CAMBRIA

April 19, 2002

APR 30 2002

RO 271

Mr. Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: **Groundwater Monitoring and System Progress Report**
First Quarter 2002
Former Exxon Service Station
3055 35th Avenue
Oakland, California
Cambria Project #130-0105

Dear Mr. Chan:

On behalf of Mr. Lynn Worthington of Golden Empire Properties, Cambria Environmental Technology, Inc. (Cambria) has prepared this groundwater monitoring and system progress report for the above-referenced site. Presented in the report are the first quarter 2002 activities and the anticipated second quarter 2002 activities.

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 and System Progress Report, First Quarter 2002

cc: Mr. Lynn Worthington, Golden Empire Properties, Inc. 5942 MacArthur Boulevard, Suite B, Oakland, CA 94605
Mr. Robert Cave, BAAQMD, Permit Services Division, 939 Ellis Street, San Francisco, CA 94109
Ms. Marie Kulka, Source Control Division, EBMUD, 375 11th Street, Oakland, CA 94607

Oakland, CA
San Ramon, CA
Sonoma, CA

Cambria Environmental Technology, Inc.

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APR 30 2002

GROUNDWATER MONITORING AND SYSTEM PROGRESS REPORT

FIRST QUARTER 2002

Former Exxon Service Station
3055 35th Avenue
Oakland, California
Cambria Project #130-0105

April 19, 2002

Prepared for:

Mr. Lynn Worthington
Golden Empire Properties, Inc.
5942 MacArthur Boulevard, Suite B
Oakland, CA 94605

Prepared by:

Cambria Environmental Technology, Inc.
6262 Hollis Street
Emeryville, California 94608

REGISTERED GEOLOGIST • RONALD A. SCHEELE • No. 6842 • STATE OF CALIFORNIA

Matthew A. Meyers
Staff Geologist

Ron Scheele, RG
Senior Geologist

GROUNDWATER MONITORING AND SYSTEM PROGRESS REPORT

FIRST QUARTER 2002

Former Exxon Service Station
3055 35th Avenue
Oakland, California
Cambria Project #130-0105

April 19, 2002

INTRODUCTION

On behalf of Mr. Lynn Worthington of Golden Empire Properties, Cambria Environmental Technology, Inc. (Cambria) has prepared this groundwater monitoring and system progress report for the above-referenced site (see Figure 1). Presented in the report are the first quarter 2002 groundwater monitoring and corrective action activities and the anticipated second quarter 2002 activities.

FIRST QUARTER 2002 ACTIVITIES

Monitoring Activities

Field Activities: On March 11, 2002, Cambria conducted quarterly monitoring activities. Cambria gauged and inspected for separate-phase hydrocarbons (SPH) monitoring wells MW-1, MW-2, MW-3 and MW-4 (Figure 1). Groundwater samples were collected from all scheduled wells not containing SPH. Field data sheets are presented in Appendix A.

Sample Analyses: Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and total petroleum hydrocarbons as diesel (TPHd) by modified EPA Method 8015, and benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020. The groundwater analytical results are summarized in Table 1. The laboratory analytical report is presented as Appendix B.

Monitoring Results

Groundwater Flow Direction: Based on depth-to-water measurements collected during Cambria's March 11, 2002 site visit, groundwater beneath the site flows to the southwest at a gradient of 0.036 ft/ft (Figure 1). The groundwater gradient is affected by a dual phase extraction (DPE) remediation system and the groundwater contours on Figure 1 do not represent static groundwater conditions. Since 1994, the primary groundwater flow direction has been toward the northwest with

a change towards the southwest usually occurring during the fourth and/or second quarters. Groundwater elevation data is presented in Table 1.

Hydrocarbon Distribution in Groundwater: Hydrocarbon concentrations have decreased in MW-4, and have remained relatively the same in other wells as compared with the previous sampling event. All monitoring wells continue to exhibit a decreasing hydrocarbon concentration trend (See appendix D for individual well concentration trend graphs). No SPH were detected in any of the wells. The maximum TPHg, benzene, and TPHd concentrations were detected in well MW-3 at 30,000, 5,000, and 2,800 micrograms per liter (μg/L), respectively. MTBE concentrations were below detection limits in all sampled wells. Analytical results are summarized in Table 1.

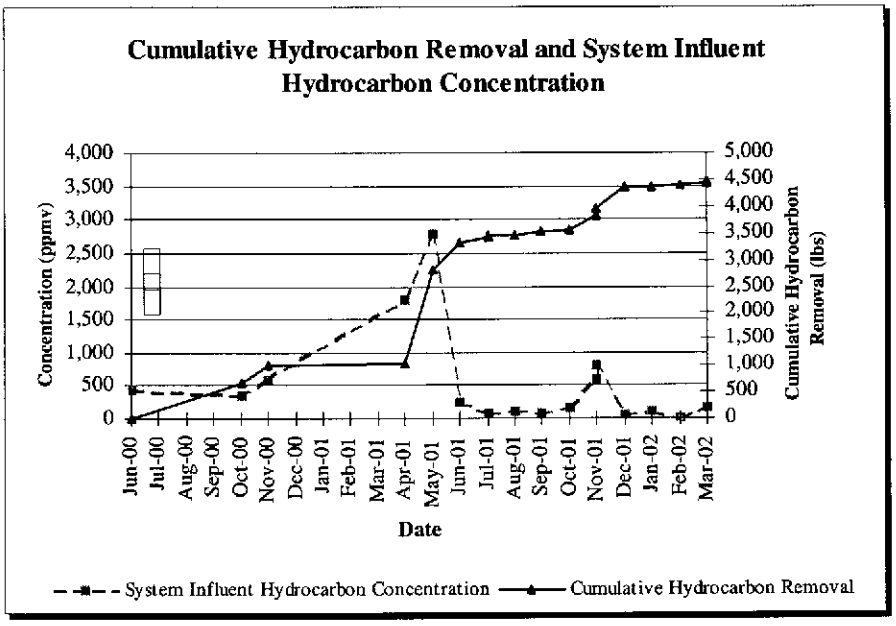
Corrective Action Activities

System Design: The dual phase extraction (DPE) remediation system consists of a trailer mounted all-electric catalytic oxidizer, a 300 cfm positive-displacement blower, a 150-gallon moisture knockout with automatic float controls, a 1 hp centrifugal transfer pump, and two 1,000-lb carbon vessels connected in series. Fourteen wells are connected to the remediation system (RW-5 through RW-14, and MW-1 through MW-4) via a 4-inch diameter PVC trunk line. See Figure 2 for the location of remediation enclosure and wells.

Remediation System Operations and Maintenance Activities: During the first quarter, Cambria performed dual phase extraction system operation and maintenance activities approximately twice per month. During operation and maintenance activities, individual well flow, vacuum, and hydrocarbon concentration measurements were collected from all remediation system wells and from the catalytic oxidizer/blower (See Tables 2, 3, and 4). During site visits, system operation parameters were also recorded in specialized field forms for future system optimization and agency inspection. As per the Bay Area Air Quality Management (BAAQMD) permit, a catalytic oxidizer operating temperature greater than 600 degrees Fahrenheit was maintained and system operation parameters were continuously measured using a chart recorder. System influent and effluent vapor samples were collected and submitted for laboratory analysis on a monthly basis. Groundwater treatment system influent and effluent samples were collected on a monthly basis. Table 2 summarizes soil vapor extraction system operations and analytical results. Table 3 summarizes groundwater extraction system operations and analytical results. Table 4 summarizes the individual well parameters. The system analytical laboratory reports are included as Attachment C.

Remediation System Performance: From January 7 through March 25, the DPE system operated continuously except for approximately two weeks. In January/February, the system shut down several times due to a dirty float switch on the groundwater knockout tank. On February 14, the float switch was cleaned and a small adjustment to the knockout tank was made to correct the problem.

From January 7 to March 25, 2002, the DPE system ran for 1,405 hours. To maximize site cleanup during the seasonally high groundwater conditions, select remediation wells were opened and closed, and well stinger depths were adjusted (See Table 4). System influent and effluent vapor samples were collected and submitted for laboratory analysis on a January 7, February 4, and March 5, 2002. System influent vapor concentrations ranged from <50 to 170 parts per million by volume (ppmv) and the hydrocarbon removal rate ranged from 0.6 to 1.6 lbs/day. System effluent vapor concentrations were below laboratory detection limits indicating that the catalytic oxidizer was achieving proper destruction efficiency and was operating within permit requirements. To date, a total of [redacted] of hydrocarbons have been [redacted]



From January 7 to March 25, 2002, approximately 118,000 gallons of groundwater was extracted and treated onsite using granular activated carbon. The average flowrate was 1.4 gallons per minute. Groundwater treatment system influent and effluent samples were collected on January 7, February 4, and March 5, 2002. System effluent groundwater concentrations for TPHg and BTEX were below laboratory detection limits indicating that no hydrocarbons were discharged to the sanitary sewer system and that the groundwater extraction portion of the DPE system was operating within permit requirements. To date, a total of [redacted] extraction and treatment.

ANTICIPATED FIRST QUARTER 2002 ACTIVITIES

Monitoring Activities

Cambria will gauge the site wells, check the wells for SPH, and collect groundwater samples from all wells not containing SPH. Groundwater samples will be analyzed for TPHg and TPHd by Modified EPA Method 8015 and BTEX and MTBE by EPA Method 8020. Cambria will prepare a groundwater monitoring report summarizing the monitoring activities and results.

Corrective Action Activities:

Cambria will continue to perform DPE operation and maintenance activities twice per month during the second quarter of 2002. The groundwater extraction stingers may from time to time be switched between select wells in an effort to help maximize hydrocarbon removal and site cleanup. System influent and effluent vapor and groundwater samples will be collected on a monthly basis, and system operation and performance will be evaluated and optimized. Records will be kept for a period of two years for possible future BAAQMD inspection.

ATTACHMENTS

Figure 1 – Groundwater Elevation and Analytical Summary Map
Table 1 – Groundwater Elevation and Analytical Data
Table 2 – DPE System Performance and Analytical Results - Soil Vapor Extraction
Table 3 – DPE System Performance and Analytical Results - Groundwater Extraction
Table 4 – DPE Well Parameters
Appendix A – Groundwater Monitoring Field Data Sheets
Appendix B – Analytical Results for Quarterly Groundwater Sampling
Appendix C – Analytical Results for DPE System Operation
Appendix D – TPHg and Benzene Concentration Trend Graphs

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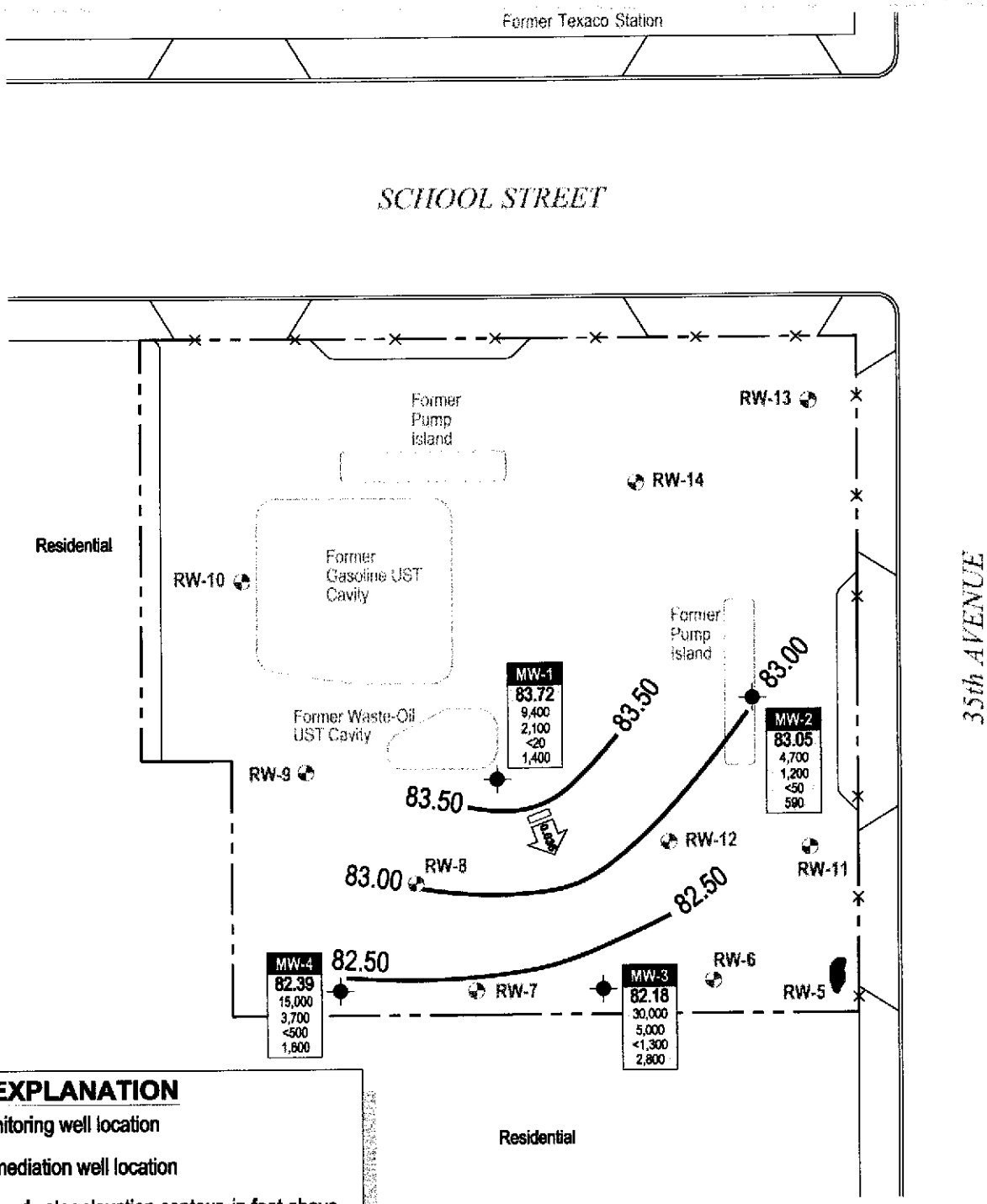

Note: Groundwater elevation contours are affected by DPE remediation system.

FIGURE
1

H:\SB-2004\OAK-002\FIGURES\1QM02-MP.DWG

Former Exxon Station
3055 35th Avenue
Oakland, California

CAMBRIA

Groundwater Elevation and Analytical Summary Map
March 11, 2002

CAMBRIA

Table 1. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID (TOC)	Date	GW Depth (ft)	SPH (ft)	GW Elev. (ft)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO (mg/L)
					<---------- Concentrations in parts per billion (µg/L) ---------->								
MW-1	05/25/94	16.79	Sheen	84.06	120,000	25,000	<50,000	22,000	17,000	2,800	16,000	---	---
100.85	07/19/94	20.77	---	80.08	---	---	---	---	---	---	---	---	---
	08/18/94	21.04	Sheen	79.81	925,000	---	---	16,500	6,200	1,000	9,400	---	---
	11/11/94	15.80	---	85.05	57,000	---	---	14,000	4,400	1,400	6,400	---	---
	02/27/95	15.53	---	85.32	45,000	---	---	2,900	2,500	760	4,100	---	---
	05/23/95	15.29	---	85.56	22,000	---	---	9,900	990	790	2,000	---	---
	08/22/95	20.90	---	79.95	23,000	---	---	6,900	340	1,200	1,900	---	---
	11/29/95	22.19	---	78.66	37,000	---	---	9,900	530	1,600	2,900	---	---
	02/21/96	11.69	---	89.16	33,000	4,300	---	10,000	480	1,000	1,800	3,300	---
	05/21/96	14.62	---	86.23	36,000	8,500	---	8,500	1,400	1,300	2,800	1,900	---
	08/22/96	22.30	---	78.55	41,000	6,200	---	8,600	1,300	1,500	2,900	<200	8.0
	11/27/96	17.24	Sheen	83.61	38,000	6,100	---	9,600	950	1,600	3,100	<400	5.6
	03/20/97	16.65	---	84.20	33,000	10,000	---	6,100	560	970	2,200	<400	8.5
	06/25/97	19.77	---	81.08	31,000	7,400[a]	---	7,400	440	890	1,800	<400	3.7
	09/17/97	20.12	---	80.73	32,000[d]	3,500[e]	---	9,100	550	1,000	2,000	<1,000	2.1
	12/22/97	12.95	---	87.90	26,000[d]	5,800[e]	---	7,900	370	920	1,500	<790	0.7
	03/18/98	12.34	Sheen	88.51	30,000[d]	4,200[e,f]	---	7,800	820	840	2,000	<1,100	1.3
	07/14/98	17.34	---	83.51	41,000[d]	8,900[e,f]	---	8,200	1,100	1,200	3,000	<200	1.8
	09/30/98	19.90	---	80.95	37,000	3,300	---	11,000	950	1,200	2,800	<20	2.0
	12/08/98	15.62	---	85.23	22,000	3,700	---	3,000	1,200	730	3,100	<900	---
	03/29/99	11.98	---	88.87	36,000[d]	6,800[e]	---	12,000	750	1,300	2,400	950	0.50
	06/29/99	20.77	---	80.08	28,000[d]	3,500[e]	---	7,300	420	810	1,700	<1,300	0.10
	09/28/99	19.68	---	81.17	13,000[d]	3,600[e,f]	---	3,200	130	320	1,100	<210	0.55
	12/10/99	17.02	---	83.83	25,000[d]	2,900[e,f]	---	5,400	130	620	1,400	<1,000	1.03
	03/23/00	12.76	---	88.09	21,000[d]	3,300[f]	---	4,700	140	470	1,100	<350	---
	09/07/00	19.45	---	81.40	40,000[d,g]	12,000[e,g]	---	3,700	1,400	910	4,900	<50	0.17
	12/05/00	18.60	---	82.25	26,000[a]	3,400[e]	---	7,900	150	580	810	<300	0.35
	03/07/01	16.19	---	84.66	13,000	2,400	---	2,700	43	69	300	<100	0.49
	06/06/01	18.47	---	82.38	19,000	4,000	---	4,500	130	270	430	<400	0.39
	08/30/01	21.70	---	79.15	8,800[a]	1,400[d]	---	2,100	45	91	240	<130	0.27

Table 1. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID (TOC)	Date	GW Depth (ft)	SPH (ft)	GW Elev. (ft)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO (mg/L)
					<---------- Concentrations in parts per billion (µg/L) ---------->								
	12/07/01	26.55	---	74.30	8,700[d]	1,900[e,f]	---	1,300	160	38	730	<20	0.59
	03/11/02	**17.13**	**---**	**83.72**	**9,400[d]**	**1,400[e]**	**---**	**2,100**	**200**	**74**	**470**	**<20**	**0.39**
MW-2	05/25/94	15.65	---	84.35	61,000	6,900	<5,000	9,900	7,400	960	4,600	---	---
100.00	07/19/94	19.81	---	80.19	---	---	---	---	---	---	---	---	---
	08/18/94	20.37	---	79.63	88,000	---	---	10,750	10,500	1,850	9,600	---	---
	11/11/94	15.52	---	84.48	54,000	---	---	5,900	6,700	1,300	7,500	---	---
	02/27/95	14.46	Sheen	85.54	44,000	---	---	5,100	5,300	930	6,400	---	---
	05/23/95	14.17	---	85.83	33,000	---	---	8,200	5,600	900	6,600	---	---
	08/22/95	19.80	---	80.20	38,000	---	---	6,400	5,000	1,100	5,600	---	---
	11/29/95	21.05	---	78.95	46,000	---	---	7,100	5,300	1,300	6,000	---	---
	02/21/96	10.53	---	89.47	59,000	---	---	8,000	6,000	1,800	8,900	4,500	---
	05/21/96	13.47	---	86.53	51,000	3,400	---	8,200	5,200	1,300	6,600	2,400	---
	08/22/96	19.12	---	80.88	37,000	5,700	---	5,100	3,500	960	4,500	<200	3.0
	11/27/96	16.61	Sheen	83.39	54,000	10,000	---	9,800	7,000	1,800	7,900	<2,000	3.1
	03/20/97	15.39	---	84.61	27,000	6,100	---	3,700	2,300	580	2,800	<400	8.1
	06/25/97	18.62	---	81.38	42,000	7,800[b]	---	7,400	3,800	1,200	5,700	<200	0.9
	09/17/97	19.05	Sheen	80.95	41,000[d]	8,900[e]	---	5,200	3,400	1,300	5,900	<700	1.2
	12/22/97	14.09	---	85.91	47,000[d]	6,100[e]	---	8,500	4,600	1,800	8,400	<1,200	1.2
	03/18/98	10.83	Sheen	89.17	58,000[d]	7,000[e,f]	---	9,300	6,100	1,800	8,200	<1,100	1.1
	07/14/98	16.07	---	83.93	42,000[d]	5,300[e,f]	---	6,000	3,000	1,000	4,800	<200	1.5
	09/30/98	18.71	---	81.29	22,000	2,400	---	3,600	1,300	720	3,200	<30	1.8
	12/08/98	14.80	---	85.20	32,000	3,100	---	9,200	680	1,100	2,300	<2,000	---
	03/29/99	11.81	---	88.19	28,000[d]	7,500[e,f]	---	4,400	1,600	950	4,100	410	1.86
	06/29/99	19.54	---	80.46	28,000[d]	3,300[e]	---	3,500	1,100	690	3,100	<1,000	0.41
	09/28/99	18.61	---	81.39	15,000[d]	3,400[e,f]	---	1,200	540	230	2,300	<36	1.18
	12/10/99	16.53	---	83.47	17,000[d]	2,500[e,f]	---	1,300	780	420	2,700	<40	0.17
	03/23/00	13.56	---	86.44	25,000[d]	3,100[i]	---	1,900	1,100	660	3,700	<500	---
	09/07/00	18.25	---	81.75	62,000[d,g]	32,000[e,g]	---	5,300	2,300	1,500	8,400	<100	0.39
	12/05/00	17.45	---	82.55	60,000[d,g]	87,000[e,f,g]	---	5,100	2,200	1,600	9,000	<200	0.31

Table 1. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID (TOC)	Date	GW Depth (ft)	SPH (ft)	GW Elev. (ft)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO (mg/L)
					<---------- Concentrations in parts per billion (µg/L) ---------->								
	03/07/01	15.68	---	84.32	34,000	3,900	---	1,200	770	620	4,300	<200	0.44
	06/06/01	17.51	---	82.49	110,000	48,000	---	14,000	9,000	1,900	12,000	<950	0.24
	08/30/01	21.00	---	79.00	43,000[a,h]	15,000[d,h]	---	3,100	720	980	5,500	<200	---
	12/07/01	24.45	---	75.55	4,100[d]	750[e,f]	---	510	88	8.2	580	<20	0.47
	03/11/02	**16.95**	**---**	**83.05**	**4,700[d]**	**590[e]**	**---**	**1,200**	**150**	**30**	**310**	**<50**	**0.24**
MW-3	05/25/94	13.93	Sheen	82.94	56,000	14,000	<50,000	14,000	14,000	1,300	11,000	---	---
96.87	07/19/94	17.04	---	79.83	---	---	---	---	---	---	---	---	---
	08/18/94	17.75	---	79.12	116,000	---	---	28,300	26,000	2,400	15,000	---	---
	11/11/94	17.80	---	79.07	89,000	---	---	1,600	1,900	1,900	14,000	---	---
	02/27/95	11.86	Sheen	85.01	250,000	---	---	22,000	26,000	7,800	21,000	---	---
	05/23/95	11.60	Sheen	85.27	310,000	---	---	18,000	17,000	4,500	2,800	---	---
	08/22/95	17.10	---	79.77	74,000	---	---	14,000	13,000	1,900	11,000	---	---
	11/29/95	16.34	---	80.53	220,000	---	---	25,000	25,000	3,500	19,000	---	---
	02/21/96	7.92	---	88.95	60,000	---	---	10,000	7,800	1,500	8,800	3,400	---
	05/21/96	10.86	Sheen	86.01	69,000	13,000	---	17,000	9,400	1,700	9,400	2,600	---
	08/22/96	16.50	---	80.37	94,000	16,000	---	17,000	15,000	2,100	12,000	330	2.0
	11/27/96	13.47	Sheen	83.40	82,000	24,000	---	14,000	13,000	2,400	13,000	<1,000	2.4
	03/20/97	12.86	---	84.01	56,000	11,000	---	9,900	6,900	1,300	8,000	3,500	9.0
	06/25/97	15.98	---	80.89	49,000	7,700[b]	---	9,700	7,100	1,300	7,000	220	5.8
	09/17/97	16.34	Sheen	80.53	78,000[d]	15,000[e]	---	11,000	9,900	1,800	10,000	<1,200	0.7
	12/22/97	10.71	Sheen	86.16	49,000[d]	14,000[e]	---	7,300	5,300	1,400	7,500	<1,100	3.1
	03/18/98	8.41	Sheen	88.46	120,000[d]	20,000[e,f]	---	21,000	19,000	2,600	15,000	<1,600	1.6
	07/14/98	13.51	---	83.36	94,000[d,g]	65,000[e,f,g]	---	18,000	14,000	1,900	11,000	<1,400	1.8
	09/30/98	16.14	---	80.73	91,000	9,800	---	17,000	13,000	2,100	12,000	<1300	2.0
	12/08/98	11.20	---	85.67	51,000	4,200	---	8,000	6,800	1,400	7,500	<1,100	---
	03/29/99	7.95	---	88.92	39,000[d]	4,600[e]	---	8,900	4,400	940	4,500	810	0.56
	06/29/99	16.98	---	79.89	71,000[d]	6,900[e]	---	12,000	7,300	1,400	8,400	<1,700	0.19
	09/28/99	15.99	---	80.88	60,000[d]	7,800[e]	---	9,400	9,200	1,000	9,900	200	0.53
	12/10/99	13.31	---	83.56	53,000[d]	5,300[e,f]	---	8,000	6,400	1,100	8,100	<200	0.48

Table 1. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID (TOC)	Date	GW Depth (ft)	SPH (ft)	GW Elev. (ft)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO (mg/L)
					<---------- Concentrations in parts per billion (µg/L) ---------->								
	03/23/00	8.98	---	87.89	77,000[d,g]	11,000[g,j]	---	10,000	9,400	1,600	11,000	<430	---
	09/07/00	15.61	---	81.26	100,000[d,g]	19,000[e,f,g]	---	17,000	12,000	1,600	11,000	<500	---
	12/05/00	14.80	---	82.07	110,000[d,g]	17,000[e,g]	---	17,000	11,000	1,900	12,000	<750	0.37
	03/07/01	14.27	---	82.60	60,000	13,000	---	7,000	4,600	900	7,100	<350	0.49
	06/06/01	14.88	---	81.99	43,000	12,000	---	3,000	1,000	770	5,200	<400	1.71
	08/30/01	12.43	---	84.44	95,000[a,h]	190,000[d,h]	---	6,900	10,000	2,700	15,000	<250	0.24
	12/07/01	24.65	---	72.22	25,000[d]	3,900[e,f]	---	2,500	1,700	64	2,200	<200	0.19
	03/11/02	**14.69**	**---**	**82.18**	**30,000[d]**	**2,800[f,e,k]**	**---**	**5,000**	**2,400**	**190**	**1,800**	**<1,300**	**0.30**
MW-4	03/20/97	13.75	---	83.59	47,000	3,100	---	11,000	4,500	1,100	5,200	3,400	8.4
97.34	06/25/97	16.15	---	81.19	61,000	5,800[b]	---	16,000	6,100	1,500	5,900	780[c]	1.4
	09/17/97	17.10	---	80.24	60,000[d]	4,400[e]	---	17,000	4,900	1,500	5,700	<1,500	1.5
	12/22/97	9.21	---	88.13	43,000[d]	3,100[e]	---	13,000	3,900	1,100	4,200	<960	3.7
	03/18/98	9.54	---	87.80	58,000[d]	5,500[e,f]	---	14,000	4,700	1,400	5,700	<1,200	0.8
	07/14/98	14.15	---	83.19	73,000[d]	2,900[e,f]	---	22,000	7,000	1,800	7,300	<200	1.0
	09/30/98	16.84	---	80.50	39,000	2,100	---	12,000	2,700	1,000	3,400	510	1.1
	12/08/98	13.45	---	83.89	27,000	1,600	---	8,900	1,600	730	2,300	<1,500	---
	03/29/99	9.10	---	88.24	48,000[d]	2,400[e,f,h]	---	15,000	3,000	1,300	5,000	1,300	1.32
	06/29/99*	---	---	---	---	---	---	---	---	---	---	---	---
	09/28/99	16.58	---	80.76	24,000[d]	3,200[e,f]	---	7,500	1,200	190	2,200	210	14.29[#]
	12/10/99	13.99	---	83.35	47,000[d]	3,100[e,f]	---	12,000	1,800	1,000	4,400	<100	0.62
	03/23/00	10.22	---	87.12	40,000[d]	3,100[e,f]	---	11,000	1,600	910	3,100	690	---
	09/07/00	16.40	---	80.94	43,000[d]	5,900[e]	---	10,000	1,100	1,100	3,400	<450	1.04
	12/05/00	15.55	---	81.79	69,000[d,g]	2,600[e,g]	---	16,000	1,300	1,300	3,400	<200	0.35
	03/20/01	14.03	---	83.31	46,000	---	---	13,000	1,000	900	2,800	<350	0.39
	06/06/01	15.49	---	81.85	75,000	5,400	---	22,000	1,800	1,900	6,400	<1,200	2.22
	08/30/01	18.00	---	79.34	43,000[a]	3,200[d]	---	6,400	630	510	2,600	<200	0.32
	12/07/01	23.45	---	73.89	32,000[d,g]	11,000[e,f,g]	---	4,500	740	310	2,300	<200	0.21
	03/11/02	**14.95**	**---**	**82.39**	**15,000[d]**	**1,600[e,f,k]**	**---**	**3,700**	**500**	**92**	**790**	**<500**	**0.30**

Table 1. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID (TOC)	Date	GW Depth (ft)	SPH (ft)	GW Elev. (ft)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO (mg/L)
					<---------- Concentrations in parts per billion (µg/L) ---------->								
Trip Blank	07/14/98	---	---	---	<50	<50	---	<0.5	<0.5	<0.5	<0.5	<5.0	---
	09/30/98	---	---	---	<50	<50	---	<0.5	<0.5	<0.5	<0.5	<5.0	---
	12/08/98	---	---	---	<50	---	---	<0.5	<0.5	<0.5	<0.5	<5.0	---
	03/29/99	---	---	---	<50	---	---	<0.5	<0.5	<0.5	<0.5	<5.0	---
	06/29/99	---	---	---	<50	---	---	<0.5	<0.5	<0.5	<0.5	<5.0	---
	03/23/00	---	---	---	<50	---	---	<0.5	<0.5	<0.5	<0.5	<5.0	---
	09/07/00	---	---	---	<50	---	---	<0.5	1.1	<0.5	1.1	<5.0	---

Abbreviations:

TOC = Top of casing elevation relative to an aribitrary datum

GW = Groundwater

SPH = Separate-phase hydrocarbons

--- = not observed/not analyzed

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015

TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015

TPHmo = Total petroleum hydrocarbons as motor oil by modified EPA Method 8015

Benzene, Ethylbenzene, Toluene, and Xylenes by EPA Method 8020

MTBE = Methyl Tertiary Butyl Ether by EPA Method 8020

DO = Dissolved oxygen

µg/L = Micrograms per liter, equivalent to parts per billion in water

mg/L = Milligrams per liter, equivalent to parts per million in water

* = Well inaccessible during site visit

Notes:

a = Result has an atypical pattern for diesel analysis

b = Result appears to be a lighter hydrocarbon than diesel

c = There is a >40% difference between primary and confirmation analysis

d = Unmodified or weakly modified gasoline is significant

e = Gasoline range compounds are significant

f = Diesel range compounds are significant; no recognizable pattern

g = lighter than water immiscible sheen is present

h = one to a few isolated peaks present

i = medium boiling point pattern does not match diesel (stoddard solvent)

j = aged diesel is significant

k = oil range compounds are significant

TOC Elevation of Well MW-4 surveyed relative to an arbitrary site datum by David Hop, Licensed Surveyor on April 19, 1997

= abnormally high reading due to added hydrogen peroxide

Table 2. DPE System Performance and Analytical Results - Soil Vapor Extraction - Golden Empire Properties (Worthington), 3055 35th Street, Oakland, California

Date	Hour Meter Readings (hrs)	System Uptime (per interval) (%)	System Inlet Temp. (degree F)	System Flow Rate (after dilution) (cfm)	System Influent HC Conc. [1] (ppmv)	System Effluent HC Conc. [2] (ppmv)		HC Removal Rate [3] (lbs/day)	Emission Rate (lbs/day)		TPHg Destruction Efficiency (%)	Gasoline Cumulative Removal (lbs)
					TPHg	TPHg	Benz	TPHg	TPHg	Benz		
6/24/2000	0	--	--	--	--	--	--	--	--	--	--	0
9/28/2000	454	20%	789	175	420	22	0.24	23.6	1.24	0.012	95	0
10/12/2000	696	72%	950	88	360	<10	<0.15	10.1	<0.28	<0.004	*	684
11/9/2000	1251	83%	820	55	590	<10	<0.15	10.5	<0.18	<0.002	*	1020
1/23/2001	1313	3%	--	--	--	--	--	--	--	--	*	1047
3/28/2001	0	--	--	--	--	--	--	--	--	--	--	1047
4/5/2001	194	101%	908	85	1,800	34	0.52	49.1	0.93	0.013	98	1047
5/3/2001	863	100%	1000	54	2,800	<10	<0.15	48.5	<0.17	<0.002	*	2811
6/4/2001	1114	33%	820	101	240	<10	<0.15	7.8	<0.32	<0.004	*	3319
7/2/2001	1429	62%	804	109.0	92	26	0.34	3.2	<0.91	<0.011	72	3421
7/10/2001	1621	100%	900	150	92	<10	<0.15	4.4	<0.48	<0.007	*	3447
8/2/2001	1759	25%	940	79	110	<10	<0.15	2.8	<0.25	<0.003	*	3472
9/7/2001	2301	63%	854	141	81	34	0.52	3.7	<1.54	<0.021	58	3535
10/3/2001	2470	27%	854	230	160	<10	0.31	11.8	<0.74	<0.021	*	3561
11/6/2001	3015	67%	955	97	590	31	0.43	18.3	<0.96	<0.012	95	3829

Table 2. DPE System Performance and Analytical Results - Soil Vapor Extraction - Golden Empire Properties (Worthington), 3055 35th Street, Oakland, California

Date	Hour Meter Readings (hrs)	System Uptime (per interval) (%)	System Inlet Temp. (degree F)	System Flow Rate (after dilution) (cfm)	System Influent HC Conc. [1] (ppmv)	System Effluent HC Conc. [2] (ppmv)		HC Removal Rate [3] (lbs/day)	Emission Rate (lbs/day)		TPHg Destruction Efficiency (%)	Gasoline Cumulative Removal (lbs)
					TPHg	TPHg	Benz	TPHg	TPHg	Benz		
11/14/2001	3184	88%	860	69	810	<10	<0.15	17.9	<0.22	<0.003	*	3957
12/6/2001	3710	96%	806	53	50	<10	<0.15	0.9	<0.17	<0.002	*	4350
1/7/2002	4472	99%	841	42	120	<10	<0.15	1.6	<0.13	<0.002	*	4377
2/4/2002	4938	69%	817	78	<50	<10	<0.15	0.6	<0.25	<0.003	*	4408
3/5/2002	5396	66%	665	26	170	<10	<0.15	1.4	<0.08	<0.001	*	4420
3/25/2002	5877	100%	--	67	--	--	--	--	--	--	--	4449

Notes and Abbreviations:

TPHg = Total petroleum hydrocarbons as gasoline
Benz = Benzene
HC Conc. = Hydrocarbon Concentrations
ppmv = Parts per million by volume. Analytical lab results converted from micrograms per liter (µg/l) to ppmv assumes the molecular weight of gasoline to be equal to that of hexane. at 1 atmosphere of pressure and 20 degrees Celsius.

[1] TPHg and benzene concentrations based on lab results by Modified EPA Methods 8015 and 8020.

[2] The hydrocarbon removal/emission rate is based on the Bay Area Air Quality Management's District's (BAAQMD) Procedures for Soil Vapor Extraction where Rate = concentration (ppmv) x flow rate (scfm) x 1 lb-mole/386x$10^6$$ft^3$ x molecular weight (86 lb/lb-mole for TPHg, 78 lb/lb-mole for benzene) x 1440 min/day.

[3] Gasoline Removal = The previous removal rates multiplied by the interval days of operation plus the previous total removal amount. The total TPHg removal is based on lab analytical results.

* As per BAAQMD permit conditions, system destruction efficiency need not be calculated for effluent TPHg concentrations less than 10 ppmv

Table 3. DPE System Performance and Analytical Results - Groundwater Extraction - Golden Empire Properties (Worthington), 3055 35th Street, Oakland, CA

Date	Hour Meter Readings (hrs)	Water Meter Readings (gallons)	Total Groundwater Extracted (gallons)	System Flow Rate Per Period (gpm)	Sample ID	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	HCs Removed Per Period (lbs)	Total HCs Removed (lbs)
10/20/00	878	0	0	NC	Inf Eff	-- --	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	--	--
10/30/00	1004	--	50	NC	Inf Eff	-- --	170 <0.5	140 <0.5	16 <0.5	200 <0.5	--	--
11/9/00	1,251	--	50	NC	Inf Eff	760 <50	120 <0.5	86 <0.5	4.2 <0.5	84 <0.5	NC	NC
12/15/00	1,267	760a	50	NC	--	--	--	--	--	--	--	--
1/23/01	1,313	3,790	3,080	1.1	In Mid Eff	3,000 <50 <50	440 <0.5 <0.5	360 <0.5 <0.5	57 <0.5 <0.5	350 <0.5 <0.5	0.019	0.019
3/28/01	0	3,970	3,210	NC	Replacement Catox System Startup			--	--	--	0.005	0.024
4/13/01	378	17,366	16,606	0.6	IN EF-1	360 <50	45 <0.5	39 <0.5	5.1 <0.5	43 <0.5	0.335	0.359
6/4/01	1,114	36,058	35,298	0.4	IN Mid EF	54 <50 <50	<0.5 <0.5 <0.5	0.69 <0.5 <0.5	<0.5 <0.5 <0.5	3.1 <0.5 <0.5	0.056	0.415

Table 3. DPE System Performance and Analytical Results - Groundwater Extraction - Golden Empire Properties (Worthington), 3055 35th Street, Oakland, CA

Date	Hour Meter Readings (hrs)	Water Meter Readings (gallons)	Total Groundwater Extracted (gallons)	System Flow Rate Per Period (gpm)	Sample ID	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	HCs Removed Per Period (lbs)	Total HCs Removed (lbs)
7/2/01	1,429	39,433	38,673	0.2	IN Mid EF	<50 <50 <50	2.5 <0.5 <0.5	1 <0.5 <0.5	<0.5 <0.5 <0.5	5 <0.5 <0.5	0.002	0.417
9/7/01	2,301	48,566	47,806	0.2	INF Mid (EFF-1) EF	4,600 <50 --	24 <0.5 --	57 <0.5 --	15 <0.5 --	140 <0.5 --	0.004	0.421
11/16/01	3,184	61,892	61,132	0.3	INF Mid (EFF-1) EF	1100 <50 --	57 <0.5 --	42 <0.5 --	6.5 <0.5 --	110 <0.5 --	0.512	0.932
12/6/01	3,710	80,094	79,334	0.6	INF Mid (EFF-1) EF	410 <50 --	31 <0.5 --	14 <0.5 --	3.2 <0.5 --	48 <0.5 --	0.167	1.099
1/7/02	4,472	132,337	131,577	1.1	INF Mid (EFF-1) EF	120 <50 --	17 <0.5 --	7.7 <0.5 --	1.5 <0.5 --	13 <0.5 --	0.179	1.278
2/4/02	4,938	164,774	164,014	1.2	INF Mid (EFF-1) EF	140 <50 --	18 <0.5 --	5.1 <0.5 --	0.86 <0.5 --	12 <0.5 --	0.032	1.310
3/5/02	5,396	208,997	208,237	1.6	INF Mid (EFF-1) EF	170 <50 --	22 <0.5 --	12 <0.5 --	1.8 <0.5 --	24 <0.5 --	0.052	1.362

Table 3. DPE System Performance and Analytical Results - Groundwater Extraction - Golden Empire Properties (Worthington), 3055 35th Street, Oakland, CA

Date	Hour Meter Readings (hrs)	Water Meter Readings (gallons)	Total Groundwater Extracted (gallons)	System Flow Rate Per Period (gpm)	Sample ID	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	HCs Removed Per Period (lbs)	Total HCs Removed (lbs)
3/25/02	5,877	250,330	249,570	1.4	--	--	--	--	--	--	0.059	1.421
						Sewer Effluent Discharge Limits: (µg/L)	5.0	5.0	5.0	5.0		

Notes:

TPHg = Total Petroleum Hydrocarbons as Gasoline

BTEX = Benzene, Toluene, Ethylbenzene, Total Xylenes

MTBE = Methyl tertiary butyl ether

µg/L = micrograms per liter

a = Malfunctioning totalizer replaced 12/15/00 (intial reading at 760 gallons)

ND = non detect

<n = below noted practical laboratory quantitation limits

Inf = Influent Sample

Eff = Effluent Sample

NC = Not calculated, insufficient data

CAMBRIA

Table 4. DPE Well Parameters - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	Date	Well Status (open/closed)	System/Stinger Vacuum (inches of H_2O)	Well Annulus Vacuum (inches of H2O)	Flow Rate (cfm)	Hydrocarbon Vapor Concentration (ppmv)	Stinger Depth (ft below TOC)
MW-1	11/6/01	open	80	--	*	--	28
	11/12/01	open	125	--	*	--	28
	11/14/01	open	85	--	*	--	28
	11/21/01	open	95	--	*	--	28
	12/6/01	open	115	--	*	--	28
	12/19/01	open	110	--	*	--	25
	1/17/02	open	130	--	*	--	25
	2/4/02	open	105	--	*	--	28
	2/14/02	closed	--	--	*	--	--
	3/5/02	closed	--	--	*	--	--
	3/11/02	closed	--	--	*	--	--
	3/25/02	open	130	--	*	--	21
	4/2/02	open	130	--	*	--	21
	4/5/02	open	135	50	*	--	21
MW-2	11/6/01	open	80	--	*	--	27
	11/12/01	open	125	--	*	--	27
	11/14/01	open	85	--	*	--	27
	11/21/01	open	95	--	*	--	27
	12/6/01	open	115	--	*	--	28
	12/19/01	closed	--	--	*	--	--
	1/17/02	closed	--	--	*	--	--
	2/4/02	open	105	--	*	--	28
	2/14/02	closed	--	--	*	--	--
	3/5/02	closed	--	--	*	--	--
	3/11/02	closed	--	--	*	--	--
	3/25/02	open	130	--	*	--	21
	4/2/02	open	130	--	*	--	21
	4/5/02	open	135	70	*	--	21
MW-3	11/6/01	open	80	--	*	--	25
	11/12/01	open	125	--	*	--	25
	11/14/01	open	85	--	*	--	25
	11/21/01	open	95	--	*	--	25
	12/6/01	open	115	--	*	--	25
	12/19/01	open	110	--	*	--	25
	1/17/02	open	130	--	*	--	25
	2/4/02	open	105	--	*	--	25
	2/14/02	closed	--	--	*	--	--
	3/5/02	closed	--	--	*	--	--
	3/11/02	closed	--	--	*	--	--
	3/25/02	closed	--	--	*	--	--
	4/2/02	closed	--	--	*	--	--
	4/5/02	closed	--	--	*	--	--
MW-4	11/6/01	open	80	--	*	--	25
	11/12/01	open	125	--	*	--	25
	11/14/01	open	85	--	*	--	25

Table 4. DPE Well Parameters - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	Date	Well Status (open/closed)	System/Stinger Vacuum (inches of H_2O)	Well Annulus Vacuum (inches of H2O)	Flow Rate (cfm)	Hydrocarbon Vapor Concentration (ppmv)	Stinger Depth (ft below TOC)
	11/21/01	open	95	--	*	--	25
	12/6/01	open	115	--	*	--	25
	12/19/01	open	110	--	*	--	25
	1/17/02	open	130	--	*	--	25
	2/4/02	open	105	--	*	--	25
	2/14/02	closed	--	--	*	--	--
	3/5/02	closed	--	--	*	--	--
	3/11/02	closed	--	--	*	--	--
	3/25/02	closed	--	--	*	--	--
	4/2/02	closed	--	--	*	--	--
	4/5/02	closed	--	--	*	--	--
RW-5	5/24/00	--	80	--	*	--	11.64
	10/6/00	--	100	--	*	--	--
	11/29/00	open	>100	--	*	4320	--
	3/29/01	open	54	--	*	650	--
	4/14/01	open	100	--	*	--	--
	4/26/01	open	85	--	*	--	15
	5/3/01	open	80	--	*	--	15
	5/23/01	open	10	--	*	--	15
	6/4/01	open	50	--	*	--	15
	6/21/01	open	65	--	*	--	15
	7/2/01	open	55	--	*	--	15
	7/16/01	open	45	--	*	--	16
	8/2/01	open	35	--	*	--	--
	8/10/01	open	20	--	*	--	--
	8/15/01	open	20	--	*	--	--
	8/27/01	open	65	--	*	--	--
	9/7/01	closed	--	--	*	--	--
	9/14/01	closed	--	--	*	--	--
	10/3/01	closed	--	--	*	--	--
	10/8/01	closed	--	--	*	--	--
	10/22/01	closed	--	--	*	--	--
	10/29/01	closed	--	--	*	--	--
	11/6/01	closed	--	--	*	--	--
	11/12/01	closed	--	--	*	--	--
	11/14/01	closed	--	--	*	--	--
	11/21/01	closed	--	--	*	--	--
	12/6/01	closed	--	--	*	--	--
	12/19/01	open	110	--	*	--	20
	1/17/02	open	130	--	*	--	20
	2/4/02	closed	--	--	*	--	--
	2/14/02	closed	--	--	*	--	--
	3/5/02	closed	--	--	*	--	--
	3/11/02	closed	--	--	*	--	--
	3/25/02	open	130	--	*	--	16
	4/2/02	open	130	--	*	--	16
	4/5/02	open	135	90	*	--	16

Table 4. DPE Well Parameters - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	Date	Well Status (open/closed)	System/Stinger Vacuum (inches of H_2O)	Well Annulus Vacuum (inches of H2O)	Flow Rate (cfm)	Hydrocarbon Vapor Concentration (ppmv)	Stinger Depth (ft below TOC)
RW-6	5/24/00	--	80	--	*	--	11.78
	10/6/00	--	--	--	*	--	--
	11/29/00	open	>100	--	*	260	--
	3/29/01	open	54	--	*	2050	--
	4/14/01	open	100	--	*	--	20
	4/26/01	closed	--	--	*	--	--
	5/3/01	closed	--	--	*	--	--
	5/23/01	closed	--	--	*	--	--
	6/4/01	open	50	--	*	--	15
	6/21/01	open	65	--	*	--	15
	7/2/01	open	55	--	*	--	15
	7/16/01	open	45	--	*	--	16
	8/2/01	open	35	--	*	--	--
	8/10/01	open	20	--	*	--	--
	8/15/01	open	20	--	*	--	--
	8/27/01	open	65	--	*	--	--
	9/7/01	closed	--	--	*	--	--
	9/14/01	closed	--	--	*	--	--
	10/3/01	closed	--	--	*	--	--
	10/8/01	closed	--	--	*	--	--
	10/22/01	closed	--	--	*	--	--
	10/29/01	closed	--	--	*	--	--
	11/6/01	closed	--	--	*	--	--
	11/12/01	closed	--	--	*	--	--
	11/14/01	closed	--	--	*	--	--
	11/21/01	closed	--	--	*	--	--
	12/6/01	closed	--	--	*	--	--
	12/19/01	closed	--	--	*	--	--
	1/17/02	closed	--	--	*	--	--
	2/4/02	closed	--	--	*	--	--
	2/14/02	closed	--	--	*	--	--
	3/5/02	closed	--	--	*	--	--
	3/11/02	open	130	--	*	--	16
	3/25/02	open	130	--	*	--	16
	4/2/02	open	12	--	*	--	16
	4/5/02	open	135	85	*	--	16
RW-7	5/24/00	--	80	--	*	--	12.5
	10/6/00	--	--	--	*	--	--
	11/29/00	open	>100	--	*	0	--
	3/29/01	open	54	--	*	52	--
	4/14/01	open	100	--	*	--	20
	4/26/01	open	85	--	*	--	15
	5/3/01	open	80	--	*	--	15
	5/23/01	open	10	--	*	--	15
	6/4/01	open	50	--	*	--	15
	6/21/01	open	65	--	*	--	15
	7/2/01	open	55	--	*	--	15
	7/16/01	open	45	--	*	--	16

Table 4. DPE Well Parameters - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	Date	Well Status (open/closed)	System/Stinger Vacuum (inches of H_2O)	Well Annulus Vacuum (inches of H2O)	Flow Rate (cfm)	Hydrocarbon Vapor Concentration (ppmv)	Stinger Depth (ft below TOC)
	8/2/01	open	35	--	*	--	--
	8/10/01	open	20	--	*	--	--
	8/15/01	open	20	--	*	--	--
	8/27/01	open	65	--	*	--	--
	9/7/01	closed	--	--	*	--	--
	9/14/01	closed	--	--	*	--	--
	10/3/01	closed	--	--	*	--	--
	10/8/01	closed	--	--	*	--	--
	10/22/01	closed	--	--	*	--	--
	10/29/01	closed	--	--	*	--	--
	11/6/01	closed	--	--	*	--	--
	11/12/01	closed	--	--	*	--	--
	11/14/01	closed	--	--	*	--	--
	11/21/01	closed	--	--	*	--	--
	12/6/01	closed	--	--	*	--	--
	12/19/01	closed	--	--	*	--	--
	1/17/02	closed	--	--	*	--	--
	2/4/02	closed	--	--	*	--	--
	2/14/02	closed	--	--	*	--	--
	3/5/02	closed	--	--	*	--	--
	3/11/02	closed	--	--	*	--	--
	3/25/02	closed	--	--	*	--	--
	4/2/02	closed	--	--	*	--	--
	4/5/02	closed	--	--	*	--	--
RW-8	5/24/00	--	--	--	*	--	--
	10/6/00	--	--	--	*	--	--
	11/29/00	open	>100	--	*	44	--
	3/29/01	open	54	--	*	60	--
	4/14/01	open	100	--	*	--	20
	4/26/01	open	85	--	*	--	15
	5/3/01	open	80	--	*	--	15
	5/23/01	open	10	--	*	--	15
	6/4/01	open	50	--	*	--	15
	6/21/01	open	65	--	*	--	--
	7/2/01	open	55	--	*	--	--
	7/16/01	open	45	--	*	--	--
	8/2/01	open	35	--	*	--	--
	8/10/01	open	20	--	*	--	--
	8/15/01	open	20	--	*	--	--
	8/27/01	open	65	--	*	--	--
	9/7/01	closed	--	--	*	--	--
	9/14/01	closed	--	--	*	--	--
	10/3/01	closed	--	--	*	--	--
	10/8/01	closed	--	--	*	--	--
	10/22/01	closed	--	--	*	--	--
	10/29/01	closed	--	--	*	--	--
	11/6/01	closed	--	--	*	--	--
	11/12/01	closed	--	--	*	--	--

Table 4. DPE Well Parameters - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	Date	Well Status (open/closed)	System/Stinger Vacuum (inches of H_2O)	Well Annulus Vacuum (inches of H2O)	Flow Rate (cfm)	Hydrocarbon Vapor Concentration (ppmv)	Stinger Depth (ft below TOC)
	11/14/01	closed	--	--	*	--	--
	11/21/01	closed	--	--	*	--	--
	12/6/01	closed	--	--	*	--	--
	12/19/01	closed	--	--	*	--	--
	1/17/02	closed	--	--	*	--	--
	2/4/02	closed	--	--	*	--	--
	2/14/02	closed	--	--	*	--	--
	3/5/02	closed	--	--	*	--	--
	3/11/02	open	--	--	*	--	18
	3/25/02	closed	--	--	*	--	--
	4/2/02	closed	--	--	*	--	--
	4/5/02	closed	--	--	*	--	--
RW-9	5/24/00	--	--	--	*	--	12.5
	10/6/00	--	--	--	*	--	--
	11/29/00	--	>100	--	*	43	--
	3/29/01	open	54	--	*	90	--
	4/14/01	open	100	--	*	--	--
	4/26/01	open	85	--	*	--	--
	5/3/01	open	80	--	*	--	--
	5/23/01	open	10	--	*	--	--
	6/4/01	open	50	--	*	--	--
	6/21/01	open	65	--	*	--	--
	7/2/01	open	55	--	*	--	--
	7/16/01	open	45	--	*	--	--
	8/2/01	open	35	--	*	--	--
	8/10/01	open	20	--	*	--	--
	8/15/01	open	20	--	*	--	--
	8/27/01	open	65	--	*	--	--
	9/7/01	closed	--	--	*	--	--
	9/14/01	closed	--	--	*	--	--
	10/3/01	closed	--	--	*	--	--
	10/8/01	closed	--	--	*	--	--
	10/22/01	closed	--	--	*	--	--
	10/29/01	closed	--	--	*	--	--
	11/6/01	closed	--	--	*	--	--
	11/12/01	closed	--	--	*	--	--
	11/14/01	closed	--	--	*	--	--
	11/21/01	closed	--	--	*	--	--
	12/6/01	closed	--	--	*	--	--
	12/19/01	closed	--	--	*	--	--
	1/17/02	closed	--	--	*	--	--
	2/4/02	closed	--	--	*	--	--
	2/14/02	open	125	--	*	--	20
	3/5/02	open	115	--	*	--	20
	3/11/02	closed	--	--	*	--	--
	3/25/02	closed	--	--	*	--	--
	4/2/02	closed	--	--	*	--	--
	4/5/02	closed	--	--	*	--	--

Table 4. DPE Well Parameters - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	Date	Well Status (open/closed)	System/Stinger Vacuum (inches of H_2O)	Well Annulus Vacuum (inches of H2O)	Flow Rate (cfm)	Hydrocarbon Vapor Concentration (ppmv)	Stinger Depth (ft below TOC)
RW-10	5/24/00	--	--	--	*	--	--
	10/6/00	--	--	--	*	--	--
	11/29/00	--	>100	--	*	>10,000	--
	3/29/01	open	54	--	*	850	--
	4/14/01	open	100	--	*	--	--
	4/26/01	open	85	--	*	--	--
	5/3/01	open	80	--	*	--	--
	5/23/01	open	10	--	*	--	--
	6/4/01	open	50	--	*	--	--
	6/21/01	open	65	--	*	--	--
	7/2/01	open	55	--	*	--	--
	7/16/01	open	45	--	*	--	--
	8/2/01	open	35	--	*	--	--
	8/10/01	open	20	--	*	--	--
	8/15/01	open	20	--	*	--	--
	8/27/01	open	65	--	*	--	--
	9/7/01	closed	--	--	*	--	--
	9/14/01	closed	--	--	*	--	--
	10/3/01	closed	--	--	*	--	--
	10/8/01	closed	--	--	*	--	--
	10/22/01	closed	--	--	*	--	--
	10/29/01	closed	--	--	*	--	--
	11/6/01	closed	--	--	*	--	--
	11/12/01	closed	--	--	*	--	--
	11/14/01	closed	--	--	*	--	--
	11/21/01	closed	--	--	*	--	--
	12/6/01	closed	--	--	*	--	--
	12/19/01	closed	--	--	*	--	--
	1/17/02	closed	--	--	*	--	--
	2/4/02	closed	--	--	*	--	--
	2/14/02	open	125	--	*	--	20
	3/5/02	open	115	--	*	--	20
	3/11/02	open	--	--	*	--	20
	3/25/02	closed	--	--	*	--	--
	4/2/02	closed	--	--	*	--	--
	4/5/02	closed	--	--	*	--	--
RW-11	5/24/00	--	80	--	*	--	11.65
	10/6/00	--	--	--	*	--	--
	11/29/00	--	>100	--	*	2280	--
	3/29/01	open	54	--	*	784	--
	4/14/01	open	100	--	*	--	--
	4/26/01	open	85	--	*	--	15
	5/3/01	open	80	--	*	--	15
	5/23/01	open	10	--	*	--	15
	6/4/01	open	50	--	*	--	20
	6/21/01	open	65	--	*	--	15
	7/2/01	open	55	--	*	--	15

Table 4. DPE Well Parameters - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	Date	Well Status (open/closed)	System/Stinger Vacuum (inches of H_2O)	Well Annulus Vacuum (inches of H2O)	Flow Rate (cfm)	Hydrocarbon Vapor Concentration (ppmv)	Stinger Depth (ft below TOC)
	7/16/01	open	45	--	*	--	16
	8/2/01	open	35	--	*	--	--
	8/10/01	open	20	--	*	--	--
	8/15/01	open	20	--	*	--	--
	8/27/01	open	65	--	*	--	--
	9/7/01	closed	--	--	*	--	--
	9/14/01	closed	--	--	*	--	--
	10/3/01	closed	--	--	*	--	--
	10/8/01	closed	--	--	*	--	--
	10/22/01	closed	--	--	*	--	--
	10/29/01	closed	--	--	*	--	--
	11/6/01	closed	--	--	*	--	--
	11/12/01	closed	--	--	*	--	--
	11/14/01	closed	--	--	*	--	--
	11/21/01	closed	--	--	*	--	--
	12/6/01	closed	--	--	*	--	--
	12/19/01	closed	--	--	*	--	--
	1/17/02	closed	--	--	*	--	--
	2/4/02	closed	--	--	*	--	--
	2/14/02	closed	--	--	*	--	--
	3/5/02	closed	--	--	*	--	--
	3/11/02	open	--	--	*	--	18
	3/25/02	closed	--	--	*	--	--
	4/2/02	closed	--	--	*	--	--
	4/5/02	closed	--	--	*	--	--
RW-12	5/24/00	--	--	--	*	--	--
	10/6/00	--	--	--	*	--	--
	11/29/00	open	>100	--	*	24	--
	3/29/01	open	54	--	*	72	--
	4/14/01	open	100	--	*	--	--
	4/26/01	open	85	--	*	--	15
	5/3/01	open	80	--	*	--	15
	5/23/01	open	10	--	*	--	15
	6/4/01	open	50	--	*	--	15
	6/21/01	open	65	--	*	--	15
	7/2/01	open	55	--	*	--	15
	7/16/01	open	45	--	*	--	16
	8/2/01	open	35	--	*	--	--
	8/10/01	open	20	--	*	--	--
	8/15/01	open	20	--	*	--	--
	8/27/01	open	65	--	*	--	--
	9/7/01	closed	--	--	*	--	--
	9/14/01	closed	--	--	*	--	--
	10/3/01	closed	--	--	*	--	--
	10/8/01	closed	--	--	*	--	--
	10/22/01	closed	--	--	*	--	--
	10/29/01	closed	--	--	*	--	--
	11/6/01	closed	--	--	*	--	--

Table 4. DPE Well Parameters - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	Date	Well Status (open/closed)	System/Stinger Vacuum (inches of H_2O)	Well Annulus Vacuum (inches of H2O)	Flow Rate (cfm)	Hydrocarbon Vapor Concentration (ppmv)	Stinger Depth (ft below TOC)
	11/12/01	closed	--	--	*	--	--
	11/14/01	closed	--	--	*	--	--
	11/21/01	closed	--	--	*	--	--
	12/6/01	closed	--	--	*	--	--
	12/19/01	closed	--	--	*	--	--
	1/17/02	closed	--	--	*	--	--
	2/4/02	closed	--	--	*	--	--
	2/14/02	closed	--	--	*	--	--
	3/5/02	closed	--	--	*	--	--
	3/11/02	closed	--	--	*	--	--
	3/25/02	open	130	--	*	--	16
	4/2/02	open	130	--	*	--	16
	4/5/02	open	135	97	*	--	16
RW-13	5/24/00	--	80	--	*	--	12.59
	10/6/00	--	--	--	*	--	--
	11/29/00	--	>100	--	*	77	--
	3/29/01	open	54	--	*	124	--
	4/14/01	open	100	--	*	--	--
	4/26/01	open	85	--	*	--	--
	5/3/01	open	80	--	*	--	--
	5/23/01	open	10	--	*	--	--
	6/4/01	open	50	--	*	--	--
	6/21/01	open	65	--	*	--	--
	7/2/01	open	55	--	*	--	--
	7/16/01	open	45	--	*	--	--
	8/2/01	open	35	--	*	--	--
	8/10/01	open	20	--	*	--	--
	8/15/01	open	20	--	*	--	--
	8/27/01	open	65	--	*	--	--
	9/7/01	closed	--	--	*	--	--
	9/14/01	closed	--	--	*	--	--
	10/3/01	closed	--	--	*	--	--
	10/8/01	closed	--	--	*	--	--
	10/22/01	closed	--	--	*	--	--
	10/29/01	closed	--	--	*	--	--
	11/6/01	closed	--	--	*	--	--
	11/12/01	closed	--	--	*	--	--
	11/14/01	closed	--	--	*	--	--
	11/21/01	closed	--	--	*	--	--
	12/6/01	closed	--	--	*	--	--
	12/19/01	closed	--	--	*	--	--
	1/17/02	closed	--	--	*	--	--
	2/4/02	closed	--	--	*	--	--
	2/14/02	open	125	--	*	--	20
	3/5/02	open	115	--	*	--	20
	3/11/02	open	--	--	*	--	16
	3/25/02	closed	--	--	*	--	--
	4/2/02	closed	--	--	*	--	--

Table 4. DPE Well Parameters - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	Date	Well Status (open/closed)	System/Stinger Vacuum (inches of H_2O)	Well Annulus Vacuum (inches of H2O)	Flow Rate (cfm)	Hydrocarbon Vapor Concentration (ppmv)	Stinger Depth (ft below TOC)
	4/5/02	closed	--	--	*	--	--
RW-14	5/24/00	--	80	--	*	--	12.33
	10/6/00	--	100	--	*	--	--
	11/29/00	--	>100	--	*	5830	--
	3/29/01	open	54	--	*	120	--
	4/14/01	open	100	--	*	--	--
	4/26/01	open	85	--	*	--	--
	5/3/01	open	80	--	*	--	--
	5/23/01	open	10	--	*	--	--
	6/4/01	open	50	--	*	--	--
	6/21/01	open	65	--	*	--	--
	7/2/01	open	55	--	*	--	--
	7/16/01	open	45	--	*	--	--
	8/2/01	open	35	--	*	--	--
	8/10/01	open	20	--	*	--	--
	8/15/01	open	20	--	*	--	--
	8/27/01	open	65	--	*	--	--
	9/7/01	closed	--	--	*	--	--
	9/14/01	closed	--	--	*	--	--
	10/3/01	closed	--	--	*	--	--
	10/8/01	closed	--	--	*	--	--
	10/22/01	closed	--	--	*	--	--
	10/29/01	closed	--	--	*	--	--
	11/6/01	closed	--	--	*	--	--
	11/12/01	closed	--	--	*	--	--
	11/14/01	closed	--	--	*	--	--
	11/21/01	closed	--	--	*	--	--
	12/6/01	closed	--	--	*	--	--
	12/19/01	closed	--	--	*	--	--
	1/17/02	closed	--	--	*	--	--
	2/4/02	closed	--	--	*	--	--
	2/14/02	open	125	--	*	--	20
	3/5/02	open	115	--	*	--	20
	3/11/02	closed	--	--	*	--	--
	3/25/02	closed	--	--	*	--	--
	4/2/02	closed	--	--	*	--	--
	4/5/02	closed	--	--	*	--	--

Notes:

* = Parameter could not be accurately measured due to the presence of water or water vapor.

-- = Data not available or not collected

CAMBRIA

APPENDIX A

Groundwater Monitoring Field Data Sheets

CAMBRIA

DAILY FIELD REPORT

Project Name: Worthington	Cambria Mgr: RAS	Field Person: SG
Project Number: 130-0105	Date: 3-11-02	Site Address: 3055 35th Ave Oakland, Ca
General Tasks: QM		

Time	Activity/Comments	Code	Hours
	RW-5 was not [redacted]		
	RW wells purged with system then sampled at		
	RW-6 = 12:30		
	RW-7 = 11:40		
	RW-8 = 11:20		
	RW-9 = 11:00		
	RW-10 = 10:40		
	RW-11 = 12:20		
	RW-12 = 12:00		
	RW-13 = 10:00		
	RW-14 = 10:20		

CAMBRIA

WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS**	Well ID: MW- 1
Project Number: **130-0105**	Date:3-11-02	Well Yield:
Site Address: **~~1075 Hiawatha Court~~ ~~Fremont~~**	Sampling Method: **Disposable bailer**	Well Diameter: 4" pvc
		Technician(s): SG
Initial Depth to Water: 17.13	Total Well Depth: 27.13	Water Column Height: 10.00
Volume/ft: ~~0.16~~ 0.65	1 Casing Volume: 6.50 ~~6.50~~	3 Casing Volumes: 19.50 ~~19.50~~
Purging Device: ~~disposable bailer~~ Bailer	Did Well Dewater?: no	Total Gallons Purged: 20
Start Purge Time: 13:42	Stop Purge Time:	Total Time:

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

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

Time	Casing Volume	Temp.	pH	Cond.	Comments
13:45	7	18.7	7.47	931	
13:47	14	19.1	7.31	1024	
13:50	20	19.3	7.39	1117	
					DO= 0.39 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW- 1	3-11-02	13:55	4 VOAs	HCL	VOCs	8015
			1 AMBER	NONE		8020

CAMBRIA

WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS**	Well ID: MW- 2
Project Number: **130-0105**	Date:3-11-02	Well Yield:
Site Address: **1075 Hiawatha Court Fremont**	Sampling Method: **Disposable bailer**	Well Diameter: 4" **pvc** Technician(s): SG
Initial Depth to Water: 16.95	Total Well Depth: 27.45	Water Column Height: 10.05
Volume/ft: 0.16	1 Casing Volume: 6.53	3 Casing Volumes: 19.59
Purging Device: **disposable bailer**	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time: 13:18	Stop Purge Time:	Total Time:

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

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

Time	Casing Volume	Temp.	pH	Cond.	Comments
13:20	7	19.5	7.20	1570	
13:23	14	19.1	7.25	1282	
13:25	20	19.1	7.15	1220	
					DO=0.24mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW- 2	3-11-02	13:30	4 VOAs	HCL	VOCs	8015
			1 AMBER	NONE		8020

CAMBRIA

WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS**	Well ID: MW- 3
Project Number: **130-0105**	Date:3-11-02	Well Yield:
Site Address: **1075 ~~Hiawatha Court~~ Fremont**	Sampling Method: **Disposable bailer**	Well Diameter: **2 " pvc**
		Technician(s): SG
Initial Depth to Water: 14.69	Total Well Depth: 25.00	Water Column Height: 10.31
Volume/ft: 0.16	1 Casing Volume: 1.64	3 Casing Volumes: 4.94
Purging Device: ~~disposable bailer~~ pvc bailer	Did Well Dewater?: NO	Total Gallons Purged: 5
Start Purge Time: 14:00	Stop Purge Time:	Total Time:

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

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

Time	Casing Volume	Temp.	pH	Cond.	Comments
14:05	1.5	18.7	7.40	1720	
14:07	3	18.9	7.20	1924	
14:10	5	18.7	7.33	1803	
					DO = 0.30 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW- 3	3-11-02	14:15	4 VOAs	HCL	VOCs	8015
			1 AMBER	NONE		8020

CAMBRIA

WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS**	Well ID: MW- 4
Project Number: **130-0105**	Date:3-11-02	Well Yield:
Site Address: ~~1075 Hiawatha Court Fremont~~	Sampling Method: **Disposable bailer**	Well Diameter: **2 " pvc**
		Technician(s): SG
Initial Depth to Water: 14.95	Total Well Depth: 30.10	Water Column Height: 15.15
Volume/ft: 0.16	1 Casing Volume: 2.42	3 Casing Volumes: 7.27
Purging Device: **disposable bailer**	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time: 12:40	Stop Purge Time:	Total Time:

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

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

Time	Casing Volume	Temp.	pH	Cond.	Comments
12:45	2.5	18.7	7.55	1135	
12:50	5	18.7	7.20	1510	
12:55	7	18.9	7.29	1401	
					DO = 0.30 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW- 4	3-11-02	13:00	4 VOAs	HCL	VOCs	8015
			1 AMBER	NONE		8020

CAMBRIA

WELL DEPTH MEASUREMENTS

Well ID	Time	Product Depth	Water Depth	Product Thickness	Well Depth	Comments
MW-1	8:30		17.13		27.13	
MW-2	8:40		16.95		27.45	
MW-3	8:45		14.69		25.00	
MW-4	8:35		14.95		30.10	

Project Name: Worthington

Project Number: **130-0105**

Measured By: S Hill

Date: **03/11/02**

F:\TEMPLATE\FORMS\FIELD\GW-DEPTH.WPD

CAMBRIA

WELL DEPTH MEASUREMENTS

Well ID	Time	Product Depth	Water Depth	Product Thickness	Well Depth	Comments
RW-5	9:15	10.38	10.57	0.19	25.85	SPH brown
RW-6	9:07		9.94		25.00	
RW-7	9:00		10.00		29.00	
RW-8	8:57		12.50		28.70	
RW-9	8:55		25.00		28.00	stinger
RW-10	8:50		19.50		24.80	
RW-11	9:03		10.22		23.85	
RW-12	9:05		11.00		24.70	
RW-13	8:52		18.25		24.75	
RW-14	8:54		12.80		24.60	

Project Name:_Worthington_____ Project Number: **130-0105**_____

Measured By: S. [illegible] Date:____**03/11/02**_____

F:\TEMPLATE\FORMS\FIELD\GW-DEPTH.WPD

CAMBRIA

APPENDIX B

Analytical Results for Quarterly Groundwater Sampling

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 Environmental Technology 6262 Hollis Street Emeryville, CA 94608	Client Project ID: #130-0105-339; Worthington	Date Sampled: 03/11/2002
		Date Received: 03/12/2002
	Client Contact: Ron Scheele	Date Extracted: 03/12/2002
	Client P.O:	Date Analyzed: 03/12/2002

03/19/02

Dear Ron:

Enclosed are:

1). the results of **4** samples from your **#130-0105-339; Worthington** 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

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 Environmental Technology	Client Project ID: #130-0105-339; Worthington	Date Sampled: 03/11/2002
6262 Hollis Street		Date Received: 03/12/2002
Emeryville, CA 94608	Client Contact: Ron Scheele	Date Extracted: 03/14-03/18/2002
	Client P.O:	Date Analyzed: 03/14-03/18/2002

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)[+]	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes	% Recovery Surrogate
0203209-001	MW-1	W	9400,a	ND<20	2100	200	74	470	97
0203209-002	MW-2	W	4700,a	ND<50	1200	150	30	310	107
0203209-003	MW-3	W	30,000,a	ND<1300	5000	2400	190	1800	105
0203209-004	MW-4	W	15,000,a	ND<500	3700	500	92	790	101
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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 Environmental Technology	Client Project ID: #130-0105-339; Worthington	Date Sampled: 03/11/2002
6262 Hollis Street		Date Received: 03/12/2002
Emeryville, CA 94608	Client Contact: Ron Scheele	Date Extracted: 03/12/2002
	Client P.O:	Date Analyzed: 03/12-03/19/2002

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)+	% Recovery Surrogate
0203209-001	MW-1	W	1400,d	118
0203209-002	MW-2	W	590,d	100
0203209-003	MW-3	W	2800,d,b,g	110
0203209-004	MW-4	W	1600,d,b,g	100
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/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) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

QC REPORT

EPA 8015m + 8020

Date: 03/18/02 **Extraction:** EPA 5030 **Matrix:** Water

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 31302					Instrument:	GC-3	
Surrogate1	ND	104.0	102.0	100.00	104	102	1.9
Xylenes	ND	34.9	35.7	30.00	116	119	2.3
Ethylbenzene	ND	11.4	11.7	10.00	114	117	2.6
Toluene	ND	11.2	11.4	10.00	112	114	1.8
Benzene	ND	11.7	10.8	10.00	117	108	8.0
MTBE	ND	11.5	10.6	10.00	115	106	8.1
TPH (gas)	ND	87.5	87.0	100.00	88	87	0.7

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

$$\text{RPD} = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation

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http://www.mccampbell.com E-mail: main@mccampbell.com

QC REPORT

EPA 8015m + 8020

Date: 03/19/02 **Extraction:** EPA 5030 **Matrix:** Water

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 31902					Instrument: GC-11 A		
Surrogate1	ND	113.0	115.0	100.00	113	115	1.8
TPH (diesel)	ND	7600.0	7725.0	7500.00	101	103	1.6

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

$$RPD = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation

0203209-ZC605.doc

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☑ 5 DAY

Report To: Ron Scheele Bill To: Cambria
Company: Cambria Environmental Technology
6262 Hollis Street
Emeryville, CA 94608
Tele: (510) 450-1983 Fax: (510) 450-8295
Project #: 130-0105-339 Project Name: Worthington
Project Location: 3035 35th Ave. Oakland, Ca
Sampler Signature: S. Hill

SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	BTEX & TPH as Gas (602/8020 + 8015) MTBE	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	Other	Comments
MW-1		3-11-02	13:55	5	VOA	X					X	X			X	X															
MW-2		3-11-02	13:30	5		X					X	X			X	X															
MW-3		3-11-02	14:15	5		X					X	X			X	X															
MW-4		3-11-02	13:00	5	↓	X					X	X			X	X															

Relinquished By:	Date:	Time:	Received By:
S. Hill	3-12-02	6:00	Secure location
	3-12-02	1:15 P.m.	Ultra Scan Worldwide #244
	3-12-02	3:15 P.m.	U. Miller 3/12/02 4:45

Remarks: Report results in EDF format

VOAS | ORG | METALS | OTHER

ICE/T ✓
HEAD SPACE ABSENT ___
PRESERVATION APPROPRIATE ✓
CONTAINERS ✓

(+) (+) (+) (+)

Sent By: McCampbell Analytical, Inc.; 1 925 798 4612; Sep-5-01 8:42AM; Page 2/2

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0203209

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

TEL:
FAX:
ProjectNo: #130-0105-339;
PO:

12-Mar-02

Sample ID	ClientSampID	Matrix	Collection Date	Bottle	Requested Tests					
					SW8015C	8021B/8015				
0203209-001	MW-1	Water	3/11/02 1:55:00 PM		B	A				
0203209-002	MW-2	Water	3/11/02 1:30:00 PM		B	A				
0203209-003	MW-3	Water	3/11/02 2:15:00 PM		B	A				
0203209-004	MW-4	Water	3/11/02 1:00:00 PM		B	A				

Comments:

	Date/Time		Date/Time
Relinquished by:		**Received by:**	
Relinquished by:		**Received by:**	
Relinquished by:		**Received by:**	

NOTICE: Solid samples are discarded after 60 days and Non-Solid samples are discarded after 30 days unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CAMBRIA

APPENDIX C

Analytical Results for DPE System Operation

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 Environmental Technology 6262 Hollis Street Emeryville, CA 94608	Client Project ID: 130-0105-337; Worthington	Date Sampled: 01/07/02
		Date Received: 01/08/02
	Client Contact: Ron Scheele	Date Extracted: 01/08/02
	Client P.O:	Date Analyzed: 01/08/02

01/15/02

Dear Ron:

Enclosed are:

1). the results of **2** samples from your **#130-0105-337; Worthington** 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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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 Environmental Technology 6262 Hollis Street Emeryville, CA 94608	Client Project ID: 130-0105-337; Worthington	Date Sampled: 01/07/02
		Date Received: 01/08/02
	Client Contact: Ron Scheele	Date Extracted: 01/08/02
	Client P.O:	Date Analyzed: 01/08/02

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes	% Recovery Surrogate
87894	INF	W	120,a	---	17	7.7	1.5	13	106
87895	EFF-1	W	ND	ND	ND	ND	ND	ND	98
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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

QC REPORT

EPA 8015m + 8020

Date: 01/08/02 **Extraction:** EPA 5030 **Matrix:** Water

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 10802					Instrument:	GC-3	
Surrogate1	ND	105.0	105.0	100.00	105	105	0.0
Xylenes	ND	31.6	32.9	30.00	105	110	4.0
Ethylbenzene	ND	10.5	10.9	10.00	105	109	3.7
Toluene	ND	10.3	10.7	10.00	103	107	3.8
Benzene	ND	9.7	10.1	10.00	97	101	4.0
MTBE	ND	9.5	9.1	10.00	95	91	4.3
TPH (gas)	ND	84.1	86.8	100.00	84	87	3.2

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

$$\text{RPD} = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation

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McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

Report To: Ron Scheele Bill To: SAME
Company: Cambria Environmental Technology
6262 Hollis Street
Emeryville, CA 94608
Tele: (510) 450-1983 Fax: (510) 450-8295
Project #: 130-0105-337 Project Name: Worthington
Project Location: 3055 35th AVE OAKLAND, CA
Sampler Signature:

SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX: Water	Soil	Air	Sludge	Other	METHOD PRESERVED: Ice	HCl	HNO_3	Other
INF	Worthington	1/7/02	2:30	3	Vom	X					X			
EFF-1				3	Vom	X					X			
EFF-2				3	Vom	X					X			

Analysis Request: BTEX & TPH as Gas (602/8020 + 8015) MTBE; 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

Other: [redacted]

Comments: ICE/ ✓ GOOD CONDITION ✓ HEAD SPACE ABSENT ✓ PRESERVATION APPROPRIATE ✓ CONTAINERS
VOAS / O&G / METALS / OTHER

Relinquished By:	Date:	Time:	Received By:
	1/7/02	4pm	Secured location
Ron Scheele	1/8/02	1143	Tony Perry 298 1/8/02
Tony Perry 298	1/8/02	1230	V. Miller 1/8/02 12:30

Remarks: ONLY ANALYZE EFF-2 IF HC CONCENTRATIONS FOUND IN EFF-1

VM SH

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 Environmental Technology 6262 Hollis Street Emeryville, CA 94608	Client Project ID: 130-0105-337;Worthington	Date Sampled: 01/07/02
		Date Received: 01/08/02
	Client Contact: Ron Scheele	Date Extracted: 01/08/02
	Client P.O:	Date Analyzed: 01/08/02

01/15/02

Dear Ron:

Enclosed are:

1). the results of **2** samples from your **#130-0105-337;Worthington** 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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Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Cambria Environmental Technology	Client Project ID: 130-0105-337;Worthington	Date Sampled: 01/07/02
6262 Hollis Street		Date Received: 01/08/02
Emeryville, CA 94608	Client Contact: Ron Scheele	Date Extracted: 01/08-01/09/02
	Client P.O:	Date Analyzed: 01/08-01/09/02

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)[+]	MTBE	Benzene	Toluene	Ethylben-zene	Xylenes	% Recovery Surrogate
87889	INF	Air	100,a	ND	3.4	1.5	0.25	1.6	---[#]
87890	EFF	Air	ND	ND	ND	0.19	ND	0.50	107

[+] ppm (mg/L) to ppmv (uL/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		Air	10 uL/L	1.5	0.15	0.15	0.15	0.25	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and air samples are reported in uL/L(ppmv), wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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

QC REPORT

EPA 8015m + 8020

Date: 01/08/02 **Extraction:** EPA 5030 **Matrix:** Air

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 10802					Instrument:	GC-3	
Surrogate1	ND	105.0	105.0	100.00	105	105	0.0
Xylenes	ND	31.6	32.9	30.00	105	110	4.0
Ethylbenzene	ND	10.5	10.9	10.00	105	109	3.7
Toluene	ND	10.3	10.7	10.00	103	107	3.8
Benzene	ND	9.7	10.1	10.00	97	101	4.0
MTBE	ND	9.5	9.1	10.00	95	91	4.3
TPH (gas)	ND	84.1	86.8	100.00	84	87	3.2

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

$$\text{RPD} = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation

29544 ZC555.doc

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

Report To: Ron Scheele Bill To: SAME
Company: Cambria Environmental Technology
6262 Hollis Street
Emeryville, CA 94608
Tele: (510) 450-1983 Fax: (510) 450-8295
Project #: 130-0105-337 Project Name: WORTHINGTON
Project Location: 3055 35TH AVE OAKLAND CA
Sampler Signature:

SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	BTEX & TPH as Gas (602/8020 + 8015) MTBE	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	Other	Comments
INF	Worthington	1/7/02	1:30p	1	Bag			X							X															87689	
EFF	Worthington	1/7/02	1:30p	1	Bag			X							X															87690	

ICE/T® ____
GOOD CONDITION ✓
HEAD SPACE ABSENT ____
PRESERVATION APPROPRIATE ____
CONTAINERS ____
VOAS | O&G | METALS | OTHER

Relinquished By:	Date:	Time:	Received By:
	1/7/02	4pm	Secure Location
Relinquished By:	Date:	Time:	Received By:
	1/8/02	1143	298 1/8/02
Relinquished By:	Date:	Time:	Received By:
298	1/8/02	1230	48/02 12:30

Remarks:
REPORT IN ppmv
10 ppmv LIMIT
20 ml injection vol
FAX RESULTS ASAP

Sent By: McCampbell Analytical, Inc.; 1 925 798 4812; Sep-5-01 8:42AM; Page 2/2

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 Environmental Technology	Client Project ID: #130-0105-343; Worthington	Date Sampled: 02/04/02
6262 Hollis Street		Date Received: 02/05/02
Emeryville, CA 94608	Client Contact: Ron Scheele	Date Extracted: 02/05/02
	Client P.O:	Date Analyzed: 02/05/02

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)*	MTBE	Benzene	Toluene	Ethylben-zene	Xylenes	% Recovery Surrogate
89626	INF	Air	ND	ND	1.4	0.37	ND	0.27	104
89627	EFF	Air	ND	ND	ND	ND	ND	ND	101

*ppm (mg/L) to ppmv (uL/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		Air	10 uL/L	1.5	0.15	0.15	0.15	0.25	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and air samples are reported in uL/L(ppmv), wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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 Environmental Technology 6262 Hollis Street Emeryville, CA 94608	Client Project ID: #130-0105-343; Worthington	Date Sampled: 02/04/02
		Date Received: 02/05/02
	Client Contact: Ron Scheele	Date Extracted: 02/05/02
	Client P.O:	Date Analyzed: 02/05/02

02/12/02

Dear Ron:

Enclosed are:

1). the results of **2** samples from your **#130-0105-343; Worthington** 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	Client Project ID: #130-0105-343; Worthington	Date Sampled: 02/04/02
6262 Hollis Street		Date Received: 02/05/02
Emeryville, CA 94608	Client Contact: Ron Scheele	Date Extracted: 02/05/02
	Client P.O:	Date Analyzed: 02/05/02

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes	% Recovery Surrogate
89626	INF	Air	ND	ND	4.4	1.4	ND	1.2	104
89627	EFF	Air	ND	ND	ND	ND	ND	ND	101
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		Air	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

QC REPORT

EPA 8015m + 8020

Date: 02/05/02 **Extraction:** EPA 5030 **Matrix:** Air

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 20702					Instrument:	GC-7	
Surrogate1	ND	108.0	109.0	100.00	108	109	0.9
Xylenes	ND	32.3	33.2	30.00	108	111	2.7
Ethylbenzene	ND	10.9	11.0	10.00	109	110	0.9
Toluene	ND	11.3	11.4	10.00	113	114	0.9
Benzene	ND	10.8	10.9	10.00	108	109	0.9
MTBE	ND	9.4	9.0	10.00	94	90	4.3
TPH (gas)	ND	106.4	105.2	100.00	106	105	1.1

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

$$\text{RPD} = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation

29930 ZC567

McCAMPBELL ANALYTICAL INC.

1534 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☑ 5 DAY

Report To: Ron Scheele Bill To: SAME

Company: Cambria Environmental Technology
6262 Hollis Street
Emeryville, CA 94608

Tele: (510) 450-1983 Fax: (510) 450-8295

Project #: 130-0105-343 Project Name: WORTHINGTON

Project Location: 3055 35TH ST OAKLAND

Sampler Signature: Ronny Scheele

SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX: Water	Soil	Air	Sludge	Other	METHOD PRESERVED: Ice	HCl	HNO_3	Other
INF	OAKLAND	2/4/2	12:30p	1	Bag			X						
EFF	↓	2/4/2	12:30p	1	Bag			X						

Analysis Request	Other	Comments
BTEX & TPH as Gas (602/8020 + 8015)/MTBE	89626	
TPH as Diesel (8015)	89627	
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		

Relinquished By:	Date:	Time:	Received By:
Ronny Scheele	2/4/2	5:30p	Received Location
Relinquished By:	Date:	Time:	Received By:
288	2/5/02	1005am	288
Relinquished By: 288	Date: 2/8/02	Time: 1455	Received By: 2/05 3:00

Remarks:

SEAL# _____
GOOD CONDITION ✓
HEAD SPACE ABSENT _____

PRESERVATION APPROPRIATE ✓
CONTAINERS ✓

VOAS	O&G	METALS	OTHER

✓ ✓

McCAMPBELL ANALYTICAL INC.
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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: #130-0105-343; Worthington	Date Sampled: 02/04/02
		Date Received: 02/05/02
	Client Contact: Ron Scheele	Date Extracted: 02/05/02
	Client P.O:	Date Analyzed: 02/05/02

02/12/02

Dear Ron:

Enclosed are:

1). the results of 3 samples from your **#130-0105-343; Worthington** 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	Client Project ID: #130-0105-343; Worthington	Date Sampled: 02/04/02
6262 Hollis Street		Date Received: 02/05/02
Emeryville, CA 94608	Client Contact: Ron Scheele	Date Extracted: 02/06-02/08/02
	Client P.O:	Date Analyzed: 02/06-02/08/02

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes	% Recovery Surrogate
89631	INF	W	140,a	---	18	5.1	0.86	12	106
89632	EFF-1	W	ND	---	ND	ND	ND	ND	106
89633	EFF-2	W	ND	---	ND	ND	ND	ND	102
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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QC REPORT

EPA 8015m + 8020

Date: 02/06/02 **Extraction:** EPA 5030 **Matrix:** Water

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 20702					Instrument:	GC-7	
Surrogate1	ND	112.0	109.0	100.00	112	109	2.7
Xylenes	ND	25.7	28.0	30.00	86	93	8.6
Ethylbenzene	ND	8.6	8.4	10.00	86	84	2.4
Toluene	ND	9.0	9.7	10.00	90	97	7.5
Benzene	ND	8.5	9.2	10.00	85	92	7.9
MTBE	ND	7.9	8.7	10.00	79	87	9.6
TPH (gas)	ND	93.3	90.2	100.00	93	90	3.3

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

$$\text{RPD} = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation

29932 ZC569

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☑ 5 DAY

Report To: Ron Scheele Bill To: SAME

Company: Cambria Environmental Technology

6262 Hollis Street

Emeryville, CA 94608

Tele: (510) 450-1983 Fax: (510) 450-8295

Project #: 130-0005-343 Project Name: WORTHINGTON

Project Location: 3055 35TH ST OAKLAND

Sampler Signature:

SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX: Water	Soil	Air	Sludge	Other	METHOD PRESERVED: Ice	HCl	HNO_3	Other
INF	OAKLAND	2/4/2	12pm	4	Voa	X					X	X		
EFF-1	↓	↓	↓	4	Voa	X					X	X		
EFF-2	↓	↓	↓	4	Voa	X					X	X		

Analysis Request

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

Other

89631

89632

89633

Comments

Relinquished By:	Date:	Time:	Received By:
	2/4/2	5:30	Second Wgaton
Relinquished By:	Date:	Time:	Received By:
	2/5/02	10:05am	
Relinquished By: 288	Date: 2/5/02	Time: 1455	Received By: 3:00 2/5/02

Remarks:

ICE/t° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT
APPROPRIATE CONTAINERS ✓
PRESERVATION ✓
VOAS ✓ O&G METALS OTHER
✓w

Sent By: McCampbell Analytical, Inc.; 1 925 798 4612; Sep-5-01 8:42AM; Page 2/2

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 Environmental Technology 6262 Hollis Street Emeryville, CA 94608	Client Project ID: #130-0105-343; Worthington	Date Sampled: 03/05/2002
		Date Received: 03/06/2002
	Client Contact: Ron Scheele	Date Extracted: 03/06/2002
	Client P.O:	Date Analyzed: 03/06/2002

03/13/02

Dear Ron:

Enclosed are:

1). the results of **2** samples from your **#130-0105-343; Worthington** 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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http://www.mccampbell.com E-mail: main@mccampbell.com

Cambria Environmental Technology	Client Project ID: #130-0105-343; Worthington	Date Sampled: 03/05/2002
6262 Hollis Street		Date Received: 03/06/2002
Emeryville, CA 94608	Client Contact: Ron Scheele	Date Extracted: 03/07/2002
	Client P.O:	Date Analyzed: 03/07/2002

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes	% Recovery Surrogate
0203099-001	INF	W	170,a	---	22	12	1.8	24	110
0203099-002	EFF-1	W	ND	---	ND	ND	ND	ND	110
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

cluttered chromatogram; sample peak coelutes with surrogate peak

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DHS Certification No. 1644

Edward Hamilton, Lab Director

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http://www.mccampbell.com E-mail: main@mccampbell.com

QC REPORT

EPA 8015m + 8020

Date: 03/07/02 **Extraction:** EPA 5030 **Matrix:** Water

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 30502					Instrument:	GC-3	
Surrogate1	ND	105.0	106.0	100.00	105	106	0.9
Xylenes	ND	32.0	32.9	30.00	107	110	2.8
Ethylbenzene	ND	10.8	11.2	10.00	108	112	3.6
Toluene	ND	11.1	11.4	10.00	111	114	2.7
Benzene	ND	10.5	10.9	10.00	105	109	3.7
MTBE	ND	9.5	9.9	10.00	95	99	4.1
TPH (gas)	ND	94.3	94.8	100.00	94	95	0.5

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

$$\text{RPD} = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation

0203099 ZC517.doc

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553
Telephone: (925) 798-1620 Fax: (925) 798-1622

Report To: Ron Scheele Bill To: SAME
Company: Cambria Environmental Technology
6262 Hollis Street
Emeryville, CA 94608
Tele: (510) 450-1983 Fax: (510) 450-8295
Project #: 130-0105-343 Project Name: WORTHINGTON
Project Location: 3055 35th AVE OAKLAND, CA
Sampler Signature: Tammy Zuell

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other
INF	Oakland	3/4/2	10:30	3	Voa.	X					X	X		
EFF-1	↓	↓	↓	3	Voa.	X					X	X		
EFF-2	↓	↓	↓	3	Voa	X					X	X		

Analysis Request

BTEX & TPH as Gas (602/8020 + 8015) MTBE ☐ ND ☐	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 PCB's ONLY	EPA 608 / 8080	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	Other	Comments
X	X															
X	X															
X	X															

VOAS ✓ O&G METALS OTHER
PRESERVATION ✓
APPROPRIATE CONTAINERS
HEAD SPACE ABSENT
TCID CONSISTENT ✓

Relinquished By:	Date:	Time:	Received By:
Tammy Zuell	3/5/2	4pm	Sunset Location
Relinquished By:	Date: 3/6/02	Time: 12 pm	Received By: ER
Relinquished By: ER	Date: 3/6/2	Time: 1745	Received By: D. McNee 3/6/02

Remarks:
ONLY ANALYZE EFF-2 IF HC's DETECTED IN EFF-1.

FAX RESULTS PLEASE.

Sent By: McCampbell Analytical, Inc.; 1 925 798 4612; Sep-5-01 8:42AM; Page 2/2

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0203099

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

TEL:
FAX:
ProjectNo: #130-0105-343
PO:

06-Mar-02

Sample ID	ClientSampID	Matrix	Collection Date	Bottle	Requested Tests						
					8021B/8015						
0203099-001	INF	Water	3/5/02 10:30:00 AM		A						
0203099-002	EFF-1	Water	3/5/02 10:30:00 AM		A						
0203099-003	EFF-2	Water	3/5/02 10:30:00 AM		A						

Comments:

	Date/Time		Date/Time
Relinquished by:		**Received by:**	
Relinquished by:		**Received by:**	
Relinquished by:		**Received by:**	

NOTICE: Solid samples are discarded after 60 days and Non-Solid samples are discarded after 30 days unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

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 Environmental Technology 6262 Hollis Street Emeryville, CA 94608	Client Project ID: #130-0105-343; Worthington	Date Sampled: 03/05/2002
		Date Received: 03/06/2002
	Client Contact: Ron Scheele	Date Extracted: 03/06/2002
	Client P.O:	Date Analyzed: 03/06/2002

03/13/02

Dear Ron:

Enclosed are:

1). the results of **2** samples from your **#130-0105-343; Worthington** 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	Client Project ID: #130-0105-343; Worthington	Date Sampled: 03/05/2002
6262 Hollis Street		Date Received: 03/06/2002
Emeryville, CA 94608	Client Contact: Ron Scheele	Date Extracted: 03/06/2002
	Client P.O:	Date Analyzed: 03/06/2002

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)[+]	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	% Recovery Surrogate
0203102-001	INF	Air	220,a	ND	4.6	2.5	0.32	2.1	---[#]
0203102-002	EFF	Air	ND	ND	ND	ND	ND	ND	104

[%] ppm (mg/L) to ppmv (uL/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		Air	10 uL/L	1.5	0.15	0.15	0.15	0.25	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and air samples are reported in uL/L(ppmv), wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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QC REPORT

EPA 8015m + 8020

Date: 03/06/02 **Extraction:** EPA 5030 **Matrix:** Air

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 30502					Instrument:	GC-3	
Surrogate1	ND	99.0	101.0	100.00	99	101	2.0
Xylenes	ND	30.0	30.5	30.00	100	102	1.7
Ethylbenzene	ND	9.9	10.1	10.00	99	101	2.0
Toluene	ND	9.6	10.0	10.00	96	100	4.1
Benzene	ND	9.3	9.5	10.00	93	95	2.1
MTBE	ND	8.3	9.4	10.00	83	94	12.4
TPH (gas)	ND	89.1	87.2	100.00	89	87	2.1

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

$$\text{RPD} = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation

0203102 -2595.doc

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

Report To: Ron Scheele Bill To: SAME

Company: Cambria Environmental Technology
6262 Hollis Street
Emeryville, CA 94608

Tele: (510) 450-1983 Fax: (510) 450-8295

Project #: 130-0105-343 Project Name: WORTHINGTON

Project Location: 3055 35TH AVE OAKLAND

Sampler Signature: Ronna Friedl

SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX: Water	Soil	Air	Sludge	Other	METHOD PRESERVED: Ice	HCl	HNO_3	Other
INF	Oakland	3/5/2	10am	1	Bag			X						
EFF	Oakland	3/5/2	10am	1	Bag			X						

Analysis Request															Other	Comments
BTEX & TPH as Gas (602/8020 + 8015) MTBE	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 PCB's ONLY	EPA 608 / 8080	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		
X															VOA'S O&G METALS OTHER	
X																

HEADSPACE ABSENT ✓ PRESERVATION APPROPRIATE ✓ CONTAINERS ✓

Relinquished By:	Date:	Time:	Received By:
Ronna Friedl	3/5/2	4pm	Secured Location
Relinquished By:	Date:	Time:	Received By:
	03/06	1200	CR
Relinquished By:	Date:	Time:	Received By:
CR	3/6	1745	Urmoller 3/6/02

Remarks:
REPORT IN ppmv ; 10 ppmv limit
20 ml injection Volume
PLEASE FAX RESULTS

Sent By: McCampbell Analytical, Inc.; 1 925 798 4612; Sep-5-01 8:42AM; Page 2/2

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0203102

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

TEL:
FAX:
ProjectNo: #130-0105-343,
PO:

06-Mar-02

Sample ID	ClientSampID	Matrix	Collection Date	Bottle	Requested Tests						
					8021B/8015						
0203102-001	INF	Air	3/5/02 10:00:00 AM		A						
0203102-002	EFF	Air	3/5/02 10:00:00 AM		A						

Comments:

	Date/Time		Date/Time
Relinquished by:		**Received by:**	
Relinquished by:		**Received by:**	
Relinquished by:		**Received by:**	

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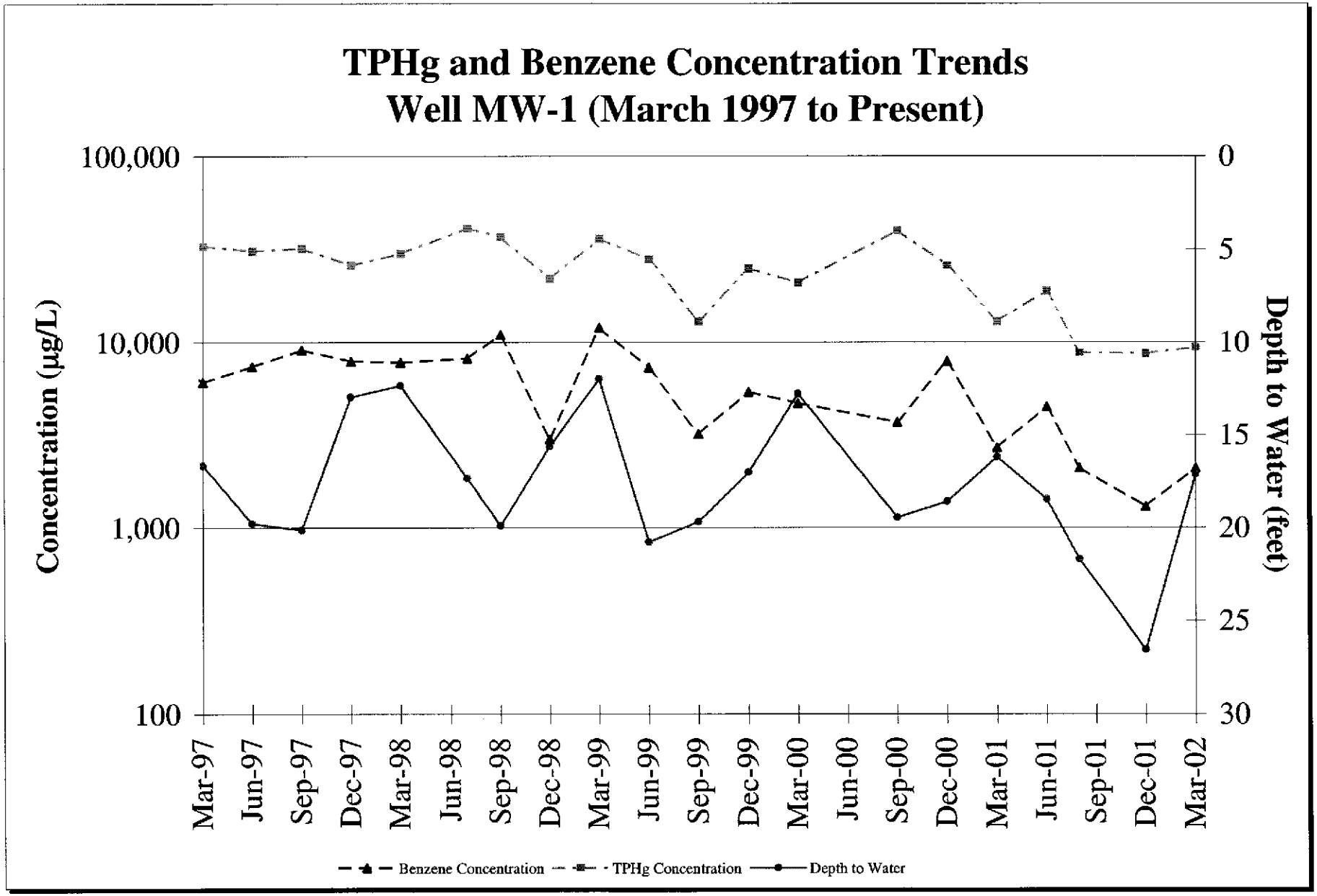
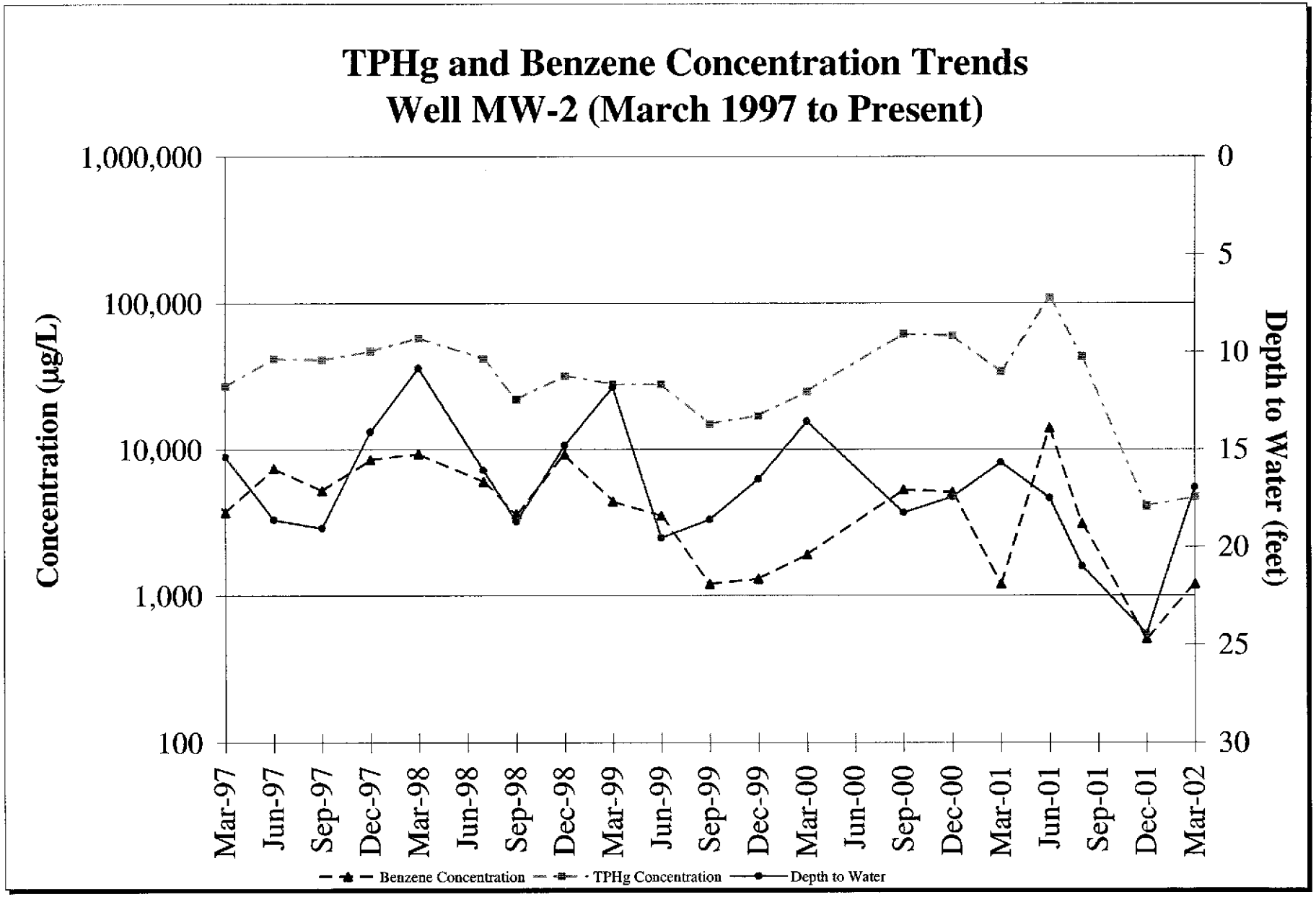
Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

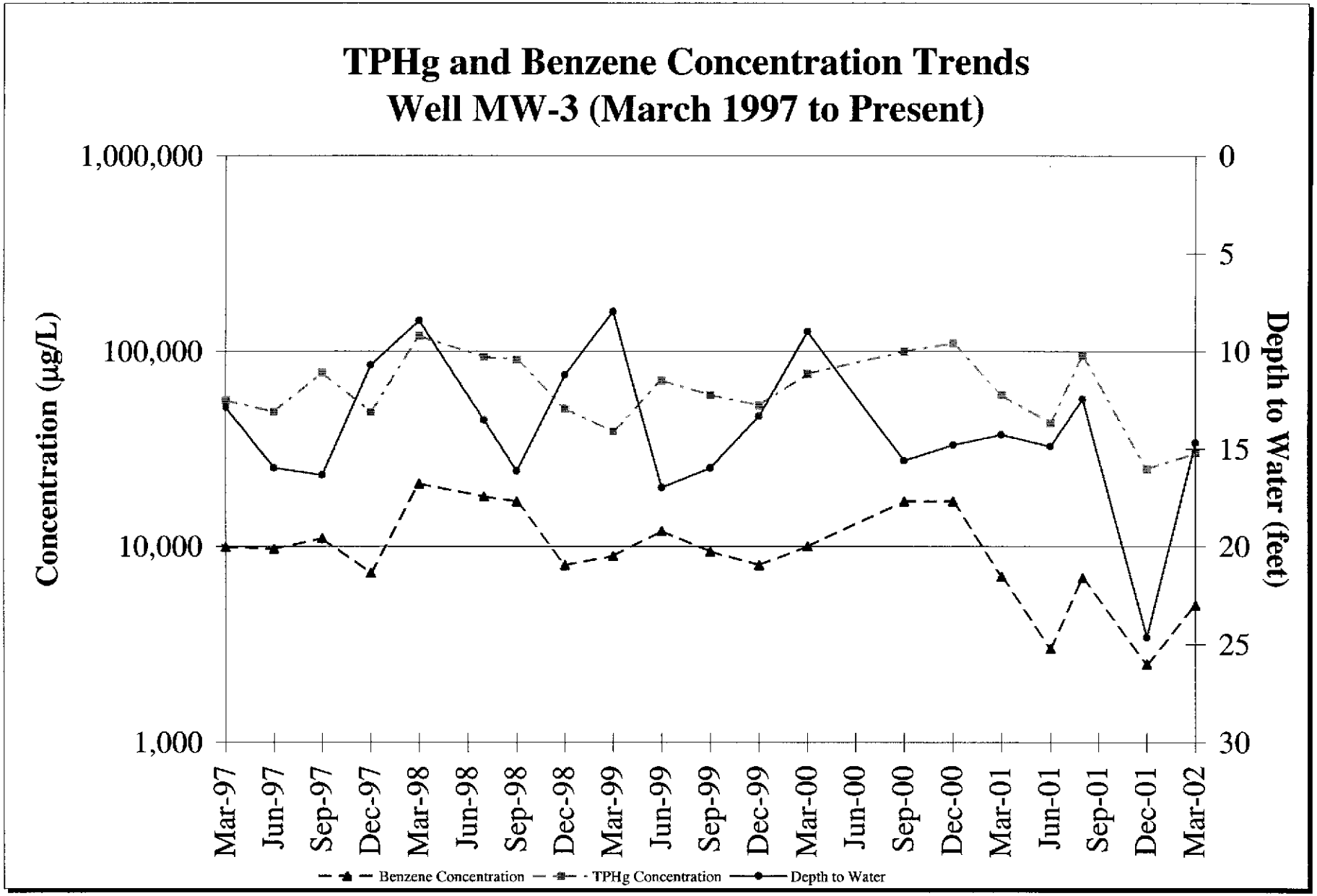
CAMBRIA

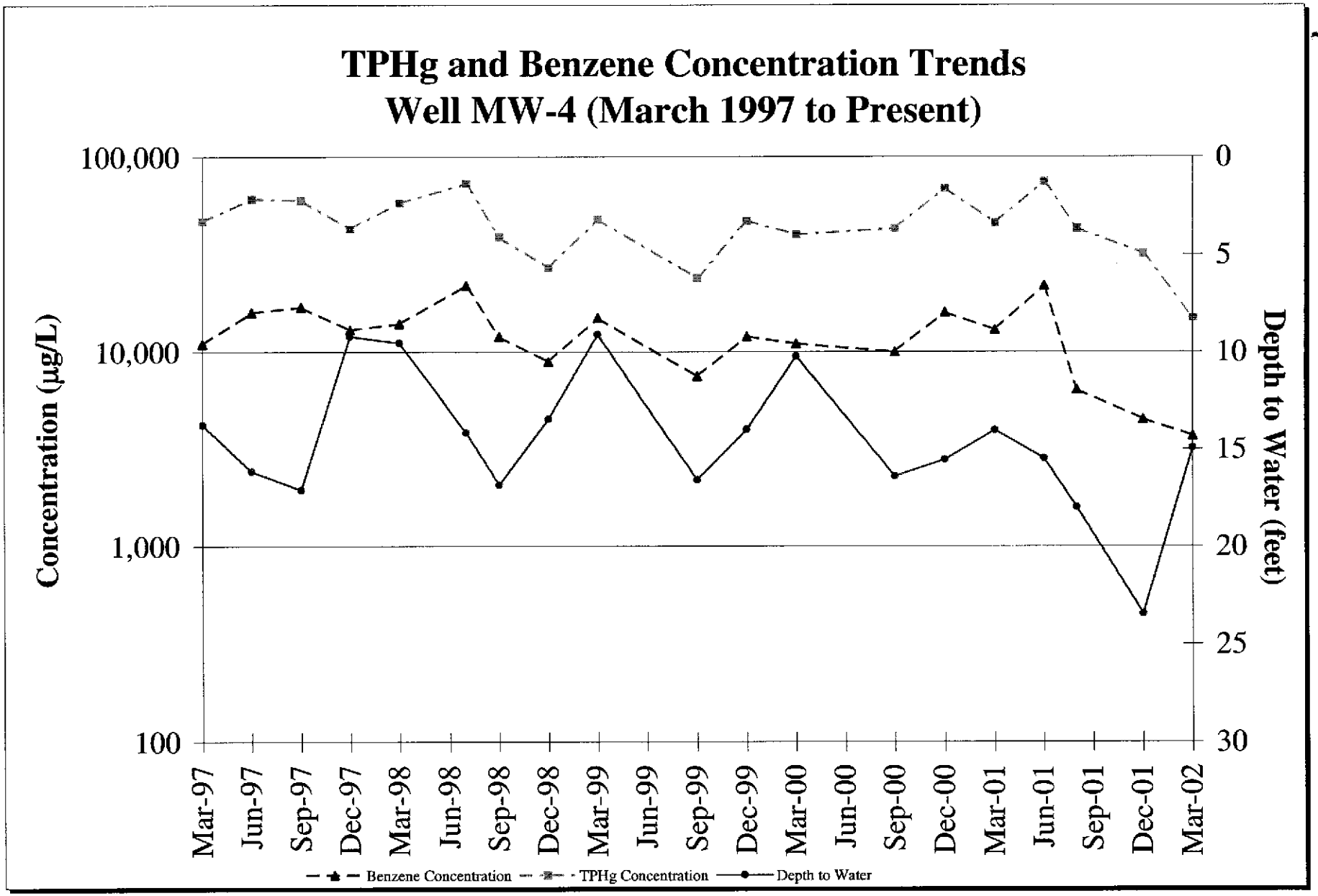
APPENDIX D

TPHg and Benzene Concentration Trend Graphs


TPHg and Benzene Concentration Trends
Well MW-1 (March 1997 to Present)
Concentration (µg/L)
100,000
10,000
1,000
100
Depth to Water (feet)
0
5
10
15
20
25
30
Mar-97
Jun-97
Sep-97
Dec-97
Mar-98
Jun-98
Sep-98
Dec-98
Mar-99
Jun-99
Sep-99
Dec-99
Mar-00
Jun-00
Sep-00
Dec-00
Mar-01
Jun-01
Sep-01
Dec-01
Mar-02
Benzene Concentration
TPHg Concentration
Depth to Water


TPHg and Benzene Concentration Trends
Well MW-2 (March 1997 to Present)
Concentration (µg/L)
1,000,000
100,000
10,000
1,000
100
Depth to Water (feet)
0
5
10
15
20
25
30
Mar-97
Jun-97
Sep-97
Dec-97
Mar-98
Jun-98
Sep-98
Dec-98
Mar-99
Jun-99
Sep-99
Dec-99
Mar-00
Jun-00
Sep-00
Dec-00
Mar-01
Jun-01
Sep-01
Dec-01
Mar-02
Benzene Concentration
TPHg Concentration
Depth to Water


TPHg and Benzene Concentration Trends
Well MW-3 (March 1997 to Present)
Concentration (µg/L)
1,000,000
100,000
10,000
1,000
Depth to Water (feet)
0
5
10
15
20
25
30
Mar-97
Jun-97
Sep-97
Dec-97
Mar-98
Jun-98
Sep-98
Dec-98
Mar-99
Jun-99
Sep-99
Dec-99
Mar-00
Jun-00
Sep-00
Dec-00
Mar-01
Jun-01
Sep-01
Dec-01
Mar-02
Benzene Concentration
TPHg Concentration
Depth to Water


TPHg and Benzene Concentration Trends
Well MW-4 (March 1997 to Present)
Concentration (µg/L)
100,000
10,000
1,000
100
0
5
10
15
20
25
30
Depth to Water (feet)
Mar-97
Jun-97
Sep-97
Dec-97
Mar-98
Jun-98
Sep-98
Dec-98
Mar-99
Jun-99
Sep-99
Dec-99
Mar-00
Jun-00
Sep-00
Dec-00
Mar-01
Jun-01
Sep-01
Dec-01
Mar-02
Benzene Concentration
TPHg Concentration
Depth to Water