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# C A M B R I A

December 27, 2005

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

Re: **Groundwater Monitoring Report - Fourth Quarter 2005**  
Hooshi's Auto Service  
1499 MacArthur Boulevard  
Oakland, California 94602  
Cambria Project #129-0741



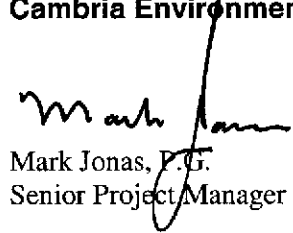
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JAN 08 2006  
STATE WATER RESOURCES CONTROL BOARD

Dear Mr. Hwang:

On behalf of Ms. Naomi Gatzke, Cambria Environmental Technology, Inc. (Cambria) has prepared this *Groundwater Monitoring Report - Fourth Quarter 2005* for the referenced site. Presented in the report is a summary of the fourth quarter 2005 activities and results, closure request status, and a description of the anticipated first quarter 2006 activities.

If you have any questions or comments regarding this report, please contact Matthew Meyers at (510) 420-3314 or Mark Jonas at (510) 420-3307.

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

  
Mark Jonas, P.G.  
Senior Project Manager

Attachments: *Groundwater Monitoring Report - Fourth Quarter 2005*

cc: Ms. Naomi Gatzke, 1545 Scenicview Drive, San Leandro, California  
Mr. Dennis Parfitt, State Water Resources Control Board, Division of Water Quality, P.O. Box 2231, Sacramento, California

**Cambria  
Environmental  
Technology, Inc.**

5900 Hollis Street  
Suite A  
Emeryville, CA 94608  
Tel (510) 420-0700  
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GROUNDWATER MONITORING REPORT - FOURTH QUARTER 2005

Hooshi's Auto Service  
1499 MacArthur Boulevard  
Oakland, California 94602  
Cambria Project #129-0741

December 27, 2005



*Prepared for:*

Ms. Naomi Gatzke  
1545 Scenicview Drive  
San Leandro, California 94577

*Prepared by:*

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

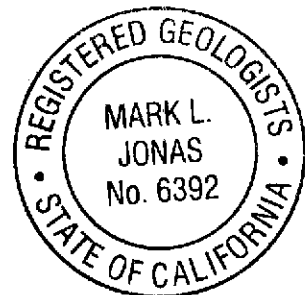
12/27/05  
M.L.J.  
12/27/05

*Written by:*

Matthew Meyers  
Project Geologist

To the best of my knowledge and Cambria Environmental Technology, Inc., the data contained herein are true and accurate. The data, findings, recommendations, specifications or professional opinions presented herein were prepared in accordance with generally accepted practice. We make no warranty, either expressed or implied. None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature.

Mark Jonas, P.G.  
Senior Project Manager



## GROUNDWATER MONITORING REPORT - FOURTH QUARTER 2005

**Hooshi's Auto Service  
1499 MacArthur Boulevard  
Oakland, California 94602  
Cambria Project #129-0741**

**December 27, 2005**



### INTRODUCTION

On behalf of Ms. Naomi Gatzke, Cambria Environmental Technology, Inc. (Cambria) has prepared this *Groundwater Monitoring Report – Fourth Quarter 2005* for the referenced site (Figure 1). Presented in this report is a summary of the fourth quarter 2005 groundwater monitoring activities and results, closure request status, and a description of the anticipated first quarter 2006 activities.

Figure 1 presents recent groundwater elevations and selected hydrochemical data. Table 1 presents recent and historic groundwater level measurements, groundwater elevations, any separate phase hydrocarbons (SPH), and hydrochemical data. Appendix A contains field data sheets for this monitoring event. Appendix B presents the recent laboratory analytical report. Appendix C includes time-series plots with Total Petroleum Hydrocarbons as gasoline (TPHg) and benzene concentrations, and groundwater elevations. Appendix D contains the GeoTracker electronic delivery confirmation documentation.

### FOURTH QUARTER 2005 ACTIVITIES

#### Monitoring Activities

**Field Activities:** On October 14, 2005, Muskan Environmental Sampling (MES) conducted quarterly monitoring and sampling activities. MES measured well water levels and collected groundwater samples from monitoring wells MW-1 through MW-6 (Figure 1). The groundwater depth measurements have been submitted to the GeoTracker database (Appendix D).

Prior to groundwater sampling, groundwater levels were measured in all monitoring wells. Each monitoring well was then purged before sampling. MES purged at least three well-casing volumes of groundwater from each monitoring well. Field measurements of pH, specific conductance, and temperature of purged groundwater were measured after the extraction of each successive casing volume. Well purging continued until consecutive pH, specific conductance, and temperature measurements appeared to stabilize. Field measurements, purge volumes, and sample collection data were recorded on field sampling data forms, presented in Appendix A.

**Sample Analyses:** Groundwater samples were analyzed by McCampbell Analytical, Inc. of Pacheco, California, a California-certified laboratory. All groundwater samples 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. The analytical laboratory report is included in Appendix B. Groundwater analytical results are provided on Table 1 and summarized on Figure 1. Analytical results have been submitted to the GeoTracker database (Appendix D).



## Monitoring Results

**Groundwater Flow Direction and Gradient:** Based on depth-to-water measurements collected during the monitoring event on October 14, 2005, groundwater appears to flow towards the southwest (Figure 1). The groundwater gradient appears to be relatively flat on-site and increases to 0.209 feet/foot towards the southwest corner of the site. The gradient and flow direction are 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 three of the six sampled wells. The highest concentration of TPHg was detected in monitoring well MW-5, at 23,000 micrograms per liter ( $\mu\text{g/L}$ ). The highest concentrations of benzene and ethylbenzene were detected in monitoring well MW-2, at 380  $\mu\text{g/L}$  and 780  $\mu\text{g/L}$ , respectively. The highest toluene and xylene concentrations were detected in well MW-5, at 370  $\mu\text{g/L}$  and 2,100  $\mu\text{g/L}$ , respectively. No hydrocarbons were detected in wells MW-3, MW-4, and MW-6. No MTBE was in any of the sampled monitoring wells. Compared to the previous quarter, hydrocarbon concentrations increased in well MW-1, decreased significantly in well MW-2, and increased slightly in well MW-5. The concentrations in MW-5 are the highest detected for TPHg since 2001 and BTEX since 2003.

## CLOSURE REQUEST STATUS

Based on the decreasing source area, hydrocarbon concentrations and the delineated hydrocarbon plume, Cambria prepared a July 21, 2004 *Closure Request* and an October 6, 2004 *Clarifications Regarding Closure Request* for this relatively low risk groundwater site. 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 and into 2006 pending the ACDEH's review of the above mentioned documents. On May 6, 2005 a *Petition for Closure* was submitted to the State Water Resources Control Board (SWRCB).

## ANTICIPATED FIRST QUARTER 2006 ACTIVITIES

### Monitoring Activities



During first quarter 2006, Cambria will measure water levels and collect groundwater samples from monitoring wells MW-1 through MW-6. Monitoring wells MW-1, MW-2, and MW-5 are sampled on a quarterly basis and monitoring 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 SW8015C, and BTEX and MTBE by EPA Method SW8021B. Cambria will prepare a groundwater monitoring report summarizing the monitoring activities and results.

### Site Closure Activities

Cambria requests a meeting with ACDEH to facilitate regulatory closure for the site.

## ATTACHMENTS

Figure 1 – Groundwater Elevation Contour and Hydrocarbon Concentration Map

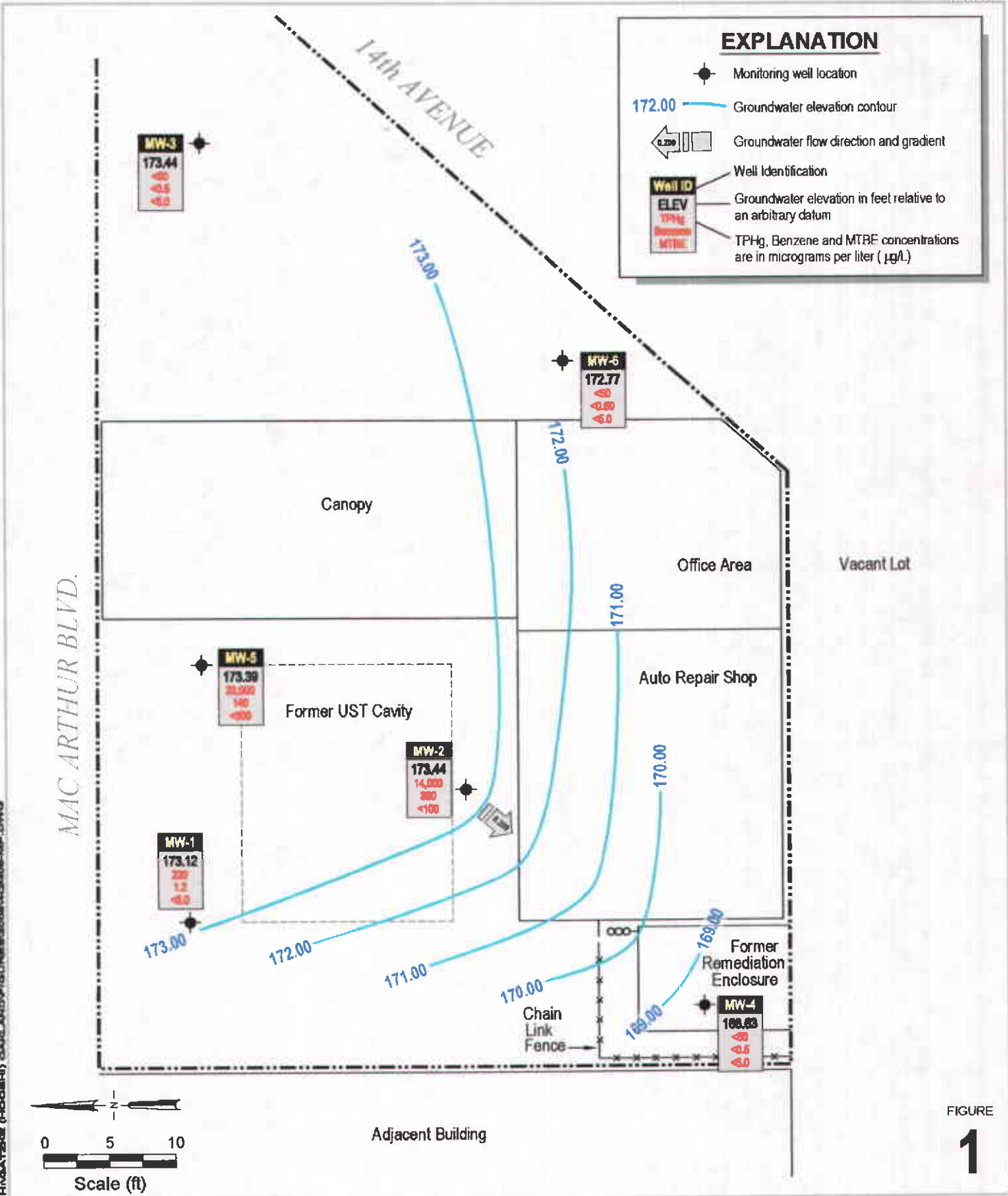
Table 1 – Groundwater Elevation and Analytical Data

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 Confirmation



**Hooshi's Auto Service**  
 1499 MacArthur Boulevard  
 Oakland, California



**Groundwater Elevation Contour  
 and Hydrocarbon Concentration Map**  
 October 14, 2005

# 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)	TPHg ←	→ (µg/L)					Notes
						Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-1	1/4/1993	--	--	--	539	130	12	22	13	--	
181.00	4/22/1993	--	--	--	1,130	75	8.0	38	11	--	
	12/27/1994	--	--	--	770	22	6.6	14	21	--	
	6/27/1996	14.11	166.89	--	3,300	260	34	59	170	80	
	12/10/1996	13.71	167.29	--	1,500	84	11	22	32	34	
	5/8/1998	13.85	167.15	--	3,200	300	12	62	36	<120	a
	8/17/1998	14.11	166.89	--	1,700	160	18	32	27	39	a
	11/4/1998	14.28	166.72	--	1,100	11	4.3	3.6	6.5	<50	a
	2/17/1999	13.41	167.59	--	320	200	47	72	75	57	a
	5/27/1999	14.16	166.84	--	2,500	81	12	29	41	<80	a
	8/19/1999	14.18	166.82	--	780	19	<0.5	5.7	4.5	28	a
180.83	11/23/1999	14.43	166.40	--	1,300	24	0.64	1.8	3.3	<100	a
	2/17/2000	13.85	166.98	--	1,300	60	9.1	22	19	22 (16)	a,b
	5/9/2000	14.01	166.82	--	2,700	55	13	19	25	34 (29)	a
	8/15/2000	14.24	166.59	--	--	--	--	--	--	--	
	12/1/2000	8.75	172.08	--	480	6.4	5.9	1.1	3.9	18 (21)	a
180.63	2/8/2001	8.49	172.14	--	64	<0.5	<0.5	<0.5	<0.5	6.1 (5.6)	a,c
	4/9/2001	8.71	171.92	--	--	--	--	--	--	--	
	4/24/2001	7.90	172.73	--	77	<0.5	<0.5	<0.5	<0.5	5.6 (3.7)	c
	8/6/2001	8.83	171.80	--	140	1.7	0.55	<0.5	0.63	5.8 (4.0)	a
	10/22/2001	8.91	171.72	--	120	0.92	<0.5	<0.5	0.59	11(10)	a
	2/1/2002	8.15	172.48	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/19/2002	8.63	172.00	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/16/2002	8.79	171.84	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/3/2002	8.90	171.73	--	110	<0.5	<0.5	<0.5	<0.5	<5.0	f
	1/10/2003	7.93	172.70	--	<50	<0.5	0.74	<0.5	<0.5	<5.0	
4/21/2003	8.17	172.46	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
7/9/2003	8.92	171.71	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
10/7/2003	9.13	171.50	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
1/22/2004	8.20	172.43	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
4/2/2004	7.09	173.54	--	110	0.52	<0.5	<0.5	<0.5	<5.0	a	
12/29/2004	6.15	174.48	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		

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**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>	1/27/2005	7.15	173.48	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/6/2005	6.84	173.79	--	140	<0.5	0.55	<0.5	0.70	<5.0	c
	7/28/2005	7.36	173.27	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/14/2005	7.51	<b>173.12</b>	--	<b>220</b>	<b>1.2</b>	<b>&lt;0.5</b>	<b>0.56</b>	<b>0.75</b>	<b>&lt;5.0</b>	<b>a</b>
MW-2	1/4/1993	--	--	--	149,000	21,700	25,000	ND	7,760	--	
<i>180.45</i>	4/22/1993	--	--	--	136,300	9,900	15,870	15,300	2,190	--	
	12/27/1994	--	--	--	94,000	11,000	18,000	2,700	16,000	--	
	6/27/1996	12.61	168.64	1.00	--	--	--	--	--	--	
	12/10/1996	11.10	169.55	0.25	--	--	--	--	--	--	
	5/8/1998	10.81	169.66	0.03	--	--	--	--	--	--	
	8/17/1998	12.16	168.31	0.02	--	--	--	--	--	--	
	11/4/1998	12.61	167.86	0.02	--	--	--	--	--	--	
	2/17/1999	9.82	170.66	0.04	--	--	--	--	--	--	
	5/27/1999	11.07	169.48	0.13	--	--	--	--	--	--	
	8/19/1999	12.79	167.68	0.02	--	--	--	--	--	--	
<i>180.24</i>	11/23/1999	12.14	168.20	0.12	--	--	--	--	--	--	
	2/17/2000	10.01	170.37	0.18	--	--	--	--	--	--	
	5/9/2000	10.88	169.38	0.03	--	--	--	--	--	--	
	8/15/2000	12.28	167.97	0.01	--	--	--	--	--	--	
	12/1/2000	8.03	172.21	--	260,000	1,100	5,000	1,900	17,000	<100	a
	2/8/2001	7.86	172.38	--	2,900	1.7	14	5.0	140	<5.0	c,d
	4/9/2001	7.95	172.29	--	--	--	--	--	--	--	
	4/24/2001	6.90	173.34	--	56,000	360	980	1,000	4,700	<5.0	a,b
	8/6/2001	8.15	172.09	--	54,000	680	1,900	1,500	7,800	<200 (<10)	a,b,j
	10/22/2001	8.22	172.02	--	32,000	420	770	1,100	4,100	<250	a,b
	2/1/2002	8.07	172.17	--	26,000	310	490	920	1,600	<1,000	a
	4/19/2002	8.60	171.64	--	16,000	300	240	1,000	990	<100	a
	7/16/2002	8.21	172.03	--	5,700	120	18	340	15	<50	a
	10/3/2002	8.14	172.10	--	4,400	44	16	68	20	<25	a
	1/10/2003	6.98	173.26	--	16,000	300	320	580	830	<100	a,b
	4/21/2003	7.25	172.99	--	12,000	350	260	610	380	<50	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)	TPHg	Benzene Toluene Ethylbenzene Xylenes MTBE					Notes	
						(µg/L)						
MW-2 cont'd	7/9/2003	7.99	172.25	--	3,300	51	7.4	47	2.8	<17	a	
	10/7/2003	8.21	172.03	--	2,400	93	11	34	22	<50	a	
	1/22/2004	7.24	173.00	--	5,900	240	130	350	200	<50	a	
	4/2/2004	6.29	173.95	--	37,000	840	1,500	1,300	5,900	<500	a	
	12/29/2004	5.37	174.87	--	9,300	240	230	330	880	<50	a	
	1/27/2005	6.38	173.86	--	37,000	1,200	1,400	1,300	5,200	<250	a	
	4/6/2005	5.88	174.36	--	21,000	400	340	780	1,700	<100	a	
	7/28/2005	6.61	173.63	--	35,000	690	1,200	1,200	5,200	<500	a	
	10/14/2005	6.80	173.44	--	14,000	380	120	780	1,200	<100	a, b	
MW-3 179.94	1/4/1993	--	--	--	1,610	772	14	11	ND	--		
	4/22/1993	--	--	--	3,040	980	34	19	16	--		
	12/27/1994	--	--	--	2,600	180	9.0	7.2	13	--		
	6/27/1996	13.20	166.74	--	2,000	22	2.9	11	7.4	56		
	12/10/1996	13.13	166.81	--	970	<0.5	<0.5	<0.5	<0.5	24		
	5/8/1998	13.03	166.91	--	780	3.7	2.1	1.1	2.4	<32	a	
	8/17/1998	13.22	166.72	--	870	2.8	<0.5	<0.5	3.7	<5.0	b,c	
	11/4/1998	13.31	166.63	--	770	1.6	4.4	2.0	6.9	<30	c	
	2/17/1999	12.89	167.05	--	650	6.2	3.4	1.5	2.6	<5.0	b,c	
	5/27/1999	12.32	167.62	--	570	1.5	1.2	0.72	1.1	<20	a	
	8/19/1999	13.19	166.75	--	830	<0.5	1.9	<0.5	1.3	<20	c,d	
	179.55	11/23/1999	13.26	166.29	--	900	<0.5	1.8	0.56	1.4	<20	c,d
		2/17/2000	12.78	166.77	--	250	<0.5	1.5	<0.5	0.62	<5.0	d
5/9/2000		12.92	166.63	--	690	<0.5	2.1	0.85	1.6	<5.0	a	
8/15/2000		13.19	166.36	--	610	<0.5	2.3	0.75	1.2	<5.0	c,d	
12/1/2000		7.50	172.05	--	120	<0.5	0.90	0.65	0.62	<5.0	c,d	
2/8/2001		7.20	172.35	--	87	<0.5	<0.5	<0.5	<0.5	<5.0	c,d	
4/9/2001		7.33	172.22	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
8/6/2001		7.61	171.94	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
10/22/2001		7.58	171.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
2/1/2002		7.53	172.02	--	<50	<0.5	<0.5	<0.5	<0.5	8.5 (8.5)		
4/19/2002	7.95	171.60	--	<50	<0.5	<0.5	<0.5	<0.5	9.0 (11)			

# 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>  sampled annually	7/16/2002	7.68	171.87	--	<50	<0.5	<0.5	<0.5	<0.5	20 (30)		
	10/3/2002	7.78	171.77	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	1/10/2003	6.91	172.64	--	<50	<0.5	<0.5	<0.5	<0.5	19 (16)		
	4/21/2003	7.21	172.34	--	--	--	--	--	--	--		
	7/9/2003	8.05	171.50	--	--	--	--	--	--	--		
	10/7/2003	8.19	171.36	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	1/22/2004	7.13	172.42	--	--	--	--	--	--	--		
	4/2/2004	5.73	173.82	--	--	--	--	--	--	--		
	12/29/2004	4.88	174.67	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	1/27/2005	5.80	173.75	--	--	--	--	--	--	--		
	4/6/2005	5.49	174.06	--	--	--	--	--	--	--		
	7/28/2005	6.02	173.53	--	--	--	--	--	--	--		
	<b>10/14/2005</b>	<b>6.11</b>	<b>173.44</b>	--	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;5.0</b>	
	MW-4	6/27/1996	17.03	163.51	--	720	2	0.5	2.5	23	3.2	
<i>180.54</i>	12/10/1996	8.50	172.04	--	80	2.4	<0.5	<0.5	6.6	<2.0		
	5/8/1998	11.46	169.08	--	<50	0.60	<0.5	<0.5	<0.5	<5.0		
	8/17/1998	13.98	166.56	--	<50	<0.5	<0.5	<0.5	0.5	<5.0		
	11/4/1998	14.36	166.18	--	96	9.7	8.1	4.8	18	<5.0	a	
	2/17/1999	8.39	172.15	--	<50	<0.5	<0.5	<0.5	0.5	<5.0		
	5/27/1999	12.80	167.74	--	<50	<0.5	1.0	<0.5	2.9	<5.0		
	8/19/1999	14.42	166.12	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
<i>180.12</i>	11/23/1999	14.63	165.49	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	2/17/2000	8.15	171.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	5/9/2000	12.81	167.31	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	8/15/2000	14.29	165.83	--	<50	2.1	<0.5	<0.5	<0.5	<5.0		
	12/1/2000	12.80	167.32	--	81	6.0	8.4	1.0	5.6	<5.0	a	
	2/8/2001	12.57	167.55	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	4/9/2001	12.50	167.62	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	8/6/2001	14.00	166.12	--	59	1.5	<0.5	<0.5	<0.5	<5.0	a	
	10/22/2001	14.05	166.07	--	130	6.3	<0.5	0.88	<0.5	<5.0	a	
	2/1/2002	13.47	166.65	--	<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-4 cont'd</i>  sampled annually	4/19/2002	13.55	166.57	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/16/2002	14.05	166.07	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/3/2002	13.09	167.03	--	77	2.1	0.51	<0.5	<0.5	<5.0	a
	1/10/2003	12.04	168.08	--	<50	<0.5	<0.5	<0.5	<0.5	20 (15)	a
	4/21/2003	12.15	167.97	--	--	--	--	--	--	--	
	7/9/2003	12.90	167.22	--	--	--	--	--	--	--	
	10/7/2003	13.15	166.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/22/2004	12.09	168.03	--	--	--	--	--	--	--	
	4/2/2004	8.97	171.15	--	--	--	--	--	--	--	
	12/29/2004	7.85	172.27	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/27/2005	8.28	171.84	--	--	--	--	--	--	--	
	4/6/2005	8.07	172.05	--	--	--	--	--	--	--	
	7/28/2005	10.83	169.29	--	--	--	--	--	--	--	
	<b>10/14/2005</b>	<b>11.49</b>	<b>168.63</b>	--	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;5.0</b>
MW-5	6/27/1996	13.62	166.74	0.16	--	--	--	--	--	--	
<i>180.23</i>	12/10/1996	13.26	167.77	1.00	--	--	--	--	--	--	
	5/8/1998	13.15	167.11	0.04	--	--	--	--	--	--	
	8/17/1998	13.36	166.89	0.02	--	--	--	--	--	--	
	11/4/1998	13.52	166.73	0.02	--	--	--	--	--	--	
	2/17/1999	13.02	167.23	0.02	--	--	--	--	--	--	
	5/27/1999	13.80	166.71	0.35	--	--	--	--	--	--	
	8/19/1999	13.45	166.86	0.10	--	--	--	--	--	--	
<i>180.09</i>	11/23/1999	14.03	166.35	0.36	--	--	--	--	--	--	
	2/17/2000	13.28	167.02	0.26	--	--	--	--	--	--	

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**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>	5/9/2000	13.55	166.77	0.29	--	--	--	--	--	--	
	8/15/2000	13.58	166.54	0.04	--	--	--	--	--	--	
<i>180.04</i>	12/1/2000	8.00	172.09	0.00	54,000	240	1,700	870	1,000	<300	c,d
	2/8/2001	7.88	172.16	0.00	33,000	63	420	120	4,500	<50	a,b
	4/9/2001	7.97	172.07	0.00	--	--	--	--	--	--	
	4/24/2001	7.00	173.04	0.00	3,200	<1.0	11	7	260	<5.0	c,d
	8/6/2001	8.17	171.87	--	2,700	11	40	21	240	<5.0	a
	10/22/2001	8.15	171.89	--	20,000	200	1,200	330	2,900	<100	a,b
	2/1/2002	8.07	171.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/19/2002	8.51	171.53	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/16/2002	8.40	171.64	--	<50	<0.5	<0.5	<0.5	1.7	<5.0	
	10/3/2002	8.18	171.86	--	15,000	94	830	460	2,200	<500	a
	1/10/2003	6.95	173.09	--	290	<0.5	1.8	<0.5	17	<5.0	a
	4/21/2003	7.18	172.86	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/9/2003	7.95	172.09	--	<50	<0.5	<0.5	<0.5	2.7	<5.0	
	10/7/2003	8.22	171.82	--	9,800	120	340	180	2,000	<50	a
	1/22/2004	7.18	172.86	--	250	<0.5	0.82	<0.5	29	<5.0	d
	4/2/2004	6.23	173.81	--	4,300	6.3	18	59	750	<25	a
	12/29/2004	5.27	174.77	--	72	<0.5	0.78	<0.5	6.5	<5.0	d
1/27/2005	6.25	173.79	--	3,300	<5.0	22	18	320	<50	a	
4/6/2005	5.90	174.14	--	3,100	1.3	6.9	7.2	100	<10	c,d	
7/28/2005	6.50	173.54	--	18,000	53	230	130	2,100	<500	a	
<b>10/14/2005</b>	<b>6.65</b>	<b>173.39</b>	--	<b>23,000</b>	<b>140</b>	<b>370</b>	<b>240</b>	<b>2,100</b>	<b>&lt;500</b>	<b>a, b</b>	
<i>MW-6</i>	6/27/1996	18.55	161.48	--	ND	ND	ND	ND	ND	--	
<i>180.03</i>	12/10/1999	11.79	168.24	--	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	
	5/8/1998	11.62	168.41	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/17/1998	12.66	167.37	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	11/4/1998	13.56	166.47	--	68	3.8	3.7	2.8	11	<5.0	a
	2/17/1999	12.91	167.12	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	5/27/1999	13.03	167.00	--	<50	1.0	1.7	0.82	4.9	<5.0	
	8/19/1999	13.10	166.93	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
<i>179.63</i>	11/23/1999	13.58	166.05	--	<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 (f*)</i>	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	SPH Thickness (ft)	TPHg ←	→ (µg/L)					Notes	
						Benzene	Toluene	Ethylbenzene	Xylenes	MTBE		
<i>MW-6 cont'd</i>	2/17/2000	10.72	168.91	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	5/9/2000	11.71	167.92	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	8/15/2000	12.49	167.14	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	12/1/2000	8.64	170.99	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	2/8/2001	8.20	171.43	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	4/9/2001	8.53	171.10	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	8/6/2001	8.69	170.94	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	10/22/2001	8.75	170.88	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	2/1/2002	8.31	171.32	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	4/19/2002	8.62	171.01	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	7/16/2002	8.84	170.79	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	10/3/2002	8.71	170.92	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	1/10/2003	6.99	172.64	--	<50	<0.5	<0.5	<0.5	<0.5	19 (16)		
	sampled annually	4/21/2003	7.15	172.48	--	--	--	--	--	--	--	
		7/9/2003	7.98	171.65	--	--	--	--	--	--	--	
		10/7/2003	8.28	171.35	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
		1/22/2004	7.15	172.48	--	--	--	--	--	--	--	
		4/2/2004	6.56	173.07	--	--	--	--	--	--	--	
		12/29/2004	5.63	174.00	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
		1/27/2005	6.66	172.97	--	--	--	--	--	--	--	
4/6/2005		6.25	173.38	--	--	--	--	--	--	--		
7/28/2005		6.71	172.92	--	--	--	--	--	--	--		
10/14/2005		6.86	172.77	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
Trip Blank	5/8/1998	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	11/4/1998	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	5/27/1999	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	11/23/1999	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
	12/1/2000	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0		

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**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) →						

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 SW8015C

Benzene, toluene, ethylbenzene, and xylenes by EPA Method SW8021B

MTBE = Methyl tertiary butyl ether by EPA Method SW8021B

(concentration in parentheses confirmed by EPA Method SW8260B)

µg/L = Micrograms per liter

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

<n = Concentration less than laboratory reporting limit of n.

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 SAMPLING FORM

<b>Date:</b>		10/14/2005				
<b>Client:</b>		Cambria Environmental Technology Inc.				
<b>Site Address:</b>		1499 MacArthur Boulevard 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>		20.01	<b>Fe=</b> <b>mg/L</b>			
<b>Depth to Water:</b>		7.51	<b>ORP=</b> <b>mV</b>			
<b>Water Column Height:</b>		12.50	<b>DO=</b> <b>mg/L</b>			
<b>Gallons/ft:</b>		0.16				
<b>1 Casing Volume (gal):</b>		2.00	<b>COMMENTS:</b> turbid			
<b>3 Casing Volumes (gal):</b>		6.00				
<b>TIME:</b>	<b>CASING VOLUME (gal)</b>	<b>TEMP (Celsius)</b>			<b>pH</b>	<b>COND. (µS/cm)</b>
10:40	2.0	19.5			7.04	790
10:43	4.0	19.7			6.98	728
10:47	6.0	19.0	6.95	745		
<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	10/14/2005	10:50	Voa	HCl, ICE	TPHg, BTEX, MTBE	8015, 8020, confirm by 8260
						<b>Signature:</b>

## WELL SAMPLING FORM

<b>Date:</b>		10/14/2005				
<b>Client:</b>		Cambria Environmental Technology Inc.				
<b>Site Address:</b>		1499 MacArthur Boulevard 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>		19.76	<b>Fe=</b> mg/L			
<b>Depth to Water:</b>		6.80	<b>ORP=</b> mV			
<b>Water Column Height:</b>		12.96	<b>DO=</b> mg/L			
<b>Gallons/ft:</b>		0.16				
<b>1 Casing Volume (gal):</b>		2.07	<b>COMMENTS:</b> turbid, odor, sheen			
<b>3 Casing Volumes (gal):</b>		6.22				
<b>TIME:</b>	<b>CASING VOLUME (gal)</b>	<b>TEMP (Celsius)</b>			<b>pH</b>	<b>COND. (µS/cm)</b>
11:20	2.1	19.8			6.72	602
11:23	4.1	20.1			6.78	638
11:26	6.2	20.1	6.80	616		
<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	10/14/2005	11:30	Voa	HCl, ICE	TPHg, BTEX, MTBE	8015, 8020, confirm by 8260
<b>Signature:</b>						

## WELL SAMPLING FORM

<b>Date:</b>		10/14/2005				
<b>Client:</b>		Cambria Environmental Technology Inc.				
<b>Site Address:</b>		1499 MacArthur Boulevard Oakland, CA				
<b>Well ID:</b>		MW-3				
<b>Well Diameter:</b>		2"				
<b>Purging Device:</b>		Disposable Bailer				
<b>Sampling Method:</b>		Disposable Bailer				
<b>Total Well Depth:</b>		19.94	<b>Fe=</b> mg/L			
<b>Depth to Water:</b>		6.11	<b>ORP=</b> mV			
<b>Water Column Height:</b>		13.83	<b>DO=</b> mg/L			
<b>Gallons/ft:</b>		0.16				
<b>1 Casing Volume (gal):</b>		2.21	<b>COMMENTS:</b> turbid			
<b>3 Casing Volumes (gal):</b>		6.64				
<b>TIME:</b>	<b>CASING VOLUME (gal)</b>	<b>TEMP (Celsius)</b>			<b>pH</b>	<b>COND. (µS/cm)</b>
10:20	2.2	19.9	7.10	622		
10:24	4.4	19.9	7.22	654		
10:28	6.6	19.9	7.20	650		
<b>Sample ID:</b>	<b>Date:</b>	<b>Time</b>	<b>Container Type</b>	<b>Preservative</b>	<b>Analytes</b>	<b>Method</b>
MW-3	10/14/2005	10:30	Voa	HCl, ICE	TPHg, BTEX, MTBE	8015, 8020, confirm by 8260
						<b>Signature:</b>



## WELL SAMPLING FORM

<b>Date:</b>		10/14/2005					
<b>Client:</b>		Cambria Environmental Technology Inc.					
<b>Site Address:</b>		1499 MacArthur Boulevard Oakland, CA					
<b>Well ID:</b>		MW-5					
<b>Well Diameter:</b>		2"					
<b>Purging Device:</b>		Disposable Bailer					
<b>Sampling Method:</b>		Disposable Bailer					
<b>Total Well Depth:</b>		14.70	<b>Fe=</b>		mg/L		
<b>Depth to Water:</b>		6.65	<b>ORP=</b>		mV		
<b>Water Column Height:</b>		8.05	<b>DO=</b>		mg/L		
<b>Gallons/ft:</b>		0.16					
<b>1 Casing Volume (gal):</b>		1.29	<b>COMMENTS:</b> turbid, odor, sheen				
<b>3 Casing Volumes (gal):</b>		3.86					
<b>TIME:</b>	<b>CASING VOLUME (gal)</b>	<b>TEMP (Celsius)</b>				<b>pH</b>	<b>COND. (µS/cm)</b>
11:00	1.3	19.7				7.05	412
11:02	2.6	20.2				7.00	428
11:04	3.9	20.1	7.02	435			
<b>Sample ID:</b>	<b>Date:</b>	<b>Time</b>	<b>Container Type</b>	<b>Preservative</b>	<b>Analytes</b>	<b>Method</b>	
MW-5	10/14/2005	11:10	Voa	HCl, ICE	TPHg, BTEX, MTBE	8015, 8020, confirm by 8260	
						<b>Signature:</b>	

## WELL SAMPLING FORM

<b>Date:</b>		10/14/2005				
<b>Client:</b>		Cambria Environmental Technology Inc.				
<b>Site Address:</b>		1499 MacArthur Boulevard Oakland, CA				
<b>Well ID:</b>		MW-6				
<b>Well Diameter:</b>		2"				
<b>Purging Device:</b>		Disposable Bailer				
<b>Sampling Method:</b>		Disposable Bailer				
<b>Total Well Depth:</b>		20.10	<b>Fe=</b> mg/L			
<b>Depth to Water:</b>		6.86	<b>ORP=</b> mV			
<b>Water Column Height:</b>		13.24	<b>DO=</b> mg/L			
<b>Gallons/ft:</b>		0.16				
<b>1 Casing Volume (gal):</b>		2.12	<b>COMMENTS:</b>			
<b>3 Casing Volumes (gal):</b>		6.36				
<b>TIME:</b>	<b>CASING VOLUME (gal)</b>	<b>TEMP (Celsius)</b>			<b>pH</b>	<b>COND. (µS/cm)</b>
10:00	2.1	19.9	7.00	971		
10:03	4.2	18.7	6.94	915		
10:05	6.4	18.5	6.93	929		
<b>Sample ID:</b>	<b>Date:</b>	<b>Time</b>	<b>Container Type</b>	<b>Preservative</b>	<b>Analytes</b>	<b>Method</b>
MW-6	10/14/2005	10:10	Voa	HCl, ICE	TPHg, BTEX, MTBE	8015, 8020, confirm by 8260
<b>Signature:</b>						

## **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.mccampbell.com E-mail: main@mccampbell.com

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #129-074; Hooshi's	Date Sampled: 10/14/05
		Date Received: 10/14/05
	Client Contact: Matt Meyers	Date Reported: 10/21/05
	Client P.O.:	Date Completed: 10/21/05

**WorkOrder: 0510261**

October 21, 2005

Dear Matt:

Enclosed are:

- 1). the results of 6 analyzed samples from your **#129-074; Hooshi's 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.mcccampbell.com E-mail: main@mcccampbell.com

Cambria Env. Technology  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #129-074; Hooshi's	Date Sampled: 10/14/05
		Date Received: 10/14/05
	Client Contact: Matt Meyers	Date Extracted: 10/15/05-10/17/05
	Client P.O.:	Date Analyzed: 10/15/05-10/17/05

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

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0510261

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	220,a	ND	1.2	ND	0.56	0.75	1	114
002A	MW-2	W	14,000,a,h	ND<100	380	120	780	1200	20	105
003A	MW-3	W	ND	ND	ND	ND	ND	ND	1	100
004A	MW-4	W	ND	ND	ND	ND	ND	ND	1	98
005A	MW-5	W	23,000,a,h	ND<500	140	370	240	2100	100	100
006A	MW-6	W	ND	ND	ND	ND	ND	ND	1	102

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.

*Angela Rydelius*  
 Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0510261

EPA Method: SW8021B/8015Cm		Extraction: SW5030B			BatchID: 18535			Spiked Sample ID: 0510257-004A		
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	107	105	2.40	109	109	0	70 - 130	70 - 130
MTBE	ND	10	99.5	92.1	7.67	91.7	94.4	2.89	70 - 130	70 - 130
Benzene	ND	10	93.9	86.8	7.77	86	88.6	2.87	70 - 130	70 - 130
Toluene	ND	10	93.5	84.6	9.98	88.3	90.8	2.84	70 - 130	70 - 130
Ethylbenzene	ND	10	94.5	91.9	2.75	89.6	92.4	3.01	70 - 130	70 - 130
Xylcnes	ND	30	95	94.3	0.704	90.3	94.7	4.68	70 - 130	70 - 130
%SS:	109	10	98	95	2.66	93	95	2.28	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 18535 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0510261-001A	0/14/05 10:50 AM	10/15/05	10/15/05 3:09 AM	0510261-002A	0/14/05 11:30 AM	10/17/05	10/17/05 8:20 PM
0510261-003A	0/14/05 10:30 AM	10/15/05	10/15/05 5:53 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.

QA/QC Officer



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0510261

EPA Method: SW8021B/8015Cm		Extraction: SW5030B			BatchID: 18550			Spiked Sample ID: 0510291-002A		
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
TPH(btex) <sup>£</sup>	ND	60	107	112	4.29	111	108	2.69	70 - 130	70 - 130
MTBE	ND	10	94	94.6	0.667	96.8	97.1	0.328	70 - 130	70 - 130
Benzene	ND	10	85.7	92.2	7.34	92.1	95.5	3.70	70 - 130	70 - 130
Toluene	ND	10	86.7	93.7	7.81	93.3	96.1	2.94	70 - 130	70 - 130
Ethylbenzene	ND	10	89.5	94.7	5.57	96.5	95.4	1.22	70 - 130	70 - 130
Xylenes	ND	30	90.7	94.7	4.32	99.3	95.3	4.11	70 - 130	70 - 130
%SS:	101	10	93	96	2.77	95	100	4.49	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 18550 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0510261-004A	10/14/05 9:55 AM	10/15/05	10/15/05 6:26 AM	0510261-005A	0/14/05 11:10 AM	10/15/05	10/15/05 7:31 AM
0510261-006A	0/14/05 10:10 AM	10/15/05	10/15/05 8:04 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.

QA/QC Officer

25102W1 CETE

**McCAMPBELL ANALYTICAL, INC.**

110 2<sup>ND</sup> AVENUE SOUTH, #137  
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 #: 129-074 Project Name: HOOSHI'S

Project Location: 1499 MacArthur Blvd. Oakland CA

Sampler Signature: Muskan Environmental Sampling

**Analysis Request**

Other Comment

Filter Samples for Metals analysis: Yes/No
MITBE/BTEX & TPH as Gas (602 / 8021 + 8025) MITBE/BTEX ONLY (EPA 602 / 8021) TPH as Diesel / Motor Oil (8015) Total Petroleum Oil & Grease (1664 / 5520 ER&F) Total Petroleum Hydrocarbons (418.1) EPA 501.2 / 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 (MITBE, ETBE, TAME, DIFE, TBA, 1,2 - DCA, 1,2 - EDB, ethanol) by 8260B confirm all MITBE by 8260

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		10-14-05	10:50	3	WBA	X					X	X			X	
MW-2			11:30													
MW-3			10:30													
MW-4			9:55													
MW-5			11:10													
MW-6			10:10	7							X				X	
TR				1	X	X					X	X				Hold

Relinquished By: [Signature] Date: 10-14-05 Time: 12:22 Received By: [Signature]

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: \_\_\_\_\_

ICE?  GOOD CONDITION  APPROPRIATE CONTAINERS   
 HEAD SPACE ABSENT  PRESERVED IN LAB   
 DECHLORINATED IN LAB   
 PRESERVATION VOAS  O&G  METALS  OTHER

22  
13  
x  
x  
x  
x

**McC Campbell Analytical, Inc.**

**CHAIN-OF-CUSTODY RECORD**



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

WorkOrder: 0510261

ClientID: CETE

EDF: YES

Report to:

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

TEL: (510) 420-0700  
 FAX: (510) 420-9170  
 ProjectNo: #129-074; Hooshi's  
 PO:

Bill to:

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

Requested TAT:

5 days

Date Received: 10/14/2005

Date Printed: 10/14/2005

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
0510261-001	MW-1	Water	10/14/2005	<input type="checkbox"/>	A	A													
0510261-002	MW-2	Water	10/14/2005	<input type="checkbox"/>	A	A													
0510261-003	MW-3	Water	10/14/2005	<input type="checkbox"/>	A	A													
0510261-004	MW-4	Water	10/14/2005	<input type="checkbox"/>	A	A													
0510261-005	MW-5	Water	10/14/2005	<input type="checkbox"/>	A	A													
0510261-006	MW-6	Water	10/14/2005	<input type="checkbox"/>	A	A													
0510261-007	TB	Water		<input checked="" type="checkbox"/>	A	A													

Test Legend:

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

Prepared by: Juanita Venegas

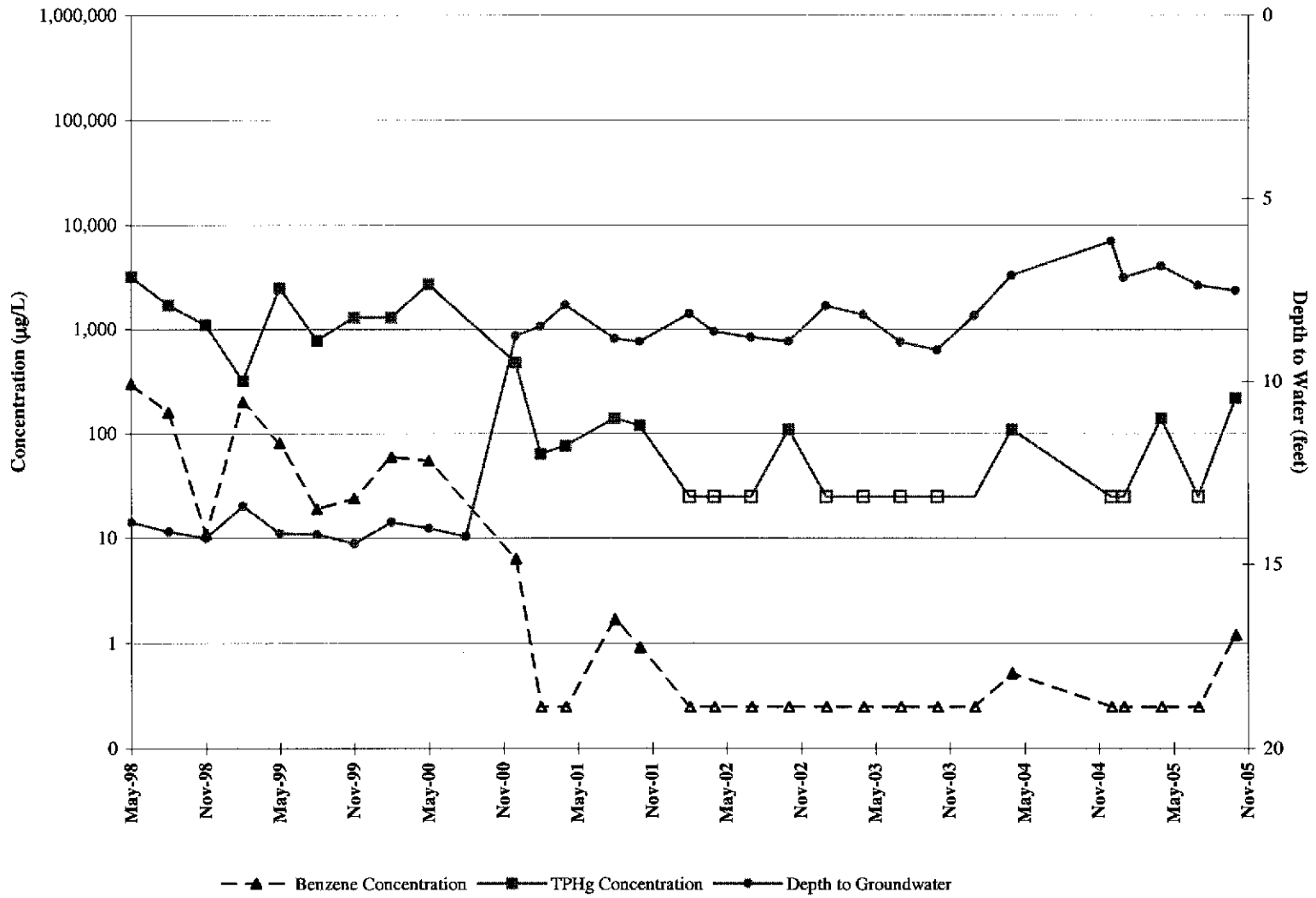
Comments:

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.

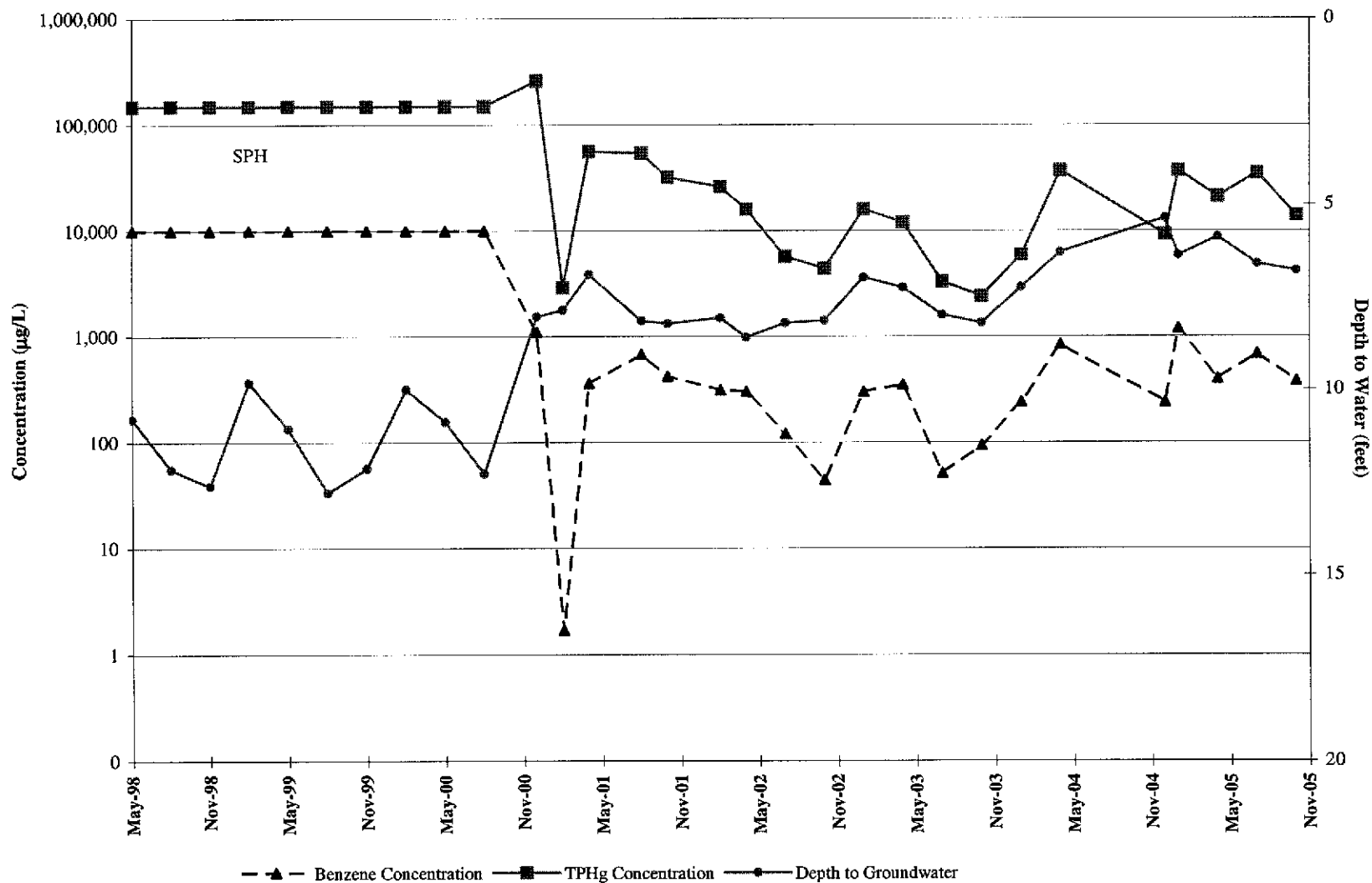
## **APPENDIX C**

**TPHg and Benzene Concentration Graphs**

**Monitoring Well MW-1  
TPHg and Benzene Concentration Trend  
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA**

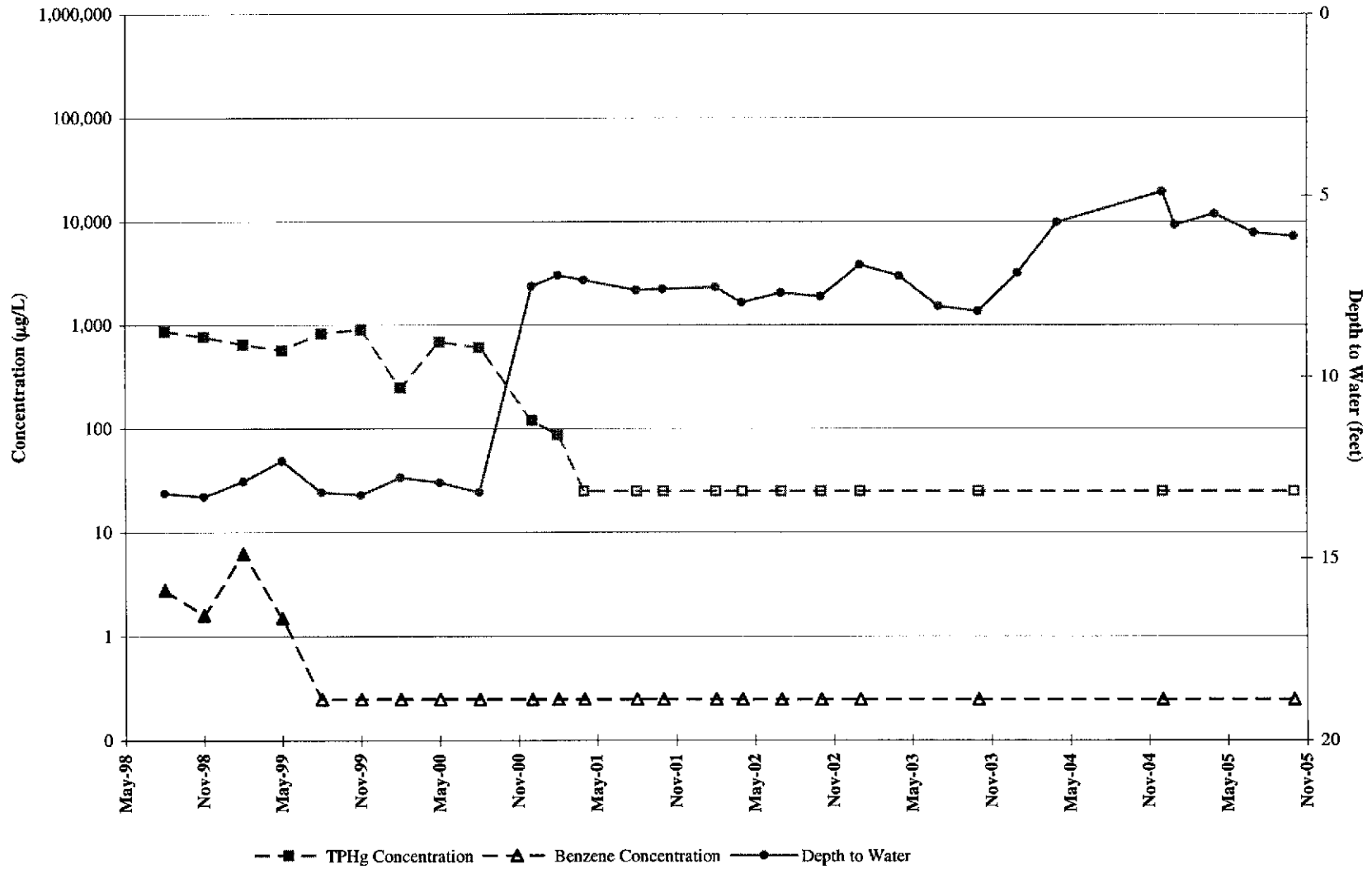


**Monitoring Well MW-2  
TPHg and Benzene Concentration Trend  
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA**

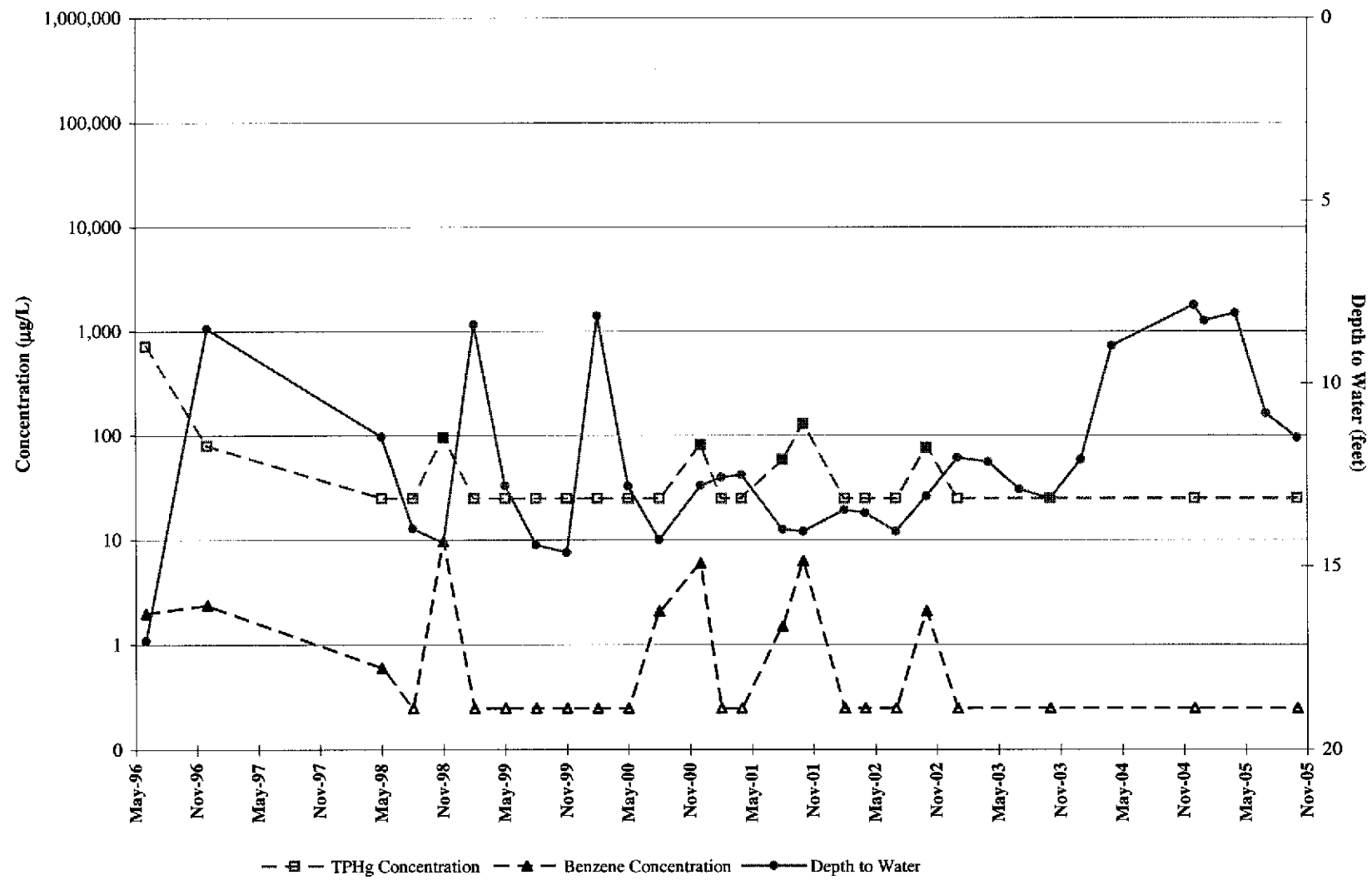




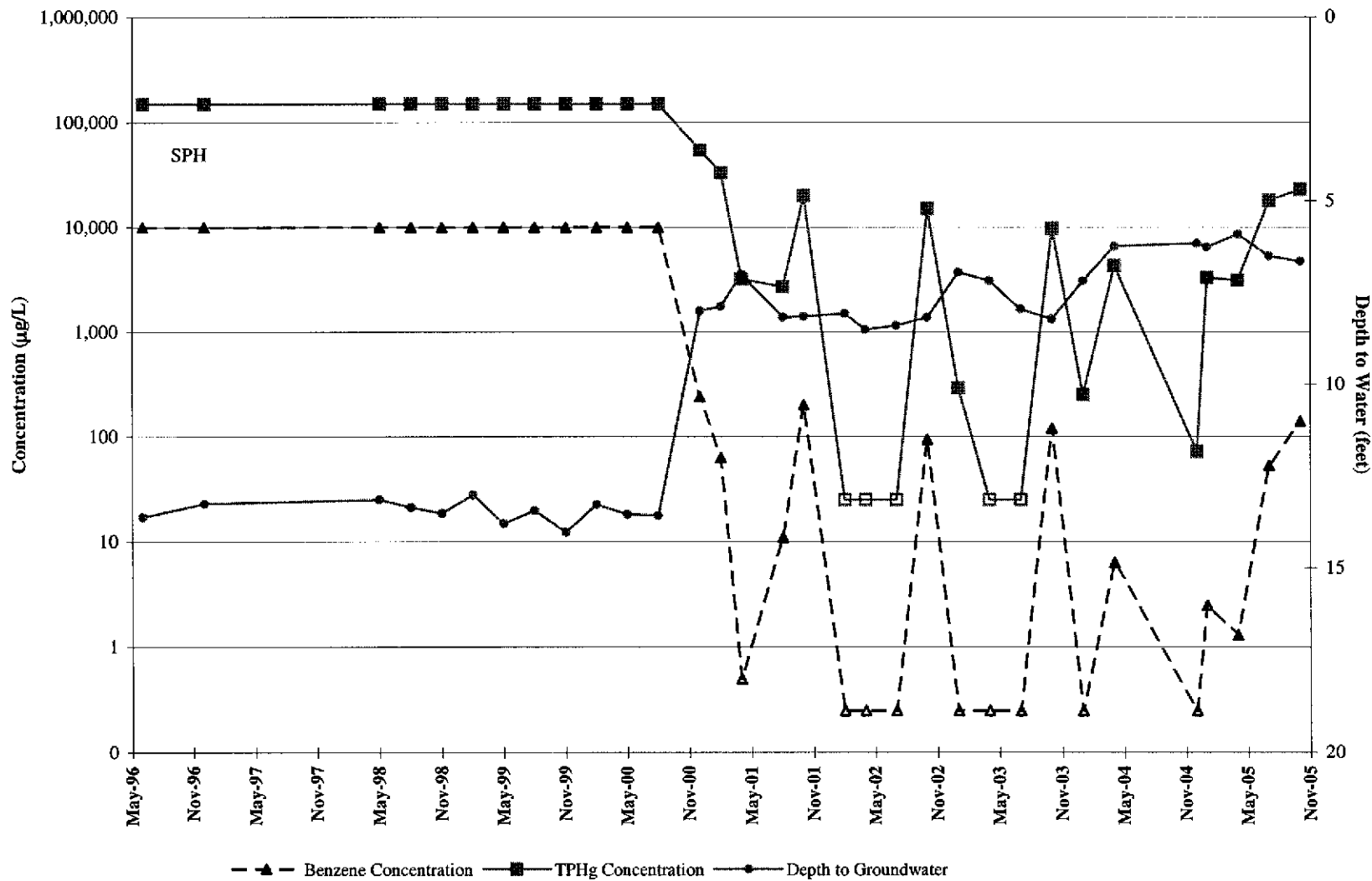
**Monitoring Well MW-3  
TPHg and Benzene Concentration Trend  
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA**



**Monitoring Well MW-4  
TPHg and Benzene Concentration Trend  
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA**



**Monitoring Well MW-5  
TPHg and Benzene Concentration Trend  
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA**



## **APPENDIX D**

### **Electronic Delivery Confirmations**

## Electronic Submittal Information

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### UPLOADING A GEO\_WELL FILE

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

**Submittal Title:** 4th Qtr 2005 GW Monitoring Report

**Submittal Date/Time:** 12/21/2005 3:02:27 PM

**Confirmation Number:** 5381825089

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## Electronic Submittal Information

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Your EDF file has been successfully uploaded!

**Confirmation Number:** 1818156361  
**Date/Time of Submittal:** 12/21/2005 3:03:32 PM  
**Facility Global ID:** T0600100714  
**Facility Name:** HOOSHI'S AUTO SERVICE  
**Submittal Title:** 4th Qtr 2005 GW Monitoring Report  
**Submittal Type:** GW Monitoring Report

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

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

CONF #	TITLE	QUARTER
1818156361	4th Qtr 2005 GW Monitoring Report	Q4 2005
SUBMITTED BY	SUBMIT DATE	STATUS
Matt Meyers	12/21/2005	PENDING REVIEW

### SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	6
# FIELD POINTS WITH DETECTIONS	3
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	3
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 &gt; REPD</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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