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November 20, 2003

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, Third Quarter 2003**

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

Alameda County

NOV 25 2003

Environmental Health



Dear Mr. Hwang:

On behalf of Ms. Naomi Gatzke, Cambria Environmental Technology, Inc. (Cambria) has prepared this *Groundwater Monitoring Report* for the above-referenced site. Presented in the report are the third quarter 2003 activities and the anticipated fourth quarter 2003 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
Senior Staff Geologist

Attachments: Groundwater Monitoring Report, Third Quarter 2003

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

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GROUNDWATER MONITORING REPORT

THIRD QUARTER 2003

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

Alameda County

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Environmental Health

November 20, 2003



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:



Matthew A. Meyers
Senior Staff Geologist





Ron Scheele, R.G.
Senior Geologist

Cambria
Environmental
Technology, Inc.

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

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GROUNDWATER MONITORING REPORT

THIRD QUARTER 2003

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

November 20, 2003



INTRODUCTION

On behalf of Ms. Naomi Gatzke, Cambria Environmental Technology, Inc. (Cambria) has prepared this *Groundwater Monitoring Report* for the above-referenced site (see Figure 1). Presented in this report are the third quarter 2003 groundwater monitoring activities and results and the anticipated fourth quarter 2003 activities.

THIRD QUARTER 2003 ACTIVITIES

Monitoring Activities

Field Activities: On July 9, 2003, Cambria gauged water levels in groundwater monitoring wells MW-1 through MW-6. Groundwater samples were obtained from monitoring wells MW-1, MW-2, and MW-5 as according to the sampling schedule. Field data sheets are presented as Appendix A. The well gauging data has been submitted to the Geotracker database. See Appendix D for the Geotracker electronic delivery confirmation.

Sample Analyses: Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015Cm; 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. See Appendix D for the Geotracker electronic delivery confirmation.

Monitoring Results

Groundwater Flow Direction and Gradient: Based on field measurements collected on July 9, 2003, groundwater beneath the site generally flows toward the southwest (Figure 1). The groundwater

gradient is relatively flat onsite and increases to 0.205 ft/ft towards the southwest corner of the site. Depth to water and groundwater elevation data are presented in Table 1.

Hydrocarbon Distribution in Groundwater: No hydrocarbons or MTBE were detected in monitoring well MW-1. Only xylenes were detected in MW-5 at a concentration of 2.7 micrograms per liter ($\mu\text{g/L}$). TPHg and benzene concentrations were detected in well MW-2 at 3,300 and 51 $\mu\text{g/L}$, respectively. Overall, hydrocarbon concentrations have decreased as compared with previous quarters and continue to exhibit a decreasing trend. See Appendix C for TPHg and benzene concentrations versus time graphs for each well.

Waste Disposal



On May 2, 2003, 65 gallons of purged groundwater from previous monitoring events was transported for disposal by Dillard Environmental Services to Romic Environmental Technologies in East Palo Alto, California. See Appendix E for a copy of the Non-Hazardous Waste Manifest.

ANTICIPATED FOURTH QUARTER 2003 ACTIVITIES

Monitoring Activities

Cambria will gauge water levels and collect groundwater samples from all wells. As per phone discussions with Mr. Don Hwang of the Alameda County Department of Environmental Health (ACDEH), the well sampling schedule has been revised so that wells MW-1, MW-2, and MW-5 will be sampled on a quarterly basis and wells MW-3, MW-4, and MW-6 will be sampled on an annual basis (during the fourth quarter). Groundwater samples will be analyzed for TPHg by Modified EPA Method 8015 and BTEX and MTBE by EPA Method 8021. 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

Based on the decreasing concentrations and the stable plume confirmation, Cambria has begun preparation of a Closure Request Report for this low risk groundwater site.

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Groundwater Monitoring Report - Third Quarter 2003

Hooshi's Auto Service

November 20, 2003

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 – Laboratory Analytical Report

Appendix C – TPHg and Benzene Concentration Graphs

Appendix D – Geotracker Electronic Delivery Confirmations

Appendix E – Non-Hazardous Waste Manifest

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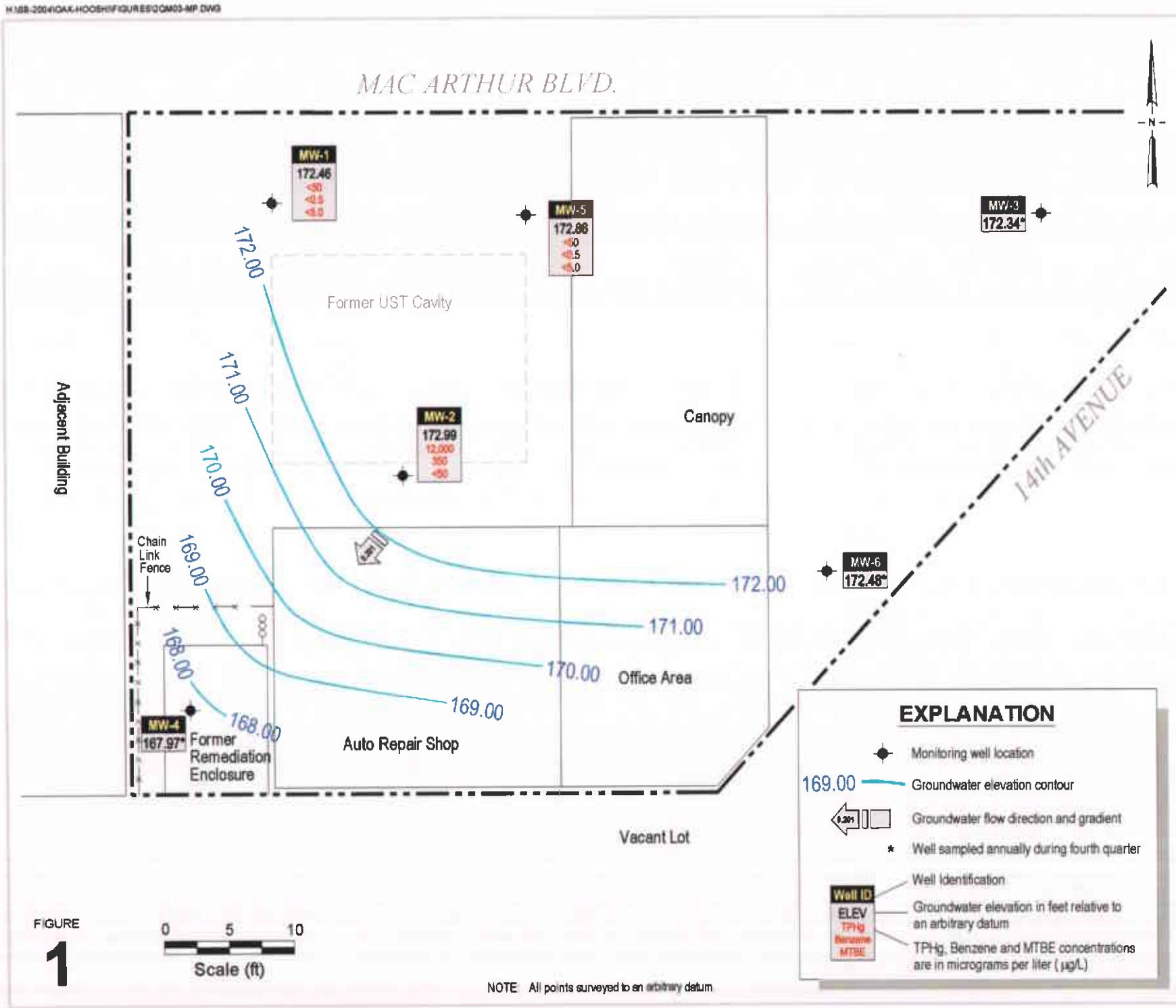


Hooshi's Auto Service
1499 MacArthur Boulevard
Oakland, California



C A M B R I A
**Groundwater Elevation Contour
and Hydrocarbon Concentration Map**
April 21, 2003

**FIGURE
1**



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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-1 <i>I81.00</i>	1/4/1993	--	--	--	539	130	12	22	13	--	
	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
<i>I80.83</i>	8/19/1999	14.18	166.82	--	780	19	<0.5	5.7	4.5	28	a
	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	--	--	--	--	--	--	--	
<i>I80.63</i>	12/1/2000	8.75	172.08	--	480	6.4	5.9	1.1	3.9	18 (21)	a
	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
<i>I10/2003</i>	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	

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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	SPH	TPHg ←	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes →
		Groundwater (ft)	Elevation (ft**) (ft)	Thickness (ft)		(μg/L)					
MW-2	1/4/1993	--	--	--	149,000	21,700	25,000	ND	7,760	--	
<i>I80.45</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>I80.24</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,h,j
	10/22/2001	8.22	172.02	--	32,000	420	770	1,100	4,100	<250	a,h
	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,h
	4/21/2003	7.25	172.99	--	12,000	350	260	610	380	<50	a
	7/9/2003	7.99	172.25	--	3,300	51	7.4	47	2.8	<17	a

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Well ID TOC (ft*)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	SPH Thickness (ft)	TPHg ←	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE →	Notes
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
179.55	8/19/1999	13.19	166.75	--	830	<0.5	1.9	<0.5	1.3	<20	c,d
	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	
sampled annually	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)	
	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	--	--	--	--	--	--	--	

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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	SPH	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
		Groundwater (ft)	Elevation (ft**) (ft)	Thickness (ft)		←	(μg/L) →				
MW-4	6/27/1996	17.03	163.51	--	720	2	0.5	2.5	23	3.2	
<i>I80.54</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>I80.12</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	
	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	--	--	--	--	--	--	--	
sampled annually	7/9/2003	12.90	167.22	--	--	--	--	--	--	--	

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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 ↔	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE	Notes
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	--	--	--	--	--	--	
	5/9/2000	13.55	166.77	0.29	--	--	--	--	--	--	
	8/15/2000	13.58	166.54	0.04	--	--	--	--	--	--	
	12/1/2000	8.00	172.09	0.00	54,000	240	1,700	870	1,000	<300	c,d
<i>180.04</i>	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,h
	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	

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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	<		Toluene (µg/L)	Ethylbenzene	Xylenes	MTBE	Notes
						Benzene	Toluene					
MW-6	6/27/1996	18.55	161.48	--	ND	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	<0.5	<2.0	
	5/8/1998	11.62	168.41	--	<50	<0.5	<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	<0.5	<5.0	
	11/4/1998	13.56	166.47	--	68	3.8	3.7	2.8	11	<5.0	<5.0	a
	2/17/1999	12.91	167.12	--	<50	<0.5	<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	<5.0	
	8/19/1999	13.10	166.93	--	<50	<0.5	<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	<0.5	<5.0	
	2/17/2000	10.72	168.91	--	<50	<0.5	<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	<0.5	<5.0	
	8/15/2000	12.49	167.14	--	<50	<0.5	<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	<0.5	<5.0	
	2/8/2001	8.20	171.43	--	<50	<0.5	<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	<0.5	<5.0	
	8/6/2001	8.69	170.94	--	<50	<0.5	<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	<0.5	<5.0	
	2/1/2002	8.31	171.32	--	<50	<0.5	<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	<0.5	<5.0	
	7/16/2002	8.84	170.79	--	<50	<0.5	<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	<0.5	<5.0	
	1/10/2003	6.99	172.64	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	19 (16)	
	4/21/2003	7.15	172.48	--	--	--	--	--	--	--	--	
<i>sampled annually</i>	7/9/2003	7.98	171.65	--	--	--	--	--	--	--	--	

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	SPH	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
		(ft)	(ft**) (ft)	Thickness		←	(μg/L) →				
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	

Abbreviations and Methods:

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)

ft = measured in feet

μg/L = Micrograms per liter

TOC = Top of casing elevation

-- = not sampled.

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 that 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

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

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

C A M B R I A



APPENDIX A

Groundwater Monitoring Field Data Sheets

CAMBRIA

Groundwater Monitoring Field Sheet

Project Name: Hoashi's

Project Number/Task: 129-0741/044

Measured By: S. Hall

Date: 7-9-03

WELL SAMPLING FORM

Project Name: Hooshi's	Cambria Mgr: MM	Well ID: MW-1
Project Number: 129-0741	Date: 7-9-03	Well Yield:
Site Address: 1499 MacArthur Boulevard Oakland, California	Sampling Method:	Well Diameter: 2 " pvc
	Disposable bailer	Technician(s): SG
Initial Depth to Water: 8.92	Total Well Depth: 19.90	Water Column Height: 10.98
Volume/ft: 0.16	1 Casing Volume: 1.75	3 Casing Volumes: 5.27
Purging Device: disposable bailer	Did Well Dewater?: no	Total Gallons Purged: 6
Start Purge Time: 4:10	Stop Purge Time: 4:24	Total Time: 14mins

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
4:15	2	19.6	7.12	1394	
4:20	4	19.3	7.19	870	
4:25	6	19.2	7.15	642	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-1	7-9-03	4:30	3 voa's	HCL	TPHg, BTEX, MTBE	8020 8015

CAMBRIA

WELL SAMPLING FORM

Project Name: Hooshi's	Cambria Mgr: MN	Well ID: MW-2
Project Number: 129-0741	Date: 7-9-03	Well Yield:
Site Address: 1499 MacArthur Boulevard Oakland, California	Sampling Method:	Well Diameter: 2 " pvc
	Disposable bailer	Technician(s): SG
Initial Depth to Water: 7.99	Total Well Depth: 19.80	Water Column Height: 11.81
Volume/ft: 0.16	1 Casing Volume: 1.88	3 Casing Volumes: 5.66
Purging Device: disposable bailer	Did Well Dewater?: no	Total Gallons Purged: 6
Start Purge Time: 5:15	Stop Purge Time: 5:29	Total Time: 14 mins

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
5:20	2	19.1	7.20	945	
5:25	4	19.4	7.21	970	
5:30	6	19.4	7.18	1013	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-2	7-9-03	5:35	3 vials	HCL	TPHg, BTEX, MTBE	8020 8015

CAMBRIA

WELL SAMPLING FORM

Project Name: Hooshi's	Cambria Mgr: MM	Well ID: MW-5
Project Number: 129-0741	Date: 7-9-03	Well Yield:
Site Address: 1499 MacArthur Boulevard Oakland, California	Sampling Method:	Well Diameter: 2 " pvc
	Disposable bailer	Technician(s): SG
Initial Depth to Water: 7.95	Total Well Depth: 14.50	Water Column Height: 6.55
Volume/ft: 0.16	1 Casing Volume: 1.04	3 Casing Volumes: 3.12
Purging Device: disposable bailer	Did Well Dewater?: no	Total Gallons Purged: 3
Start Purge Time: 4:45	Stop Purge Time: 4:59	Total Time: 14mins

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
4:50	1	19.1	7.15	1950	
4:55	2	19.1	7.20	1372	
5:00	3	19.1	7.22	1240	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-5	7-9-03	5:05	3 voa's	HCL	TPHg, BTEX, MTBE	8020 8015

McCAMPBELL ANALYTICAL INC.

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

Telephone: (925) 798-1620

Fax: (925) 798-1622

FILE COPY

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HOUR 48 HOUR 5 DAY

EDF Required? Yes No

Report To: <u>Matt Meyers</u>	Bill To: <u>Cambria Env. Tech</u>																											
Company: Cambria Environmental Technology Inc.																												
5900 Hollis Street Emeryville, CA 94608	E-mail: <u>mmeyers@cambria-env.com</u>																											
Tele: 510-420-3314	Fax: 510-450-8295 510-420-9170																											
Project #: 129-0741-044	Project Name: Hooshi's																											
Project Location: 1499 MacArthur Blvd. Oakland, Ca																												
Sampler Signature: <u>J. M. Meyers</u>																												
SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	MATRIX		METHOD PRESERVED		Analysis Request						Other	Comments												
		Date	Time		Type	Containers	Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃			Other	BTEX & TPH as Gas (602/8020 / 8015) / MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&FB&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310
MW-1		7-20-03	4:30	3	Voa	X	X			X	X			X	X		EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	
MW-2		7-20-03	5:35	3	Voa	X	X			X	X			X	X		EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	
MW-5		7-20-03	5:05	3	Voa	X	X			X	X			X	X		EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	
Relinquished By:	Date:	Time:	Received By:	Remarks:																								
<u>J. M. Meyers</u>	7-20-03	5:30	Secure location																									
Relinquished By:	Date:	Time:	Received By:																									
Relinquished By:	Date:	Time:	Received By:																									

C A M B R I A



APPENDIX B

Laboratory Analytical Report



McCampbell Analytical Inc.

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

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #129-0741-044; Hooshi's	Date Sampled: 07/09/03
	Client Contact: Matt Meyers"	Date Received: 07/11/03
	Client P.O.:	Date Reported: 07/17/03
		Date Completed: 07/17/03

WorkOrder: 0307196

July 17, 2003

Dear Matt:

Enclosed are:

- 1). the results of 3 analyzed samples from your #129-0741-044; 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. McCampbell 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



McCampbell Analytical Inc.

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

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #129-0741-044; Hooshi's	Date Sampled: 07/09/03
		Date Received: 07/11/03
	Client Contact: Matt Meyers"	Date Extracted: 07/12/03-07/16/03
	Client P.O.:	Date Analyzed: 07/12/03-07/16/03

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

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0307196

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in µg/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 McCampbell 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 ~2 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.



McCampbell Analytical Inc.

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

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W

WorkOrder: 0307196

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 7779		Spiked Sample ID: 0307177-014A				
	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex) [£]	ND	60	99.8	98	1.76	99.1	98	1.08	70	130
MTBE	ND	10	96.3	101	4.33	98.3	100	2.09	70	130
Benzene	ND	10	97.6	96.9	0.725	97.8	99.8	2.09	70	130
Toluene	ND	10	98.9	98	0.935	98.5	100	1.72	70	130
Ethylbenzene	ND	10	101	100	0.572	100	102	1.44	70	130
Xylenes	ND	30	100	100	0	100	103	3.28	70	130
%SS:	105	100	103	102	0.793	102	104	1.36	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 = $100 * (\text{MS-Sample}) / (\text{Amount Spiked})$; RPD = $100 * (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) * 2$.

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

NR = 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.

0307194

McCAMPBELL ANALYTICAL INC.
110 2nd AVENUE SOUTH, #D7
PACIFICO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HOUR 48 HOUR 5 DAY

EDF Required? Yes No

Report To: Matt Meyers Bill To: Cambria Env. Tech
Company: Cambria Environmental Technology Inc.
5900 Hollis Street
Emeryville, CA 94608 E-mail: mmeyers@cambria-env.com
Tele: 510-420-3314 Fax: 510-450-8295 510-420-9170
Project #: 129-0741-044 Project Name: Hoshii's
Project Location: 1499 MacArthur Blvd. Oakland, Ca
Sampler Signature: [Signature]

Relinquished By:

Date

Date: Time: Received By

Secure location

Remarks

Relinquished Fly

Date

Date: _____ Time: _____ Received By: _____

Received By:

Belinquisched By:

Date _____

Date: 3 Time: Received By:

Received By: *[Signature]*



CHAIN-OF-CUSTODY RECORD

WorkOrder: 0307196

Client:

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

TEL: (510) 420-0700
FAX: (510) 420-3394
ProjectNo: #129-0741-044; Hooshi's
PO:

Date Received: 7/11/03
Date Printed: 7/11/03

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests					
					<>	N8021B/8015C				
0307196-001	MW-1	Water	7/9/03 4:30:00 PM	<input type="checkbox"/>	A	A				
0307196-002	MW-2	Water	7/9/03 5:35:00 AM	<input type="checkbox"/>		A				
0307196-003	MW-5	Water	7/9/03 5:05:00 AM	<input type="checkbox"/>		A				

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.

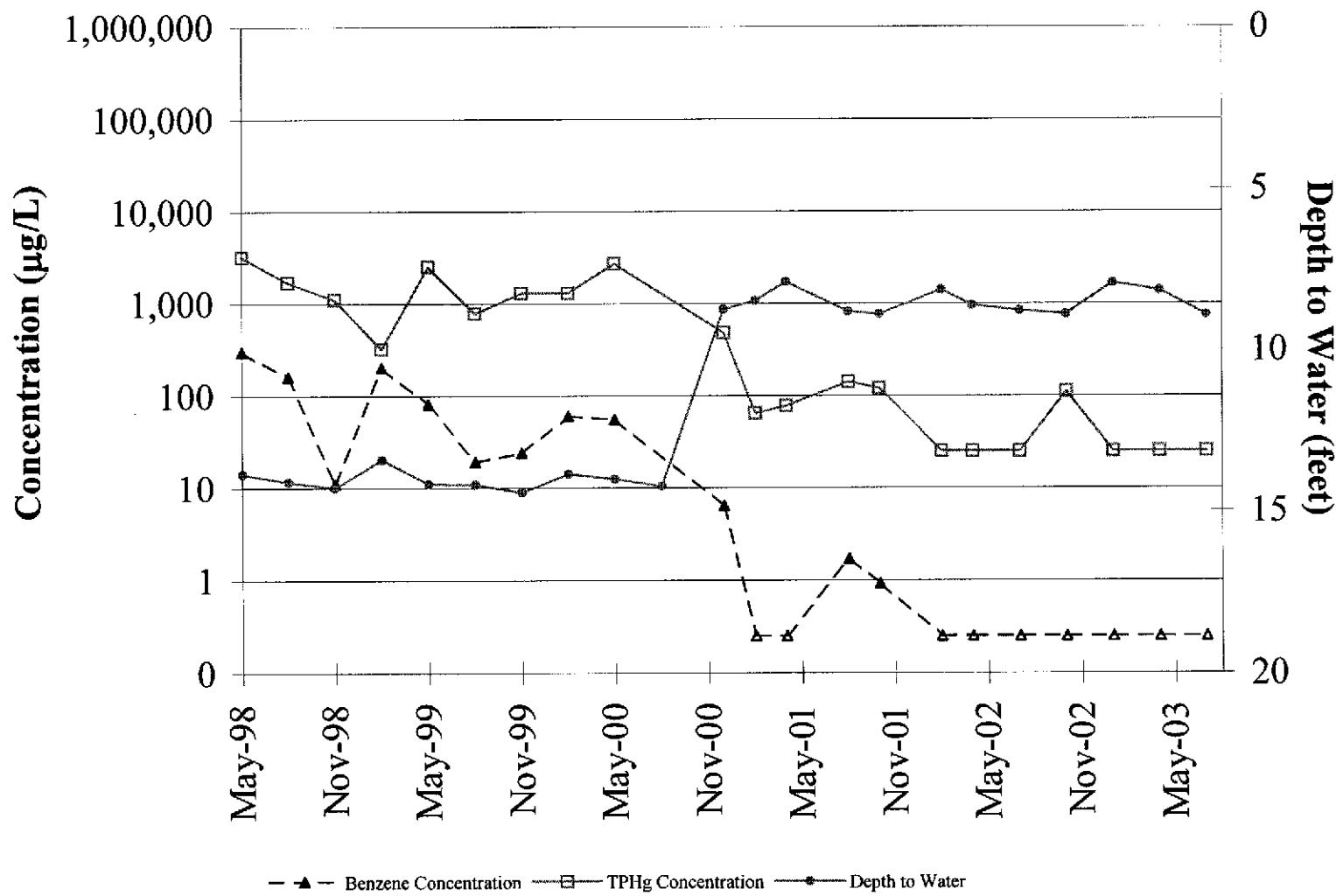
C A M B R I A



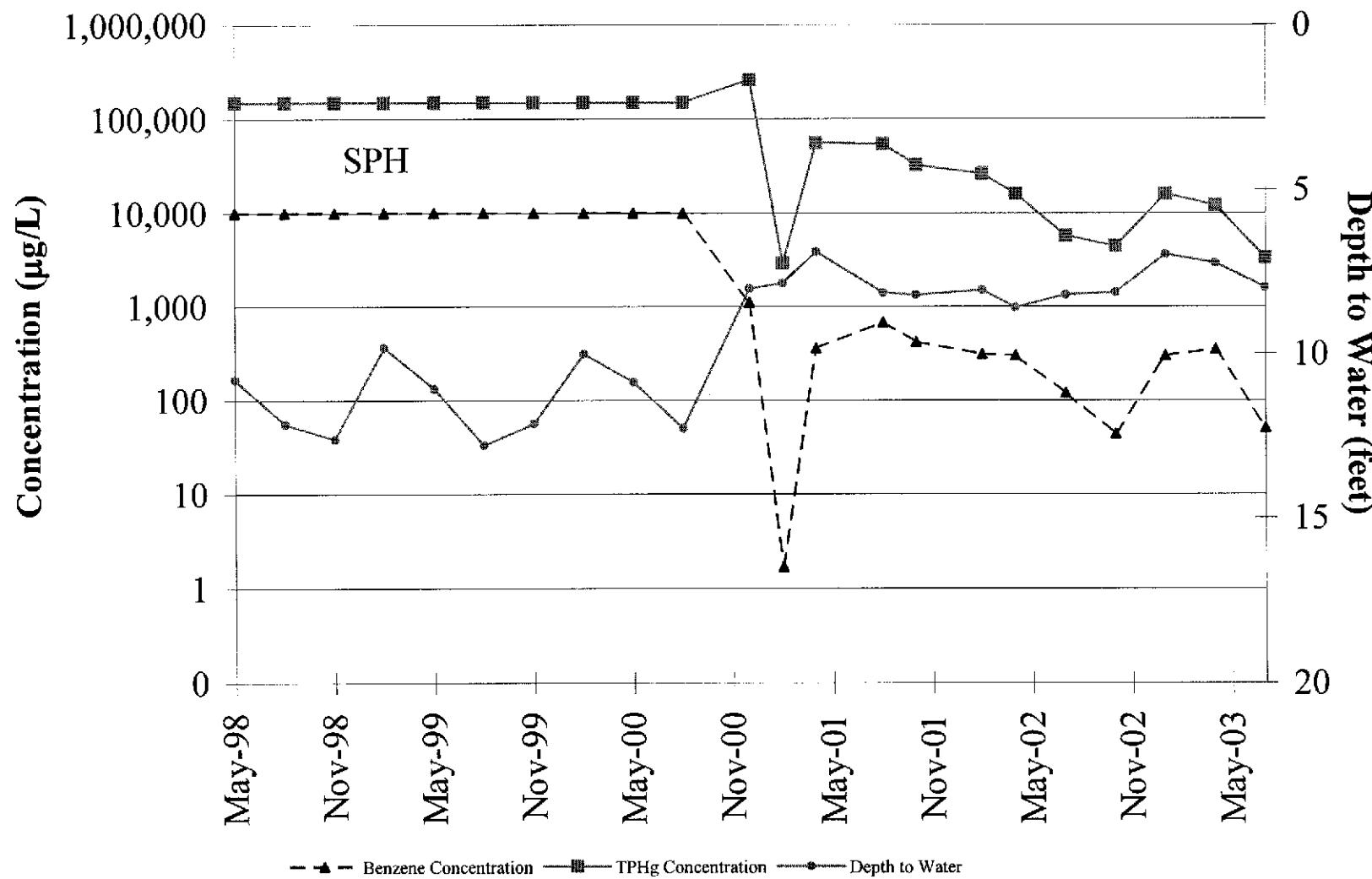
APPENDIX C

TPHg and Benzene Concentration Graphs

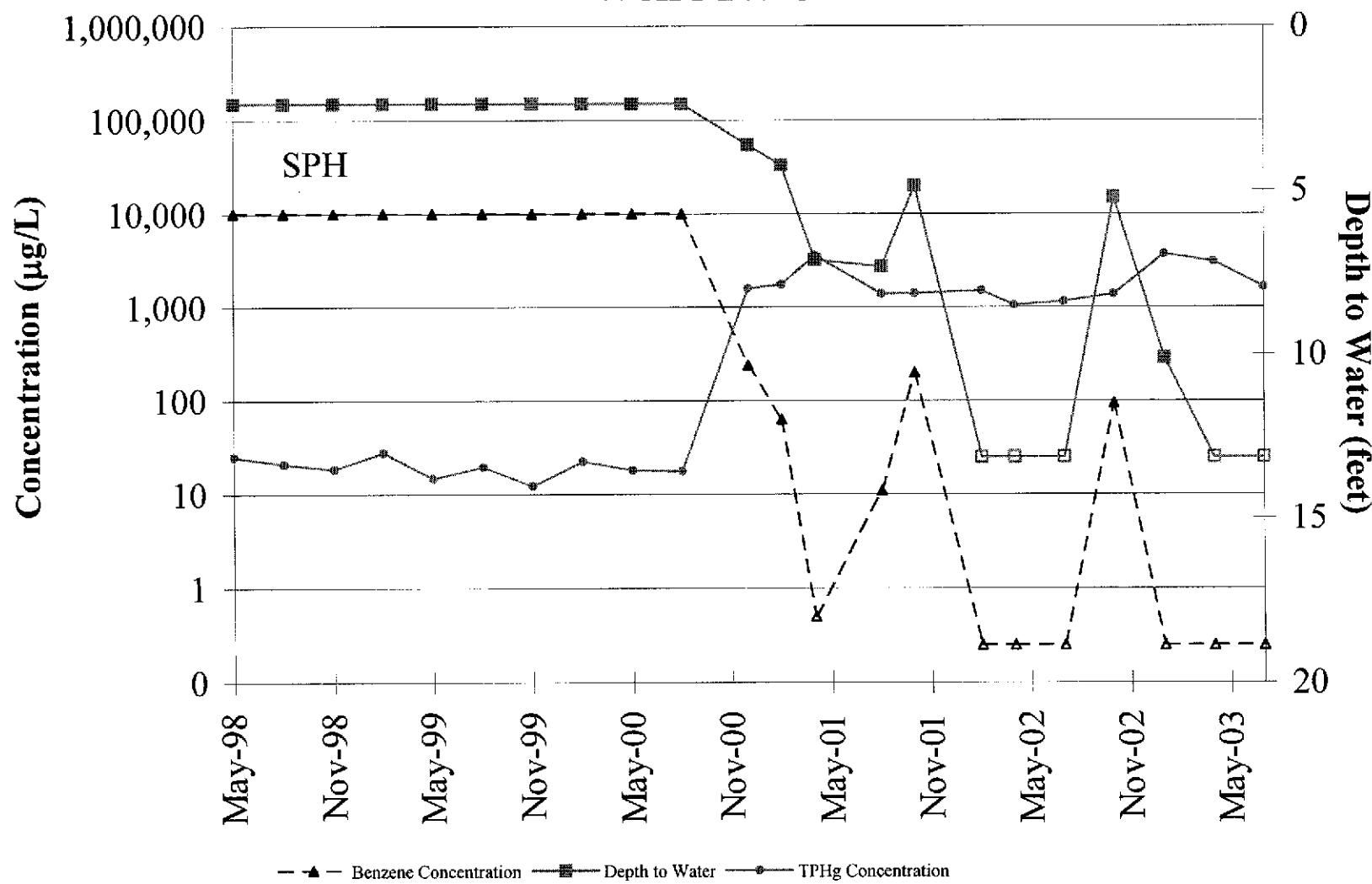
TPHg and Benzene Concentration Trend Well MW-1



TPHg and Benzene Concentration Trend Well MW-2



TPHg and Benzene Concentration Trend Well MW-5



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APPENDIX D

Geotracker Electronic Delivery Confirmations

AB2886 Electronic Delivery

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

Your EDF file has been successfully uploaded!

Confirmation Number: 4005818068

Date/Time of Submittal: 10/28/2003 6:02:03 PM

Facility Global ID: T0600100714

Facility Name: HOOSHI'S AUTO SERVICE

Submittal Title: 3rd Qtr 2003 Groundwater Monitoring Analytical Data

Submittal Type: GW Monitoring Report

Logged in as CAMBRIA-EM (AUTH_RP)

CONTACT SITE [ADMINISTRATOR](#).

AB2886 Electronic Delivery

[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: 3rd Qtr 2003 Groundwater Depths, 1499 MacArthur Street,
Oakland

Submittal Date/Time: 10/28/2003 6:07:14 PM

**Confirmation
Number:** 2434193253

[Back to Main Menu](#)

Logged in as CAMBRIA-EM (AUTH_RP)

[CONTACT SITE ADMINISTRATOR](#)

C A M B R I A



APPENDIX E

Non-Hazardous Waste Manifest

COPY

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. MOOSHIS		Manifest Document No.: 4-2-12-5-1		2. Page 1 of 1	
3. Generator's Name and Mailing Address HESSIS 1699 HACARTON ROAD BIRMINGHAM, AL		MAIL: 5900 MILLIE STREET BIRMINGHAM, AL 35208 ATTN: WATT REYER					
4. Generator's Phone WATT REYER 334-222-1111		6. US EPA ID Number 10 20 30 40 50 60 70		A. State Transporter's ID B. Transporter 1 Phone C. State Transporter's ID D. Transporter 2 Phone			
5. Transporter 1 Company Name REED ENVIRONMENTAL TECHNOLOGIES 2081 GAY ROAD EAST VALENTINE, VA 24303		8. US EPA ID Number 10 20 30 40 50 60 70		E. State Facility's ID F. Facility's Phone (540) 325-1515			
11. WASTE DESCRIPTION NON HAZARDOUS WATER, (pH: 8.67715)		10. US EPA ID Number 10 20 30 40 50 60 70		12. Containers No. 001 Type TT		13. Total Quantity 065	
a.		14. Unit Wt/Vol.					
b.							
c.							
d.							
G. Additional Descriptions for Materials Listed Above LIQUID LIQUID LIQUID LIQUID		H. Handling Codes for Wastes Listed Above					
15. Special Handling Instructions and Additional Information Emergency Contact: (925) 631-6850, BILLARD JONES 983-001, RON 09-34326							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
Printed/Typed Name H. Shaffer		Signature H. Shaffer		Date Month 5 Day 2 Year 03			
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name PAUL RONDARES		Signature P. Rondares		Date Month 5 Day 2 Year 03			
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name J. Om		Signature J. Om		Date Month 05 Day 05 Year 03			
19. Discrepancy Indication Space							
20. Facility Owner or Operator, Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.							
Printed/Typed Name J. Om		Signature J. Om		Date Month 05 Day 05 Year 03			