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R [REDACTED] 199
May 21, 2003

Ms. Susan Hugo
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: **Groundwater Monitoring Report - First Quarter 2003**
Connell Automobile Dealership
3093 Broadway
Oakland, California
Case No. 469
Cambria Project #425-1580

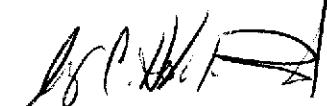
Dear Ms. Hugo:

On behalf of Messrs. George Hill and Gordon Linden, Cambria Environmental Technology, Inc. (Cambria) has prepared this quarterly monitoring report for the above-referenced site. Presented in this report are the first quarter 2003 activities, and anticipated second quarter 2003 activities.

If you have any questions or comments please feel free to call me at (510) 420-3307.

Sincerely,

Cambria Environmental Technology, Inc.



Mary C. Holland-Ford
Project Geologist

Attachments: Groundwater Monitoring Report - First Quarter 2003

cc: Mr. George Hill, 305 Sheridan Avenue, Piedmont, California 94611
Mr. Gordon Linden, 150 La Salle Avenue, Piedmont, California 94611
Mr. Paul Kibel, Fitzgerald, Abbott & Beardsley, LLP, 1221 Broadway, 21st Floor, Oakland, California 94612
Mr. Leroy Griffin, Hazardous Materials Manager, Fire Department - OES, 1605 MLK Jr. Way, Oakland, California 94612

**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 - FIRST QUARTER 2003

Connell Automobile Dealership
3093 Broadway
Oakland, California
Case No. 469
Cambria Project #425-1580

May 21, 2003

Alameda County
MAY 28 2003
Environmental Health



Prepared for:

Mr. George Hill
305 Sheridan Avenue
Piedmont, California 94611

Mr. Gordon Linden
150 La Salle Avenue
Piedmont, California 94611

Prepared by:

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




Mary C. Holland-Ford
Project Geologist

Cambria
Environmental
Technology, Inc.

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


Ron Scheele, RG
Associate Geologist

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GROUNDWATER MONITORING REPORT - FIRST QUARTER 2003

Connell Automobile Dealership
3093 Broadway
Oakland, California
Case No. 469
Cambria Project #425-1580

May 21, 2003

INTRODUCTION

As required by the Alameda County Health Care Services Agency (ACHCSA), Cambria Environmental Technology, Inc. (Cambria) has prepared this *First Quarter 2003 Groundwater Monitoring Report* for the above-referenced site (Figure 1). Described below are the first quarter 2003 monitoring activities and results and the anticipated second quarter 2003 activities.

FIRST QUARTER 2003 ACTIVITIES

Monitoring Activities

Field Activities: On January 20, 2003, Cambria gauged and inspected all groundwater monitoring wells for separate-phase hydrocarbons (SPH) (Figure 1). Groundwater samples were collected from wells MW-4, MW-7, MW-8, MW-9, MW-13, and MW-15 as described by the sampling protocol in Appendix B. Wells MW-1, MW-6, and MW-14 were not sampled due to the presence of SPH in the well. Hydrocarbons have not been detected in wells MW-1, MW-3, MW-5, MW-10, MW-11, and MW-15 and therefore these wells are no longer on the sampling protocol. Field data sheets are presented in Appendix C. The well gauging data has been submitted to the Geotracker database. See Appendix D for the electronic delivery confirmations.

Sample Analysis: Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), TPH as diesel (TPHd), TPH as motor oil (TPHmo) by EPA Method 8015, benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tertiary butyl ether (MTBE) by EPA Method 8021B, and halogenated volatile organic compounds (HVOCs) by EPA Method 8010. In addition, samples from wells MW-9 and MW-15 were analyzed for (LUFT) metals. Dissolved oxygen was also measured in all wells that were sampled. All analyses were performed by McCampbell Analytical of Pacheco, California, a California-certified laboratory. Laboratory analytical results are shown in Tables 1, 2, and 3 and summarized on Figure 1. The laboratory analytical reports and chain of custody are included in Appendix C. The groundwater sampling

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Groundwater Monitoring Report - First Quarter 2003
Connell Automobile Dealership
Oakland, California
May 21, 2003

results have been submitted to the Geotracker database. See Appendix D for the electronic delivery confirmations.

Monitoring Results

 **Groundwater Flow Direction:** Based on depth-to-water measurements collected on January 20, 2003, groundwater beneath the site generally flows toward the northeast with a gradient of 0.093 ft/ft (Figure 1). This gradient is consistent with historical data. Depth to water and groundwater elevation data are presented in Table 1.

Contaminant Distribution in Groundwater: In general, analytical results were consistent relative to the previous quarter. SPH were measured or observed in wells MW-1, MW-6, MW-14 (sheen) and MW-15 (sheen). TPHg and benzene was detected in samples from wells MW-4, MW-8, MW-9, and MW-15, with the highest concentrations in well MW-4 at 110,000 micrograms per liter ($\mu\text{g/L}$). Benzene was also detected in these wells with the highest concentration in well MW-15 at 9,900 $\mu\text{g/L}$. TPHd was detected in wells MW-4, MW-7, MW-8, MW-9, and MW-15 with the highest concentration in well MW-4 at 29,000 $\mu\text{g/L}$. TPHd results are likely related to gasoline as indicated in the footnotes of the laboratory analytical report. No HVOCs were detected with the exception of 1,2-DCA (in wells MW-4, MW-8, MW-9, and MW-15) which is typically related to gasoline.

Corrective Action Activities

Separate-Phase Hydrocarbon Removal: Cambria conducted SPH removal activities on January 17, 2003, January 27, 2003, and March 5, 2003. During these site visits Cambria removed a total of 0.054 gallons of SPH from wells MW-1, MW-6, and MW-14. As of March 5, 2003, a total of approximately 152.58 gallons of SPH have been removed since SPH removal activities began in December 1991. Table 4 presents the SPH thickness measurements, the amount of SPH removed from the wells during each site visit, and the cumulative volume of SPH removed.

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Groundwater Monitoring Report - First Quarter 2003
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ANTICIPATED SECOND QUARTER 2003 ACTIVITIES

Request for Reduced Sampling

Based on the low or non-detectable levels of TPHmo, LUFT metals, and HVOCs over the past four quarters, Cambria requests that these analyses be removed from the well sampling protocol. Cambria also requests that all samples be passed through a silica gel cleanup, prior to being analyzed for TPHd, to remove potential contributions of non-hydrocarbon organics.



Monitoring Activities

Cambria will gauge all wells, check wells for SPH, and collect groundwater samples from all wells not containing SPH. Upon agency approval of the reduced sampling request, groundwater samples will be analyzed for TPHg and TPHd (with silica gel cleanup) by modified EPA Method 8015, and BTEX and MTBE by EPA Method 8021B. Cambria will summarize groundwater monitoring and corrective action activities in the *Second quarter 2003, Quarterly Monitoring Report*.

Correction Activities

Cambria will continue to perform monthly SPH recovery events by hand-bailing from all wells with measurable SPH.

ATTACHMENTS

Figure 1 – Groundwater Elevation Contour and Hydrocarbon Concentration Map

Table 1 – Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCs
Table 2 – Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCS
Table 3 – LUFT Metals in Groundwater
Table 4 – Liquid Phase Hydrocarbon Removal

Appendix A – Well Sampling Protocol
Appendix B – Groundwater Monitoring Field Data
Appendix C – Results for Groundwater Sampling Sheets
Appendix D – Geotracker Electronic Delivery Confirmations

Connell Automobile Dealership
3093 Broadway
Oakland, California

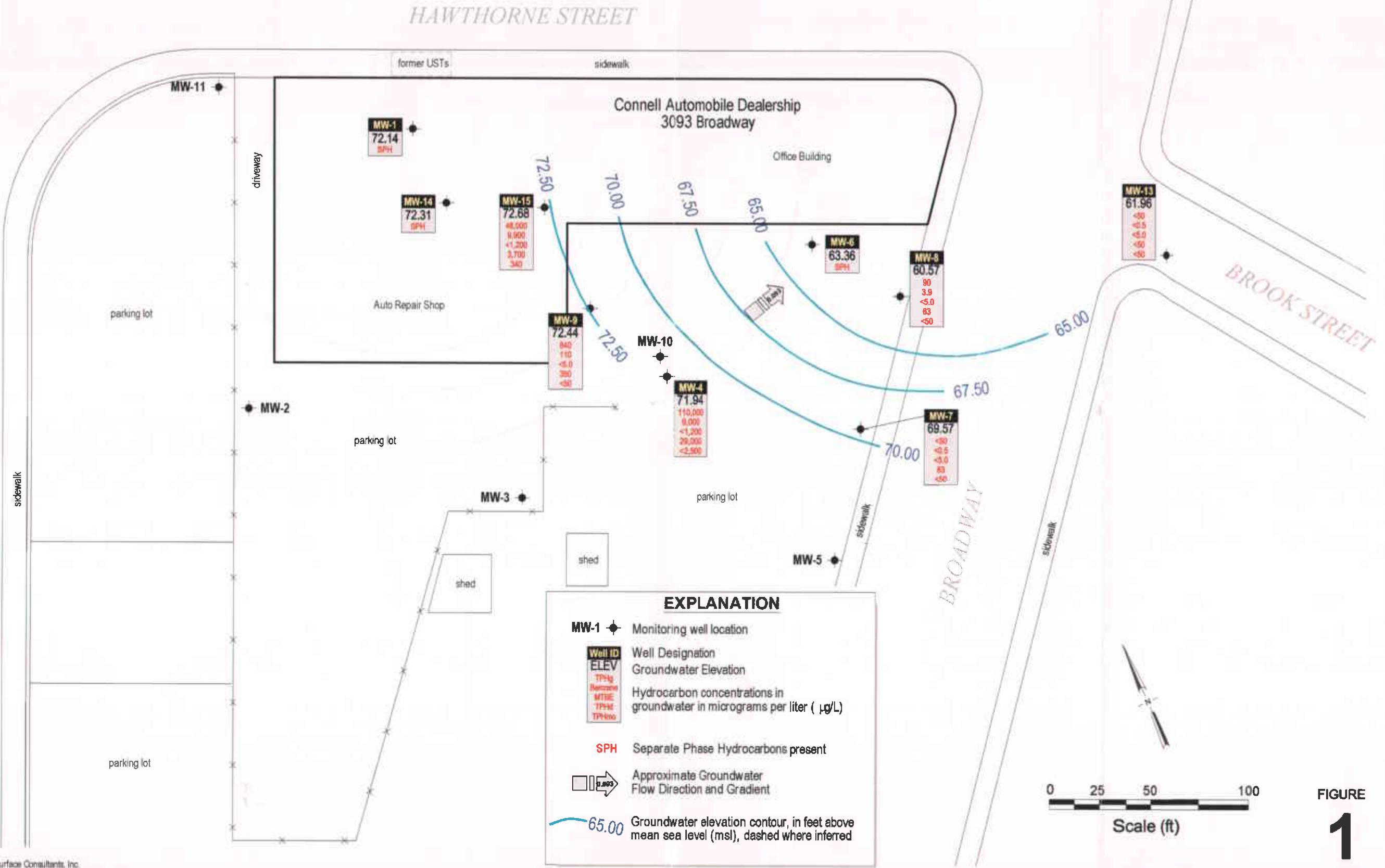
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Groundwater Elevation Contours with Benzene and MTBE Concentrations

January 20, 2003

1

FIGURE



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Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Benzene	Toluene	Ethyl- benzene	Xylenes	MTBE	1,2-DCA	Other HVOCs
										µg/L	
MW-1	10/5/1990	26.40	68.08	620,000	33,000	50,000	7,900	41,000	--	2,900	ND
94.48	3/1/1991	27.46	67.02	SPH	--	--	--	--	**	--	--
	10/12/1992	26.44	68.04	490,000	51,000	59,000	5,000	27,000	--	1,300	--
	11/24/1992	26.63	67.85	320,000	35,000	43,000	4,200	22,000	--	1,600	ND
	4/5/1993	23.77	70.71	270,000	50,000	58,000	4,600	25,000	--	1,800	ND
	7/21/1993	24.51	69.97	SPH	--	--	--	--	--	--	--
	11/9/1993	26.06	68.42	SPH	--	--	--	--	--	--	--
	8/30/1995	21.73	72.75	SPH	--	--	--	--	--	--	--
	12/4/1995	21.94	72.54	SPH	--	--	--	--	<200	--	--
	5/2/1996	20.65	73.83	340,000	57,000	73,000	7,200	38,000	--	1,200	--
	11/5/1996	24.29	70.19	270,000	43,000	56,000	4,500	34,000	--	--	--
	5/9/1997	22.79	71.69	240,000	36,000	45,000	3,300	17,900	--	930	--
	11/5/1997	25.06	69.42	240,000	42,000	48,000	3,600	18,800	<1,000	1,200	--
	2/9/1998	22.64	71.84	220,000	47,000	60,000	5,200	29,800	<1,000	1,500	ND
	5/1/1998	19.95	74.53	160,000	35,000	42,000	2,800	16,000	<1,000	1,100	ND
	11/3/1998	23.29	71.19	200,000	39,000	49,000	4,400	26,000	<500	1,200	ND
	3/24/1999	22.30	72.18	SPH	--	--	--	--	--	--	--
	7/1/1999	22.70	71.78	SPH	--	--	--	--	--	--	--
	9/21/1999	23.81	70.67	SPH	--	--	--	--	--	--	--
	2/9/2000	23.95	70.59	SPH	--	--	--	--	--	--	--
	5/31/2000	22.05	72.43	SPH	--	--	--	--	--	--	--
	8/8/2000	22.49	71.99	SPH	--	--	--	--	--	--	--
	11/14/2000	24.65	69.83	SPH	--	--	--	--	--	--	--
	3/1/2001	24.22	70.28	SPH	--	--	--	--	--	--	--
	5/7/2001	23.85	70.67	SPH (0.05)	--	--	--	--	--	--	--
	8/1/2001	23.91	70.64	SPH (0.09)	--	--	--	--	--	--	--
	11/5/2001	23.95	70.67	SPH (0.18)	--	--	--	--	--	--	--
	2/13/2002	23.15	71.39	SPH(0.07)	--	--	--	--	--	--	--
	5/2/2002	23.91	70.60	SPH (0.04)	--	--	--	--	--	--	--
	8/4/2002	24.02	70.48	SPH (0.03)	--	--	--	--	--	--	--
	11/26/2002	24.47	70.05	SPH (0.05)	--	--	--	--	--	--	--
	1/20/2003	22.37	72.14	SPH (0.04)	--	--	--	--	--	--	--

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Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Ethyl- benzene						1,2-DCA	Other HVOCs
					Benzene	Toluene	Xylenes	MTBE	μg/L	←		
MW-2 94.81	3/1/1991	27.86	66.95	<50	<0.5	<0.5	<0.5	--	<1.0	ND		
	11/24/1992	27.91	66.90	<50	<0.5	1.1	<0.5	--	<1.0	ND		
	4/5/1993	25.95	68.86	<50	<0.5	<0.5	<0.5	--	<1.0	ND		
	7/21/1993	25.59	69.22	<50	<0.5	<0.5	<0.5	--	<1.0	ND		
	11/10/1993	26.72	68.09	<50	<0.5	<0.5	<0.5	--	<1.0	ND		
	8/30/1995	25.75	69.06	<50	<0.5	<0.5	<0.5	--	<1.0	--		
	5/3/1996	23.28	71.53	<50	<0.5	<0.5	<0.5	--	<1.0	ND		
	5/8/1997	24.58	70.23	<50	<0.5	0.7	<0.5	--	<1.0	--		
	4/29/1998	22.18	72.63	<50	<0.5	<0.5	<0.5	<2	<1.0	ND		
MW-3 90.08	3/1/1991	23.17	66.91	<50	<0.5	0.6	<0.5	--	<1.0	ND		
	11/25/1992	23.01	67.07	50	<0.5	0.9	<0.5	2	--	<1.0	ND	
	4/5/1993	22.11	67.97	<50	<0.5	<0.5	<0.5	--	<1.0	ND		
	7/21/1993	23.93	66.15	<50	<0.5	<0.5	<0.5	--	<1.0	ND		
	11/10/1993	23.14	66.94	<50	<0.5	<0.5	<0.5	--	<1.0	ND		
	8/30/1995	20.61	69.47	<50	<0.5	<0.5	<0.5	--	<1.0	--		
	5/3/1996	18.43	71.65	<50	<0.5	<0.5	<0.5	--	<1.0	ND		
	5/8/1997	19.77	70.31	<50	<0.5	0.7	<0.5	--	<1.0	--		
	4/29/1998	17.92	72.16	<50	<0.5	<0.5	<0.5	<2	<1.0	ND		
MW-4 88.84	3/1/1991	23.79	65.05	150,000	20,000	38,000	2,800	14,000	**	610	ND	
	10/12/1992	22.48	66.36	230,000	15,000	32,000	2,500	14,000	--	430	--	
	11/24/1992	22.60	66.24	210,000	14,000	31,000	2,500	14,000	--	500	ND	
	4/2/1993	20.11	68.73	SPH	--	--	--	--	--	--	--	
	7/21/1993	20.48	68.36	SPH	--	--	--	--	--	--	--	
	11/9/1993	21.71	67.13	SPH	--	--	--	--	--	--	--	
	8/30/1995	19.90	68.94	SPH	--	--	--	--	--	--	--	
	12/1/1995	19.40	69.44	SPH	--	--	--	--	--	--	--	
	5/2/1996	17.50	71.34	140,000	24,000	50,000	3,000	15,100	--	420	ND	
	11/4/1996	20.13	68.71	160,000	16,000	38,000	2,700	14,000	--	380	ND	
	5/8/1997	18.63	70.21	170,000	16,000	37,000	2,400	15,900	--	290	--	
	11/5/1997	20.19	68.65	190,000	15,000	31,000	2,200	14,600	<400	290	--	
	2/9/1998	18.28	70.56	110,000	19,000	42,000	2,500	18,300	<500	300	--	

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Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Benzene	Toluene	Ethyl- benzene	Xylenes	MTBE	1,2-DCA	Other HVOCs
				←			μg/L	←			→
MW-4	5/1/1998	16.11	72.73	130,000	15,000	31,000	2,000	13,400	<1,000	260	ND
88.84	8/4/1998	17.54	71.30	130,000	16,000	34,000	2,400	15,700	<400	240	ND
(cont'd)	11/2/1998	19.21	69.63	140,000	16,000	32,000	2,300	15,500	<400	230	ND
	3/26/1999	17.51	71.33	110,000	15,000	30,000	1,600	15,000	450 ⁴	210	5
	7/1/1999	18.80	70.04	110,000	13,000	23,000	1,600	12,000	<83	170	5
	9/21/1999	19.85	68.99	140,000	16,000	31,000	2,400	14,800	ND	<1000	5
	2/9/2000	19.76	69.08	140,000	16,000	28,000	2,100	14,000	<400	100	DCB: 5.9, MCB: 5
	5/31/2000	17.90	70.94	15,000	17,000	28,000	2,400	14,000	<0.5 ⁶	<0.5	ND
	8/8/2000	18.62	70.22	140,000	15,000	25,000	2,100	13,000	<300	110	ND
	11/14/2000	19.63	69.21	150,000	19,000	36,000	2,900	17,000	<200	120	ND
	3/1/2001	19.68	69.16	120,000	10,000	15,000	1,300	10,000	<2000	110	ND
	5/7/2001	18.60	70.24	210,000	12,000	19,000	1,900	12,000	<200	100	ND
	8/1/2001	18.73	70.11	160,000	13,000	21,000	2,200	13,000	<200	84	ND
	11/5/2001	18.97	69.87	220,000	15,000	26,000	3,100	16,000	<200	72	ND
	2/13/2002	18.59	70.25	180,000	6,100	11,000	1,400	13,000	<200	55	VINE: 620, NE: 10 ¹
	5/2/2002	18.77	70.07	110,000	13,000	20,000	2,000	10,000	<1,200	87	ND
	8/4/2002	18.95	69.89	92,000	9,200	15,000	1,800	10,000	<2,000	44	ND
	11/26/2002	20.83	68.01	110,000	16,000	26,000	2,700	12,000	<1,000	56	ND
	1/20/2003	16.90	71.94	110,000	9,000	16,000	1,900	11,000	<1,200	32	ND
MW-5	3/15/1991	26.31	58.53	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
84.84	11/10/1992	26.83	58.01	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	4/2/1993	26.62	58.22	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	7/21/1993	26.60	58.24	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	11/9/1993	27.24	57.60	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	8/30/1995	27.46	57.38	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	--
	5/3/1996	26.02	58.82	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	5/8/1997	26.76	58.08	<50	<0.5	0.5	<0.5	<0.5	--	<1.0	--
	4/29/1998	26.55	58.29	<50	<0.5	0.5	<0.5	<0.5	<2	<1.0	ND
MW-6	3/15/1991	25.82	59.80	80,000	12,000	13,000	1,100	5,400	--	1,400	DBCM: 160
85.62	10/12/1992	25.02	60.60	19,000	3,200	1,400	200	560	--	840	--
	12/1/1992	28.87	56.75	SPH	--	--	--	--	--	--	--
	4/2/1993	26.96	58.66	SPH	--	--	--	--	--	--	--

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Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Ethyl- benzene						1,2-DCA	Other HVOCs
					Benzene	Toluene	μg/L	Xylenes	MTBE	↔		
MW-6 <i>(cont'd)</i>	7/21/1993	26.17	59.45	SPH	--	--	--	--	--	--	--	--
	11/9/1993	27.51	58.11	SPH	--	--	--	--	--	--	--	--
	8/30/1995	28.00	57.62	SPH	--	--	--	--	--	--	--	--
	12/1/1995	27.58	58.04	SPH	--	--	--	--	<8,000,000	71	--	--
86.94	5/3/1996	28.15	58.79	130,000	37,000	50,000	3,200	14,200	--	2,400	ND	--
	5/9/1997	26.54	60.40	1,700,000	14,000	27,000	4,000	28,200	--	1,200	--	--
85.82	11/5/1997	26.16	60.78	160,000	13,000	19,000	1,900	14,300	<200	790	--	--
	5/1/1998	22.96	62.86	130,000	15,000	23,000	1,700	13,200	<500	1,100	ND	--
	11/3/1998	24.35	61.47	110,000	17,000	21,000	1,800	10,700	<200	990	ND	--
	3/26/1999	23.82	62.00	SPH	--	--	--	--	--	--	--	--
	7/1/1999	24.45	61.37	SPH	--	--	--	--	--	--	--	--
	9/21/1999	24.58	61.24	SPH	--	--	--	--	--	--	--	--
	2/9/2000	24.93	61.24	SPH	--	--	--	--	--	--	--	--
	5/31/2000	23.47	62.41	SPH	--	--	--	--	--	--	--	--
	8/8/2000	23.85	61.97	SPH	--	--	--	--	--	--	--	--
	11/14/2000	24.61	61.21	SPH	--	--	--	--	--	--	--	--
	3/1/2001	23.97	61.85	SPH	--	--	--	--	--	--	--	--
	5/7/2001	23.17	62.71	SPH	--	--	--	--	--	--	--	--
	8/1/2001	obstruction in well	--	--	--	--	--	--	--	--	--	--
	11/5/2001	obstruction in well	--	--	--	--	--	--	--	--	--	--
	2/13/2002	obstruction in well	--	--	--	--	--	--	--	--	--	--
	5/2/2002	23.25	62.41	SPH (0.05)	--	--	--	--	--	--	--	--
	8/4/2002	23.55	62.29	SPH (0.03)	--	--	--	--	--	--	--	--
MW-7 <i>85.41</i>	11/26/2002	24.22	61.62	SPH (0.03)	--	--	--	--	--	--	--	--
	1/20/2003	22.49	63.36	SPH (0.04)	--	--	--	--	--	--	--	--
	3/15/1991	21.63	63.78	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND	--
	11/24/1992	21.52	63.89	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND	--
	4/2/1993	20.08	65.33	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND	--
	7/21/1993	19.59	65.82	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND	--
	11/9/1993	20.65	64.76	<50	<0.5	1	<0.5	1.7	--	<1.0	ND	--
	8/30/1995	18.78	66.63	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	--	--
	12/1/1995	19.47	65.94	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND	--

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Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Benzene	Toluene	Ethyl- benzene	Xylenes	MTBE	1,2-DCA	Other HVOCs
					←	μg/L	←	→			
MW-7	5/2/1996	17.15	68.26	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
85.41	8/8/1996	18.48	66.93	<50	<0.5	<0.5	<0.5	<0.5	<2	<1.0	ND
(cont'd)	11/4/1996	18.69	66.72	<50	<1	<1	<1	<1	--	<1.0	ND
	2/6/1997	17.44	67.97	<50	<0.5	<0.5	<0.5	<0.5	<2	<1.0	ND
	5/8/1997	17.72	67.69	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	--
	8/7/1997	18.49	66.92	<50	<0.5	<0.5	<0.5	<0.5	<2	<1.0	ND
	11/5/1997	18.86	66.55	<50	<0.5	<0.5	<0.5	<0.5	<2	1	--
	2/9/1998	17.56	67.85	<50	<0.5	<0.5	<0.5	<0.5	<2	<1.0	--
	4/29/1998	16.23	69.18	<50	<0.5	<0.5	<0.5	<0.5	<2	<1.0	ND
	8/4/1998	17.24	68.17	<50	<0.5	<0.5	<0.5	<0.5	<2	1.1	ND
	11/2/1998	17.91	67.50	<50	<0.5	<0.5	<0.5	<0.5	<2	1.2	ND
	3/26/1999	16.42	68.99	<50	<0.5	<0.5	<0.5	<0.5	<2	ND	ND
	7/1/1999	17.90	67.51	85	<0.5	1.1	0.55	2.5	<0.5	1.0	5
	9/21/1999	18.91	66.50	<50	0.7	1.8	<0.5	1.5	<5.0	<5.0	ND
	2/9/2000	16.74	68.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
MW-8 85.50	5/31/2000	16.21	69.20	<50	3	6	1	9	<0.5	<0.5	ND
	8/8/2000	16.92	68.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.52	ND
	11/14/2000	17.00	68.41	<50	<0.5	0.63	<0.5	<0.5	<5.0	<0.5	ND
	3/1/2001	17.09	68.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	5/7/2001	17.19	68.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	8/1/2001	17.25	68.16	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	11/5/2001	17.35	68.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	2/13/2002	17.50	67.91	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	5/2/2002	17.30	68.11	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	8/4/2002	17.58	67.83	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	11/26/2002	18.35	67.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	1/20/2003	15.84	69.57	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND

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Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Benzene	Toluene	Ethyl- benzene	Xylenes	MTBE	1,2-DCA	Other HVOCs
										µg/L	
MW-8	8/30/1995	26.35	59.15	660	360	6.8	13	2.8	--	130	--
85.50	12/4/1995	26.72	58.78	250	46	0.9	4.9	<0.5	--	94	ND
(cont'd)	5/3/1996	25.47	60.03	69	110	<0.5	<0.5	1.5	--	100	ND
	8/8/1996	26.41	59.09	120	11	<0.5	<0.5	<0.5	<2	93	ND
	11/5/1996	26.77	58.73	110	20	<1	1	<1	--	98	ND
	2/6/1997	25.84	59.66	67 ^{1,2}	51	<0.5	0.56	<0.5	<2	81	ND
	5/9/1997	26.39	59.11	110 ^{1,2}	59	<0.5	<0.5	<0.5	--	76	--
	8/7/1997	26.72	58.78	<50	12 ³	<0.5	<0.5	<0.5	<2	79	ND
	11/5/1997	26.82	58.68	<50	9.4	<0.5	<0.5	<0.5	<2	84	--
	2/9/1998	25.57	59.93	<50	6	<0.5	<0.5	<0.5	<2	85	--
	5/1/1998	25.64	59.86	430	490	7.1	27	26	<10	85	ND
	8/5/1998	25.96	59.54	140	19	<0.5	5.2	5.3	<2	69	ND
	11/3/1998	26.27	59.23	150	110	1.1	4.3	4.5	<2	67	ND
	3/31/1999	20.93	64.57	54	170	1.5	4.1	1.9	4.4 ⁴	5.9	1,1 DCA: 0.7
	7/1/1999	26.59	58.91	140	58	0.9	3	2.3	<0.5	55	⁵
	9/21/1999	26.89	58.61	670	170	2.6	11	7.9	<5	41	ND
	2/9/2000	26.60	58.90	300	60	1.2	4.8	1.2	<5.0	40	<0.5
	8/8/2000	26.43	59.07	270	56	1.2	4.1	1.0	<5.0	39	ND
	11/14/2000	26.60	58.90	330	64	1.3	3.5	0.60	<5.0	47	ND
	3/1/2001	26.41	59.09	400	140	<0.5	<0.5	0.55	<5.0	16	ND
	5/7/2001	26.55	58.95	240	37	0.71	2.5	0.77	<5.0	48	ND
	8/1/2001	26.71	58.79	130	5.2	<0.5	<0.5	<0.5	<5.0	39	ND
	11/5/2001	26.67	58.83	140	3.3	<0.5	<0.5	<0.5	<5.0	44	ND
	2/13/2002	26.15	59.35	1,100	440	0.087	0.66	2.0	<5.0	47	ND
	5/2/2002	26.63	58.87	90	3.9	<0.5	<0.5	<0.5	<5.0	47	ND
	8/4/2002	26.80	58.70	120	2.4	0.77	<0.5	<0.5	<5.0	44	ND
	11/26/2002	27.50	58.00	85	3.7	<0.5	<0.5	<0.5	<5.0	45	ND
	1/20/2003	24.93	60.57	90	3.9	0.67	<0.5	<0.5	<5.0	44	ND

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Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCS

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Ethyl- benzene				MTBE	1,2-DCA	Other HVOCS
					Benzene	Toluene	Xylenes	µg/L			
MW-9	11/24/1992	23.51	66.86	19,000	180	590	23	2,000	--	340	TCM: 15
90.37	4/5/1993	21.14	69.23	2,300	48	4	0.6	13	--	600	TCM: 2
	7/21/1993	21.54	68.83	2,300	170	8.1	15	<0.5	--	1100	ND
	11/10/1993	27.53	62.84	4,400	69	7.3	21	9.7	--	900	ND
	8/30/1995	19.59	70.78	3,200	3,900	49	80	22.8	--	960	--
	12/4/1995	20.65	69.72	--	--	--	--	--	<2	--	--
	5/2/1996	18.63	71.74	<1300	2,600	<13	200	<13	--	550	ND
	11/5/1996	20.69	69.68	1,800	280	<5	65	<5	--	770	ND
	5/9/1997	19.96	70.41	1,100	160	<0.5	42	<0.5	--	690	--
	8/8/1997	20.84	69.53	570 ^{1,2}	<0.5	<0.5	<0.5	0.78 ³	<2	680	ND
	11/5/1997	21.55	68.82	490 ¹	<0.5	<0.5	6	<0.5	<2	500	--
	2/9/1998	20.21	70.16	270 ¹	48	17	5.8	<0.5	<2	520	--
	5/1/1998	19.27	71.10	550	70	<0.5	22	2.2	<2	390	ND
	8/5/1998	19.35	71.02	550 ¹	88	<0.5	13	1.9 ³	<2	420	ND
	11/2/1998	20.43	69.94	580	<0.5	<0.5	7.5 ³	1.6 ³	<2	430	ND
	3/25/1999	18.46	71.91	1,100	160	<0.5	21	2.1 ³	5.7 ⁴	550	ND
	7/1/1999	19.95	70.42	540	100	7.4	26	16.9	<1.3	400	⁵
	9/21/1999	21.15	69.22	2,700	320	98	88	47	<20	540	ND
	2/9/2000	21.08	69.29	1,600	81	3.6	19	18	<5.0	360	<0.5
	5/31/2000	19.11	71.26	1,500	170	13	25	<1.0	<0.5	300	ND
	8/8/2000	19.86	70.51	1,300	140	2.1	19	<0.5	<5.0	330	ND
	11/14/2000	20.90	69.47	1,700	250	2.6	44	2.1	<5.0	610	ND
	3/1/2001	20.45	69.92	1,800	170	5.6	30	2.5	<20	620	ND
	5/7/2001	19.83	70.54	1,500	120	2.6	24	<0.5	<5.0	400	ND
	8/1/2001	20.02	70.35	2,600	280	4.8	50	<0.5	<5.0	450	ND
	11/5/2001	19.85	70.52	2,200	170	4.5	100	0.54	<5.0	260	ND
	2/13/2002	19.80	70.57	1,800	98	3	58	1.5	<5.0	340	ND
	5/2/2002	19.93	70.44	1,100	82	1.4	20	<0.5	<10	330	ND
	8/4/2002	20.20	70.17	1,200	130	2.5	50	0.58	<10	360	ND
	11/26/2002	20.37	70.00	1,200	150	3.3	48	<2.5	<25	250	ND
	1/20/2003	17.93	72.44	840	110	1.2	31	0.76	<5.0	330	ND

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Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCs
 Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Benzene	Toluene	Ethyl- benzene	Xylenes	MTBE	1,2-DCA	Other HVOCs
							µg/L				
MW-10 88.60	10/12/1992	21.55	67.05	28,000	2,700	3,800	210	1,300	--	150	--
	11/24/1992	21.86	66.74	130,000	9,700	19,000	1,400	8,400	--	370	ND
	4/5/1993	19.14	69.46	63,000	6,300	14,000	1,100	7,500	--	70	ND
	7/21/1993	19.79	68.81	140,000	16,000	31,000	2,200	13,000	--	700	ND
	8/30/1995	17.99	70.61	92,000	13,000	24,000	1,800	9,100	--	300	--
	5/3/1996	17.04	71.56	81,000	17,000	29,000	2,100	8,500	--	320	ND
	5/9/1997	18.36	70.24	63,000	7,400	13,000	940	4,100	--	150	--
	5/1/1998	15.84	72.76	60,000	7,100	14,000	1,100	5,300	<250	120	ND
MW-11 102.06	11/24/1992	33.65	68.41	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	12/8/92***	33.37	68.69	<50	<0.1	<0.1	<0.1	<0.1	--	--	--
	12/8/1992	33.37	68.69	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
	4/5/1993	31.03	71.03	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	7/21/1993	31.90	70.16	160	<0.5	1.8	<0.5	<0.5	--	<1.0	ND
	11/9/1993	32.60	69.46	80	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	8/30/1995	28.92	73.14	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	--
	5/3/1996	28.00	74.06	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	5/8/1997	29.93	72.13	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	--
	4/29/1998	27.22	74.84	<50	<0.5	<0.5	<0.5	<0.5	<2	<1.0	ND
MW-13 84.06	11/24/1992	26.05	58.01	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	12/8/92***	25.08	58.98	<50	<0.1	<0.1	<0.1	<0.1	--	--	--
	12/8/1992	25.08	58.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
	4/5/1993	24.64	59.42	<50	<0.5	0.9	<0.5	<0.5	--	<1.0	ND
	7/21/1993	24.29	59.77	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	11/9/1993	24.23	59.83	<50	<0.5	<0.5	<0.5	<0.5	--	<1.0	ND
	8/30/1995	23.30	60.76	<50	49	<0.5	<0.5	<0.5	--	3.6	--
	12/1/1995	23.80	60.26	<50	<0.5	<0.5	<0.5	<0.5	--	4.1	ND
	5/3/1996	23.19	60.87	<50	<0.5	<0.5	<0.5	<0.5	--	4	ND

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Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Ethyl- benzene				MTBE	1,2-DCA	Other HVOCs
					Benzene	Toluene	Xylenes	µg/L			
MW-13	8/8/1996	23.44	60.62	<50	32	<0.5	<0.5	<0.5	<2	6.4	ND
84.06	11/5/1996	24.04	60.02	<50	<1	<1	<1	<1	--	5.7	ND
(cont'd)	2/6/1997	23.24	60.82	<50	<0.5	<0.5	<0.5	<0.5	<2	3.5	ND
	5/8/1997	23.46	60.60	<50	81	<0.5	<0.5	<0.5	--	5.5	--
	8/8/1997	23.92	60.14	<50	<0.5	<0.5	<0.5	<0.5	<2	6.8	ND
	11/5/1997	24.27	59.79	<50	<0.5	<0.5	<0.5	<0.5	<2	5.5	--
	2/9/1998	22.89	61.17	<50	<0.5	<0.5	<0.5	<0.5	<2	2.9	--
	4/29/1998	22.27	61.79	<50	24	<0.5	<0.5	<0.5	<2	5.7	ND
	8/4/1998	22.75	61.31	120	200	<1	<1	<1	<4	6.2	ND
	11/3/1998	23.90	60.16	59 ¹	33	<0.5	<0.5	<0.5	<2	6.1	ND
	3/31/1999	23.11	60.95	130	0.56	<0.5	<0.5	<0.5	<2	1.4	ND
	7/1/1999	23.40	60.66	160	370	19	1.2	3.5	<1	4.2	5
	9/21/1999	21.91	62.15	370	150	1.0	0.8	0.8	<5.0	<5.0	ND
	2/9/2000	23.84	60.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.1	<0.5
	8/8/2000	23.31	60.75	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.6	ND
	11/14/2000	24.00	60.06	<50	<0.5	0.52	<0.5	<0.5	<5.0	3.3	ND
	3/1/2001	23.93	60.13	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	5/7/2001	23.93	60.13	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.3	ND
	8/1/2001	24.10	59.96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	11/5/2001	24.02	60.04	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	2/13/2002	23.70	60.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	5/2/2002	23.97	60.09	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.54	ND
	8/4/2002	24.19	59.87	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	11/26/2002	24.78	59.28	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND
	1/20/2003	22.10	61.96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND

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Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Benzene	Toluene	Ethyl- benzene	Xylenes	MTBE	1,2-DCA	Other HVOCs
μg/L											
MW-14 94.66	5/26/1998	21.67	72.99	41,000	7,100	11,000	720	3,900	<1000	440	ND
	7/1/1999	22.95	71.71	SPH	--	--	--	--	--	--	--
	9/21/1999	24.26	70.40	SPH	--	--	--	--	--	--	--
	2/9/2000	24.13	70.53	92,000	12,000	17,000	1,300	8,700	<140	450	<0.5
	5/31/2000	22.09	72.57	SPH	--	--	--	--	--	--	--
	8/8/2000	22.88	71.78	SPH	--	--	--	--	--	--	--
	11/14/2000	23.90	70.76	SPH	--	--	--	--	--	--	--
	3/1/2001	23.97	70.69	SPH	--	--	--	--	--	--	--
	5/7/2001	23.45	71.23	SPH (sheen)	--	--	--	--	--	--	--
	8/1/2001	23.57	71.12	SPH (0.06)	--	--	--	--	--	--	--
	11/5/2001	23.50	71.18	SPH (0.03)	--	--	--	--	--	--	--
	2/13/2002	22.99	71.70	SPH (0.04)	--	--	--	--	--	--	--
	5/2/2002	23.51	71.17	SPH (0.02)	--	--	--	--	--	--	--
	8/4/2002	23.61	71.06	SPH (0.01)	--	--	--	--	--	--	--
	1/20/2003	22.35	72.31	SPH (sheen)	--	--	--	--	--	--	--
MW-15 94.76	5/26/1998	21.87	72.89	130,000	30,000	38,000	2,500	12,600	<1000	1,200	ND
	7/1/1999	22.25	72.51	SPH	--	--	--	--	--	--	--
	9/21/1999	24.12	70.64	SPH	--	--	--	--	--	--	--
	2/9/2000	24.42	70.34	180,000	32,000	37,000	2,800	14,000	<200	1,100	<0.5
	5/31/2000	22.40	72.36	SPH	--	--	--	--	--	--	--
	8/8/2000	23.17	71.59	SPH	--	--	--	--	--	--	--
	11/14/2000	24.15	70.61	SPH	--	--	--	--	--	--	--
	3/1/2001	23.99	70.77	SPH	--	--	--	--	--	--	--
	5/7/2001	23.50	71.26	SPH (sheen)	--	--	--	--	--	--	--
	8/1/2001	23.62	71.14	SPH (sheen)	--	--	--	--	--	--	--
	11/5/2001	23.65	71.11	SPH (sheen)	--	--	--	--	--	--	--
	2/13/2002	23.09	71.67	68,000	9,300	8,500	760	2,600	<200	560	ND
	5/2/2002	23.59	71.17	SPH (sheen)	--	--	--	--	--	--	--
	8/4/2002	23.65	71.11	SPH (sheen)	--	--	--	--	--	--	--
	11/26/2002	24.59	70.17	SPH (sheen)	--	--	--	--	--	--	--
	1/20/2003	22.08	72.68	48,000	9,900	10,000	1,000	3,600	<1,200	170	ND

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Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons and HVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg	Benzene	Toluene	Ethyl- benzene	Xylenes	MTBE	1,2-DCA	Other HVOCs
Trip Blank	8/1/2001	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--
	11/5/2001	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--
	2/13/2002	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--

Abbreviations and Notes:

TOC Elev. (ft) = Top of casing elevation in feet above mean sea level

µg/l = micrograms per liter = parts per billion = ppb

TVH = Total Volatile Hydrocarbons

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = Methyl tert-butyl ether

1,2-DCA = 1,2 Dichloroethane

HVOCs = Halogenated volatile organic compounds by EPA Method 8010

DCB = 1, 3 Dichlorobenzene

MCB = Chlorobenzene

DBCM = Dibromochloromethane

TCM = Chloroform = trichloromethane

ND = None detected above laboratory reporting limit, see laboratory report for individual reporting limits.

-- = Sample not analyzed

SPH = Free product encountered in well

<n = Chemical not present at a concentration in excess of detection limit shown

MW-1 was initially referred to as Sample 5.

* = Suspect laboratory contamination contributing to test result.

** = Fuel fingerprint analysis indicates MTBE is not present in the free product sample collected from this well.

*** = Duplicate sample sent to a different chemical laboratory.

1 = Sample exhibits fuel pattern which does not resemble standard

2 = Lighter hydrocarbons than indicated standard

3 = Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two

4 = Detection may potentially be a false positive, to be checked during the next event.

5 = One or more of the following substances found: Acetone, 1,2-Dibromoethane, 1,3,5-Trimethylbenzene, 2-Chlorotoluene, 1,2,4-Trimethylbenzene, n-Butylbenzene, and Naphthalene. See laboratory results for details.

6 = Confirmed by GC/MS.

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Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH/TPHd	TPHmo	2-Methyl naphthalene μg/L	Naphthalene	Other SVOCs
MW-1	10/5/1990	26.40	68.08	<500	--	--	--	--
94.48	3/1/1991	27.46	67.02	SPH	--	--	--	--
	10/12/1992	26.44	68.04	--	--	--	--	--
	11/24/1992	26.63	67.85	4,600	--	--	--	--
	4/5/1993	23.77	70.71	25,000	--	--	--	--
	7/21/1993	24.51	69.97	SPH	--	--	--	--
	11/9/1993	26.06	68.42	SPH	--	--	--	--
	8/30/1995	21.73	72.75	SPH	--	630	1,200	ND
	12/4/1995	21.94	72.54	SPH	--	--	--	--
	5/2/1996	20.65	73.83	32,000	--	250	640	ND
	11/5/1996	24.29	70.19	--	--	--	--	--
	5/9/1997	22.79	71.69	28,000	--	280	650	ND
	11/5/1997	25.06	69.42	28,000	--	720	1,500	ND
	2/9/1998	22.64	71.84	27,000	--	160	570	ND
	5/1/1998	19.95	74.53	29,000	--	--	--	--
	5/27/1998	--	--	--	--	120	630	ND
	11/3/1998	23.29	71.19	37,000	--	500	1,100	ND
	3/24/1999	22.30	72.18	SPH	--	--	--	--
	7/1/1999	22.70	71.78	SPH	--	--	--	--
	9/21/1999	23.81	70.67	SPH	--	--	--	--
	2/9/2000	23.95	70.59	SPH	--	--	--	--
	5/31/2000	22.05	72.43	SPH	--	--	--	--
	11/14/2000	24.65	69.83	SPH	--	--	--	--
	3/1/2001	24.22	70.28	SPH	--	--	--	--
	5/7/2001	23.85	70.67	SPH	--	--	--	--
	8/1/2001	23.91	70.64	SPH	--	--	--	--
	11/5/2001	23.95	70.67	SPH	--	--	--	--
	2/13/2002	23.15	71.39	SPH(0.07)	--	--	--	--
	5/2/2002	23.91	70.60	SPH (0.04)	--	--	--	--
	8/4/2002	24.02	70.48	SPH(0.03)	--	--	--	--
	11/26/2002	24.47	70.05	SPH (0.05)	--	--	--	--
	1/20/2003	22.37	72.14	SPH (0.04)	--	--	--	--

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Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH/TPHd	TPHmo	2-Methyl naphthalene μg/L	Naphthalene	Other SVOCs
MW-2 94.81	3/1/1991	27.86	66.95	<50	-	--	-	-
	11/24/1992	27.91	66.90	<50	-	--	-	-
	4/5/1993	25.95	68.86	870	-	--	-	-
	7/21/1993	25.59	69.22	<50	-	--	-	-
	11/10/1993	26.72	68.09	240	-	--	-	-
	8/30/1995	25.75	69.06	150	-	--	-	-
	5/3/1996	23.28	71.53	<50	-	--	-	-
	5/8/1997	24.58	70.23	<50	-	--	-	-
	4/29/1998	22.18	72.63	<47	-	--	-	-
MW-3 90.08	3/1/1991	23.17	66.91	<50	-	--	-	-
	11/25/1992	23.01	67.07	160	-	--	-	-
	4/5/1993	22.11	67.97	<50	-	--	-	-
	7/21/1993	23.93	66.15	<50	-	--	-	-
	11/10/1993	23.14	66.94	<50	-	--	-	-
	8/30/1995	20.61	69.47	<50	-	--	-	-
	5/3/1996	18.43	71.65	<50	-	--	-	-
	5/8/1997	19.77	70.31	<50	-	--	-	-
	4/29/1998	17.92	72.16	<47	-	--	-	-
MW-4 88.84	3/1/1991	23.79	65.05	<500	-	--	-	-
	10/12/1992	22.48	66.36	--	-	-	-	-
	11/24/1992	22.60	66.24	1,600	--	--	-	-
	4/2/1993	20.11	68.73	SPH	-	--	-	-
	7/21/1993	20.48	68.36	SPH	-	--	-	-
	11/9/1993	21.71	67.13	SPH	-	--	-	-
	8/30/1995	19.90	68.94	SPH	-	--	-	-
	12/1/1995	19.40	69.44	SPH	-	--	-	-
	5/2/1996	17.50	71.34	9,200	--	--	-	-
MW-5 88.84	11/4/1996	20.13	68.71	4,700	-	--	-	-
	5/8/1997	18.63	70.21	5,100	--	--	-	-

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Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH/TPHd	TPHmo	2-Methyl naphthalene µg/L	Naphthalene	Other SVOCs
MW-4 88.84 (cont'd)	11/5/1997	20.19	68.65	3,700	--	--	--	--
	2/9/1998	18.28	70.56	4,800	--	--	--	--
	5/1/1998	16.11	72.73	5,000	--	--	--	--
	8/4/1998	17.54	71.30	3,500	--	--	--	--
	11/2/1998	19.21	69.63	7,200	--	--	--	--
	3/26/1999	17.51	71.33	14,000	--	--	--	--
	7/1/1999	18.80	70.04	17,000	--	370	860	ND
	9/21/1999	19.85	68.99	14,000	--	360	820	ND
	2/9/2000	19.76	69.08	12,000	1,000	290	700	ND
	5/31/2000	17.90	70.94	14,000 **	<500	--	--	--
	11/14/2000	19.63	69.21	8,000	290	--	--	--
	3/1/2001	19.68	69.16	57,000	2,800	210	510	ND
	5/7/2001	18.60	70.24	56,000	3,600	--	--	--
	8/1/2001	18.73	70.11	42,000	6,700	--	--	--
	11/5/2001	18.97	69.87	49,000	14,000	--	--	--
	2/13/2002	18.59	70.25	140,000	11,000	620	1000	--
	5/2/2002	18.77	70.07	68,000	<25,000	--	--	--
	8/4/2002	18.95	69.89	58,000	<25,000	--	--	--
	11/26/2002	20.83	68.01	7,100	<250	--	--	--
	1/20/2003	16.90	71.94	29,000	<2500	--	--	--
MW-5 84.84	3/15/1991	26.31	58.53	<50	--	--	--	--
	11/10/1992	26.83	58.01	50	--	--	--	--
	4/2/1993	26.62	58.22	<50	--	--	--	--
	7/21/1993	26.60	58.24	190	--	--	--	--
	11/9/1993	27.24	57.60	170	--	--	--	--
	8/30/1995	27.46	57.38	180	--	--	--	--
	5/3/1996	26.02	58.82	<50	--	--	--	--
	5/8/1997	26.76	58.08	<50	--	--	--	--
	4/29/1998	26.55	58.29	<47	--	--	--	--

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Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH/TPHd	TPHmo	2-Methyl naphthalene μg/L	Naphthalene	Other SVOCs
MW-6	3/15/1991	25.82	59.80	<50	-	--	--	--
85.62	10/12/1992	25.02	60.60	--	--	--	--	--
	12/1/1992	28.87	56.75	SPH	--	--	--	--
	4/2/1993	26.96	58.66	SPH	--	--	--	--
	7/21/1993	26.17	59.45	SPH	--	--	--	--
	11/9/1993	27.51	58.11	SPH	--	--	--	--
	8/30/1995	28.00	57.62	SPH	--	--	--	--
	12/1/1995	27.58	58.04	SPH	--	--	--	--
	5/3/1996	26.83	58.79	9,000	--	--	--	--
86.94	5/9/1997	26.54	60.40	53,000	--	--	--	--
	11/5/1997	26.16	60.78	65,000	--	--	--	--
85.82	5/1/1998	22.96	62.86	25,000	--	--	--	--
	11/3/1998	24.35	61.47	30,000	--	--	--	--
	3/26/1999	23.82	62.00	SPH	--	--	--	--
	7/1/1999	24.45	61.37	SPH	--	--	--	--
	9/21/1999	24.58	61.24	SPH	--	--	--	--
	2/9/2000	24.93	61.24	SPH	--	--	--	--
	5/31/2000	23.47	62.41	SPH	--	--	--	--
	11/14/2000	24.61	61.21	SPH	--	--	--	--
	3/1/2001	23.97	61.85	SPH	--	--	--	--
	5/7/2001	23.17	-23.11	SPH	--	--	--	--
	8/1/2001	obstruction in well		--	--	--	--	--
	11/5/2001	obstruction in well		--	--	--	--	--
	2/13/2002	obstruction in well		--	--	--	--	--
	5/2/2002	23.25	62.41	SPH (0.05)	--	--	--	--
	8/4/2002	23.55	62.29	SPH (0.03)	--	--	--	--
	11/26/2002	24.22	61.62	SPH (0.03)	--	--	--	--
	1/20/2003	22.49	63.36	SPH (0.04)	--	--	--	--
MW-7	3/15/1991	21.63	63.78	<50	--	--	--	--
85.41	11/24/1992	21.52	63.89	<50	--	--	--	--
	4/2/1993	20.08	65.33	<50	--	--	--	--
	7/21/1993	19.59	65.82	150	--	--	--	--
	11/9/1993	20.65	64.76	200	--	--	--	--
	8/30/1995	18.78	66.63	170	--	--	--	--

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Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH/TPHd	TPHmo	2-Methyl naphthalene μg/L	Naphthalene	Other SVOCs
MW-7	12/1/1995	19.47	65.94	<50	--	--	--	--
85.41	5/2/1996	17.15	68.26	<50	--	--	--	--
(cont'd)	8/8/1996	18.48	66.93	<50	--	--	--	--
	11/4/1996	18.69	66.72	<50	--	--	--	--
	2/6/1997	17.44	67.97	<50	--	--	--	--
	5/8/1997	17.72	67.69	<50	--	--	--	--
	8/7/1997	18.49	66.92	<50	--	--	--	--
	11/5/1997	18.86	66.55	<50	--	--	--	--
	2/9/1998	17.56	67.85	<50	--	--	--	--
	4/29/1998	16.23	69.18	<47	--	--	--	--
	8/4/1998	17.24	68.17	<50	--	--	--	--
	11/2/1998	17.91	67.50	<50	--	--	--	--
3/26/1999	16.42	68.99	<50	--	--	--	--	--
7/1/1999	17.90	67.51	<50	--	<10	<10	ND	
9/21/1999	18.91	66.50	<48	--	<9.5	<9.5	ND	
2/9/2000	16.74	68.67	<50	<250	<10	<10	ND	
5/31/2000	16.21	69.20	<50	<500	--	--	--	
11/14/2000	17.00	68.41	<50	<250	--	--	--	
3/1/2001	17.09	68.32	<50	<250	<10	<10	ND	
5/7/2001	17.19	68.22	<50	<250	--	--	--	
8/1/2001	17.25	68.16	<50	<250	--	--	--	
11/5/2001	17.35	68.06	<50	<250	--	--	--	
2/13/2002	17.50	67.91	<50	<250	--	--	--	
5/2/2002	17.30	68.11	<50	<250	--	--	--	
8/4/2002	17.58	67.83	<50	<250	--	--	--	
11/26/2002	18.35	67.06	<50	<250	--	--	--	
1/20/2003	15.84	69.57	83	<250	--	--	--	
MW-8	10/12/1992	27.70	57.80	--	--	--	--	--
85.50	11/25/1992	27.62	57.88	170	--	--	--	--
	4/8/1993	26.64	58.86	100	--	--	--	--
	7/21/1993	26.60	58.90	90	--	--	--	--
	11/11/1993	27.18	58.32	170	--	--	--	--
	8/30/1995	26.35	59.15	240	--	--	--	--
	12/4/1995	26.72	58.78	<50	--	--	--	--
	5/3/1996	25.47	60.03	94	--	--	--	--

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Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs
 Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH/TPHd	TPHmo	2-Methyl naphthalene μg/L	Naphthalene	Other SVOCs
MW-8	8/8/1996	26.41	59.09	250	--	--	--	--
85.50	11/5/1996	26.77	58.73	<50	--	--	--	--
(cont'd)	2/6/1997	25.84	59.66	130	--	--	--	--
	5/9/1997	26.39	59.11	120	--	--	--	--
	8/7/1997	26.72	58.78	150	--	--	--	--
	11/5/1997	26.82	58.68	110	--	--	--	--
	2/9/1998	25.57	59.93	75	--	--	--	--
	5/1/1998	25.64	59.86	210	--	--	--	--
	8/5/1998	25.96	59.54	260	--	--	--	--
	11/3/1998	26.27	59.23	190	--	--	--	--
	3/31/1999	20.93	64.57	200	--	--	--	--
	7/1/1999	26.59	58.91	170	--	<9.6	<9.6	ND
	9/21/1999	26.89	58.61	420	--	<9.4	<9.4	ND
	2/9/2000	26.60	58.90	120	280	<10	<10	ND
	5/31/2000	26.16	59.34	160 **	<500	--	--	--
	11/14/2000	26.60	58.90	150	<250	--	--	--
	3/1/2001	26.41	59.09	54	<250	<10	<10	Phenol: 25
	5/7/2001	26.55	58.95	<50	<250	--	--	--
	8/1/2001	26.71	58.79	58	<250	--	--	--
	11/5/2001	26.67	58.83	84	<250	--	--	--
	2/13/2002	26.15	59.35	83	<250	--	--	--
	5/2/2002	26.63	58.87	<50	<250	--	--	--
	8/4/2002	26.80	58.70	260	<250	--	--	--
	11/26/2002	27.50	58.00	<50	<250	--	--	--
	1/20/2003	24.93	60.57	63	<250	--	--	--
MW-9	11/24/1992	23.51	66.86	320	--	--	--	--
90.37	4/5/1993	21.14	69.23	920	--	--	--	--
	7/21/1993	21.54	68.83	450	--	--	--	--
	11/10/1993	27.53	62.84	450	--	--	--	--
	8/30/1995	19.59	70.78	680	--	--	--	--
	12/4/1995	20.65	69.72	--	--	--	--	--
	5/2/1996	18.63	71.74	710	--	--	--	--
	11/5/1996	20.69	69.68	420	--	--	--	--
	5/9/1997	19.96	70.41	490	--	--	--	--

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Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs
 Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH/TPHd	TPHmo	2-Methyl naphthalene μg/L	Naphthalene	Other SVOCs
MW-9	8/8/1997	20.84	69.53	480	--	--	--	--
90.37	11/5/1997	21.55	68.82	370	--	--	--	--
(cont'd)	2/9/1998	20.21	70.16	410	--	--	--	--
	5/1/1998	19.27	71.10	450	--	--	--	--
	8/5/1998	19.35	71.02	630	--	--	--	--
	11/2/1998	20.43	69.94	500	--	--	--	--
	3/25/1999	18.46	71.91	630	--	--	--	--
	7/1/1999	19.95	70.42	570	--	<9.5	<9.5	ND
	9/21/1999	21.15	69.22	770	--	<9.4	<9.4	ND
	2/9/2000	21.08	69.29	320	<250	<10	<10	ND
	5/31/2000	19.11	71.26	390 **	<500	--	--	--
	11/14/2000	20.90	69.47	160	<250	--	--	--
	3/1/2001	20.45	69.92	220	<250	<10	<10	ND
	5/7/2001	19.83	70.54	290	<250	--	--	--
	8/1/2001	20.02	70.35	460	<250	--	--	--
	11/5/2001	19.85	70.52	230	<250	--	--	--
	2/13/2002	19.80	70.57	210	<250	--	--	--
	5/2/2002	19.93	70.44	250	<250	--	--	--
	8/4/2002	20.20	70.17	300	<250	--	--	--
	11/26/2002	20.37	70.00	270	<250	--	--	--
	1/20/2003	17.93	72.44	350	<250	--	--	--
MW-10	10/12/1992	21.55	67.05	--	--	--	--	--
88.60	11/24/1992	21.86	66.74	1,300	--	--	--	--
	4/5/1993	19.14	69.46	5,000	--	--	--	--
	7/21/1993	19.79	68.81	20,000	--	--	--	--
	8/30/1995	17.99	70.61	5,900	--	--	--	--
	5/3/1996	17.04	71.56	5,600	--	--	--	--
	5/9/1997	18.36	70.24	2,500	--	--	--	--
	5/1/1998	15.84	72.76	2,000	--	--	--	--
MW-11	11/24/1992	33.65	68.41	220	--	--	--	--
102.06	12/8/92*	33.37	68.69	140	--	--	--	--
	12/8/1992	33.37	68.69	120	--	--	--	--
	4/5/1993	31.03	71.03	<50	--	--	--	--

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Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH/TPHd	TPHmo	2-Methyl naphthalene μg/L	Naphthalene	Other SVOCs
MW-11	7/21/1993	31.90	70.16	150	--	--	--	--
<i>102.06</i>	11/9/1993	32.60	69.46	60	--	--	--	--
<i>(cont'd)</i>	8/30/1995	28.92	73.14	240	--	--	--	--
	5/3/1996	28.00	74.06	<50	--	--	--	--
	5/8/1997	29.93	72.13	<50	--	--	--	--
	4/29/1998	27.22	74.84	<47	--	--	--	--
MW-13	11/24/1992	26.05	58.01	3,600	--	--	--	--
<i>84.06</i>	12/8/92*	25.08	58.98	210	--	--	--	--
	12/8/1992	25.08	58.98	100	--	--	--	--
	4/5/1993	24.64	59.42	<50	--	--	--	--
	7/21/1993	24.29	59.77	<50	--	--	--	--
	11/9/1993	24.23	59.83	160	--	--	--	--
	8/30/1995	23.30	60.76	<50	--	--	--	--
	12/1/1995	23.80	60.26	<50	--	--	--	--
	5/3/1996	23.19	60.87	<50	--	--	--	--
	8/8/1996	23.44	60.62	<50	--	--	--	--
	11/5/1996	24.04	60.02	<50	--	--	--	--
	2/6/1997	23.24	60.82	<50	--	--	--	--
	5/8/1997	23.46	60.60	<50	--	--	--	--
	8/8/1997	23.92	60.14	<50	--	--	--	--
	11/5/1997	24.27	59.79	<50	--	--	--	--
	2/9/1998	22.89	61.17	<50	--	--	--	--
	4/29/1998	22.27	61.79	<47	--	--	--	--
	8/4/1998	22.75	61.31	78	--	--	--	--
	11/3/1998	23.90	60.16	<50	--	--	--	--
	3/31/1999	23.11	60.95	<48	--	--	--	--
	7/1/1999	23.40	60.66	100	--	<9.6	<9.6	ND
	9/21/1999	21.91	62.15	<48	--	<9.4	<9.4	ND
	2/9/2000	23.84	60.22	<50	<250	<10	<10	ND

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Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH/TPHd	TPHmo	2-Methyl naphthalene μg/L	Naphthalene	Other SVOCs
MW-13 <i>84.06</i> <i>(cont'd)</i>	5/31/2000	22.97	61.09	<50	<500	--	--	--
	11/14/2000	24.00	60.06	65	<250	--	--	--
	3/1/2001	23.93	60.13	<50	<250	<10	<10	ND
	5/7/2001	23.93	60.13	<50	<250	--	--	--
	8/1/2001	24.10	59.96	<50	<250	--	--	--
	11/5/2001	24.02	60.04	350	610	--	--	--
	2/13/2002	23.70	60.36	<50	<250	--	--	--
	5/2/2002	23.97	60.09	<50	<250	--	--	--
	8/4/2002	24.19	59.87	810	310	--	--	--
	11/26/2002	24.78	59.28	66	<250	--	--	--
MW-14 <i>94.66</i>	1/20/2003	22.10	61.96	<50	<250	--	--	--
	5/26/1998	21.67	72.99	7,700	--	--	--	--
	7/1/1999	22.95	71.71	SPH	--	--	--	--
	9/21/1999	24.26	70.40	SPH	--	--	--	--
	2/9/2000	24.13	70.53	14,000	1,500	290	600	ND
	5/31/2000	22.09	72.57	SPH	--	--	--	--
	11/14/2000	23.90	70.76	SPH	--	--	--	--
	3/1/2001	23.97	70.69	SPH	--	--	--	--
	5/7/2001	23.45	71.23	SPH	--	--	--	--
	8/1/2001	23.57	71.12	SPH	--	--	--	--
	11/5/2001	23.50	71.18	SPH	--	--	--	--
	2/13/2002	22.99	71.70	SPH (0.04)	--	--	--	--
	5/2/2002	23.51	71.17	SPH (0.02)	--	--	--	--
	8/4/2002	23.61	71.06	SPH (0.01)	--	--	--	--
	11/26/2002	24.35	70.31	SPH (sheen)	--	--	--	--
	1/20/2003	22.35	72.31	SPH (sheen)	--	--	--	--

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Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH/TPHD	TPHmo	2-Methyl naphthalene μg/L	Naphthalene	Other SVOCs
MW-15 94.76	5/26/1998	21.87	72.89	1,700	--	--	--	--
	7/1/1999	22.25	72.51	SPH	--	--	--	--
	9/21/1999	24.12	70.64	SPH	--	--	--	--
	2/9/2000	24.42	70.34	4,000	1,200	50	270	ND
	5/31/2000	22.40	72.36	SPH	--	--	--	--
	11/14/2000	24.15	70.61	SPH	--	--	--	--
	3/1/2001	23.99	70.77	SPH	--	--	--	--
	5/7/2001	23.50	71.26	SPH	--	--	--	--
	8/1/2001	23.62	71.14	SPH	--	--	--	--
	11/5/2001	23.65	71.11	SPH (sheen)	--	--	--	--
	2/13/2002	23.09	71.67	3,100	<250	17	68	ND*
	5/2/2002	23.59	71.17	SPH (sheen)	--	--	--	--
	8/4/2002	23.65	71.11	SPH (sheen)	--	--	--	--
	11/26/2002	24.59	70.17	SPH (sheen)	--	--	--	--
1/20/2003		22.08	72.68	3,700	340	--	--	--

Abbreviations and Notes:

TOC Elev. (ft) = Top of casing elevation, surveyed to an arbitrary datum

TEH = Total extractable hydrocarbons

TPHD = Total petroleum hydrocarbons as diesel

TPHmo = Total petroleum hydrocarbons as motor oil

SVOCs = Semi-volatile organic compounds

Other SVOC's = All other compounds analyzed by EPA Method 8270

μg/l = micrograms per liter = parts per billion = ppb

ND = None detected above laboratory reporting limit, see laboratory report for individual reporting limits

ND* = not detected except for benzoic acid 74; creosol: 68

< n = Not detected above n ug/l

-- = Not analyzed/not available

* = Duplicate sample sent to a different chemical laboratory

** = Does not match diesel pattern

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Table 3. LUFT Metals in Groundwater

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Sampling Date	Cadmium	Chromium	Lead ug/l	Nickel	Zinc
MW-4	7/1/1999	<5	<10	59	<20	<20
	9/21/1999	<5	<10	66	<20	33
	2/9/2000	<5	17	68	<50	<50
MW-7	7/1/1999	<5	<10	<3	<20	<20
	9/21/1999	<5	<10	<3	<20	<20
	2/9/2000	<5	14	8.6	59	<50
MW-8	7/1/1999	<5	<10	<3	<20	<20
	9/21/1999	<5	<10	<3	<20	<20
	2/9/2000	<5	<5	<5	<50	<50
MW-9	7/1/1999	<5	<10	<3	34	<20
	9/21/1999	<5	<10	<3	25	37
	2/9/2000	<5	82	29	160	130
	3/1/2001	<5	47	<5	72	<50
	5/7/2001	<5	49	<5	<50	<50
	8/1/2001	<5	<20	<5	<50	<50
	2/13/2002	<5	--	<5	<50	<50
	1/20/2003	<5	<20	<5	<50	<50
MW-13	7/1/1999	<5	<10	<3	<20	<20
	9/21/1999	<5	<10	<3	<20	<20
	2/9/2000	<5	12	15	<50	<50
MW-14	2/9/2000	<5	210	24	2,500	280
MW-15	2/9/2000	<5	140	1,800	220	150
	2/13/2002	<5	--	<5	<50	<50
	1/20/2003	<5	<20	36	<50	<50

Abbreviations and Notes:

LUFT metals analyzed by EPA Method 6010

ug/l = micrograms per liter

-- = Not analyzed/not available

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Table 4. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Water (ft)	SPH Thickness (ft)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)	Notes
MW-1	12/23/1991	26.86	1.15	2.00	2.00	1
94.48	12/26/1991	26.08	0.22	0.50	2.50	1
	1/13/1992	26.53	0.66	1.00	3.50	1
	2/28/1992	27.75	0.42	2.00	5.50	1
	11/9/1993	26.06	1.17	0.50	6.00	1
	11/3/1995	23.10	0.76	0.75	6.75	1
	11/30/1995	23.38	0.70	0.25	7.00	1
	1/3/1996	23.30	0.78	0.53	7.53	1
	2/2/1996	22.96	0.84	0.75	8.28	1
	3/1/1996	21.69	0.14	0.10	8.38	1
	4/4/1996	21.11	0.00	0.00	8.38	1
	5/2/1996	20.96	0.00	0.00	8.38	1
	6/5/1996	20.98	0.04	0.10	8.48	1
	7/9/1996	21.64	0.20	0.10	8.58	1
	8/8/1996	22.43	0.33	0.05	8.63	1
	9/10/1996	23.25	0.60	0.10	8.73	1
	10/1/1996	23.58	0.60	0.25	8.98	1
	11/4/1996	24.29	0.78	0.13	9.11	1
	12/2/1996	24.63	0.88	0.26	9.37	1
	1/3/1997	24.08	0.81	0.39	9.76	1
	2/6/1997	22.46	0.30	0.01	9.77	1
	3/5/1997	23.00	0.00	0.00	9.77	1
	4/1/1997	22.29	0.20	0.01	9.78	1
	5/8/1997	22.79	0.33	0.02	9.80	1
	6/6/1997	24.33	1.69	0.26	10.06	1
	7/8/1997	24.00	0.96	0.20	10.26	1
	8/7/1997	24.58	1.29	1.00	11.26	1
	9/10/1997	24.93	1.21	1.50	12.76	1
	10/1/1997	24.89	0.86	0.26	13.02	1
	11/4/1997	25.06	0.77	0.26	13.28	1
	12/4/1997	24.76	0.54	0.19	13.47	1
	1/8/1998	23.66	0.00	0.00	13.47	1
	2/5/1998	22.64	0.00	0.00	13.47	1
	3/6/1998	20.80	0.00	0.00	13.47	1
	4/2/1998	20.31	0.00	0.00	13.47	1
	4/29/1998	19.95	0.00	0.00	13.47	1
	6/3/1998	20.41	0.00	0.00	13.47	1
	7/9/1998	20.97	0.07	0.00	13.47	1
	8/4/1998	21.40	trace	trace	13.47	1
	8/26/1998	21.85	0.10	trace	13.47	1
	11/2/1998	22.92	0.39	trace	13.47	1
	12/4/1998	23.29	0.29	0.01	13.48	1

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Table 4. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Water (ft)	SPH Thickness (ft)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)	Notes
MW-1	1/5/1999	23.51	0.42	0.03	13.51	1
(cont'd)	2/8/1999	23.08	0.05	0.25	13.76	1
	3/24/1999	21.90	0.01	0.01	13.77	1
	4/30/1999	21.52	0.00	0.00	13.77	1
	7/1/1999	22.70	0.03	0.01	13.78	1
	9/21/1999	23.81	0.08	0.20	13.98	1
	10/20/1999	23.90	0.10	0.01	13.99	1
	12/13/1999	24.24	trace	0.00	13.99	1
	2/9/2000	23.95	0.07	0.05	14.04	1
	2/15/2000	--	0.00	0.00	14.04	2
	2/25/2000	23.69	0.00	0.06	14.10	2
	3/3/2000	23.27	0.00	0.05	14.15	2
	3/28/2000	22.39	0.00	0.13	14.28	2
	5/2/2000	22.29	0.00	0.05	14.32	2
	5/31/2000	22.05	0.00	0.00	14.32	2
	7/3/2000	22.10	trace	0.02	14.34	2
	8/4/2000	22.40	0.00	0.01	14.35	2
	10/6/2000	23.47	0.46	0.01	14.36	1
	11/3/2000	24.14	0.78	0.00	14.36	
	12/1/2000	25.40	0.83	1.75	16.11	1,2
	1/4/2001	25.13	0.09	0.25	16.36	2
	2/2/2001	25.12	0.03	0.13	16.49	2
	4/3/2001	23.19	0.24	0.10	16.59	
	5/4/2001	23.31	0.47	0.00	16.59	
	5/7/2001	23.85	0.05	0.03	16.62	2
	6/11/2001	23.77	0.67	0.00	16.62	2
	5/2/2002	23.41	0.46	0.01	16.62	
	6/14/2002	23.95	0.03	0.01	16.63	2
	8/4/2002	24.02	0.03	0.01	16.64	2
	9/24/2002	24.59	0.01	0.003	16.64	2
	10/16/2002	25.08	0.03	0.003	16.64	2
	11/6/2002	25.71	0.08	0.005	16.65	2
	11/26/2002	24.47	0.05	0.003	16.65	2
	12/9/2002	24.08	0.07	0.009	16.66	2
	1/17/2003	22.14	0.07	0.005	16.67	1,2
	1/27/2003	22.55	0.02	0.003	16.67	2
	3/5/2003	23.53	0.02	0.25	16.92	1,2
MW-4	12/23/1991	22.63	0.98	2.50	2.50	1
88.84	12/26/1991	22.52	0.96	6.00	8.50	1
	1/10/1992	22.74	0.99	5.00	13.50	1
	2/28/1992	22.00	0.67	4.00	17.50	1
	3/11/1992	21.71	0.55	3.50	21.00	1
	3/13/1992	21.56	0.49	3.50	24.50	1
	3/17/1992	25.46	0.44	2.25	26.75	1
	3/18/1992	21.38	0.44	2.50	29.25	1
	3/19/1992	21.33	0.48	1.50	30.75	1

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Table 4. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> <i>(ft)</i>	Sampling Date	Depth to Water (ft)	SPH Thickness (ft)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)	Notes
MW-4	3/23/1992	21.29	0.42	4.00	34.75	1
<i>(cont'd)</i>	3/24/1992	21.31	0.38	1.50	36.25	1
	3/25/1992	21.17	0.36	1.00	37.25	1
	3/26/1992	21.08	0.35	1.00	38.25	1
	3/27/1992	20.92	0.26	0.50	38.75	1
	3/31/1992	21.15	0.44	0.50	39.25	1
	4/1/1992	20.90	0.24	0.25	39.50	1
	4/2/1992	20.90	0.17	0.13	39.63	1
	4/6/1992	--	--	0.13	39.76	1
	4/10/1992	20.91	0.33	0.25	40.01	1
	4/13/1992	21.04	0.42	0.25	40.26	1
	4/20/1992	20.74	0.19	0.13	40.39	1
	5/4/1992	20.83	0.33	0.13	40.52	1
	5/18/1992	21.33	0.23	0.13	40.65	1
	5/26/1992	20.83	0.17	0.13	40.78	1
	6/1/1992	20.85	0.19	0.06	40.84	1
	6/29/1992	21.38	0.53	0.25	41.09	1
	7/29/1992	21.69	0.56	1.11	42.20	1
	8/28/1992	21.35	0.63	1.68	43.88	1
	4/3/1993	20.11	0.51	0.13	44.01	1
	11/9/1993	20.48	0.52	0.03	44.04	1
	8/30/1995	21.71	0.63	1.75	45.79	1
	10/2/1995	19.90	2.20	0.50	46.29	1
	11/3/1995	18.76	0.57	0.25	46.54	1
	11/30/1995	19.17	0.65	0.25	46.79	1
	1/3/1996	19.45	0.44	0.05	46.84	1
	2/2/1996	19.50	0.32	0.10	46.94	1
	3/1/1996	19.31	0.20	0.20	47.14	1
	4/4/1996	17.53	0.18	0.20	47.34	1
	5/2/1996	17.50	0.25	0.20	47.54	1
	6/5/1996	17.67	0.39	0.15	47.69	1
	7/9/1996	18.29	0.50	0.16	47.85	1
	8/8/1996	18.84	0.00	0.00	47.85	1
	9/10/1996	19.31	0.34	0.05	47.90	1
	10/1/1996	19.51	0.29	0.05	47.95	1
	11/4/1996	20.13	0.35	0.02	47.97	1
	12/2/1996	20.23	0.33	0.02	47.99	1
	1/3/1997	19.33	0.10	0.02	48.01	1
	2/6/1997	18.13	0.01	0.01	48.02	1
	4/30/1999	17.28	trace	0.00	48.02	1
	2/9/2000	19.76	0.00	0.00	48.02	1
	2/15/2000	--	0.00	0.00	48.02	2
	2/25/2000	19.30	0.00	0.00	48.02	2

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Table 4. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Water (ft)	SPH Thickness (ft)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)	Notes
MW-6	12/23/1991	28.40	3.21	7.50	7.50	1
85.62	12/26/1991	27.25	1.67	2.00	9.50	1
	1/10/1992	27.23	0.90	1.00	10.50	1
	2/4/1992	27.71	2.04	2.00	12.50	1
	2/28/1992	27.92	3.00	3.00	15.50	1
	3/10/1992	27.16	2.06	2.75	18.25	1
	3/12/1992	25.96	0.52	2.00	20.25	1
	3/23/1992	26.34	1.09	1.00	21.25	1
	3/30/1992	25.73	0.35	0.50	21.75	1
	4/10/1992	25.29	0.05	0.25	22.00	1
	4/13/1992	25.52	0.21	0.13	22.13	1
	4/20/1992	25.38	0.10	0.13	22.26	1
	5/4/1992	25.40	--	0.13	22.39	1
	5/8/1992	25.50	0.17	0.06	22.45	1
	5/26/1992	25.46	0.13	0.13	22.58	1
	6/1/1992	25.46	0.09	0.06	22.64	1
	6/29/1992	25.59	0.14	0.19	22.83	1
	7/29/1992	26.90	1.71	0.60	23.43	1
	8/28/1992	25.09	2.62	2.40	25.83	1
	12/2/1992	--	--	0.00	25.83	1
	4/3/1993	26.96	2.86	1.75	27.58	1
	11/9/1993	27.51	3.06	0.83	28.41	1
	8/30/1995	28.00	7.96	4.50	32.91	1
	10/2/1995	28.24	6.14	4.00	36.91	1
	11/3/1995	28.39	6.13	3.00	39.91	1
	11/30/1995	26.91	3.44	2.50	42.41	1
	1/3/1996	27.58	4.41	2.50	44.91	1
	2/2/1995	27.58	4.37	5.00	49.91	1
	3/1/1996	27.96	5.15	4.00	53.91	1
	4/4/1996	27.96	5.41	5.00	58.91	1
	5/2/1996	26.83	4.66	4.50	63.41	1
	6/5/1996	27.15	5.17	4.00	67.41	1
	7/9/1996	27.08	4.86	4.50	71.91	1
	8/8/1996	26.71	4.05	4.00	75.91	1
	9/10/1996	26.83	3.82	3.50	79.41	1
	10/1/1996	26.96	3.77	4.00	83.41	1
	11/4/1996	--	--	NM	NM	4
86.94	12/2/1996	--	--	NM	NM	4
	1/3/1997	--	--	NM	NM	4
	2/6/1997	25.08	0.20	NM	NM	4

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Table 4. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to Water (ft)	SPH Thickness (ft)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)	Notes
MW-6	3/5/1997	24.20	0.00	NM	NM	4
(cont'd)	4/1/1997	24.04	0.00	NM	NM	4
85.82	5/8/1997	26.54	1.88	0.40	83.81	1
	6/6/1997	25.33	0.21	0.03	83.84	1
	7/8/1997	25.30	0.07	0.00	83.84	1
	8/7/1997	25.52	0.00	0.00	83.84	1
	9/10/1997	25.76	0.00	0.00	83.84	1
	10/1/1997	25.12	0.00	0.00	83.84	1
	11/4/1997	26.16	0.18	0.02	83.86	1
	12/4/1997	26.08	0.16	0.05	83.91	1
	1/8/1998	25.79	0.10	0.66	84.57	1
	2/5/1998	25.31	0.89	NM	84.57	4
	3/6/1998	24.63	0.46	0.04	84.61	1
	4/2/1998	24.45	0.59	0.10	84.71	1
	4/29/1998	22.96	0.55	0.09	84.80	1
	6/3/1998	22.81	0.41	0.03	84.83	1
	7/9/1998	23.04	0.35	0.05	84.88	1
	8/4/1998	23.29	0.35	0.04	84.92	1
	8/26/1998	23.50	0.31	0.01	84.93	1
	11/2/1998	24.24	0.43	0.02	84.95	1
	12/4/1998	24.35	0.32	0.01	84.96	1
	1/5/1999	24.51	0.40	0.03	84.99	1
	2/8/1999	24.00	0.03	0.13	85.12	1
	3/24/1999	23.82	0.19	0.03	85.15	1
	4/30/1999	23.60	1.13	0.10	85.25	1
	7/1/1999	24.45	0.42	0.06	85.31	1
	7/27/1999	25.35	0.24	0.06	85.37	1
	8/19/1999	24.87	0.24	0.06	85.43	1
	9/21/1999	24.58	0.10	0.20	85.63	1
	10/20/1999	25.05	0.17	0.20	85.83	1
	12/13/1999	25.08	0.10	0.06	85.89	1
	2/9/2000	24.93	0.44	0.25	86.14	1
	2/15/2000	--	0.00	0.07	86.21	3
	2/25/2000	24.23	0.00	0.01	86.22	3
	3/3/2000	24.00	0.00	0.00	86.22	3
	3/28/2000	23.54	0.00	0.05	86.27	3
	5/2/2000	23.52	0.06	0.03	86.30	3
	5/31/2000	23.39	0.08	0.00	86.30	3
	7/3/2000	23.61	trace	0.02	86.32	3
	8/4/2000	23.80	0.10	0.01	86.33	3
	10/6/2000	24.22	0.04	0.01	86.34	
	11/3/2000	24.30	0.09	0.00	86.34	
	12/1/2000	24.38	0.07	0.03	86.37	2, 3

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Table 4. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> <i>(ft)</i>	Sampling Date	Depth to Water (ft)	SPH Thickness (ft)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)	Notes
MW-6	1/4/2001	24.65	0.17	0.00	86.37	5
<i>(cont'd)</i>	2/2/2001	24.72	0.22	0.25	86.62	3
	4/3/2001	23.90	0.06	0.05	86.67	
	5/4/2001	23.95	0.07	0.05	86.72	
	5/7/2001	—	—	0.08	86.80	
	6/11/2001	24.25	0.10	0.00	86.80	
	5/2/2002	23.25	0.01	0.00	86.80	2
	6/14/2002	23.17	0.07	0.01	86.81	1
	8/4/2002	23.55	0.03	0.01	86.82	1
	9/24/2002	23.98	0.02	0.007	86.82	1
	10/16/2002	24.20	0.09	0.005	86.83	1
	11/6/2002	25.78	0.07	0.005	86.83	1
	11/26/2002	24.22	0.03	0.009	86.84	1, 3
	12/9/2002	23.97	0.05	0.021	86.86	1, 3
	1/17/2003	21.30	0.06	0.013	86.88	1, 3
	1/27/2003	22.49	0.02	0.016	86.89	1, 3
	3/5/2003	24.35	0.06	0.013	86.91	1, 3
MW-9 90.37	8/8/1996	19.89	0.35	0.10	0.10	1
MW-14 94.66	12/4/1998	23.42	0.23	0.01	0.06	1
	1/5/1999	23.36	0.12	0.01	0.07	1
	2/8/1999	23.17	trace	0.01	0.13	1
	3/24/1999	22.08	trace	trace	0.13	1
	4/30/1999	21.17	0.01	trace	0.13	1
	7/1/1999	22.95	0.04	trace	0.13	1
	9/21/1999	24.26	trace	trace	0.13	1
	10/20/1999	24.10	0.00	0.00	0.13	1
	2/9/2000	24.13	0.00	0.00	0.13	1
	2/15/2000	—	0.00	0.00	0.13	1
	2/25/2000	—	0.00	0.00	0.13	2
	3/3/2000	23.27	0.00	0.05	0.44	2
	3/28/2000	22.40	0.00	0.13	1.25	2
	5/2/2000	22.22	0.00	0.04	1.49	2
	5/31/2000	22.09	0.00	0.00	1.49	2
	7/3/2000	22.35	trace	0.01	1.55	2
	8/4/2000	22.78	0.00	0.03	1.73	2
	10/6/2000	23.48	0.00	0.00	1.73	
	11/3/2000	23.60	0.00	0.00	1.73	
	12/1/2000	23.90	0.04	0.04	1.97	1, 2
	1/4/2001	24.10	0.00	0.00	1.97	
	2/2/2001	24.27	0.00	0.10	2.58	2
	4/3/2001	23.06	0.00	0.05	2.89	2
	5/4/2001	23.05	0.00	0.00	2.89	
	5/7/2001	23.45	0.02	0.01	2.93	2
	6/11/2001	23.40	0.00	0.00	2.93	

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Table 4. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> <i>(ft)</i>	Sampling Date	Depth to Water (ft)	SPH Thickness (ft)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)	Notes
<i>MW-14</i>	5/2/2002	23.51	0.02	0.003	2.95	2
<i>(cont'd)</i>	6/14/2002	23.88	0.01	0.003	2.97	2
	8/4/2002	23.61	0.01	0.004	2.99	2
	9/24/2002	24.07	0.01	0.007	3.03	2
	10/16/2002	24.29	trace	0.007	3.07	2
	11/6/2002	25.85	0.00	0.00	3.07	2
	11/26/2002	24.35	trace	0.00	3.07	2
	12/9/2002	24.05	trace	0.00	3.07	2
	1/17/2003	22.09	0.00	0.00	3.07	2
	1/27/2003	22.60	0.00	0.00	3.07	2
	3/5/2003	23.63	0.00	0.13	3.86	1,2
<i>Total SPH Removed (gallons):</i>					152.58	

Abbreviations and Notes:

TOC Elev. (ft) = Top of casing elevation, surveyed to an arbitrary datum

-- = Not measured or not applicable

NM = Not Measured. Product was being removed by vapor extraction at time of measurement.

1 = SPH removed by manual bailing

2 = SPH removed from well by absorbent sock

3 = SPH removed from well by passive skimmer

4 = vapor extraction system operating in well

5 = No product removed; skimmer adjusted incorrectly and filled with water.

APPENDIX A

Well Sampling Protocol

ATTACHMENT A

Well Sampling Protocol

Well Sampling Protocol - May 8, 2000 Workplan Addendum			
Sampling Frequency and Analytes			
Source Area Wells			
MW-1	Quarterly	Annually (1 st Qtr)	TPHd, TPHmo, TPHg, BTEX, MTBE, HVOCs, DO
MW-6			(SVOCs, LUFT Metals also)
MW-14			
MW-15			
Down-Gradient/Gross-Gradient Wells			
MW-4	Quarterly	Quarterly	TPHd, TPHmo, TPHg, BTEX, MTBE, HVOCs, DO
MW-7			(SVOCs and LUFT Metals- 1 st qtr only)
MW-8			
MW-9			
MW-13			
Notes: 1) Per the May 3, 1999 ACHG's letter to Messrs. Hill and Linden, monitoring wells MW-2, MW-3, MW-5, MW-10, and MW-11 were dropped from the monitoring program. 2) To simplify the protocol, LUFT Metals will be analyzed annually (1/SE plan) for all sampled wells.			

APPENDIX B

Groundwater Monitoring Field Data

CAMBRIA

Groundwater Monitoring Field Sheet

Project Name: Connelly
Measured By: J. M.

Project Number/Task: 425-1580

WELL SAMPLING FORM

Project Name: <i>Connell</i>	Cambria Mgr: <i>MHF</i>	Well ID: <i>MW-41</i>
Project Number: <i>425-1580</i>	Date: <i>1-20-03</i>	Well Yield:
Site Address: <i>3093 Broadway Oakland, Ca</i>	Sampling Method:	Well Diameter: <i>2" pvc</i>
	<i>Disposable bailer</i>	Technician(s): <i>SG</i>
Initial Depth to Water: <i>16.90</i>	Total Well Depth: <i>24.00</i>	Water Column Height: <i>7.10</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.13</i>	3 Casing Volumes: <i>3.39</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>3</i>
Start Purge Time: <i>4:15</i>	Stop Purge Time: <i>4:29</i>	Total Time: <i>14 mins</i>

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. (°C)	pH	Cond. (uS)	Comments
4:20	1	18.1	7.22	1370	
4:25	2	18.5	7.24	924	strong odor
4:30	3	18.21	7.29	759	

Fe = mg/L ORP = mV DO = 0.35 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-41</i>	<i>1-20-03</i>	<i>4:35</i>	<i>6 voa 1 Amb 1 1/2 poly</i>	<i>HCl — —</i>		

WELL SAMPLING FORM

Project Name: Connell	Cambria Mgr: MHF	Well ID: MW-7
Project Number: 425-1580	Date: 1-20-03	Well Yield:
Site Address: 3093 Broadway Oakland, Ca	Sampling Method:	Well Diameter: 2 0 pvc
	Disposable bailer	Technician(s): SG
Initial Depth to Water: 15.84	Total Well Depth: 30.00	Water Column Height: 14.16
Volume/ft: 0.16	1 Casing Volume: 2.26	3 Casing Volumes: 6.79
Purging Device: disposable bailed	Did Well Dewater?: no	Total Gallons Purged: 7
Start Purge Time: 3:35	Stop Purge Time: 3:49	Total Time: 14 mins

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. (°C)	pH	Cond. (uS)	Comments
3:40	2.5	18.9	7.08	1185	
3:45	5	18.8	7.11	720	
3:50	7	18.8	7.12	792	

Fe = mg/L ORP = mV DO = 0.61 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-7	1-20-03	3:55	6voa 1 Amb 1 1/2 poly	HCl —		

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WELL SAMPLING FORM

Project Name: <u>Connell</u>	Cambria Mgr: <u>MHF</u>	Well ID: <u>MW-8</u>
Project Number: <u>425-1580</u>	Date: <u>1-20-03</u>	Well Yield:
Site Address: <u>3093 Broadway</u> <u>Oakland, Ca</u>	Sampling Method:	Well Diameter: <u>6 pvc</u>
	<u>Disposable bailer</u>	Technician(s): <u>SG</u>
Initial Depth to Water: <u>24.93</u>	Total Well Depth: <u>39.40</u>	Water Column Height: <u>14.47</u>
Volume/ft: <u>1.47</u>	1 Casing Volume: <u>21.27</u>	3 Casing Volumes: <u>63.81</u>
Purging Device: <u>hand pump</u>	Did Well Dewater?: <u>no</u>	Total Gallons Purged: <u>64</u>
Start Purge Time: <u>2:20</u>	Stop Purge Time: <u>3:19</u>	Total Time: <u>59 mins</u>

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. (°C)	pH	Cond. (uS)	Comments
2:40	22	18.5	7.13	7.24	
2:55	44	18.6	7.09	7.48	
3:20	64	18.7	7.09	8.50	

Fe = mg/L ORP = mV DO = 0.65 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-8	1-20-03	3:25	6voa 1Amb 15L poly	HCl —		

CAMBRIA

WELL SAMPLING FORM

Project Name: <u>Connell</u>	Cambria Mgr: <u>MHF</u>	Well ID: <u>MW-9</u>
Project Number: <u>425-1580</u>	Date: <u>1-20-03</u>	Well Yield:
Site Address: <u>3093 Broadway</u> <u>Oakland, Ca</u>	Sampling Method:	Well Diameter: <u>2" pvc</u>
	<u>Disposable bailer</u>	Technician(s): <u>SG</u>
Initial Depth to Water: <u>17.93</u>	Total Well Depth: <u>30.50</u>	Water Column Height: <u>12.57</u>
Volume/ft: <u>0.16</u>	1 Casing Volume: <u>2.01</u>	3 Casing Volumes: <u>6.03</u>
Purging Device: <u>disposable bails</u>	Did Well Dewater?: <u>no</u>	Total Gallons Purged: <u>6</u>
Start Purge Time: <u>4:55</u>	Stop Purge Time: <u>5:29</u>	Total Time: <u>34 mins</u>

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. (°C)	pH	Cond. (uS)	Comments
5:10	2	19.1	7.18	1728	
5:25	4	19.2	7.15	1577	
5:30	6	19.2	7.17	1490	

Fe = mg/L ORP = mV DO = 0.31 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-9	1-20-03	5:35	6voa 1Amb 1 1/2 poly	HCl —		

WELL SAMPLING FORM

Project Name: Connell	Cambria Mgr: MHF	Well ID: MW-13
Project Number: 425-1580	Date: 1-20-03	Well Yield:
Site Address: 1093 Broadway Oakland, Ca	Sampling Method: Disposable bailer	Well Diameter: 2 0 pvc Technician(s): SG
Initial Depth to Water: 22.10	Total Well Depth: 39.45	Water Column Height: 17.35
Volume/ft: 0.16	1 Casing Volume: 2.77	3 Casing Volumes: 8.32
Purging Device: disposable bailer	Did Well Dewater?: no	Total Gallons Purged: 8
Start Purge Time: 12:55	Stop Purge Time: 1:24	Total Time: 34 mins

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. (°C)	pH	Cond. (uS)	Comments
1:10	3.5	19.3	7.07	618	
1:20	6.0	19.1	7.13	695	
1:30	8.0	19.2	7.15	720	

Fe = mg/L ORP = mV DO = 0.53 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-13	1-20-03	1:35	6voa 1Amo 15L poly	HCl —		

WELL SAMPLING FORM

Project Name: Connell	Cambria Mgr: MHF	Well ID: MW-15
Project Number: 425-1580	Date: 1-20-03	Well Yield:
Site Address: 3093 Broadway Oakland, Ca	Sampling Method:	Well Diameter: 2" pvc
	Disposable bailer	Technician(s): SG
Initial Depth to Water: 22.08	Total Well Depth: 37.00	Water Column Height: 14.92
Volume/ft: 0.16	1 Casing Volume: 2.38	3 Casing Volumes: 7.16
Purging Device: disposable biler	Did Well Dewater?: no	Total Gallons Purged: 7
Start Purge Time: 6:10	Stop Purge Time: 6:34	Total Time: 24 mins

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. (°C)	pH	Cond. (uS)	Comments
6:15	3	19.3	7.04	840	
6:25	6	19.1	7.19	1070	
6:35	7	19.1	7.17	1155	

$$\text{Fe} = \text{mg/L} \quad \text{ORP} = \text{mV} \quad \text{DO} = 0.24 \text{ mg/L}$$

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-15	1-20-03	6:40	6voa 1AmB 15L poly	HCl —		

CHAIN OF CUSTODY RECORD

McCAMPBELL ANALYTICAL INC.

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

Telephone: (925) 798-1620

Fax: (925) 798-1622

TURN AROUND TIME:

RUSH 24 HOUR 48 HOUR 5 DAY

EDF Required? Yes No

Analysis Request

Other

Comments

Report To: Mary Holland Foss Bill To: Cambria Env. Tech

Company: Cambria Environmental Technology Inc.

6262 Hollis Street

Emeryville, CA 94608 E-mail:

Tele: 510-450-1982 Fax: 510-450-8295

Project #: 452-1580 Project Name: ConnellProject Location: 3093 Broadway Oakland, CaSampler Signature: R. J. M.

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-4		1-20-03	4:35	7	300 400	X					XX			X X
MW-7		1-20-03	3:55	7	300 400	X	X				XX			X X
MW-8		1-20-03	3:25	7	300 400	X					XX			X X
MW-9		1-20-03	5:35	8	300 400	X	X				XX			X X
MW-13		1-20-03	1:35	7	300 400	X					XX			X X
MW-15		1-20-03	5:40	8	300 400	X					XX			X X

BTEX & TPH as Gas (602/8020 + 8015)/MTBE

TPH as Diesel (8015) /TPH & O

Total Petroleum Oil & Grease (5520 E&P/B&F)

Total Petroleum Hydrocarbons (418.1)

EPA 601 / 8010

BTEX ONLY (EPA 602 / 8020)

EPA 608 / 8080

EPA 624 / 8240 / 8260

EPA 625 / 8270

PAH's / PNA's by EPA 625 / 8270 / 8310

CAM-17 Metals

LJFT 5 Metals

Lead (7240/7421/739.2/6010)

RCI

HYD/C's & SVOC'S
Pb, Cd, Cr, Zn Ni (fins)

Relinquished By:

S. M. F.

Date: Time: Received By:

1-20-03 5:00 secure location

Remarks:

Relinquished By:

Date: Time: Received By:

Relinquished By:

Date: Time: Received By:

Product Removal Form Connell Automobile Dealership, Oakland, CA

By: Rowan Date: 3/5/03
 Project and Task #: 425-1580-011

Well	Treatment	Time	Gallons Removed*	DTW/ DTP	Comments
MW-1	SoakEase	10:50	0.25 *	23.53 23.51	BAIL ~5 TIMES
MW-6	Skimmer	10:00	?	24.35 24.29	BAIL ~10 TIMES
MW-14	SoakEase	11:30	0.13 *	23.63 —	BAIL ONCE

* If SoakEase is removed, wring out used sock into bucket and estimate vol. removed. Saturated socks theoretically hold about 1 quart (0.25 gal) of product. Skimmer receptacle holds about $\frac{1}{2}$ quart (0.14 gal) of product.

* 1ST TIME HERE *

Notes ARRIVE ON SITE, LOOK FOR WELLS - LOCATE MW-6.

OPEN WELL AND ATTEMPT TO TAG. UNARCE W/ SKIMMER REMOVE SKIMMER AND DRAIN. - NOT MUCH LIQUID IN RECEPTACLE. TAG WELL.

SKIMMER IS COATED WITH GREEN SLIME AND CHUNKS OF BLACK MUCK. CLEAN THOROUGHLY. BAIL WELL - GETTING WATER AND COATING BAILER WITH SLIME → CLEAN OFF BAILER EACH TIME BAIL MW-6 ~ 10 TIMES, CLEANING OFF BAILER EACH TIME REPLACE SKIMMER AND CLOSE WELL FIND MW-1 AND MW-14 → PULL PIGS AND WRING OUT MW-1 HAS 1 FULL SOCK SATURATED, MW-14 HAS $\frac{1}{2}$ SOCK SATURATED. WRING OUT AND REPLACE. TAG WELLS AND BAIL w/ NEW BAILER.

No. of Product Drums Onsite: 2

Drum capacity available: plenty

H:\SB-2004\UST Fund\ConnellNFP-removal-form.wpd

DISPOSE OF ALL GENERATED WASTE INTO 55 gal DRUM ON SITE IN NORTHWEST PARKING LOT

Product Removal Form Connell Automobile Dealership, Oakland, CA

By: John Doe Date: 1-17-03

Project and Task #: 425-1580-011

Well	Treatment	Time	Gallons Removed*	DTW/ DTP	Comments
MW-1	SoakEase	12:00	20 ml	22.14 22.07	20ml SPTI bailed
MW-6	Skimmer	1:20	~ 50ml	28.30 21.24	~20ml bailed ~30ml removed from skimmer
MW-14	SoakEase	2:00	0.0	22.09 no SP	no SPTI removed shear n

* If SoakEase is removed, wring out used sock into bucket and estimate vol. removed. Saturated socks theoretically hold about 1 quart (0.25 gal) of product. Skimmer receptacle holds about $\frac{1}{2}$ quart (0.14 gal) of product.

Notes

No. of Product Drums Onsite: 2 (1) equal (1) spent

Drum capacity available: _____

Product Removal Form Connell Automobile Dealership, Oakland, CA

By: J. M. Date: 1-27-03

Project and Task #: 425-1580-011

Well	Treatment	Time	Gallons Removed*	DTW/ DTP	Comments
MW-1	SoakEase	6:05	~10m	22.55/ 22.53	SPE removed ~ 10m
MW-6	Skimmer	6:55	~10ml	22.49/ 22.47	bailed ~10m skimmer emptied ~5ml
MW-14	SoakEase	5:15	no SPE thick sheen	22.60/ —	removed sheen

* If SoakEase is removed, wring out used sock into bucket and estimate vol. removed. Saturated socks theoretically hold about 1 quart (0.25 gal) of product. Skimmer receptacle holds about $\frac{1}{2}$ quart (0.14 gal) of product.

Notes

No. of Product Drums Onsite: 2

Drum capacity available: (1) 5 gal empty
(1) 5 gal contains soaks & SPE

APPENDIX C

Results for Groundwater Sampling Sheets



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 6262 Hollis St. Emeryville, CA 94608	Client Project ID: #452-1580; Connell	Date Sampled: 01/20/03
	Client Contact: Mary Holland Ford	Date Received: 01/21/03
	Client P.O.:	Date Reported: 01/29/03
		Date Completed: 01/29/03

WorkOrder: 0301264

January 29, 2003

Dear Mary:

Enclosed are:

- 1). the results of 6 analyzed samples from your **#452-1580; Connell 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 6262 Hollis St. Emeryville, CA 94608	Client Project ID: #452-1580; Connell	Date Sampled: 01/20/03
		Date Received: 01/21/03
	Client Contact: Mary Holland Ford	Date Extracted: 01/23/03-01/24/03
	Client P.O.:	Date Analyzed: 01/23/03-01/24/03

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

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0301264

*water and vapor samples are reported in µg/L, soil and sludge samples in mg/kg, wipe samples in µg/wipe, and TCLP extracts in µg/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.

DHS Certification No. 1644

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 6262 Hollis St. Emeryville, CA 94608	Client Project ID: #452-1580; Connell	Date Sampled: 01/20/03
		Date Received: 01/21/03
	Client Contact: Mary Holland Ford	Date Extracted: 01/21/03
	Client P.O.:	Date Analyzed: 01/22/03-01/27/03

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3510C

Analytical methods: SW801SC

Work Order: 0301264

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

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

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+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 diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent / mineral spirit.



McCormick Analytical Inc.

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

Cambria Env. Technology 6262 Hollis St. Emeryville, CA 94608	Client Project ID: #452-1580; Connell	Date Sampled: 01/20/03
		Date Received: 01/21/03
	Client Contact: Mary Holland Ford	Date Extracted: 01/23/03
	Client P.O.:	Date Analyzed: 01/23/03

Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8021B

Work Order: 0301264

Lab ID	0301264-001B	0301264-002B	0301264-003B	0301264-004B	Reporting Limit for DF =1	
Client ID	MW-4	MW-7	MW-8	MW-9		
Matrix	W	W	W	W		
DF	50	1	5	20	S	W
Compound	Concentration					µg/kg
Bromodichloromethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
Bromoform	ND<25	ND	ND<2.5	ND<10	NA	0.5
Bromomethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
Carbon Tetrachloride	ND<25	ND	ND<2.5	ND<10	NA	0.5
Chlorobenzene	ND<25	ND	ND<2.5	ND<10	NA	0.5
Chloroethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
2-Chloroethyl vinyl ether	ND<25	ND	ND<2.5	ND<10	NA	0.5
Chloroform	ND<25	ND	ND<2.5	ND<10	NA	0.5
Chloromethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
Dibromochloromethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
1,2-Dichlorobenzene	ND<25	ND	ND<2.5	ND<10	NA	0.5
1,3-Dichlorobenzene	ND<25	ND	ND<2.5	ND<10	NA	0.5
1,4-Dichlorobenzene	ND<25	ND	ND<2.5	ND<10	NA	0.5
Dichlorodifluoromethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
1,1-Dichloroethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
1,2-Dichloroethane	32	ND	44	330	NA	0.5
1,1-Dichloroethene	ND<25	ND	ND<2.5	ND<10	NA	0.5
cis-1,2-Dichloroethene	ND<25	ND	ND<2.5	ND<10	NA	0.5
trans-1,2-Dichloroethene	ND<25	ND	ND<2.5	ND<10	NA	0.5
1,2-Dichloropropane	ND<25	ND	ND<2.5	ND<10	NA	0.5
cis-1,3-Dichloropropene	ND<25	ND	ND<2.5	ND<10	NA	0.5
trans-1,3-Dichloropropene	ND<25	ND	ND<2.5	ND<10	NA	0.5
Methylene chloride	ND<25	ND	ND<2.5	ND<10	NA	0.5
1,1,2,2-Tetrachloroethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
Tetrachloroethene	ND<25	ND	ND<2.5	ND<10	NA	0.5
1,1,1-Trichloroethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
1,1,2-Trichloroethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
Trichloroethene	ND<25	ND	ND<2.5	ND<10	NA	0.5
Trichlorofluoromethane	ND<25	ND	ND<2.5	ND<10	NA	0.5
Vinyl Chloride	ND<25	ND	ND<2.5	ND<10	NA	0.5
Surrogate Recoveries (%)						
%SS:	86.7	99.9	96.4	96.7		
Comments	h					

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



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 6262 Hollis St. Emeryville, CA 94608	Client Project ID: #452-1580; Connell	Date Sampled: 01/20/03
		Date Received: 01/21/03
	Client Contact: Mary Holland Ford	Date Extracted: 01/23/03
	Client P.O.:	Date Analyzed: 01/23/03

Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8021B

Work Order: 0301264

Lab ID	0301264-005B	0301264-006B			Reporting Limit for DF =1	
Client ID	MW-13	MW-15				
Matrix	W	W				
DF	1	10	S	W		
Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND	ND<5.0			NA	0.5
Bromoform	ND	ND<5.0			NA	0.5
Bromomethane	ND	ND<5.0			NA	0.5
Carbon Tetrachloride	ND	ND<5.0			NA	0.5
Chlorobenzene	ND	ND<5.0			NA	0.5
Chloroethane	ND	ND<5.0			NA	0.5
2-Chloroethyl vinyl ether	ND	ND<5.0			NA	0.5
Chloroform	ND	ND<5.0			NA	0.5
Chloromethane	ND	ND<5.0			NA	0.5
Dibromochloromethane	ND	ND<5.0			NA	0.5
1,2-Dichlorobenzene	ND	ND<5.0			NA	0.5
1,3-Dichlorobenzene	ND	ND<5.0			NA	0.5
1,4-Dichlorobenzene	ND	ND<5.0			NA	0.5
Dichlorodifluoromethane	ND	ND<5.0			NA	0.5
1,1-Dichloroethane	ND	ND<5.0			NA	0.5
1,2-Dichloroethane	ND	170			NA	0.5
1,1-Dichloroethene	ND	ND<5.0			NA	0.5
cis-1,2-Dichloroethene	ND	ND<5.0			NA	0.5
trans-1,2-Dichloroethene	ND	ND<5.0			NA	0.5
1,2-Dichloropropane	ND	ND<5.0			NA	0.5
cis-1,3-Dichloropropene	ND	ND<5.0			NA	0.5
trans-1,3-Dichloropropene	ND	ND<5.0			NA	0.5
Methylene chloride	ND	ND<5.0			NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND<5.0			NA	0.5
Tetrachloroethene	ND	ND<5.0			NA	0.5
1,1,1-Trichloroethane	ND	ND<5.0			NA	0.5
1,1,2-Trichloroethane	ND	ND<5.0			NA	0.5
Trichloroethene	ND	ND<5.0			NA	0.5
Trichlorofluoromethane	ND	ND<5.0			NA	0.5
Vinyl Chloride	ND	ND<5.0			NA	0.5

Surrogate Recoveries (%)

%SS:	99.5	87.3		
Comments		h,i		

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



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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

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		Date Received: 01/21/03
	Client Contact: Mary Holland Ford	Date Extracted: 01/21/03
	Client P.O.:	Date Analyzed: 01/21/03-01/23/03

LUFT 5 Metals*

Extraction method: E200.7/E200.9

Analytical methods: E200.7/E200.9

Work Order: 0301264

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TTLC	0.005	0.02	0.005	0.05	0.05	mg/L
	S	TTLC	NA	NA	NA	NA	NA	NA

* water samples are reported in mg/L, soil/sludge/solid/product samples in mg/kg, wipes in µg/wipe and all TCLP / STLC / DISTLC / SPLP extracts in mg/L.

ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

Analytical Methods: EPA 6010C/200.7 for all elements except: 200.9 (water- Sb, As, Pb, Se, Ti); 245.1 (Hg); 7010 (sludge/soil/solid/oil/product/wipes - As, Se, Ti); 7471B (Hg).

DISTLC extractions are performed using STLC methodology except that deionized water is substituted for citric acid buffer as the extraction fluid. DISTLC results are not applicable to STLC regulatory limits.

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations; x) reporting limit raised due to matrix interference.



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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: 0301264

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 5693		Spiked Sample ID: N/A				
Compound	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(gas)	N/A	60	N/A	N/A	N/A	108	114	6.12	80	120
MTBE	N/A	10	N/A	N/A	N/A	97.2	95.1	2.16	80	120
Benzene	N/A	10	N/A	N/A	N/A	119	119	0.0533	80	120
Toluene	N/A	10	N/A	N/A	N/A	114	115	0.761	80	120
Ethylbenzene	N/A	10	N/A	N/A	N/A	118	115	2.58	80	120
Xylenes	N/A	30	N/A	N/A	N/A	120	120	0	80	120
%SS:	N/A	100	N/A	N/A	N/A	113	113	0.00994	80	120

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.

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.

% 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.



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

Matrix: W

WorkOrder: 0301264

EPA Method: SW8021B		Extraction: SW5030B		BatchID: 5692		Spiked Sample ID: 0301264-005B				
Compound	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
Chlorobenzene	ND	10	92.3	93.8	1.56	92	94.3	2.51	70	130
1,1-Dichloroethene	ND	10	112	105	6.34	112	116	3.87	70	130
Trichloroethene	ND	10	87.5	85.7	2.00	85.1	85.9	0.969	70	130
%SS:	99.5	100	93.8	90.7	3.37	92.8	89.9	3.24	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.

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.

% 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.



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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 E200.7/E200.9

Matrix: W

WorkOrder: 0301264

EPA Method: E200.7/E200.9		Extraction: E200.7/E200.9		BatchID: 5633		Spiked Sample ID: N/A				
Compound	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
Cadmium	N/A	10	N/A	N/A	N/A	111	113	1.50	70	130
Chromium	N/A	10	N/A	N/A	N/A	97.6	97.4	0.185	70	130
Nickel	N/A	10	N/A	N/A	N/A	104	96.8	7.31	70	130
Zinc	N/A	10	N/A	N/A	N/A	108	102	5.90	70	130
%SS:	N/A	100	N/A	N/A	N/A	108	102	4.92	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.

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.

% 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.



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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 E200.7/E200.9

Matrix: W

WorkOrder: 0301264

EPA Method: E200.7/E200.9		Extraction: E200.7/E200.9		BatchID: 5632		Spiked Sample ID: N/A				
Compound	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
Lead	N/A	0.010	N/A	N/A	N/A	117	109	7.59	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.

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.

% 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.



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 SW8015C

Matrix: W

WorkOrder: 0301264

EPA Method: SW8015C		Extraction: SW3510C		BatchID: 5688		Spiked Sample ID: N/A				
Compound	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(d)	N/A	7500	N/A	N/A	N/A	106	105	0.814	70	130
%SS:	N/A	100	N/A	N/A	N/A	95	93.5	1.52	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.

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.

% 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.

McCAMPBELL ANALYTICAL INC.

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



CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 0301264

Client:

Cambria Env. Technology
6262 Hollis St.
Emeryville, CA 94608

TEL: (510) 450-1983
FAX: (510) 450-8295
ProjectNo: #452-1580; Connell
PO:

Date Received: 1/21/03
Date Printed: 1/24/03

Sample ID	ClientSampID	Matrix	Collection Date	Hold	<>	Requested Tests			
						200_7/E200	SW8015C	SW8021B	8021B/8015
0301264-001	MW-4	Water	1/20/03 4:35:00 PM		A		A	B	A
0301264-002	MW-7	Water	1/20/03 3:55:00 PM				A	B	A
0301264-003	MW-8	Water	1/20/03 3:25:00 PM				A	B	A
0301264-004	MW-9	Water	1/20/03 5:35:00 PM		D	A	B	A	
0301264-005	MW-13	Water	1/20/03 1:35:00 PM			A	B	A	
0301264-006	MW-15	Water	1/20/03 1:40:00 PM		D	A	B	A	

Prepared by: Sonia 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.

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: 1073899149

Date/Time of Submittal: 2/20/2003 4:37:18 PM

Facility Global ID: T0600100406

Facility Name: CONNELL OLDSMOBILE

Submittal Title: 1QM03

Submittal Type: GW Monitoring Report

Logged in as CAMBRIA-EM (AUTH_RP)

CONTACT SITE ADMINISTRATOR.

Locational Information

CONNELL OLDSMOBILE (OAKLAND)
3093 BROADWAY
OAKLAND , CA 94611
CASE STATUS: OPEN
[SHOW THIS SITE ON MAP](#)
[RETURN TO REPORT MAIN MENU](#)

REGIONAL BOARD - CASE #: 01-0447
SAN FRANCISCO BAY RWQCB (REGION 2) - (BG)
CONTACT: BETTY GRAHAM - (510) 622-2300
LOCAL AGENCY (LEAD AGENCY) - CASE #: 469
ALAMEDA COUNTY LOP - (UNK)

PHYSICAL LOCATION:

GLOBAL ID	LATITUDE	LONGITUDE
T0600100406	37.82083	-122.2607

GEOGRAPHIC DATA DETAILS:

DATUM North American Datum 1983	SURVEY METHOD Geocoded
PROJECTION Geographic Projection	ESTIMATED ACCURACY 376.24 feet
SOURCE OF DATA ETAK Geocoding Class 1 Block Match - Street Segment Exact Address Match	

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