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May 29, 2001

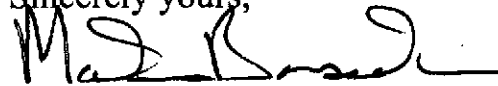
Mr. Thomas Peacock
Supervising HMS, LOP
ACHCSA
1131 Harbor Bay Parkway
Alameda, CA 94501
(510) 567-6700 / FAX 337-9335
tpeacock@co.alameda.ca.us

SUBJECT: IQ01 Monitoring Report
1432 Harrison Street, Oakland, CA 94612
SITE ID 498

Dear Mr. Peacock:

Attached is the IQ01 groundwater monitoring data for the above site.
If you have a question, please contact me.

Sincerely yours,



Mark Borsuk

C A M B R I A

May 16, 2001

Mr. Mark Borsuk, Esq.
1626 Vallejo St.
San Francisco, CA 94123-5116

Re: **Groundwater Monitoring Report**
First Quarter 2001
1432 Harrison Street
Oakland, California
Cambria Project #540-0188



Dear Mr. Borsuk:

As you requested, Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report for the above-referenced site. Presented in the report are the first quarter 2001 activities and results and the anticipated second quarter 2001 activities. Attached are additional copies for submittal to the regulatory agency.

If you have any questions or comments regarding this report, please call me at (510) 450-1983.

Sincerely,

Cambria Environmental Technology, Inc.

Ron Scheele, RG
Senior Geologist

Attachments: Groundwater Monitoring Report, First Quarter 2001

Oakland, CA
San Ramon, CA
Sonoma, CA

**Cambria
Environmental
Technology, Inc.**

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

C A M B R I A

GROUNDWATER MONITORING REPORT

FIRST QUARTER 2001

1432 Harrison Street
Oakland, California
Cambria Project #540-0188

May 16, 2001

Prepared for:

Mr. Mark Borsuk, Esq.
1626 Vallejo St.
San Francisco, CA 94123-5116


Prepared by:

Cambria Environmental Technology, Inc.
1144 65th Street, Suite B
Oakland, California 94608





Jason Olson
Senior Staff Environmental Scientist




Ron Scheele, RG
Senior Geologist

FOURTH QUARTER 2000

1432 Harrison Street
Oakland, California
Cambria Project #540-0188-030

May 16, 2001

INTRODUCTION

On behalf of Mr. Mark Borsuk, Esq., Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report for the above-referenced site (see Figure 1). Presented below are the first quarter 2001 activities and results and the anticipated second quarter 2001 activities.

FIRST QUARTER 2001 ACTIVITIES AND RESULTS**Monitoring Activities**

Field Activities: On March 6, 2001, Cambria conducted quarterly monitoring activities. Cambria gauged and inspected for separate-phase hydrocarbons (SPH) wells MW-1 through MW-6 (see Figure 1). Groundwater samples were collected from all wells not containing SPH. Field Data Sheets are presented as Appendix A.

Sample Analyses: Groundwater 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. Any samples containing MTBE were further analyzed for MTBE using EPA Method 8260. Analytical results are included as Appendix B. Groundwater elevations are shown on Figure 1.

Monitoring Results

Groundwater Flow Direction: Based on depth-to-water measurements collected during Cambria's March 6, 2001 site visit, groundwater flow beneath the site is divided. On the south side of the former USTs, groundwater flows toward the south-southwest at a rate of 0.034 feet/feet, while on the north side of the former USTs, groundwater flows toward the north at a rate of 0.016 feet/feet (Figure 1). This is consistent with historical groundwater flow rates and directions.

Hydrocarbon Distribution in Groundwater: Hydrocarbon concentrations detected this quarter have decreased as compared with the previous sampling event. No SPH were detected in any of the wells. The maximum TPHg and benzene concentrations were detected in well MW-1 at 180,000 micrograms per liter ($\mu\text{g/L}$) and 27,000 $\mu\text{g/L}$, respectively. No MTBE concentrations were detected in any of the wells at the site.

Corrective Action Activities

Remediation System: Cambria has begun the initial air permitting process related to the installation of the proposed soil vapor extraction remediation system. Cambria has also met with PG&E engineers to determine how best to bring electricity to the remediation system.



ANTICIPATED FIRST QUARTER 2001 ACTIVITIES

Groundwater Sampling: Cambria will gauge all wells, check the wells for SPH, and collect groundwater samples from wells MW-1, MW-2, MW-4, MW-5, and MW-6. Groundwater samples will be analyzed for TPHg by Modified EPA Method 8015 and BTEX and MTBE by EPA Method 8020. Any samples containing MTBE will be confirmed by EPA Method 8260. Cambria will prepare a groundwater monitoring report summarizing the monitoring activities and results.

Remediation System: Due to higher than expected air permit and PG&E costs, Cambria is awaiting UST Cleanup Fund pre-approval to continue with the remediation system installation activities.

APPENDIXES

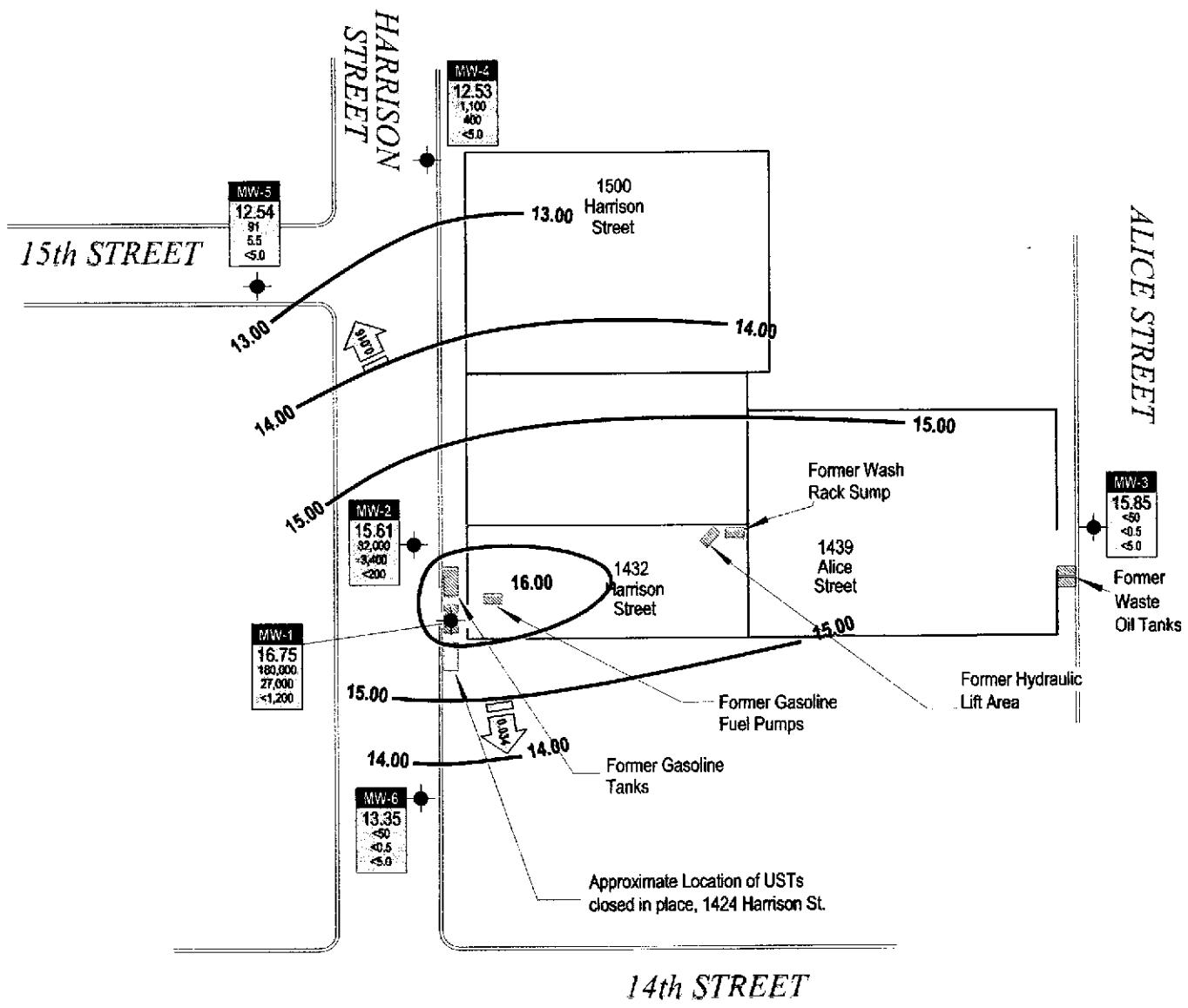
Figure 1 - Groundwater Elevation Contours

Table 1 - Groundwater Elevation and Analytical Data

Appendix A – Field Data Sheets

Appendix B - Laboratory Analytical Results

H:\SB-2004 (UST FUND)\OAKL-188-BORSUK\QMBORSUK QMR 1Q01.DOC



EXPLANATION

- Groundwater monitoring well
- Groundwater elevation contour, in feet above msl, dashed where inferred
- Groundwater flow direction and gradient
- Well ID
- ELEV
- TPH
- Benzene
- MTBE
- Well designation
- Groundwater elevation, in feet above mean sea level (msl)
- Hydrocarbons in groundwater, in ug/l. MTBE analysis for wells MW-2 and MW-4 by EPA Method 8260, all others by EPA Method 8020.

Scale (ft)

FIGURE 1

1432 Harrison Street

Oakland, California



C A M B R I A

Groundwater Elevation Contours

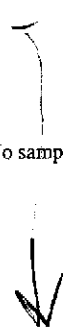
March 6, 2001

H:\88-2004\CAK-18\FIGURES\1\0101-MP.DWG

CAMBRIA

Table 1. Groundwater Elevation and Analytic Data - 1432 Harrison St., Oakland, CA.

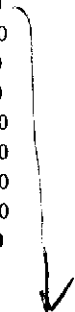
Well/Boring ID	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (8260) (µg/l)	Notes	
MW-1	8/1/94	--	--	--	170,000	35,000	51,000	2,400	13,000	--	--	
	12/21/94	34.95	19.53	15.42	180,000	41,000	64,000	3,100	100,000	--	--	
	3/13/95	34.95	18.66	16.29	150,000	31,000	45,000	2,500	17,000	--	--	
	6/27/95	34.95	18.20	16.75	71,000	17,000	18,000	1,600	7,700	--	--	
	7/7/95	34.95	18.35	16.60	71,000	17,000	18,000	1,600	7,700	--	--	
	9/28/95	34.95	18.20	16.75	110,000	27,000	34,000	1,700	14,000	--	--	
	12/20/95	34.95	19.96	14.99	120,000	33,000	43,000	2,300	15,000	--	--	
	3/26/96	34.95	19.27	15.68	140,000	29,000	36,000	1,900	13,000	<200*	d	
	6/20/96	34.95	18.64	16.31	110,000	30,000	38,000	2,200	13,000	<200*	--	
	9/26/96	34.95	19.35	15.60	170,000	28,000	40,000	2,200	15,000	ND**	--	
	10/28/96	34.95	19.58	15.37	--	--	--	--	--	--	--	
	12/12/96	34.95	19.68	15.27	110,000	36,000	47,000	2,500	16,000	ND*	--	
	3/31/97	34.95	18.80	16.15	160,000	24,000	39,000	1,900	13,000	ND*	--	
	6/27/97	34.95	19.26	15.69	130,000	25,000	36,000	2,000	14,000	ND*	--	
	9/9/97	34.95	19.70	15.25	99,000	22,000	27,000	1,600	13,000	270*	--	
	12/18/97	34.95	19.25	15.70	160,000	30,000	44,000	2,200	15,000	ND***	--	
	3/12/98	34.95	17.52	17.43	190,000	20,000	49,000	2,500	18,000	ND***	--	
	6/22/98	34.95	18.63	16.32	90,000	19,000	40,000	2,100	16,000	--	--	
	9/18/98	34.95	18.60	16.35	190,000	29,000	48,000	2,400	17,000	--	--	
	12/23/98	34.95	19.18	15.77	140,000	24,000	44,000	2,000	8,200	--	--	
	3/29/99	34.95	18.52	16.43	181,000	22,200	40,100	1,844	12,200	--	--	
	6/23/99	34.95	18.60	16.35	80,000	20,000	33,000	1,600	11,000	--	--	
	9/24/99	34.95	19.05	15.90	117,000	15,100	20,700	1,550	11,800	--	--	
	12/23/99	34.95	19.95	15.00	186,000	25,900	39,000	1,990	12,400	--	--	
	3/21/00	34.95	18.48	16.47	210,000	35,000	42,000	2,200	13,000	<3,000	a	
	7/3/00	34.95	18.95	16.00	200,000	33,000	46,000	2,200	15,000	<200*	a	
	9/7/00	34.95	19.45	15.50	Free Product present (Sheen). No sample taken.							
	12/5/00	34.95	19.90	15.05	220,000	42,000	57,000	2,700	17,000	<200	a	
	3/6/01	34.95	18.20	16.75	180,000	27,000	39,000	2,000	13,000	<1200 (<20)	a,l	
											--	



CAMBRIA

Table 1. Groundwater Elevation and Analytic Data - 1432 Harrison St., Oakland, CA.

Well/Boring ID	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (8260) (µg/l)	Notes
MW-2	8/1/94	--	--	--	130,000	28,000	35,000	3,000	12,000	--	--
	12/21/94	35.18	19.91	15.27	200	140,000	200,000	3,500	22,000	--	--
	3/13/95	35.18	19.15	16.03	500	9,200	23,000	7,000	36,000	--	--
	6/27/95	35.18	18.74	16.44	120,000	23,000	30,000	2,700	13,000	--	--
	7/7/95	35.18	18.80	16.38	120,000	23,000	30,000	2,700	13,000	--	--
	9/28/95	35.18	19.30	15.88	110,000	23,000	29,000	2,500	11,000	--	--
	12/20/95	35.18	20.24	14.94	83,000	980	1,800	2,200	10,000	--	--
	3/26/96	35.18	19.69	15.49	150,000	23,000	32,000	2,800	12,000	<200*	d
	6/20/96	35.18	19.20	15.98	94,000	15,000	23,000	2,400	12,000	<200*	--
	9/26/96	35.18	19.80	15.38	150,000	20,000	29,000	2,800	12,000	ND**	--
	10/28/96	35.18	20.18	15.00	--	--	--	--	--	--	--
	12/12/96	35.18	20.17	15.01	58,000	3,100	11,000	1,700	8,100	220*	--
	3/31/97	35.18	19.67	15.51	38,000	6,000	7,900	690	3,300	ND*	--
	6/27/97	35.18	19.68	15.50	62,000	13,000	16,000	1,300	6,000	ND*	--
	9/9/97	35.18	20.20	14.98	81,000	16,000	18,000	1,800	8,600	ND***	--
	12/18/97	35.18	19.80	15.38	110,000	18,000	26,000	2,200	9,500	ND***	--
	3/12/98	35.18	18.07	17.11	120,000	16,000	26,000	2,200	9,400	ND***	--
	6/22/98	35.18	18.29	16.89	38,000	9,800	9,500	1,500	6,000	--	--
	9/18/98	35.18	19.09	16.09	68,000	12,000	16,000	1,400	5,900	--	--
	12/23/98	35.18	19.67	15.51	180,000	16,000	22,000	2,200	8,300	--	--
	3/29/99	35.18	18.97	16.21	16,600	1,380	1,920	373	1,840	--	--
	6/23/99	35.18	18.25	16.93	41,000	10,000	9,400	1,100	5,000	--	--
	9/24/99	35.18	19.60	15.58	40,600	4,880	3,490	1,090	4,560	--	--
	12/23/99	35.18	20.21	14.97	61,900	6,710	9,320	1,150	5,360	--	--
	3/21/00	35.18	18.93	16.25	98,000	14,000	21,000	1,600	6,900	<1600	a
	7/3/00	35.18	19.38	15.80	140,000	18,000	33,000	2,600	11,000	<200*	a
	9/7/00	35.18	19.83	15.35	110,000	17,000	21,000	2,200	9,700	<100***	a,l
	12/5/00	35.18	20.30	14.88	130,000	19,000	28,000	2,500	11,000	<200	a
	3/6/01	35.18	19.57	15.61	32,000	3,400	3,400	580	2,500	<200	a



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Table 1. Groundwater Elevation and Analytic Data - 1432 Harrison St., Oakland, CA.

Well/Boring ID	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (8260) (µg/l)	Notes
MW-3	8/1/94	--	--	--	<50	<0.5	<0.5	<0.5	<2.0	--	--
	12/21/94	33.97	18.82	15.15	<50	<0.5	<0.5	<0.5	<0.5	--	e
	3/13/95	33.97	17.86	16.11	<50	<0.5	<0.5	<0.5	<0.5	--	f,g
	7/7/95	33.97	18.25	15.72	--	--	--	--	--	--	h
	9/28/95	33.97	18.00	15.97	--	--	--	--	--	--	--
	12/20/95	33.97	18.74	15.23	--	--	--	--	--	--	--
	3/26/96	33.97	18.25	15.72	--	--	--	--	--	--	--
	6/20/96	33.97	18.35	15.62	--	--	--	--	--	--	--
	9/26/96	33.97	19.12	14.85	--	--	--	--	--	--	--
	10/28/96	33.97	19.11	14.86	--	--	--	--	--	--	--
	12/12/96	33.97	18.61	15.36	--	--	--	--	--	--	--
	3/31/97	33.97	18.35	15.62	--	--	--	--	--	--	--
	6/27/97	33.97	18.81	15.16	--	--	--	--	--	--	--
	9/9/97	33.97	19.18	14.79	--	--	--	--	--	--	--
	12/18/97	33.97	18.64	15.33	--	--	--	--	--	--	--
	3/12/98	33.97	17.56	16.41	--	--	--	--	--	--	--
	6/22/98	33.97	18.64	15.33	--	--	--	--	--	--	--
	9/18/98	33.97	18.33	15.64	--	--	--	--	--	--	--
	12/23/98	33.97	18.60	15.37	--	--	--	--	--	--	--
	3/29/99	33.97	17.85	16.12	--	--	--	--	--	--	--
	6/23/99	33.97	18.67	15.30	--	--	--	--	--	--	--
	9/24/99	33.97	18.64	15.33	--	--	--	--	--	--	--
	12/23/99	33.97	19.32	14.65	--	--	--	--	--	--	--
	3/21/00	33.97	17.89	16.08	--	--	--	--	--	--	--
	7/3/00	33.97	18.40	15.57	--	--	--	--	--	--	--
	9/7/00	33.97	18.75	15.22	--	--	--	--	--	--	--
	12/5/00	33.97	19.03	14.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	3/6/01	33.97	18.12	15.85	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--

CAMBRIA

Table 1. Groundwater Elevation and Analytic Data - 1432 Harrison St., Oakland, CA.

Well/Boring ID	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (8260) (µg/l)	Notes
MW-4	10/28/96	30.77	19.32	11.45	10,000	3,900	420	400	360	<200*	--
	12/12/96	30.77	19.42	11.35	11,000	4,200	410	420	260	32*	--
	3/31/97	30.77	18.67	12.10	ND	ND	ND	ND	ND	ND*	--
	6/27/97	30.77	19.08	11.69	160	49	1.2	ND	5.9	ND*	--
	9/9/97	30.77	19.33	11.44	7,400	5,000	410	230	470	33*	--
	12/18/97	30.77	19.17	11.60	710	170	8.0	ND	39	ND***	--
	3/12/98	30.77	17.68	13.09	1,300	410	21	ND	57	ND***	--
	6/22/98	30.77	17.63	13.14	ND	ND	ND	ND	ND	--	--
	9/18/98	30.77	18.58	12.19	ND	42	1.6	ND	4.8	--	--
	12/23/98	30.77	19.01	11.76	1,900	1,000	76	50	120	--	--
	3/29/99	30.77	18.35	12.42	ND	ND	ND	ND	ND	--	--
	6/23/99	30.77	17.58	13.19	ND	ND	ND	ND	ND	--	--
	9/24/99	30.77	19.05	11.72	9,150	3,270	131	34	537	--	--
	12/23/99	30.77	19.41	11.36	12,200	5,360	275	424	592	--	--
	3/21/00	30.77	18.42	12.35	45,000	16,000	1,100	1,400	1,900	1400* (<35)***	a,l
	7/3/00	30.77	18.82	11.95	33,000	10,000	720	840	1,800	<200*	a
	9/7/00	30.77	19.21	11.56	26,000	8,800	800	740	1,500	<50***	a,l,m
12/5/00	30.77	19.60	11.17	41,000	11,000	840	930	1,900	<200	a	
3/6/01	30.77	18.24	12.53	1,100	400	5.7	<0.5	20	<5.0	a	
MW-5	10/28/96	31.61	19.88	11.73	90	4.0	0.6	<0.50	<0.50	16*	--
	12/12/96	31.61	20.09	11.52	230	5.6	0.9	ND	0.9	3.6*	--
	3/31/97	31.61	19.24	12.37	90	3.1	ND	ND	ND	ND*	--
	6/27/97	31.61	19.16	12.45	ND	ND	ND	ND	ND	ND*	--
	9/9/97	31.61	19.93	11.68	ND	ND	ND	ND	ND	ND*	--
	12/18/97	31.61	19.77	11.84	ND	ND	ND	ND	ND	ND***	--
	3/12/98	31.61	19.77	11.84	79	2.3	ND	0.8	ND	ND*	--
	6/22/98	31.61	18.08	13.53	ND	ND	ND	ND	ND	--	--
	9/18/98	31.61	19.12	12.49	ND	ND	ND	ND	ND	--	--
	12/23/98	31.61	19.60	12.01	ND	0.8	0.9	ND	ND	--	--
	3/29/99	31.61	18.88	12.73	ND	ND	ND	ND	ND	--	--
	6/23/99	31.61	18.05	13.56	ND	ND	ND	ND	ND	--	--
9/24/99	31.61	19.61	12.00	ND	ND	ND	ND	ND	--	--	

CAMBRIA

Table 1. Groundwater Elevation and Analytic Data - 1432 Harrison St., Oakland, CA.

Well/Boring ID	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (8260) (µg/l)	Notes
	12/23/99	31.61	20.01	11.60	ND	ND	ND	ND	ND	--	--
	3/21/00	31.61	19.05	12.56	140	<0.5	<0.5	<0.5	<0.5	<5.0	k
	7/3/00	31.61	19.40	12.21	85	8.1	3.1	1.6	7.8	<5.0*	a
	9/7/00	31.61	19.62	11.99	<50	<0.5	<0.5	<0.5	<0.5	<5.0*	--
	12/5/00	31.61	20.25	11.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	3/6/01	31.61	19.07	12.54	91	5.5	<0.5	<0.5	<0.5	<5.0	--
MW-6	10/28/96	32.89	20.02	12.87	<50	<0.50	<0.50	<0.50	<0.50	<2.0*	--
	12/12/96	32.89	20.18	12.71	ND	ND	ND	ND	ND	ND*	--
	3/31/97	32.89	19.81	13.08	--	--	--	--	--	--	--
	6/27/97	32.89	19.76	13.13	--	--	--	--	--	--	--
	9/9/97	32.89	20.06	12.83	ND	ND	ND	ND	ND	ND*	--
	12/18/97	32.89	19.90	12.99	ND	ND	ND	ND	ND	--	--
	3/12/98	32.89	18.00	14.89	ND	ND	ND	ND	ND	ND*	--
	6/22/98	32.89	18.43	14.46	ND	ND	ND	ND	ND	--	--
	9/18/98	32.89	19.10	13.79	ND	ND	ND	ND	ND	--	--
	12/23/98	32.89	19.61	13.28	ND	ND	ND	ND	ND	--	--
	3/29/99	32.89	18.92	13.97	ND	ND	ND	ND	ND	--	--
	6/23/99	32.89	18.41	14.48	ND	ND	ND	ND	ND	--	--
	9/24/99	32.89	19.61	13.28	ND	ND	ND	ND	ND	--	--
	12/23/99	32.89	20.30	12.59	ND	ND	ND	ND	ND	--	--
	3/21/00	32.89	18.97	13.92	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	7/3/00	32.89	19.46	13.43	59	5.1	2.3	1.1	5.3	<5.0*	a
	9/7/00	32.89	19.95	12.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0*	--
	12/5/00	32.89	20.50	12.39	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	3/6/01	32.89	19.54	13.35	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
Trip Blank	3/21/00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	9/7/00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--

CAMBRIA

Table 1. Groundwater Elevation and Analytic Data - 1432 Harrison St., Oakland, CA.

Well/Boring ID	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (8260) (µg/l)	Notes
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Abbreviations

TPHg = Total petroleum hydrocarbons as gasoline by EPA method Modified 8015.

Benzene, toluene, ethylbenzene, xylenes by EPA method 8020.

-- = Not Sampled/Not Analyzed

<n = Not detected in sample above n µg/l.

ND = Not detected at minimum quantitation limit. See laboratory reports.

µg/l = micrograms per liter

MTBE = Methyl tert-butyl ether

* = MTBE by EPA Method 8020

** = MTBE by EPA Method 8240

*** = MTBE by EPA Method 8260

VOCs = volatile organic compounds

Notes

a = Unmodified or weakly modified gasoline is significant.

b = Lighter than water immiscible sheen is present.

c = Liquid sample that contains greater than ~5 vol. % sediment.

d = MTBE result confirmed by secondary column or GC/MS analysis.

e = Sample analyzed for purgeable hydrocarbons by EPA method 8010,
no purgeable halocarbons were detected.

f = Sample analyzed for VOCs by EPA method 8240, no non-BTEX compounds were detected.

g = Sample analyzed for Total Petroleum Hydrocarbons as motor oil (TPHmo) by
EPA method Modified 8015, no TPHmo was detected.

h = Analytic sampling discontinued. Approved by Alameda County Department of
Environmental Health.

i = Lighter than gasoline range compounds are significant.

j = Gasoline range compounds having broad chromatographic peaks are significant.

k = No recognizable pattern.

l = Sample diluted due to high organic content.

m = Liquid sample that contains greater than 5 vol. % sediment.

C A M B R I A



APPENDIX A

Field Data Sheets

C A M B R I A



APPENDIX B

Laboratory Analytical Results



McCAMPBELL ANALYTICAL INC.

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

Cambria Environmental Technology 6262 Hollis Street Emeryville, CA 94608	Client Project ID: #180-1214; Borsuik	Date Sampled: 03/06/2001
		Date Received: 03/07/2001
	Client Contact: Ron Scheele	Date Extracted: 03/07/2001
	Client P.O:	Date Analyzed: 03/07/2001

03/19/2001

Dear Ron:

Enclosed are:

- 1). the results of 6 samples from your #180-1214; Borsuik 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,

Edward Hamilton, Lab Director



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Cambria Environmental Technology 6262 Hollis Street Emeryville, CA 94608	Client Project ID: #180-1214; Borsuik	Date Sampled: 03/06/2001
	Client Contact: Ron Scheele	Date Received: 03/07/2001
	Client P.O:	Date Extracted: 03/12/2001
		Date Analyzed: 03/12/2001

Methyl tert-Butyl Ether *

EPA method 8260 modified

Lab ID	Client ID	Matrix	MTBE*	% Recovery Surrogate
61672	MW-1	W	ND<20,j	106
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W	1.0 ug/L		
	S	5.0 ug/kg		

* water samples are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe and all TCLP / STLC / SPLP extracts in ug/L
 h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) sample diluted due to high organic content.



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QC REPORT

Date: 03/07/01 Matrix: Water

Extraction: TTLC

Compound	Concentration: ug/L			%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	

SampleID: 22601

Instrument: GC-3

Surrogate1	0.000	103.0	99.0	100.00	103	99	4.0
Xylenes	0.000	29.0	27.8	30.00	97	93	4.2
Ethyl Benzene	0.000	9.6	9.3	10.00	96	93	3.2
Toluene	0.000	10.0	9.6	10.00	100	96	4.1
Benzene	0.000	10.2	9.8	10.00	102	98	4.0
MTBE	0.000	8.7	9.4	10.00	87	94	7.7
GAS	0.000	72.1	70.1	100.00	72	70	2.8

SampleID: 22601

Instrument: GC-2 A

Surrogate1	0.000	107.0	106.0	100.00	107	106	0.9
TPH (diesel)	0.000	8425.0	8225.0	7500.00	112	110	2.4

$$\% \text{ Recovery} = \frac{(MS - \text{Sample})}{\text{Amount Spiked}} \cdot 100$$

$$RPD = \frac{(MS - MSD)}{(MS + MSD)} \cdot 100$$

RPD means Relative Percent Deviation



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QC REPORT

VOCs (EPA 8240/8260)

Date: 03/12/01-03/13/01 Matrix: Water

Extraction: N/A

Compound	Concentration: ug/L			%Recovery		RPD	
	Sample	MS	MSD	Amount Spiked	MS		MSD
SampleID: 31210		Instrument: GC-4					
Surrogate	0.000	105.0	104.0	100.00	105	104	1.0
tert-Amyl Methyl Ether	0.000	99.0	105.0	100.00	99	105	5.9
Methyl tert-Butyl Ether	0.000	111.0	109.0	100.00	111	109	1.8
Ethyl tert-Butyl Ether	0.000	100.0	97.0	100.00	100	97	3.0
Di-isopropyl Ether	0.000	87.0	90.0	100.00	87	90	3.4
Toluene	0.000	114.0	114.0	100.00	114	114	0.0
Benzene	0.000	93.0	92.0	100.00	93	92	1.1
Chlorobenzene	0.000	98.0	100.0	100.00	98	100	2.0
Trichloroethane	0.000	98.0	98.0	100.00	98	98	0.0
1,1-Dichloroethene	0.000	111.0	123.0	100.00	111	123	10.3

$$\% \text{ Recovery} = \frac{(MS - \text{Sample})}{\text{Amount Spiked}} \cdot 100$$

$$RPD = \frac{(MS - MSD)}{(MS + MSD)} \cdot 100$$

RPD means Relative Percent Deviation

