.62	<5.0	d
	5/9/00	12.92	166.63	--	690	<0.5	2.1	0.85	1.6	<5.0	a
	8/15/00	13.19	166.36	--	610	<0.5	2.3	0.75	1.2	<5.0	c,d
	12/1/00	7.50	172.05	--	120	<0.5	0.90	0.65	0.62	<5.0	c,d
	2/8/01	7.20	172.35	--	87	<0.5	<0.5	<0.5	<0.5	<5.0	c,d
	4/9/01	7.33	172.22	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/6/01	7.61	171.94	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	

CAMBRIA

Table 1. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID <i>TOC (ft*)</i>	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	SPH Thickness (ft)	TPHg ←	→ (µg/L)					Notes
						Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
<i>MW-3 cont'd</i>	10/22/01	7.58	171.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/1/02	7.53	172.02	--	<50	<0.5	<0.5	<0.5	<0.5	8.5 (8.5)	
	4/19/02	7.95	171.60	--	<50	<0.5	<0.5	<0.5	<0.5	9.0 (11)	
	7/16/02	7.68	171.87	--	<50	<0.5	<0.5	<0.5	<0.5	20 (30)	
	10/3/02	7.78	171.77	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/10/03	6.91	172.64	--	<50	<0.5	<0.5	<0.5	<0.5	19 (16)	
	sampled annually	4/21/03	7.21	172.34	--	--	--	--	--	--	
	7/9/03	8.05	171.50	--	--	--	--	--	--	--	
	10/7/03	8.19	171.36	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/22/04	7.13	172.42	--	--	--	--	--	--	--	
	4/2/04	5.73	173.82	--	--	--	--	--	--	--	
	12/29/04	4.88	174.67	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/27/05	5.80	173.75	--	--	--	--	--	--	--	
<i>MW-4</i>	6/27/96	17.03	163.51	--	720	2	0.5	2.5	23	3.2	
<i>180.54</i>	12/10/96	8.50	172.04	--	80	2.4	<0.5	<0.5	6.6	<2.0	
	5/8/98	11.46	169.08	--	<50	0.60	<0.5	<0.5	<0.5	<5.0	
	8/17/98	13.98	166.56	--	<50	<0.5	<0.5	<0.5	0.5	<5.0	
	11/4/98	14.36	166.18	--	96	9.7	8.1	4.8	18	<5.0	a
	2/17/99	8.39	172.15	--	<50	<0.5	<0.5	<0.5	0.5	<5.0	
<i>180.12</i>	5/27/99	12.80	167.74	--	<50	<0.5	1.0	<0.5	2.9	<5.0	
	8/19/99	14.42	166.12	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	11/23/99	14.63	165.49	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/17/00	8.15	171.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	5/9/00	12.81	167.31	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/15/00	14.29	165.83	--	<50	2.1	<0.5	<0.5	<0.5	<5.0	
	12/1/00	12.80	167.32	--	81	6.0	8.4	1.0	5.6	<5.0	a
	2/8/01	12.57	167.55	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/9/01	12.50	167.62	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/6/01	14.00	166.12	--	59	1.5	<0.5	<0.5	<0.5	<5.0	a
10/22/01	14.05	166.07	--	130	6.3	<0.5	0.88	<0.5	<5.0	a	

CAMBRIA

Table 1. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID TOC (ft*)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	SPH Thickness (ft)	← (µg/L) →						Notes
					TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-4 cont'd sampled annually	2/1/02	13.47	166.65	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/19/02	13.55	166.57	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/16/02	14.05	166.07	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/3/02	13.09	167.03	--	77	2.1	0.51	<0.5	<0.5	<5.0	a
	1/10/03	12.04	168.08	--	<50	<0.5	<0.5	<0.5	<0.5	20 (15)	a
	4/21/03	12.15	167.97	--	--	--	--	--	--	--	
	7/9/03	12.90	167.22	--	--	--	--	--	--	--	
	10/7/03	13.15	166.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/22/04	12.09	168.03	--	--	--	--	--	--	--	
	4/2/04	8.97	171.15	--	--	--	--	--	--	--	
	12/29/04	7.85	172.27	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/27/05	8.28	171.84	--	--	--	--	--	--	--	
MW-5	6/27/96	13.62	166.74	0.16	--	--	--	--	--	--	
180.23	12/10/96	13.26	167.77	1.00	--	--	--	--	--	--	
	5/8/98	13.15	167.11	0.04	--	--	--	--	--	--	
	8/17/98	13.36	166.89	0.02	--	--	--	--	--	--	
	11/4/98	13.52	166.73	0.02	--	--	--	--	--	--	
	2/17/99	13.02	167.23	0.02	--	--	--	--	--	--	
	5/27/99	13.80	166.71	0.35	--	--	--	--	--	--	
	8/19/99	13.45	166.86	0.10	--	--	--	--	--	--	
180.09	11/23/99	14.03	166.35	0.36	--	--	--	--	--	--	
	2/17/00	13.28	167.02	0.26	--	--	--	--	--	--	
	5/9/00	13.55	166.77	0.29	--	--	--	--	--	--	
	8/15/00	13.58	166.54	0.04	--	--	--	--	--	--	
	12/1/00	8.00	172.09	0.00	54,000	240	1,700	870	1,000	<300	c,d
180.04	2/8/01	7.88	172.16	0.00	33,000	63	420	120	4,500	<50	a,b
	4/9/01	7.97	172.07	0.00	--	--	--	--	--	--	
	4/24/01	7.00	173.04	0.00	3,200	<1.0	11	7	260	<5.0	c,d
	8/6/01	8.17	171.87	--	2,700	11	40	21	240	<5.0	a
	10/22/01	8.15	171.89	--	20,000	200	1,200	330	2,900	<100	a,b

CAMBRIA

Table 1. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID <i>TOC (ft*)</i>	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	SPH Thickness (ft)	TPHg ←	→ (µg/L)					Notes
						Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
<i>MW-5 cont'd</i>	2/1/02	8.07	171.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/19/02	8.51	171.53	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/16/02	8.40	171.64	--	<50	<0.5	<0.5	<0.5	1.7	<5.0	
	10/3/02	8.18	171.86	--	15,000	94	830	460	2,200	<500	a
	1/10/03	6.95	173.09	--	290	<0.5	1.8	<0.5	17	<5.0	a
	4/21/03	7.18	172.86	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/9/03	7.95	172.09	--	<50	<0.5	<0.5	<0.5	2.7	<5.0	
	10/7/03	8.22	171.82	--	9,800	120	340	180	2,000	<50	a
	1/22/04	7.18	172.86	--	250	<0.5	0.82	<0.5	29	<5.0	d
	4/2/04	6.23	173.81	--	4,300	6.3	18	59	750	<25	a
	12/29/04	5.27	174.77	--	72	<0.5	0.78	<0.5	6.5	<5.0	d
	1/27/05	6.25	173.79	--	3,300	<5.0	22	18	320	<50	a
	MW-6	6/27/96	18.55	161.48	--	ND	ND	ND	ND	ND	--
<i>180.03</i>	12/10/99	11.79	168.24	--	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	
	5/8/98	11.62	168.41	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/17/98	12.66	167.37	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	11/4/98	13.56	166.47	--	68	3.8	3.7	2.8	11	<5.0	a
	2/17/99	12.91	167.12	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	5/27/99	13.03	167.00	--	<50	1.0	1.7	0.82	4.9	<5.0	
	8/19/99	13.10	166.93	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
<i>179.63</i>	11/23/99	13.58	166.05	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/17/00	10.72	168.91	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	5/9/00	11.71	167.92	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/15/00	12.49	167.14	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	12/1/00	8.64	170.99	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/8/01	8.20	171.43	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/9/01	8.53	171.10	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/6/01	8.69	170.94	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/22/01	8.75	170.88	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/1/02	8.31	171.32	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/19/02	8.62	171.01	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	

CAMBRIA

Table 1. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	SPH Thickness (ft)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
		(µg/L)									
MW-6 cont'd sampled annually	7/16/02	8.84	170.79	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/3/02	8.71	170.92	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/10/03	6.99	172.64	--	<50	<0.5	<0.5	<0.5	<0.5	19 (16)	
	4/21/03	7.15	172.48	--	--	--	--	--	--	--	
	7/9/03	7.98	171.65	--	--	--	--	--	--	--	
	10/7/03	8.28	171.35	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/22/04	7.15	172.48	--	--	--	--	--	--	--	
	4/2/04	6.56	173.07	--	--	--	--	--	--	--	
	12/29/04	5.63	174.00	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/27/05	6.66	172.97	--	--	--	--	--	--	--	
Trip Blank	5/8/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	11/4/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	5/27/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	11/23/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	12/1/00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	

Abbreviations and Methods:

TOC = Top of casing elevation

ft = Measured in feet

SPH = Separate phase hydrocarbons

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015

Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8020

MTBE = Methyl tertiary butyl ether by EPA Method 8020

(concentration in parentheses confirmed by EPA Method 8260)

µg/L = Micrograms per liter

-- = Not sampled, not analyzed, or not applicable

ND = Compound not detected, detection limit unknown

* = Wells surveyed to an arbitrary datum

** = Calculated groundwater elevation corrected for SPH by the relation: Groundwater Elevation = Well Elevation - Depth to Water + (0.8xSPH thickness (ft))

*** = Due to the air sparge system running during sampling, samples collected on 4/9/01 were anomalous. Well was resampled on 4/24/01 with the air sparge system off.

Notes:

a - The analytical laboratory noted that unmodified or weakly modified gasoline is significant.

b - The analytical laboratory noted lighter than water immiscible sheen is present.

c - The analytical laboratory noted no recognizable pattern.

d - The analytical laboratory noted heavier gasoline range compounds are significant (aged gasoline?)

f - The analytical laboratory noted one to a few isolated non-target peaks present

j - The analytical laboratory noted sample diluted due to high organic content.

APPENDIX A

Groundwater Monitoring Field Data Sheets



WELL GAUGING SHEET

Client: Cambria Environmental Technology						
Site Address: 1499 MacArthur Blvd. Oakland, CA						
Date: 1/27/2005			Signature: <i>[Handwritten Signature]</i>			
Well ID	Time	Depth to SPH	Depth to Water	SPH Thickness	Depth to Bottom	Comments
MW-1	11:20		7.15		20.03	
MW-2	11:30		6.38		19.85	
MW-3	11:15		5.80		19.98	
MW-4	11:05		8.28		19.85	
MW-5	11:25		6.25		14.65	
MW-6	11:10		6.66		20.12	




WELL SAMPLING FORM

Date:		1/27/2005				
Client:		Cambria Environmental Technology				
Site Address:		1499 MacArthur Blvd. Oakland, CA				
Well ID:		MW-1				
Well Diameter:		2"				
Purging Device:		Disposable Bailer				
Sampling Method:		Disposable Bailer				
Total Well Depth:		20.03	Fe=	mg/L		
Depth to Water:		7.15	ORP=	mV		
Water Column Height:		12.88	DO=	mg/L		
Volume/ft:		0.16				
1 Casing Volume (gal):		2.0608	COMMENTS: Slightly turbid, light brown			
3 Casing Volumes (gal):		6.1824				
TIME:	CASING VOLUME (gal)	TEMP (Celsius)			pH	COND. (microns)
12:20	2.0608	21.9	7.31	872		
12:25	3.0912	22.0	7.33	824		
12:30	6.1824	21.8	7.27	830		
Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-1	1/27/2005	12:30	3 Voa	HCl	TPHg, BTEX, MTBE	8015, 8020, 8260
				Signature:		




WELL SAMPLING FORM

Date:		1/27/2005				
Client:		Cambria Environmental Technology				
Site Address:		1499 MacArthur Blvd. Oakland, CA				
Well ID:		MW-2				
Well Diameter:		2"				
Purging Device:		Disposable Bailer				
Sampling Method:		Disposable Bailer				
Total Well Depth:		19.85	Fe=	mg/L		
Depth to Water:		6.38	ORP=	mV		
Water Column Height:		13.47	DO=	mg/L		
Volume/ft:		0.16				
1 Casing Volume (gal):		2.1552	COMMENTS: Heavy sheen, strong odor, black odor			
3 Casing Volumes (gal):		6.4656				
TIME:	CASING VOLUME (gal)	TEMP (Celsius)			pH	COND. (microns)
1:00	2.1552	21.2	7.05	668		
1:05	3.2328	21.2	7.17	687		
1:10	6.4656	21.5	7.20	696		
Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-2	1/27/2005	1:15	3 Voa	HCl	TPH, BTEX, MTBE	8015, 8020, 8260
				Signature:		



WELL SAMPLING FORM

Date:		1/27/2005				
Client:		Cambria Environmental Technology				
Site Address:		1499 MacArthur Blvd. Oakland, CA				
Well ID:		MW-5				
Well Diameter:		2"				
Purging Device:		Disposable Bailer				
Sampling Method:		Disposable Bailer				
Total Well Depth:		14.65	Fe= mg/L			
Depth to Water:		6.25	ORP= mV			
Water Column Height:		8.40	DO= mg/L			
Volume/ft:		0.16				
1 Casing Volume (gal):		1.344	COMMENTS: Slightly turbid			
3 Casing Volumes (gal):		4.032				
TIME:	CASING VOLUME (gal)	TEMP (Celsius)			pH	COND. (microns)
12:40	1.344	21.1			7.35	407
12:45	2.016	21.1			6.80	443
12:50	4.032	21.2	6.89	477		
Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-5	1/27/2005	12:55	3 Voa	HCl	TPHg, BTEX, MTBE	8015, 8020, 8260
				Signature:		



DRUM INVENTORY

Client:	Cambria Environmental Technology		
Project:	129-0741		
Site Address:	1499 MacArthur Blvd. Oakland, CA		
Date:	1/27/2005		
ARRIVAL	Amount	Soil	Water
COMMENTS (color, type, label markings, location etc.): 3 open black top steel drums (rusted) empty near well MW-4	FULL		
	3/4		
	1/2		
	1/4		
	2/3		
	1/3		
DEPARTURE	Amount	Soil	Water
COMMENTS (color, type, label markings, location etc.): generated 1 open black top steel drum of purgewater. Near well MW-4 TOTAL drums onsite 4 (only 1 has water).	FULL		
	3/4		
	1/2		
	1/4		
	2/3		
	1/3		1
	TOTAL	0	1

APPENDIX B

Analytical Results for Groundwater Sampling



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: #129-0741	Date Sampled: 01/27/05
		Date Received: 01/27/05
	Client Contact: Matt Meyers	Date Reported: 02/03/05
	Client P.O.:	Date Completed: 02/10/05

WorkOrder: 0501392

February 10, 2005

Dear Matt:

Enclosed are:

- 1). the results of 3 analyzed samples from your #129-0741 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

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0501392

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 14845			Spiked Sample ID: 0501392-001A			
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) [£]	ND	60	83.1	85.8	3.25	89.6	94.3	5.12	70 - 130	70 - 130
MTBE	ND	10	89.2	88.2	1.14	99	97.2	1.83	70 - 130	70 - 130
Benzene	ND	10	90.7	89.9	0.882	106	106	0	70 - 130	70 - 130
Toluene	ND	10	90.2	89.8	0.451	105	105	0	70 - 130	70 - 130
Ethylbenzene	ND	10	92	92.2	0.145	107	107	0	70 - 130	70 - 130
Xylenes	ND	30	94	94.3	0.354	107	110	3.08	70 - 130	70 - 130
%SS:	101	10	101	99	2.07	107	101	5.43	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

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.

 QA/QC Officer

0014
0501392

McCAMPBELL ANALYTICAL, INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560

Website: www.mccampbell.com Email: 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 (Normal)~~ ~~No~~ ~~Write On (DW)~~ ~~No~~

Report To: Matt Meyers Bill To:
Company: Cambria Environmental Tech.
5900 Hollis St. Ste A
Emeryville CA E-Mail: fmurayama@cambriaenv.com
Tele: (510) 420-3314 Fax: (510) 420-9170
Project #: 129-0741 Project Name:
Project Location: 1499 MacArthur Blvd, Oakland, CA
Sampler Signature: J. Will Muskan Environmental Services

Analysis Request										Other	Comment						
MTBE / BTEX & TPH as Gas (602 / 8021 / 8015)	MTBE / BTEX ONLY (EPA 602 / 8021)	TPH as Diesel / Motor Oil (8015)	Total Petroleum Oil & Grease (1664 / 5520 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)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	<u>confirm all METS by 8/26</u>	Filter Samples for Metal analysis: Yes / No

(+)
+
(+)
L

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED							
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other				
MW-1		1-27-05	12:35	3	VOG	X					X	X						
MW-2			12:45	3							X	X						
MW-5			12:55	3							X	X						
TR		X		2	X						X	X						Hold

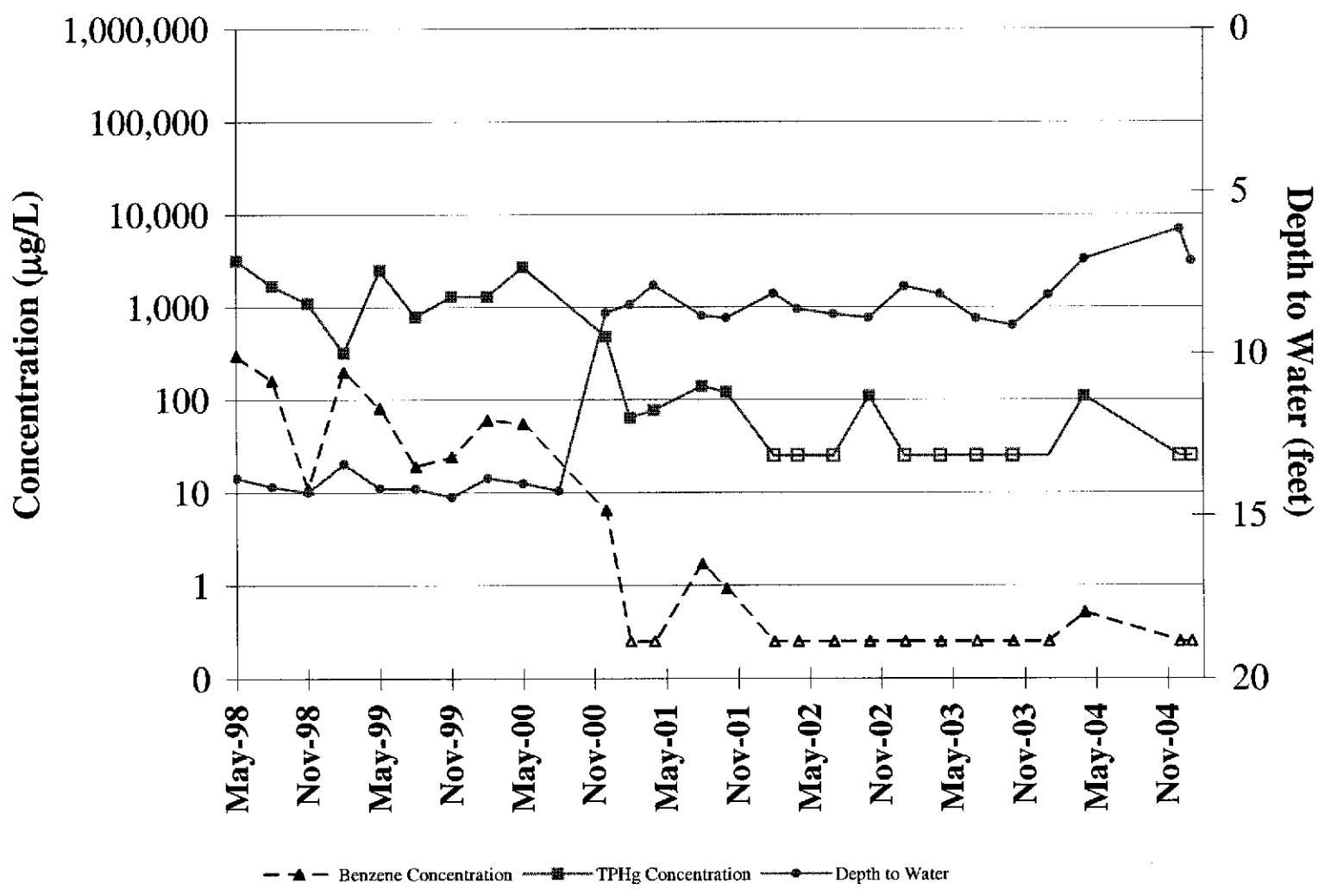
Relinquished By: J. Will Muskan Date: 1-27-05 Time: 2:20 Received By: [Signature]
Relinquished By: Date: Time: Received By:
Relinquished By: Date: Time: Received By:

ICE/°
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB
COMMENTS: EdF required
VOAS | O&G | METALS | OTHER
PRESERVATION | pH<2

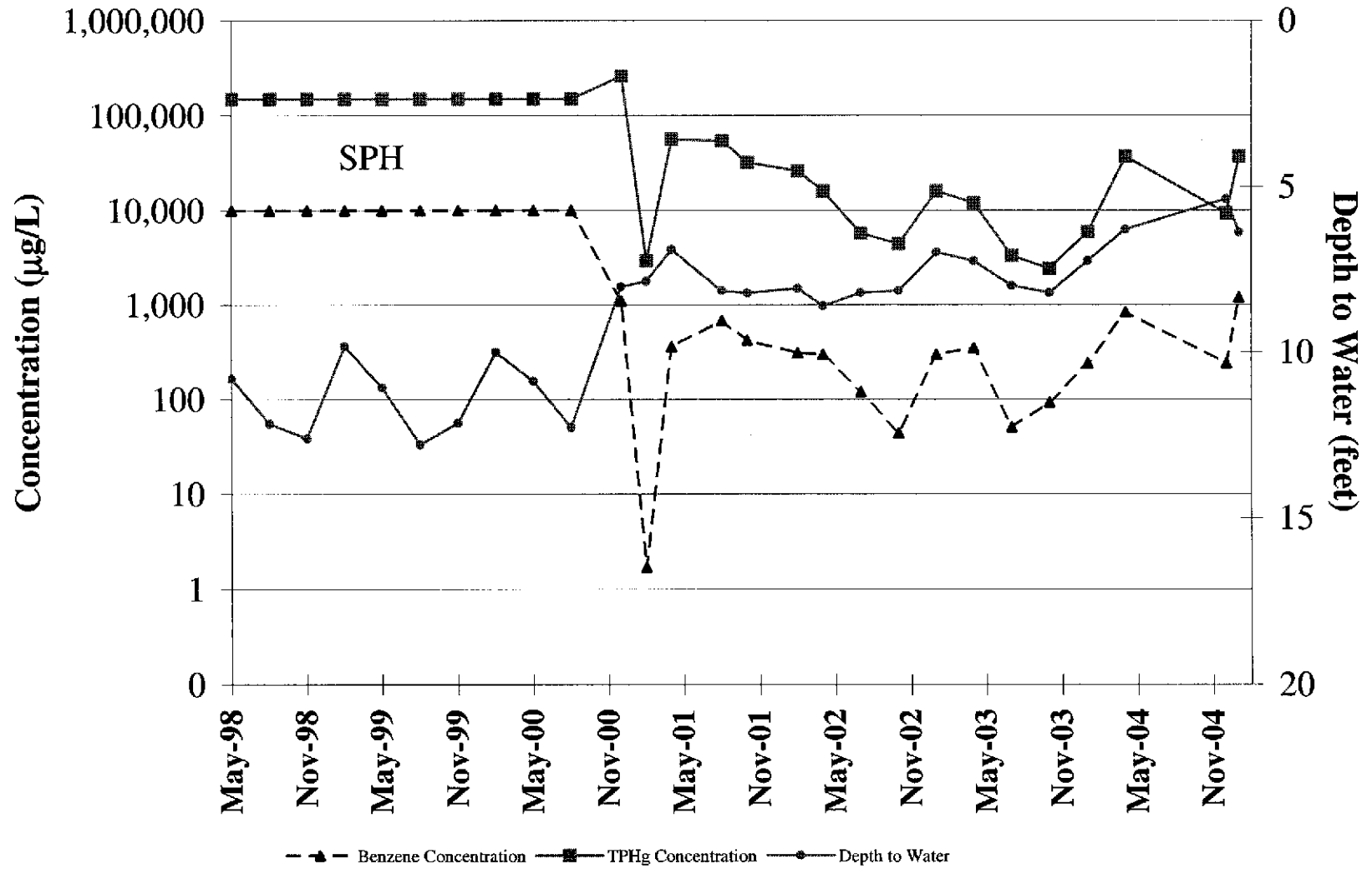
APPENDIX C

TPHg and Benzene Concentration Graphs

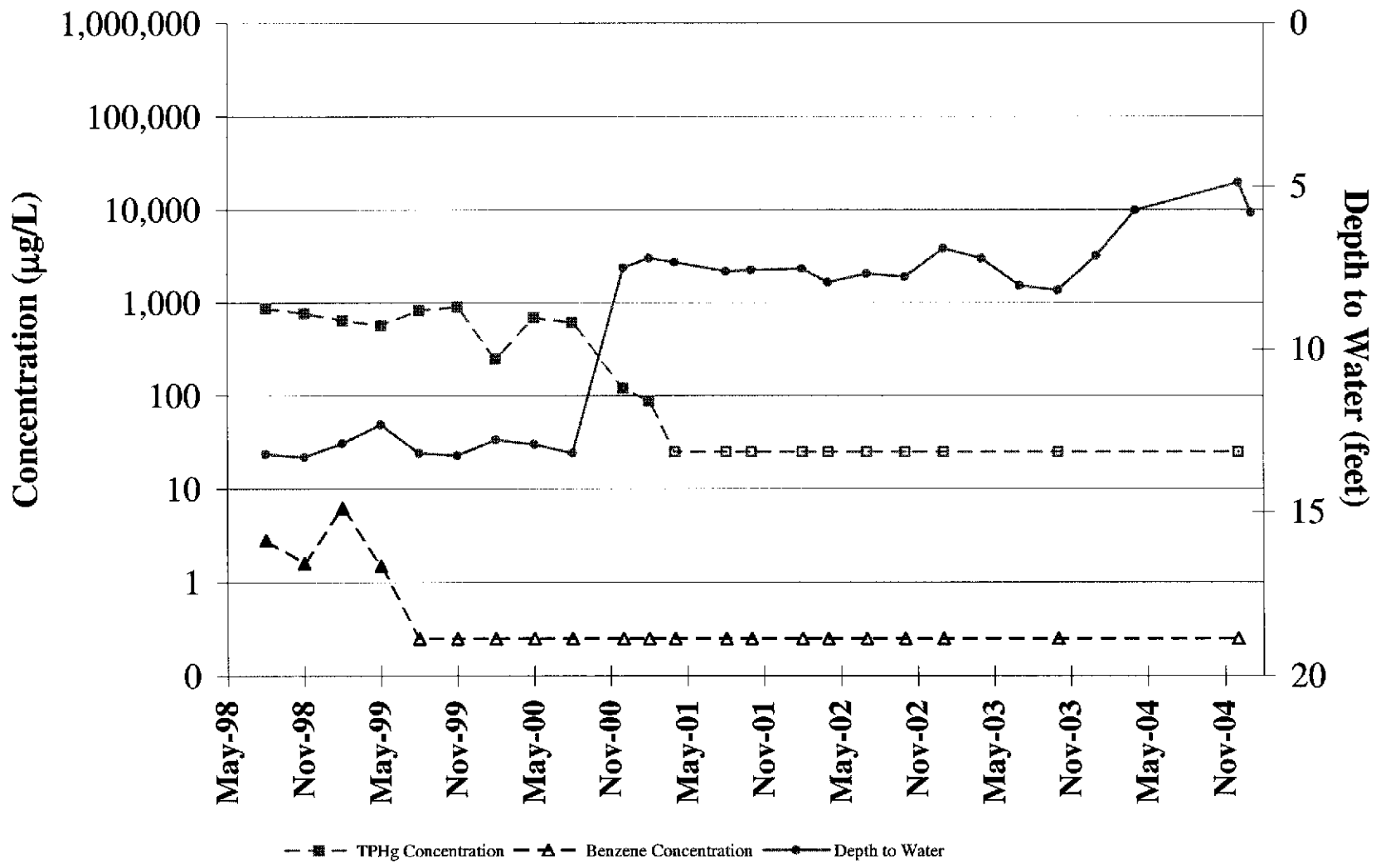
TPHg and Benzene Concentration Trend Well MW-1



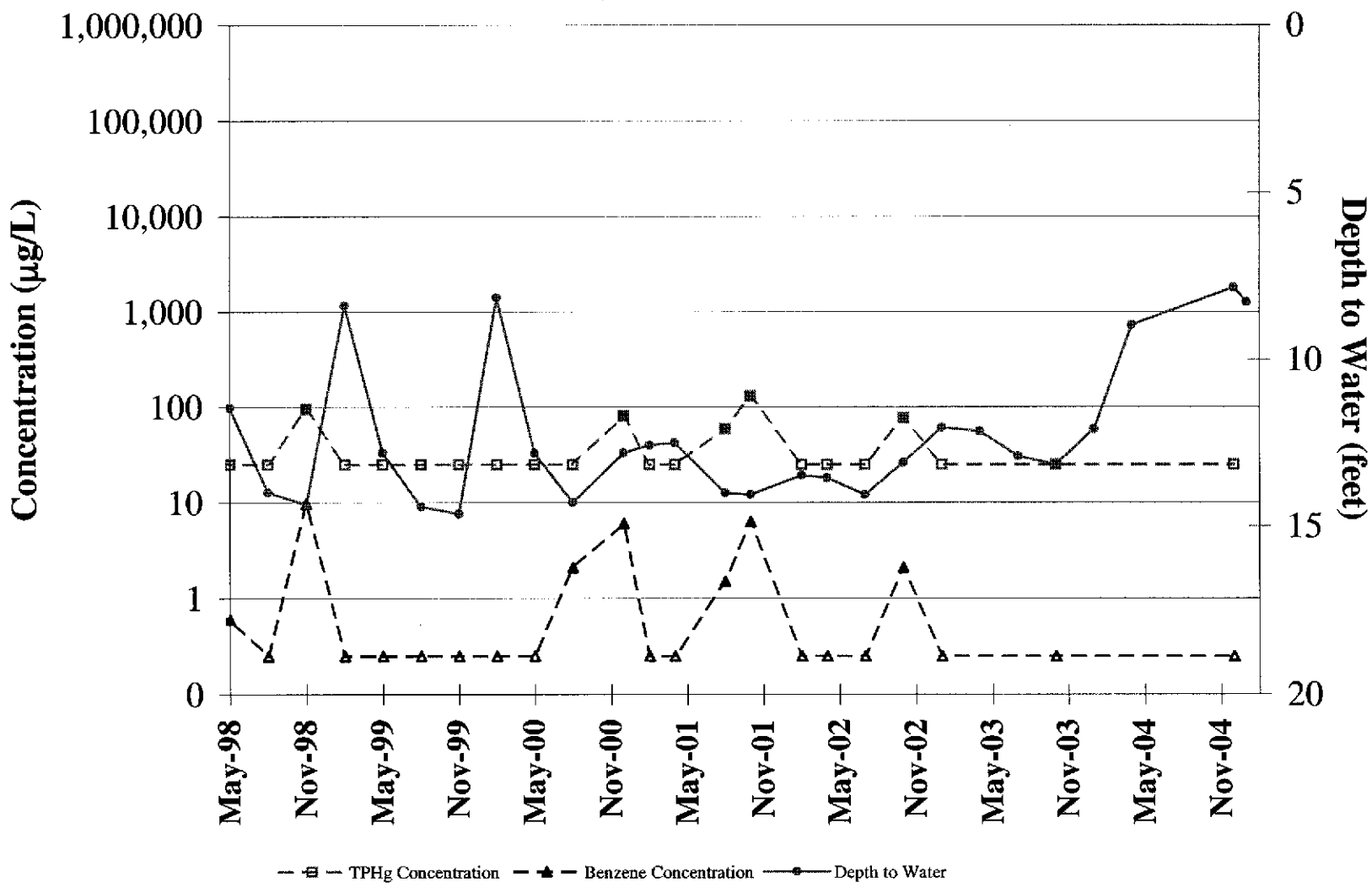
TPHg and Benzene Concentration Trend Well MW-2



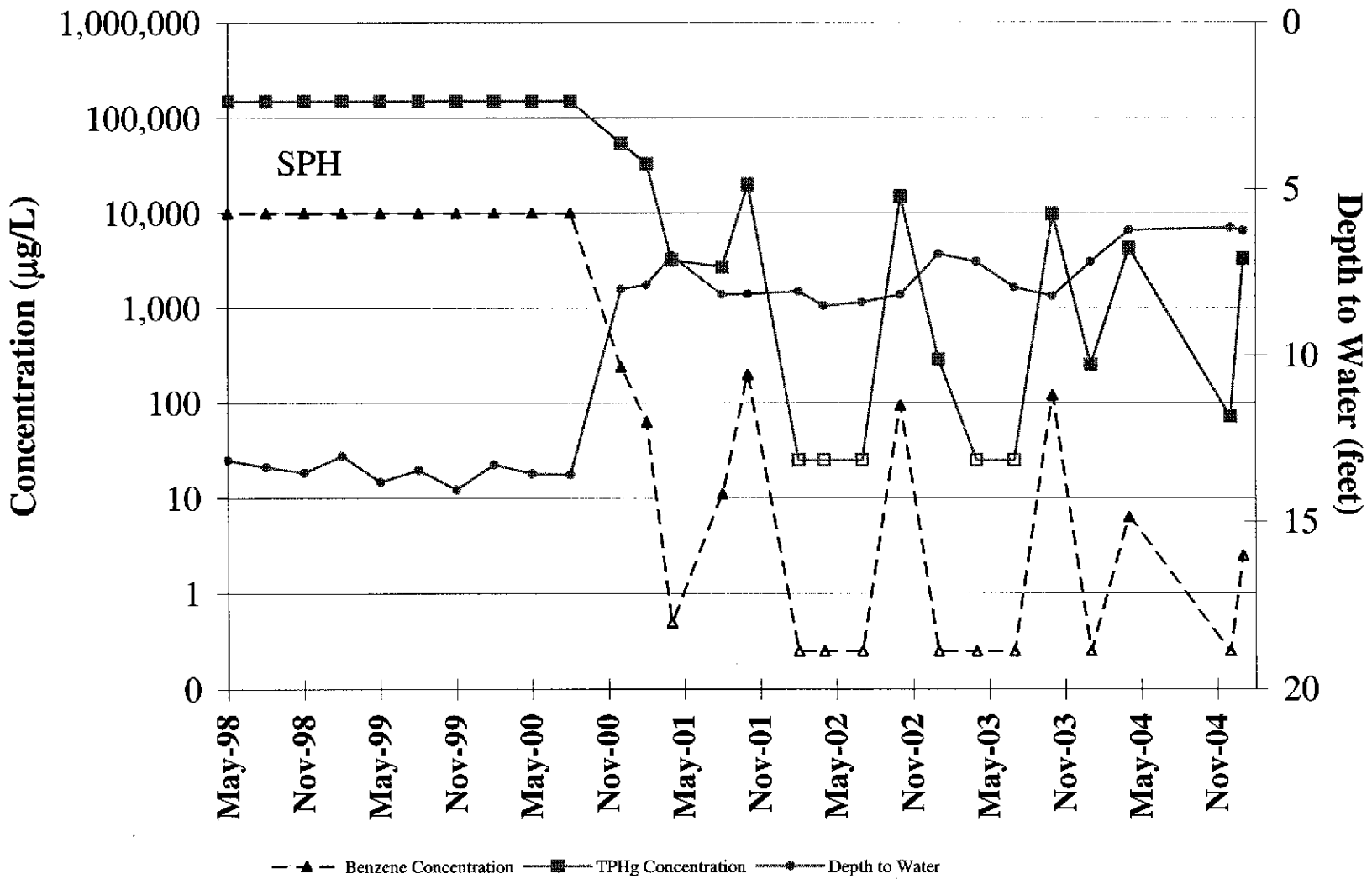
TPHg and Benzene Concentration Trend Well MW-3



TPHg and Benzene Concentration Trend Well MW-4



TPHg and Benzene Concentration Trend Well MW-5



APPENDIX D

Electronic Delivery Confirmations

Electronic Submittal Information

[Main Menu](#) |
 [View/Add Facilities](#) |
 [Upload EDD](#) |
 [Check EDD](#)

Your EDF file has been successfully uploaded!

Confirmation Number: 7683962404
Date/Time of Submittal: 2/10/2005 2:52:54 PM
Facility Global ID: T0600100714
Facility Name: HOOSHI'S AUTO SERVICE
Submittal Title: 1st Qtr 2005 GW Analytical Data
Submittal Type: GW Monitoring Report

Click [here](#) to view the detections report for this upload.

HOOSHI'S AUTO SERVICE 1499 MACARTHUR BLVD OAKLAND, CA 94602	<u>Regional Board - Case #: 01-0777</u> SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) <u>Local Agency (lead agency) - Case #: 3597</u> ALAMEDA COUNTY LOP
---	--

CONF #	TITLE	QUARTER
7683962404	1st Qtr 2005 GW Analytical Data	Q1 2005
<u>SUBMITTED BY</u>	<u>SUBMIT DATE</u>	<u>STATUS</u>
Matt Meyers	2/10/2005	PENDING REVIEW

SAMPLE DETECTIONS REPORT

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

METHOD QA/QC REPORT

METHODS USED	SW8021F
TESTED FOR REQUIRED ANALYTES?	N
MISSING PARAMETERS NOT TESTED:	
- SW8021F REQUIRES ETBE TO BE TESTED	
- SW8021F REQUIRES TAME TO BE TESTED	
- SW8021F REQUIRES DIPE TO BE TESTED	
- SW8021F REQUIRES TBA TO BE TESTED	
- SW8021F REQUIRES DCA12 TO BE TESTED	
- SW8021F REQUIRES EDB TO BE TESTED	
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 > REPD</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as CAMBRIA-EM (AUTH_RP)

CONTACT SITE ADMINISTRATOR.

Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

UPLOADING A GEO_WELL FILE

**Processing is complete. No errors were found!
Your file has been successfully submitted!**

Submittal Title: 1st Qtr 2005 GW Depth Data for 1499 MacArthur Blvd.,
Oakland

Submittal Date/Time: 2/10/2005 2:54:17 PM

Confirmation
Number: 9102619767

[Back to Main Menu](#)

Logged in as CAMBRIA-EM (AUTH_RP)

[CONTACT SITE ADMINISTRATOR](#)

Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

UPLOADING A GEO_REPORT FILE

YOUR DOCUMENT UPLOAD WAS SUCCESSFUL!

Facility Name: HOOSHI'S AUTO SERVICE
Global ID: T0600100714
Title: Groundwater Monitoring Report - First Quarter
2005
Document Type: Monitoring Report - Quarterly
Submittal Type: GEO_REPORT
Submittal Date/Time: 3/22/2005 1:31:15 PM
**Confirmation
Number:** 9847943961

Click [here](#) to view the document.

[Back to Main Menu](#)

Logged in as CAMBRIA-EM (AUTH_RP)

CONTACT SITE [ADMINISTRATOR](#)