

CAMBRIA

DH 20129

May 13, 2003

Mr. Lee Douglas  
Douglas Parking  
1721 Webster Street  
Oakland, California 94612

Alameda County  
MAY 19 2003  
Environmental Health

Re: **Groundwater Monitoring Report – First Quarter 2003**  
Douglas Parking  
1721 Webster Street  
Oakland, California  
File No. 4070  
Cambria Project No. 580-0197



Dear Mr. Douglas:

Cambria Environmental Technology, Inc. (Cambria) is pleased to provide this first quarter 2003 monitoring report for the above-referenced site. The report describes the first quarter 2003 activities and results as well as the anticipated second quarter 2003 activities.

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

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

Mary C. Holland-Ford  
Project Geologist

Attachments: First Quarter 2003 Monitoring Report

**Cambria  
Environmental  
Technology, Inc.**

cc: Mr. Barney M. Chan, Alameda County Department of Environmental Health, 1131 Harbor Bay Parkway,  
2nd Floor, Alameda, California 94502  
Mr. Hari Patel, Technical Review Unit, UST Cleanup Fund, 1001 I Street, Sacramento, California 94244

5900 Hollis Street  
Suite A  
Emeryville, CA 94608  
Tel (510) 420-0700  
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C A M B R I A

GROUNDWATER MONITORING REPORT – FIRST QUARTER 2003

Douglas Parking  
1721 Webster Street  
Oakland, California  
File No. 4070  
Cambria Project No. 580-0917

May 13, 2003



*Prepared for:*


Mr. Lee Douglas  
Douglas Parking  
1721 Webster Street  
Oakland, California 94612

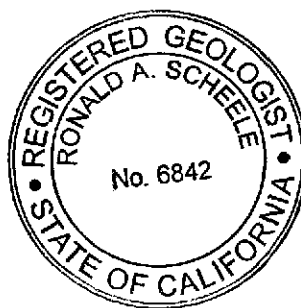
*Prepared by:*

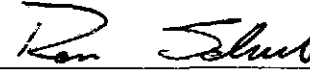
Cambria Environmental Technology, Inc.  
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Mary C. Holland-Ford  
Project Geologist



  
Ron Scheele, RG  
Associate Geologist

# C A M B R I A

## GROUNDWATER MONITORING REPORT – FIRST QUARTER 2003

Douglas Parking  
1721 Webster Street  
Oakland, California  
File No. 4070  
Cambria Project No. 580-0917

May 13, 2003

### INTRODUCTION



On behalf of Douglas Parking, Cambria Environmental Technology, Inc. (Cambria) is submitting this first quarter 2003 groundwater monitoring report for the above-referenced site. Presented below are the first quarter 2003 activities and results, and the anticipated second quarter 2003 activities.

### FIRST QUARTER 2003 ACTIVITIES AND RESULTS

#### Monitoring Activities

*Field Activities:* On January 12, 2003, Cambria gauged depth-to-water and inspected for separate-phase hydrocarbons (SPH) in wells MW-1 through MW-5. Groundwater samples were collected from wells MW-2 through MW-5. Well MW-1 is not included in the sampling schedule. Field data sheets are presented as Appendix A. The well gauging data has been submitted to the Geotracker database. See Appendix B for the Geotracker Electronic Delivery Confirmations.

*Sample Analyses:* The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015, and benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tert-butyl ether (MTBE) by EPA Method 8020 by McCampbell Analytical, Inc. of Pacheco, California. MTBE concentrations detected by EPA Method 8021 were confirmed by EPA Method 8260. The laboratory analytical report is included as Appendix C. The analytical data has been submitted to the Geotracker database. See Appendix B for the Geotracker Electronic Delivery Confirmations.

#### Monitoring Results

*Groundwater Flow Direction:* Based on depth-to-water data collected during Cambria's January 12, 2003 site visit, groundwater beneath the site flows toward the northeast with an average gradient of 0.0097 ft/ft, which is consistent with historical data. Groundwater elevation data for this site visit is summarized in Figure 1 and on Table 1.

**Hydrocarbon Distribution in Groundwater:** No SPH was detected in any of the wells. The maximum TPHg and benzene concentrations were detected in well MW-2 at 67,000 and 7,600 micrograms per liter ( $\mu\text{g/L}$ ), respectively. No hydrocarbons or MTBE were detected above laboratory reporting limits in groundwater samples from downgradient wells MW-4 and MW-5. Overall, hydrocarbon concentrations are consistent with historical levels.



## ANTICIPATED SECOND QUARTER 2003 ACTIVITIES

### Monitoring Activities

Cambria will gauge the site wells, inspect the wells for SPH, and collect groundwater samples from all wells not containing SPH. If MTBE is detected in any groundwater samples, concentrations will be confirmed using EPA Method 8260. Following field activities, Cambria will tabulate the data, contour groundwater elevation data, and prepare a groundwater monitoring report.

### Offsite Plume Delineation

On March 28 2002, Cambria submitted a *Subsurface Investigative Work Plan*. The proposed scope of work included the installation of two offsite groundwater monitoring wells. Work Plan approval from the Alameda County Health Care Services Agency (ACHCSA) has been received and Cambria will begin implementation of the workplan in the second quarter.

### Corrective Action Activities

On April 29, 2002, the ACHCSA requested further information regarding Cambria's proposed feasibility testing. Additional information will be provided to ACHCSA and upon agency approval, Cambria will begin feasibility testing involving soil vapor extraction and air sparging.

**ATTACHMENTS**

Figure 1 – Groundwater Elevation Contour and Benzene Concentration Map

Table 1 – Groundwater Elevation and Analytical Data

Appendix A – Field Data Sheets

Appendix B – Geotracker Electronic Delivery Confirmations

Appendix C – Laboratory Analytical Report



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### EXPLANATION

● Groundwater Monitoring Well

SB-A ● Soil Boring Location

Well ID Well ID

ELEV Groundwater Elevation

TPH Benzene Conc. in Groundwater in parts per billion (ppb); Date is most recent sampling event unless otherwise noted.

NS Not Sampled

7.00 Groundwater Elevation Contour (ft)

Groundwater Flow Direction  
Gradient (ft/ft) = 0.0097

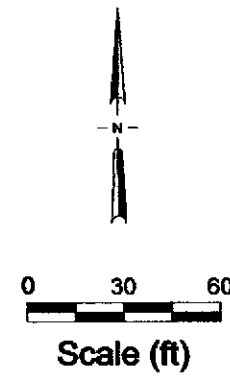
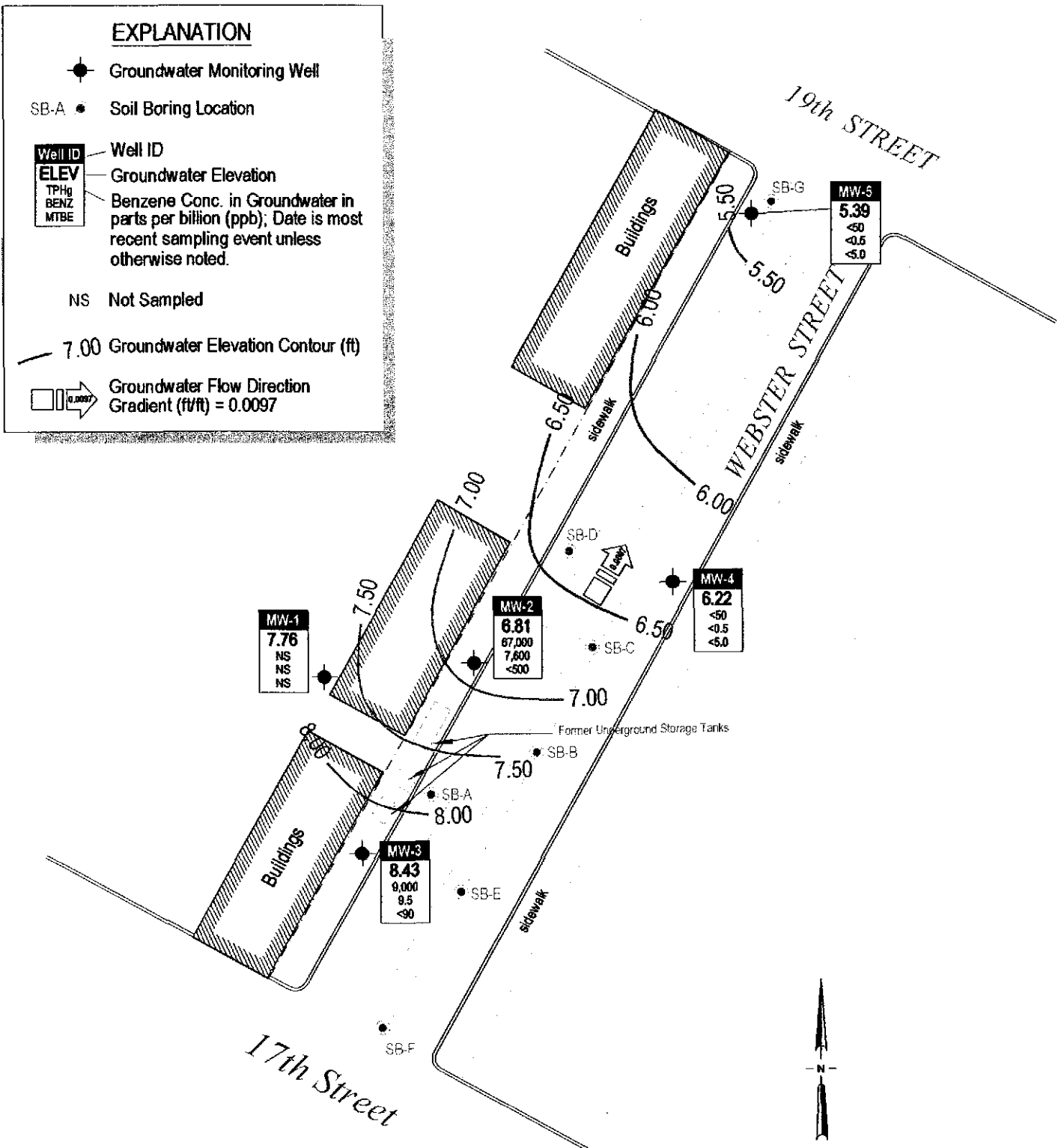


FIGURE 1

H:\SB-2004\DOUGLAS\1721 Webster\FIGURE1\CM03.MXD.DWG

Base map from Piers Environmental Services

**Douglas Parking Facility**  
1721 Webster Street  
Oakland, California



C A M B R I A

**Groundwater Elevation Contours  
and Concentration Map**

January 12, 2003

# CAMBRIA

Table 1. Groundwater Elevation and Analytical Data - 1721 Webster Street, Oakland, CA

Well ID (TOC)	Date	Depth to Water (ft)	Groundwater Elevation (ft)	TPHg ←	Benzene	Toluene (Concentrations in µg/l)	Ethylbenzene	Xylenes	MTBE →	DO (mg/L)
MW-1	12/2/1994	19.42	9.83	nd	nd	nd	nd	nd	-	-
29.25	3/6/1995	20.69	9.04	nd	nd	nd	nd	nd	-	-
29.73	7/11/1995	20.65	9.16	nd	nd	nd	nd	nd	-	-
29.81	5/10/1996	20.80	9.01	nd	nd	nd	nd	nd	-	-
	10/2/1996	21.35	8.46	-	-	-	-	-	-	-
	2/28/1997	20.57	9.24	-	-	-	-	-	-	-
	9/16/1997	21.50	8.31	-	-	-	-	-	-	-
	2/5/1998	20.91	8.90	-	-	-	-	-	-	1.90
	8/11/1998	20.50	9.31	-	-	-	-	-	-	0.06
	2/8/1999	21.42	8.39	-	-	-	-	-	-	6.00
	2/24/1999	22.99	6.82	-	-	-	-	-	-	2.00
	3/3/1999	20.84	8.97	-	-	-	-	-	-	3.80
	3/10/1999	20.89	8.92	-	-	-	-	-	-	3.40
	3/17/1999	20.84	8.97	-	-	-	-	-	-	2.80
	5/4/1999	20.80	9.01	-	-	-	-	-	-	3.50
	7/20/1999	21.25	8.56	-	-	-	-	-	-	3.07
	10/5/1999	21.37	8.44	-	-	-	-	-	-	5.40
	1/7/2000	21.65	8.16	-	-	-	-	-	-	2.10
	4/6/2000	21.05	8.76	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.90
	7/31/2000	21.13	8.68	-	-	-	-	-	-	1.80
	10/3/2000	21.69	8.12	-	-	-	-	-	-	1.42
	1/12/2001	22.00	7.81	-	-	-	-	-	-	0.68
	4/11/2001	22.16	7.65	-	-	-	-	-	-	0.51
	7/6/2001	22.57	7.24	-	-	-	-	-	-	-
	10/25/2001	22.71	7.10	-	-	-	-	-	-	-
	3/4/2002	22.53	7.28	-	-	-	-	-	-	-
	4/18/2002	22.81	7.00	-	-	-	-	-	-	-
	7/9/2002	22.95	6.86	-	-	-	-	-	-	-
	10/4/2002	23.13	6.68	-	-	-	-	-	-	-
	1/12/2003	22.05	7.76	-	-	-	-	-	-	-
MW-2	12/2/1994	19.50	7.60	61,300	3,000	3,900	160	4,500	-	-
27.10	3/6/1995	18.49	8.61	98,000	8,400	16,000	2,000	2,600	-	-
27.40	7/11/1995	18.45	8.95	38,000	3,100	7,500	940	3,700	-	-
	5/10/1996	18.56	8.84	63,000	7,400	16,000	1,500	6,000	-	-
	10/2/1996	19.15	8.25	21,000	2,200	3,400	430	1,600	-	-
	2/28/1997	18.43	8.97	39,000	4,700	9,600	950	4,200	nd	-
	9/16/1997	19.26	8.14	29,000	3,300	5,800	690	2,900	<620	-
	2/5/1998	18.66	8.74	10,000	1,000	2,000	170	860	<330	7.90
	8/11/1998	18.41	8.99	12,000	1,200	2,300	260	1,400	300	5.40
	2/8/1999	19.84	7.56	5,500	740	1,200	150	780	60	3.70
	2/17/1999	18.94	8.46	-	-	-	-	-	-	>20
	2/24/1999	20.76	6.64	-	-	-	-	-	-	>20
	3/3/1999	18.55	8.85	-	-	-	-	-	-	>20
	3/10/1999	20.74	6.66	-	-	-	-	-	-	>20
	3/17/1999	18.57	8.83	-	-	-	-	-	-	>20
		18.55	8.85	90,000	9,200	21,000	1,600	10,000	560	3.20
	7/20/1999	18.98	8.42	28,000	2,100	3,700	900	4,200	<860	0.64
	10/5/1999	19.10	8.30	11,000	870	180	30	1,400	<110	0.58
	1/7/2000	19.41	7.99	15,000	1,300	2,100	440	1,800	<14	0.94
	4/6/2000	18.80	8.60	17,000	1,800	3,100	500	2,200	<50	0.64
	7/31/2000	18.87	8.53	17,000	1,500	2,700	430	2,100	<200	0.50
	10/3/2000	19.45	7.95	27,000	2,500	4,000	660	2,900	<50	0.16
	1/12/2001	19.80	7.60	25,000	2,700	4,100	670	3,000	<200	0.35
	4/11/2001	20.03	7.37	97,000	9,500	21,000	2,200	7,900	<200	-
	7/6/2001	20.19	7.21	3,500	500	150	11	420	<5.0	-
	10/25/2001	20.35	7.05	3,800	620	230	70	400	<50	-
	3/4/2002	20.37	7.03	46,000	7,300	12,000	870	3,200	<500	-
	4/18/2002	20.15	7.25	68,000	5,100	8,900	1,100	4,000	<1,000	-

# CAMBRIA

**Table 1. Groundwater Elevation and Analytical Data - 1721 Webster Street, Oakland, CA**

Well ID (TOC)	Date	Depth to Water (ft)	Groundwater Elevation (ft)	TPHg ←	Benzene ←	Toluene (Concentrations in µg/l)	Ethylbenzene →	Xylenes →	MTBE →	DO (mg/L)
MW-2	7/9/2002	21.09	6.31	1,000	200	8.9	0.67	82	<10	-
(cont'd)	10/4/2002	21.28	6.12	270	100	3.4	0.53	10	<5.0	-
	1/12/2003	20.59	6.81	67,000	7,600	13,000	1,400	5,600	<500	-
MW-3	12/2/1994	22.15	7.35	394,000	1,200	nd	1,800	4,000	-	-
29.50	3/6/1995	20.09	9.16	21,000	400	150	24	62	-	-
29.25	7/11/1995	19.99	9.57	12,000	nd	10	16	99	-	-
29.56	5/10/1996	20.24	9.32	8,600	nd	7.6	16	84	-	-
	10/2/1996	20.90	8.66	11,000	nd	7.4	19	92	-	-
	2/28/1997	20.12	9.44	6,000	nd	4.4	17	88	50	-
	9/16/1997	20.97	8.59	6,500	<0.5	1	1	7	<5.0	-
	2/5/1998	20.39	9.17	5,400	<0.5	6.3	15	86	<63	1.90
	8/11/1998	19.95	9.61	2,700	<0.5	3.5	3.2	12	<10	0.05
	2/8/1999	20.58	8.98	6,100	<0.5	8.1	18	80	<140	2.20
	2/17/1999	20.53	9.03	-	-	-	-	-	-	>20
	2/24/1999	22.53	7.03	-	-	-	-	-	-	>20
	3/3/1999	20.28	9.28	-	-	-	-	-	-	>20
	3/10/1999	22.45	7.11	-	-	-	-	-	-	>20
	3/17/1999	20.26	9.30	-	-	-	-	-	-	>20
	5/4/1999	20.24	9.32	11,000	<2	<2	9.8	140	<10	3.10
	7/20/1999	20.68	8.88	11,000	<0.5	3.1	13	88	<80	0.75
	10/5/1999	20.81	8.75	31,000	62	<0.5	21	170	<90	0.68
	1/7/2000	21.09	8.47	13,000	<0.5	<2	21	140	<80	1.96
	4/6/2000	20.48	9.08	5,300	1.5	1.4	9.8	60	<30	4.15
	7/31/2000	20.62	8.94	7,100	3.5	1.0	12	66	<5.0	0.35
	10/3/2000	21.13	8.43	8,000	<0.5	3.3	11	70	<40	3.66
	1/12/2001	21.45	8.11	11,000	4.3	6.7	11	73	<70	0.35
	4/11/2001	21.69	7.87	10,000	<0.5	<0.5	11	65	<10	-
	7/6/2001	21.60	7.96	13,000	5.3	1.6	11	58	<5.0	-
	10/25/2001	21.70	7.86	11,000	<0.5	3.0	15	70	<10	-
	3/4/2002	21.65	7.91	1,900	1.3	0.8	<0.5	15	<5.0	-
	4/18/2002	21.77	7.79	1,500	1.0	0.97	1.3	5.8	<5	-
	7/9/2002	22.03	7.53	13,000	6.8	5.7	13	59	<90	-
	10/4/2002	22.15	7.41	8,400	<10	<10	<10	42	<100	-
	1/12/2003	21.13	8.43	9,000	9.5	5.1	8.5	46	<90	-
MW-4	5/10/1996	16.98	8.31	14,000	nd	1,200	720	3,100	-	-
25.29	10/2/1996	17.65	7.64	12,000	nd	650	580	2,200	-	-
	2/28/1997	16.80	8.49	13,000	nd	1,100	750	2,700	110	-
	9/17/1997	17.93	7.36	13,000	<2.5	820	750	2,900	<190	-
	2/5/1998	16.78	8.51	13,000	<1.0	690	690	2,900	<170	2.10
	8/11/1998	16.59	8.70	15,000	<5	360	520	1,900	280	2.80
	2/8/1999	17.10	8.19	9,800	<5	680	770	2,200	300	1.80
	2/24/1999	18.95	6.34	-	-	-	-	-	-	2.20
	3/3/1999	16.80	8.49	-	-	-	-	-	-	4.60
	3/10/1999	16.86	8.43	-	-	-	-	-	-	3.70
	3/17/1999	16.82	8.47	-	-	-	-	-	-	4.30
	5/4/1999	16.86	8.43	11,000	46	600	620	1,900	<100	4.10
	7/20/1999	17.30	7.99	13,000	<0.5	470	7.0	2,000	<150	0.38
	10/5/1999	17.43	7.86	18,000	4.4	720	800	2,100	<120	0.71
	1/7/2000	17.78	7.51	18,000	<2	930	990	2,700	<30	0.98
	4/6/2000	17.17	8.12	8,000	31	390	530	1,300	<10	1.33
	7/31/2000	17.21	8.08	6,200	13	170	460	850	<10	0.50
	10/3/2000	18.00	7.29	14,000	42	820	730	2,000	<50	0.54
	1/12/2001	18.20	7.09	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.39
	4/11/2001	18.31	6.98	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-
	7/6/2001	18.35	6.94	470	2.3	1.6	0.81	43	<5.0	-
	10/25/2001	18.47	6.82	110	0.70	<0.5	<0.5	3.3	<5.0	-
	3/4/2002	18.43	6.86	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-
	4/18/2002	18.61	6.68	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-



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**Table 1. Groundwater Elevation and Analytical Data - 1721 Webster Street, Oakland, CA**

Well ID (TOC)	Date	Depth to Water (ft)	Groundwater Elevation (ft)	TPHg	Concentrations in µg/l					DO (mg/L)
					Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-4	7/9/2002	19.50	5.79	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-
(cont'd)	10/4/2002	19.83	5.46	310	2.0	2.9	13	16	<0.5	-
	1/12/2003	19.07	6.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-
MW-5 21.97	5/10/1996	14.60	7.37	nd	nd	nd	nd	nd	-	-
	10/2/1996	15.25	6.72	nd	nd	nd	nd	nd	-	-
	2/28/1997	14.31	7.66	nd	nd	nd	nd	nd	nd	-
	9/17/1997	15.18	6.79	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	-
	2/5/1998	13.64	8.33	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.80
	8/11/1998	13.92	8.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.05
	2/8/1999	14.19	7.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.00
	2/24/1999	16.18	5.79	-	-	-	-	-	-	4.90
	3/3/1999	14.23	7.74	-	-	-	-	-	-	3.40
	3/10/1999	14.32	7.65	-	-	-	-	-	-	3.60
	3/17/1999	14.25	7.72	-	-	-	-	-	-	3.90
	5/4/1999	14.41	7.56	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.20
	7/20/1999	14.44	7.53	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.99
	10/5/1999	14.79	7.18	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.52
	1/7/2000*	15.23	6.74	-	-	-	-	-	-	-
	4/6/2000	14.74	7.23	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.67
	7/31/2000	14.52	7.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.55
	10/3/2000	15.37	6.60	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.51
	1/12/2001	15.70	6.27	6,400	13	290	450	1,100	<40	0.71
	4/11/2001	15.78	6.19	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-
	7/6/2001	15.97	6.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-
10/25/2001	16.05	5.92	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
3/4/2002	16.21	5.76	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
4/18/2002	16.59	5.38	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
7/9/2002	16.94	5.03	170	1.0	0.65	2.1	4.0	<15	-	
10/4/2002	17.14	4.83	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
1/12/2003	16.58	5.39	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	
Trip Blank	01/12/01	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-
	4/11/2001	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-
	7/6/2001	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-
	3/4/2002	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-

**Notes and Abbreviations:**

Benzene, Toluene, Ethylbenzene, and Xylenes by EPA Method 8020  
 TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015  
 MTBE = methyl tertiary butyl ether by EPA Method 80208260  
 DO = dissolved oxygen  
 <n = Below detection limit of n µg/L  
 TOC = top of casing in feet above mean sea level

\* = Well inaccessible  
 µg/L = micrograms per liter  
 mg/L = milligrams per liter  
 nd = not detected

Data prior to 7/11/95 from Gen Tech and Piers Environmental Quarterly Groundwater Monitoring Reports dated December 2, 1994 and March 6, 1995, respectively.

Sampling no longer required in well MW-1 per September 17, 1996, ACDEH letter to Douglas Parking.  
 DO monitoring (no hydrocarbon analyses), as described in November 11, 1998 Remedial Workplan.

**APPENDIX A**

**Field Data Sheets**

### Groundwater Monitoring Field Sheet

Well ID	Time	DTP	DTW	Product Thickness	Amount of Product Removed	Casing Diam.	Comment
MW-1	5:00		22.05				
MW-2	5:20		20.59				
MW-3	5:15		21.13				
MW-4	5:10		19.07				
MW-5	5:05		16.58				

Project Name: Douglas Parkings

Project Number/Task: 580-0197

Measured By: S. Hill

Date: 1-12-03

WELL SAMPLING FORM

Project Name: <u>Douglas Parking</u>	Cambria Mgr: <u>MHF</u>	Well ID: <u>MW-2</u>
Project Number: <u>580-0197</u>	Date: <u>1-12-02</u>	Well Yield:
Site Address: <u>1721 Webster St. Oakland, Ca</u>	Sampling Method: <u>Disposable Bailer</u>	Well Diameter: <u>2 1/2 pvc</u>
		Technician(s): <u>SG</u>
Initial Depth to Water: <u>20.59</u>	Total Well Depth: <u>25.70</u>	Water Column Height: <u>5.11</u>
Volume/ft: <u>0.16</u>	1 Casing Volume: <u>0.81</u>	3 Casing Volumes: <u>2.43</u>
Purging Device: <u>Disposable bailer</u>	Did Well Dewater?: <u>no</u>	Total Gallons Purged: <u>2.5</u>
Start Purge Time: <u>7:10</u>	Stop Purge Time: <u>7:24</u>	Total Time: <u>14 mins</u>

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

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

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<u>7:15</u>	<u>1.0</u>	<u>18.9</u>	<u>7.10</u>	<u>1054</u>	
<u>7:20</u>	<u>1.5</u>	<u>19.2</u>	<u>7.14</u>	<u>720</u>	
<u>7:25</u>	<u>2.5</u>	<u>19.4</u>	<u>7.12</u>	<u>645</u>	

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

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<u>MW-2</u>	<u>1-12-03</u>	<u>7:30</u>	<u>3VOR</u>	<u>HCl</u>	<u>TPH, BTEX, MTBE</u>	<u>8015/8020</u>

WELL SAMPLING FORM

Project Name: <u>Douglas Parking</u>	Cambria Mgr: <u>MHF</u>	Well ID: <u>MW-3</u>
Project Number: <u>580-0197</u>	Date: <u>1-12-03</u>	Well Yield:
Site Address: <u>1721 Webster St. Oakland, Ca</u>	Sampling Method: <u>Disposable Bailer</u>	Well Diameter: <u>3" pvc</u>
		Technician(s): <u>SG</u>
Initial Depth to Water: <u>21.13</u>	Total Well Depth: <u>26.65</u>	Water Column Height: <u>5.52</u>
Volume/ft: <u>0.16</u>	1 Casing Volume: <u>0.88</u>	3 Casing Volumes: <u>2.64</u>
Purging Device: <u>Disposable bailer</u>	Did Well Dewater?: <u>no</u>	Total Gallons Purged: <u>2.5</u>
Start Purge Time: <u>6:35</u>	Stop Purge Time: <u>6:49</u>	Total Time: <u>14 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
<u>6:40</u>	<u>1.0</u>	<u>19.1</u>	<u>7.19</u>	<u>790</u>	
<u>6:45</u>	<u>1.5</u>	<u>19.3</u>	<u>7.11</u>	<u>824</u>	
<u>6:50</u>	<u>2.5</u>	<u>19.3</u>	<u>7.08</u>	<u>895</u>	

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

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<u>MW-3</u>	<u>1-12-03</u>	<u>6:55</u>	<u>3Voa</u>	<u>HCl</u>	<u>TPH<sub>3</sub> BTEX MTRBE</u>	<u>8015/8020</u>

WELL SAMPLING FORM

Project Name: <u>Douglas Parking</u>	Cambria Mgr: <u>MHF</u>	Well ID: <u>MW-4</u>
Project Number: <u>580-0197</u>	Date: <u>1-12-03</u>	Well Yield:
Site Address: <u>1721 Webster St. Oakland, Ca</u>	Sampling Method: <u>Disposable Bailer</u>	Well Diameter: <u>2" pvc</u>
		Technician(s): <u>SG</u>
Initial Depth to Water: <u>19.07</u>	Total Well Depth: <u>29.20</u>	Water Column Height: <u>10.13</u>
Volume/ft: <u>0.16</u>	1 Casing Volume: <u>1.62</u>	3 Casing Volumes: <u>4.86</u>
Purging Device: <u>Disposable bailer</u>	Did Well Dewater?: <u>no</u>	Total Gallons Purged: <u>5</u>
Start Purge Time: <u>6:05</u>	Stop Purge Time: <u>6:19</u>	Total Time: <u>14mins</u>

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

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

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<u>6:10</u>	<u>1.5</u>	<u>19.5</u>	<u>7.29</u>	<u>520</u>	
<u>6:15</u>	<u>3</u>	<u>19.7</u>	<u>7.15</u>	<u>974</u>	
<u>6:20</u>	<u>5</u>	<u>19.8</u>	<u>7.18</u>	<u>995</u>	

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

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<u>MW-4</u>	<u>1-12-03</u>	<u>6:25</u>	<u>3VON</u>	<u>HCl</u>	<u>TPH<sub>5</sub> BTEX MTBE</u>	<u>8015/8020</u>

WELL SAMPLING FORM

Project Name: <u>Douglas Parking</u>	Cambria Mgr: <u>MHE</u>	Well ID: <u>MW-5</u>
Project Number: <u>580-0197</u>	Date: <u>1-12-03</u>	Well Yield:
Site Address: <u>1721 Webster St.</u> <u>Oakland, Ca</u>	Sampling Method: <u>Disposable Bailer</u>	Well Diameter: <u>3" pvc</u>
		Technician(s): <u>SCA</u>
Initial Depth to Water: <u>16.58</u>	Total Well Depth: <u>24.30</u>	Water Column Height: <u>7.72</u>
Volume/ft: <u>0.16</u>	1 Casing Volume: <u>1.23</u>	3 Casing Volumes: <u>3.69</u>
Purging Device: <u>Disposable bailer</u>	Did Well Dewater?: <u>no</u>	Total Gallons Purged: <u>3.5</u>
Start Purge Time: <u>5:30</u>	Stop Purge Time: <u>5:44</u>	Total Time: <u>14 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
<u>5:35</u>	<u>1.5</u>	<u>19.7</u>	<u>7.21</u>	<u>795</u>	
<u>5:40</u>	<u>2.5</u>	<u>19.3</u>	<u>7.24</u>	<u>1011</u>	
<u>5:45</u>	<u>3.5</u>	<u>19.3</u>	<u>7.27</u>	<u>1090</u>	

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

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<u>MW-5</u>	<u>1-12-03</u>	<u>5:50</u>	<u>3VOR</u>	<u>HCl</u>	<u>TPH, BTEX, MTBE</u>	<u>8015/8020</u>

McCAMPBELL ANALYTICAL INC.

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

Telephone: (925) 798-1620

Fax: (925) 798-1622

FILE COPY

CHAIN OF CUSTODY RECORD

TURN AROUND TIME:

RUSH 24 HOUR 48 HOUR 5 DAY

EDF Required?  Yes  No

Report To: Mary Holland Ford 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 #: 580-0197 Project Name: Douglas Parking  
Project Location: 1721 Webster St. Oakland, Ca  
Sampler Signature: [Signature]

Analysis Request										Other	Comments	
BTEX & TPH as Gas (602/8020 + 8015) / MTBE												Confirm all MTBE w/its by 8260
TPH as Diesel (8015)												
Total Petroleum Oil & Grease (5520 E&F/B&F)												
Total Petroleum Hydrocarbons (418.1)												
EPA 601 / 8010												
BTEX ONLY (EPA 602 / 8020)												
EPA 608 / 8080												
EPA 608 / 8080 PCB's ONLY												
EPA 624 / 8240 / 8260												
EPA 625 / 8270												
PAH's / PNA's by EPA 625 / 8270 / 8310												
CAM-17 Metals												
LUFT 5 Metals												
Lead (7240/7421/239 2/6010)												
RCI												

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED					
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO <sub>3</sub>	Other		
MW-2		1-12-03	7:30	3	VOL	X					X	X				
MW-3		1-12-03	6:55	3	VOL	X					X	X				
MW-4		1-12-03	6:25	3	VOL	X					X	X				
MW-5		1-12-03	5:50	3	VOL	X					X	X				

Relinquished By: [Signature] Date: 1-13-03 Time: 6:00 Received By: secure location

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

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

Remarks: \_\_\_\_\_



**APPENDIX B**

Geotracker Electronic Delivery Confirmations

## AB2886 Electronic Delivery

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

### UPLOADING A GEO\_WELL FILE

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

**Submittal Title:** Douglas, Webster 1QM03  
geo\_well

**Submittal Date/Time:** 5/8/2003 2:29:56 PM

**Confirmation  
Number:** 2780792057

[Back to Main Menu](#)

Logged in as CAMBRIA-EM (AUTH\_RP)

[CONTACT SITE ADMINISTRATOR](#)

## AB2886 Electronic Delivery

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

Your EDF file has been successfully uploaded!

**Confirmation Number:** 1654575943

**Date/Time of Submittal:** 5/8/2003 2:34:01 PM

**Facility Global ID:** T0600100140

**Facility Name:** DOUGLAS PARKING COMPANY

**Submittal Title:** Douglas 1QM03

**Submittal Type:** GW Monitoring Report

Logged in as CAMBRIA-EM (AUTH\_RP)

CONTACT SITE [ADMINISTRATOR](#).

**APPENDIX C**

Laboratory Analytical Report



McC Campbell 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](mailto:main@mccampbell.com)

Cambria Env. Technology 6262 Hollis St. Emeryville, CA 94608	Client Project ID: #580-0197; Douglas Parking	Date Sampled: 01/12/03
		Date Received: 01/14/03
	Client Contact: Mary Holland-Ford	Date Reported: 01/17/03
	Client P.O.:	Date Completed: 01/17/03

**WorkOrder: 0301154**

January 17, 2003

Dear Mary:

Enclosed are:

- 1). the results of 4 analyzed samples from your **#580-0197; Douglas Parking project,**
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager



**McC Campbell Analytical Inc.**

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

Cambria Env. Technology  6262 Hollis St.  Emeryville, CA 94608	Client Project ID: #580-0197; Douglas Parking	Date Sampled: 01/12/03
	Client Contact: Mary Holland-Ford	Date Received: 01/14/03
	Client P.O.:	Date Extracted: 01/15/03
		Date Analyzed: 01/15/03

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

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0301154

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-2	W	67,000,a	ND<500	7600	13,000	1400	5600	100	96.9
002A	MW-3	W	9000,a	ND<90	9.5	5.1	8.5	46	10	106
003A	MW-4	W	ND	ND	ND	ND	ND	ND	1	117
004A	MW-5	W	ND	ND	ND	ND	ND	ND	1	111

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

\*water and vapor samples 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 McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~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.

Edward Hamilton, Lab Director



**QC SUMMARY REPORT FOR SW8021B/8015Cm**

Matrix: W

WorkOrder: 0301154

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 5616		Spiked Sample ID: 0301155-006A				
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)	ND	60	110	109	1.25	103	103	0.312	80	120
MTBE	15.56	10	102	109	2.84	84.5	89.5	5.74	80	120
Benzene	ND	10	114	114	0.0461	99.8	96.3	3.62	80	120
Toluene	0.5035	10	110	105	4.36	101	99.2	1.86	80	120
Ethylbenzene	ND	10	113	114	0.447	97.6	94.6	3.08	80	120
Xylenes	ND	30	120	110	8.70	103	99.7	3.61	80	120
%SS:	102	100	110	107	2.79	92	89.3	3.07	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 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / (MS + 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.

date

0301154

McCAMPBELL ANALYTICAL INC.

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

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME:

RUSH 24 HOUR 48 HOUR 5 DAY

EDF Required?  Yes  No

Report To: Mary Holland Ford 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 #: 580-0197

Project Name: Douglas Parking

Project Location: 1721 Webster St. Oakland, Ca

Sampler Signature: [Signature]

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				Analysis Request	Other	Comments
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO <sub>3</sub>	Other			
MW-2		1-12-03	7:30	3	Voa	X					X	X					Confirm all MTBE wits by 8260
MW-3		1-12-03	6:55	3	Voa	X					X	X					
MW-4		1-12-03	6:25	3	Voa	X					X	X					
MW-5		1-12-03	5:50	3	Voa	X					X	X					

Relinquished By: [Signature] Date: 11-3-03 Time: 6:00 Received By: secure location

Relinquished By: [Signature] Date: 01/14 Time: 1305 Received By: [Signature]

Relinquished By: [Signature] Date: 2/14 Time: 1430 Received By: [Signature]

Remarks:  
ICRP   
COP   
PRESERVED IN LAB



**McCampbell Analytical Inc.**



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

**CHAIN-OF-CUSTODY RECORD**

WorkOrder: 0301154

**Client:**

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

TEL: (510) 450-1983  
 FAX: (510) 450-8295  
 ProjectNo: #580-0197; Douglas Parking  
 PO:

Date Received: 1/14/03  
 Date Printed: 1/14/03

Sample ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests			
					<>	8021B/8015		
0301154-001	MW-2	Water	1/12/03 7:30:00 AM	<input type="checkbox"/>	A	A		
0301154-002	MW-3	Water	1/12/03 6:55:00 AM	<input type="checkbox"/>		A		
0301154-003	MW-4	Water	1/12/03 6:25:00 AM	<input type="checkbox"/>		A		
0301154-004	MW-5	Water	1/12/03 5:50:00 AM	<input type="checkbox"/>		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.