

C A M B R I A

April 20, 2005

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

Alameda County
APR 25 2005
Environmental Health

Re: **Groundwater Monitoring Report
First Quarter 2005**
Former Exxon Service Station
3055 35th Avenue
Oakland, California
Cambria Project #130-0105



Dear Mr. Gholami:

On behalf of Mr. Lynn Worthington of Golden Empire Properties, Cambria Environmental Technology, Inc. (Cambria) has prepared this *Groundwater Monitoring Report – First Quarter 2005*. Presented in the report are the first quarter 2005 activities and the anticipated second quarter 2005 activities.

If you have any questions or comments regarding this report, please call me at (510) 420-3361.

Sincerely,
Cambria Environmental Technology, Inc.


Subbarao Nagulapaty
Project Engineer

Attachments: Groundwater Monitoring Report - First Quarter 2005

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

**Cambria
Environmental
Technology, Inc.**

5900 Hollis Street
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Emeryville, CA 94608
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GROUNDWATER MONITORING REPORT

FIRST QUARTER 2005

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

April 20, 2005



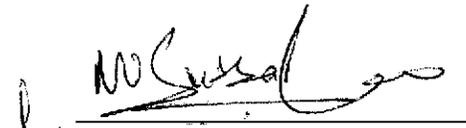
Prepared for:

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

Alameda County
APR 26 2005
Environmental Health Division

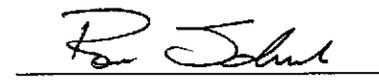
Prepared by:

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Staff Scientist





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Senior Geologist

GROUNDWATER MONITORING REPORT

FIRST QUARTER 2005

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

April 20, 2005



INTRODUCTION

On behalf of Mr. Lynn Worthington of Golden Empire Properties, Cambria Environmental Technology, Inc. (Cambria) has prepared this *Groundwater Monitoring Report* for the above-referenced site (see Figure 1). Presented in the report are the first quarter 2005 groundwater monitoring and corrective action activities and the anticipated second quarter activities.

FIRST QUARTER 2005 ACTIVITIES

Monitoring Activities

Field Activities: On March 7, 2005, Cambria subcontracted Muskan Environmental Sampling (MES) to perform quarterly monitoring activities. MES gauged and inspected for separate-phase hydrocarbons (SPH) in all monitoring wells (Figure 1). Groundwater samples were collected from wells MW-1 through MW-4, RW-5, and RW-9. Groundwater monitoring field data sheets are presented in Appendix A. The monitoring data has been submitted to the GeoTracker database. See Appendix C for the GeoTracker electronic delivery confirmation.

Sample Analyses: Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and total petroleum hydrocarbons as diesel (TPHd) with silica gel clean-up by modified EPA Method 8015, and benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8021B. The laboratory analytical report is presented as Appendix B. The analytical data has been submitted to the GeoTracker database. See Appendix C for the GeoTracker electronic delivery confirmation.

Monitoring Results

Groundwater Flow Direction: Based on depth to water measurements collected during MES's March 7, 2005 site visit, groundwater beneath the site generally flows towards the west with a gradient of 0.012 ft/ft. The groundwater gradient is generally consistent with historical static groundwater conditions. Groundwater monitoring data is presented in Table 1.

Hydrocarbon Distribution in Groundwater: Hydrocarbon concentrations were detected in all six sampled wells. TPHg concentrations ranged from 7,000 micrograms per liter ($\mu\text{g/L}$) to 50,000 $\mu\text{g/L}$, with the highest concentration detected in well MW-3. Benzene concentrations ranged from 720 $\mu\text{g/L}$ to 6,100 $\mu\text{g/L}$, with the highest concentration detected in well MW-3. TPHd concentrations ranged from 510 $\mu\text{g/L}$ to 14,000 $\mu\text{g/L}$, with the highest concentration detected in well MW-3. MTBE was detected above laboratory detection limits in well MW-2 at a concentration of 1,100 $\mu\text{g/L}$. Hydrocarbon concentrations have increased this quarter consistent with the seasonal rise in the groundwater table. Hydrocarbon concentrations continue to exhibit overall decreasing trends (see Appendix D for individual well concentration trend graphs). Analytical results are summarized in Table 1 and shown on Figure 1.

Corrective Action Activities

System Shutdown and Removal: No corrective action activities took place during first quarter 2005. Due to low hydrocarbon removal rates during the third quarter 2004, Cambria requested and received approval from the Alameda County Health Care Services Agency (ACHCSA) to shutdown the two-phase extraction (TPE) remediation system operations. On September 29, 2004, remediation activities ceased and the TPE system was removed from the site on September 30, 2004.

ANTICIPATED SECOND QUARTER 2005 ACTIVITIES

Monitoring Activities

During the second quarter 2005, Cambria will coordinate with MES to gauge the site wells, check the wells for SPH, and collect groundwater samples from monitoring wells MW-1 through MW-4, RW-5, and RW-9. Groundwater samples will be analyzed for TPHg and TPHd with silica gel clean-up by Modified EPA Method 8015 and BTEX and MTBE by EPA Method 8021B. Cambria will summarize groundwater monitoring activities and results in the *Groundwater Monitoring Report – Second Quarter 2005*.

Corrective Action Activities

On February 22, 2005, Cambria submitted a *Remediation Work Plan* to the Alameda County Health Care Services Agency (ACHCSA) which proposed implementation of in-situ chemical oxidation using ozone to further remediate the site. To date, ACHCSA has yet to respond to this submittal. In accordance with Title 23 CCR, Chapter 16, Article 11, Sec. 2722 regulations, Cambria will notify ACHCSA of our intention to begin implementation of the work plan following 60 days after the submittal, unless otherwise directed by ACHCSA.

**ATTACHMENTS**

Figure 1 – Groundwater Elevation and Analytical Summary Map – March 7, 2005

Table 1 – Groundwater Elevations and Analytical Data

Appendix A – Groundwater Monitoring Field Data Sheets

Appendix B – Analytical Results for Groundwater Sampling

Appendix C – GeoTracker Electronic Delivery Confirmations

Appendix D – TPHg and Benzene Concentration Trend Graphs

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

Well ID	Date	GW	SPH	GW	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	TPE System
TOC		Depth (ft)	(ft)	Elev. (ft)	Concentrations in micrograms per liter (µg/L)								(mg/L)	Status
MW-1	5/25/94	16.79	Sheen	84.06	120,000	25,000	<50,000	22,000	17,000	2,800	16,000	---	---	
100.85	7/19/94	20.77	---	80.08	---	---	---	---	---	---	---	---	---	
	8/18/94	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	---	---	
	2/27/95	15.53	---	85.32	45,000	---	---	2,900	2,500	760	4,100	---	---	
	5/23/95	15.29	---	85.56	22,000	---	---	9,900	990	790	2,000	---	---	
	8/22/95	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	---	---	
	2/21/96	11.69	---	89.16	33,000	4,300	---	10,000	480	1,000	1,800	3,300	---	
	5/21/96	14.62	---	86.23	36,000	8,500	---	8,500	1,400	1,300	2,800	1,900	---	
	8/22/96	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	
	3/20/97	16.65	---	84.20	33,000	10,000	---	6,100	560	970	2,200	<400	8.5	
	6/25/97	19.77	---	81.08	31,000	7,400 ^a	---	7,400	440	890	1,800	<400	3.7	
	9/17/97	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	
	3/18/98	12.34	Sheen	88.51	30,000 ^d	4,200 ^{e,f}	---	7,800	820	840	2,000	<1,100	1.3	
	7/14/98	17.34	---	83.51	41,000 ^d	8,900 ^{e,f}	---	8,200	1,100	1,200	3,000	<200	1.8	
	9/30/98	19.90	---	80.95	37,000	3,300	---	11,000	950	1,200	2,800	<20	2.0	
	12/8/98	15.62	---	85.23	22,000	3,700	---	3,000	1,200	730	3,100	<900	---	
	3/29/99	11.98	---	88.87	36,000 ^d	6,800 ^e	---	12,000	750	1,300	2,400	950	0.50	
	6/29/99	20.77	---	80.08	28,000 ^d	3,500 ^e	---	7,300	420	810	1,700	<1,300	0.10	
	9/28/99	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	
	3/23/00	12.76	---	88.09	21,000 ^d	3,300 ^f	---	4,700	140	470	1,100	<350	---	
	9/7/00	19.45	---	81.40	40,000 ^{d,g}	12,000 ^{e,g}	---	3,700	1,400	910	4,900	<50	0.17	
	12/5/00	18.60	---	82.25	26,000 ^a	3,400 ^e	---	7,900	150	580	810	<300	0.35	Not operating
	3/7/01	16.19	---	84.66	13,000	2,400	---	2,700	43	69	300	<100	0.49	Not operating
	6/6/01	18.47	---	82.38	19,000	4,000	---	4,500	130	270	430	<400	0.39	Not operating
	8/30/01	21.70	---	79.15	8,800 ^a	1,400 ^d	---	2,100	45	91	240	<130	0.27	Operating
	12/7/01	26.55	---	74.30	8,700 ^d	1,900 ^{e,f}	---	1,300	160	38	730	<20	0.59	Operating
	3/11/02	17.13	---	83.72	9,400 ^d	1,400 ^e	---	2,100	200	74	470	<20	0.39	Operating
	6/10/02	24.10	---	76.75	4,200 ^d	900 ^{e,k}	---	830	170	110	460	<100	---	Operating
	9/26/02	20.30	---	80.55	7,000 ^d	1,300 ^{e,lk}	---	1,300	190	200	760	<100	0.70	Operating
	11/21/02	21.55	---	79.30	83,000 ^{d,m}	200,000 ^{e,n}	---	7,100	1,700	3,000	13,000	<1,000	0.49	Operating
	1/13/03	14.80	---	86.05	20,000 ^d	5,300 ^{e,f}	---	2,300	480	300	2,100	<500	0.33	Not operating
	4/25/03	20.90	---	79.95	4,200 ^d	320 ^f	---	580	81	59	470	<50	---	Operating

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

Well ID	Date	GW	SPH	GW	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	TPE System	
TOC		Depth (ft)	(ft)	Elev. (ft)	Concentrations in micrograms per liter (µg/L)									(mg/L)	Status
	5/30/03	16.65	---	84.20	---	---	---	---	---	---	---	---	---	Not operating	
	9/3/03	24.16	---	76.69	14,000 ^d	36,000 ^{e,f}	---	300	50	33	480	<50	---	Operating	
	12/2/03	24.12	---	76.73	7,100 ^{d,g}	9,300 ^{e,f,g}	---	1,400	230	160	820	<100	---	Operating	
	3/18/04	17.70	---	83.15	3,600 ^d	1,100 ^{e,f}	---	650	59	38	370	<90	---	Operating	
167.02	6/16/04	19.20	---	147.82	8,100 ^d	2,300 ^{e,f}	---	1,500	69	22	1,000	<100	---	Not operating	
	9/27/04	23.07	---	143.95	7,800 ^d	1,700 ^e	---	1,800	110	120	670	<180	0.28	Not operating	
	12/27/04	17.04	---	149.98	10,000 ^d	1,400 ^e	---	2,400	170	170	1,500	<120	0.41	Not operating	
	3/7/05	10.73	---	156.29	8,700 ^d	1,300 ^{e,f,k}	---	1,200	99	140	770	<500	0.91	Not operating	
MW-2	5/25/94	15.65	---	84.35	61,000	6,900	<5,000	9,900	7,400	960	4,600	---	---		
100.00	7/19/94	19.81	---	80.19	---	---	---	---	---	---	---	---	---		
	8/18/94	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	---	---		
	2/27/95	14.46	Sheen	85.54	44,000	---	---	5,100	5,300	930	6,400	---	---		
	5/23/95	14.17	---	85.83	33,000	---	---	8,200	5,600	900	6,600	---	---		
	8/22/95	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	---	---		
	2/21/96	10.53	---	89.47	59,000	---	---	8,000	6,000	1,800	8,900	4,500	---		
	5/21/96	13.47	---	86.53	51,000	3,400	---	8,200	5,200	1,300	6,600	2,400	---		
	8/22/96	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		
	3/20/97	15.39	---	84.61	27,000	6,100	---	3,700	2,300	580	2,800	<400	8.1		
	6/25/97	18.62	---	81.38	42,000	7,800 ^b	---	7,400	3,800	1,200	5,700	<200	0.9		
	9/17/97	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		
	3/18/98	10.83	Sheen	89.17	58,000 ^d	7,000 ^{e,f}	---	9,300	6,100	1,800	8,200	<1,100	1.1		
	7/14/98	16.07	---	83.93	42,000 ^d	5,300 ^{e,f}	---	6,000	3,000	1,000	4,800	<200	1.5		
	9/30/98	18.71	---	81.29	22,000	2,400	---	3,600	1,300	720	3,200	<30	1.8		
	12/8/98	14.80	---	85.20	32,000	3,100	---	9,200	680	1,100	2,300	<2,000	---		
	3/29/99	11.81	---	88.19	28,000 ^d	7,500 ^{e,f}	---	4,400	1,600	950	4,100	410	1.86		
	6/29/99	19.54	---	80.46	28,000 ^d	3,300 ^e	---	3,500	1,100	690	3,100	<1,000	0.41		
	9/28/99	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		
	3/23/00	13.56	---	86.44	25,000 ^d	3,100 ⁱ	---	1,900	1,100	660	3,700	<500	---		
	9/7/00	18.25	---	81.75	62,000 ^{d,g}	32,000 ^{e,g}	---	5,300	2,300	1,500	8,400	<100	0.39		
	12/5/00	17.45	---	82.55	60,000 ^{d,g}	87,000 ^{e,f,g}	---	5,100	2,200	1,600	9,000	<200	0.31	Not operating	
	3/7/01	15.68	---	84.32	34,000	3,900	---	1,200	770	620	4,300	<200	0.44	Not operating	

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Well ID	Date	GW	SPH	GW	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MITBE	DO	TPE System
<i>TOC</i>		Depth (ft)	(ft)	Elev. (ft)	Concentrations in micrograms per liter (µg/L)								(mg/L)	Status
	6/6/01	17.51	---	82.49	110,000	48,000	---	14,000	9,000	1,900	12,000	<950	0.24	Not operating
	8/30/01	21.00	---	79.00	43,000 ^{a,h}	15,000 ^{d,h}	---	3,100	720	980	5,500	<200	---	Operating
	12/7/01	24.45	---	75.55	4,100 ^d	750 ^{e,f}	---	510	88	8.2	580	<20	0.47	Operating
	3/11/02	16.95	---	83.05	4,700 ^d	590 ^e	---	1,200	150	30	310	<50	0.24	Operating
	6/10/02	18.59	---	81.41	14,000 ^d	2,000 ^e	---	2,600	710	150	2,000	<800	---	Operating
	9/26/02	20.39	---	79.61	4,800 ^d	660 ^e	---	770	200	140	740	<50	0.29	Operating
	11/21/02	18.75	---	81.25	210,000 ^{d,g}	350,000 ^{e,g}	---	14,000	23,000	4,400	28,000	<1,700	0.43	Operating
	1/13/03	13.60	---	86.40	32,000 ^{d,g}	14,000 ^{e,f,g,k}	---	4,500	1,600	920	3,600	<1000	0.39	Not operating
	4/25/03	19.05	---	80.95	3,800 ^d	310 ^e	---	460	78	72	410	310	---	Operating
	5/30/03	15.23	---	84.77	---	---	---	---	---	---	---	---	---	Not operating
	9/3/03	23.57	---	76.43	2,900 ^d	2,300 ^e	---	240	57	68	380	770	---	Operating
	12/2/03	23.17	---	76.83	2,400 ^{d,g}	3,300 ^{e,f,g}	---	91	20	14	250	890	---	Operating
	3/18/04	15.78	---	84.22	4,200 ^d	870 ^{e,f}	---	730	89	<5.0	480	2,300	---	Operating
166.14	6/16/04	18.15	---	147.99	15,000 ^d	9,800 ^{e,f}	---	800	210	290	1,800	2,000	---	Not operating
	9/27/04	27.55**	---	138.59	770 ^d	1,000 ^{e,f,k}	---	20	7.9	10	140	1,600	0.79	Operating
	12/27/04	16.81	---	149.33	17,000 ^d	3,800 ^{e,f}	---	1,300	370	540	3,800	620	0.94	Not operating
	3/7/05	9.31	Sheen	156.83	20,000 ^{d,k}	8,300 ^{e,f,k,g}	---	1,400	330	430	2,600	1,100	0.88	Not operating
MW-3	5/25/94	13.93	Sheen	82.94	56,000	14,000	<50,000	14,000	14,000	1,300	11,000	---	---	
96.87	7/19/94	17.04	---	79.83	---	---	---	---	---	---	---	---	---	
	8/18/94	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	---	---	
	2/27/95	11.86	Sheen	85.01	250,000	---	---	22,000	26,000	7,800	21,000	---	---	
	5/23/95	11.60	Sheen	85.27	310,000	---	---	18,000	17,000	4,500	2,800	---	---	
	8/22/95	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	---	---	
	2/21/96	7.92	---	88.95	60,000	---	---	10,000	7,800	1,500	8,800	3,400	---	
	5/21/96	10.86	Sheen	86.01	69,000	13,000	---	17,000	9,400	1,700	9,400	2,600	---	
	8/22/96	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	
	3/20/97	12.86	---	84.01	56,000	11,000	---	9,900	6,900	1,300	8,000	3,500	9.0	
	6/25/97	15.98	---	80.89	49,000	7,700 ^b	---	9,700	7,100	1,300	7,000	220	5.8	
	9/17/97	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	
	3/18/98	8.41	Sheen	88.46	120,000 ^d	20,000 ^{e,f}	---	21,000	19,000	2,600	15,000	<1,600	1.6	
	7/14/98	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	
	9/30/98	16.14	---	80.73	91,000	9,800	---	17,000	13,000	2,100	12,000	<1300	2.0	

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

Well ID	Date	GW	SPH	GW	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	TPE System
TOC		Depth (ft)	(ft)	Elev. (ft)	Concentrations in micrograms per liter (µg/L)								(mg/L)	Status
	12/8/98	11.20	---	85.67	51,000	4,200	---	8,000	6,800	1,400	7,500	<1,100	---	
	3/29/99	7.95	---	88.92	39,000 ^d	4,600 ^e	---	8,900	4,400	940	4,500	810	0.56	
	6/29/99	16.98	---	79.89	71,000 ^d	6,900 ^e	---	12,000	7,300	1,400	8,400	<1,700	0.19	
	9/28/99	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	
	3/23/00	8.98	---	87.89	77,000 ^{d,g}	11,000 ^{e,i}	---	10,000	9,400	1,600	11,000	<430	---	
	9/7/00	15.61	---	81.26	100,000 ^{d,g}	19,000 ^{e,f,g}	---	17,000	12,000	1,600	11,000	<500	---	
	12/5/00	14.80	---	82.07	110,000 ^{d,g}	17,000 ^{e,g}	---	17,000	11,000	1,900	12,000	<750	0.37	Not operating
	3/7/01	14.27	---	82.60	60,000	13,000	---	7,000	4,600	900	7,100	<350	0.49	Not operating
	6/6/01	14.88	---	81.99	43,000	12,000	---	3,000	1,000	770	5,200	<400	1.71	Not operating
	8/30/01	12.43	---	84.44	95,000 ^{d,h}	190,000 ^{d,h}	---	6,900	10,000	2,700	15,000	<250	0.24	Operating
	12/7/01	24.65	---	72.22	25,000 ^d	3,900 ^{e,f}	---	2,500	1,700	64	2,200	<200	0.19	Operating
	3/11/02	14.69	---	82.18	30,000 ^d	2,800 ^{f,g,k}	---	5,000	2,400	190	1,800	<1,300	0.30	Operating
	6/10/02	22.94	---	73.93	9,000 ^d	990 ^{e,k}	---	1,800	1,300	96	1,000	<300	---	Operating
	9/26/02	18.85	---	78.02	50,000 ^{d,g}	130,000 ^{e,g}	---	3,900	5,400	820	6,600	<500	0.19	Operating
	11/21/02	17.85	0.05	79.06	37,000 ^{d,g}	120,000 ^{e,g}	---	4,000	660	1,200	5,100	<1,700	0.28	Operating
	1/13/03	11.43	---	85.44	21,000 ^{d,g}	6,300 ^{e,f,g,k}	---	2,400	2,300	390	3,000	<500	0.31	Not operating
	4/25/03	18.30	---	78.57	12,000 ^d	1,200 ^e	---	1,800	850	150	1,200	<500	---	Operating
	5/30/03	13.30	---	83.57	---	---	---	---	---	---	---	---	---	Not operating
	9/3/03	21.65	---	75.22	8,100 ^d	3,300 ^e	---	220	170	66	560	<50	---	Operating
	12/2/03	17.70	---	79.17	30,000 ^{d,g}	8,400 ^{e,f,g}	---	2,900	2,100	530	3,600	<500	---	Operating
	3/18/04	16.49	---	80.38	15,000 ^d	2,300 ^{e,f}	---	2,600	990	260	1,700	<300	---	Operating
162.94	6/16/04	15.40	---	147.54	23,000 ^d	8,800 ^{e,f}	---	2,100	1,300	360	2,800	<1,000	---	Operating
	9/27/04	23.65	---	139.29	5,200 ^d	1,700 ^{e,f}	---	430	220	100	680	250	0.55	Operating
	12/27/04	14.58	---	148.36	32,000 ^{d,g}	24,000 ^{e,f,g,k}	---	4,400	2,800	650	4,800	<250	0.71	Not operating
	3/7/05	6.91	Sheen	156.03	50,000 ^{d,g}	14,000 ^{e,f,g}	---	6,100	2,100	1,300	7,400	<500	0.62	Not operating
MW-4	3/20/97	13.75	---	83.59	47,000	3,100	---	11,000	4,500	1,100	5,200	3,400	8.4	
97.34	6/25/97	16.15	---	81.19	61,000	5,800 ^b	---	16,000	6,100	1,500	5,900	780 ^e	1.4	
	9/17/97	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	
	3/18/98	9.54	---	87.80	58,000 ^d	5,500 ^{e,f}	---	14,000	4,700	1,400	5,700	<1,200	0.8	
	7/14/98	14.15	---	83.19	73,000 ^d	2,900 ^{e,f}	---	22,000	7,000	1,800	7,300	<200	1.0	
	9/30/98	16.84	---	80.50	39,000	2,100	---	12,000	2,700	1,000	3,400	510	1.1	
	12/8/98	13.45	---	83.89	27,000	1,600	---	8,900	1,600	730	2,300	<1,500	---	
	3/29/99	9.10	---	88.24	48,000 ^d	2,400 ^{e,h}	---	15,000	3,000	1,300	5,000	1,300	1.32	
	06/29/99*	---	---	---	---	---	---	---	---	---	---	---	---	

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

Well ID	Date	GW	SPH	GW	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	IPE System
TOC		Depth (ft)	(ft)	Elev. (ft)	Concentrations in micrograms per liter (µg/L)								(mg/L)	Status
	9/28/99	16.58	---	80.76	24,000 ^d	3,200 ^{e,f}	---	7,500	1,200	190	2,200	210	14.29 ^h	
	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	
	3/23/00	10.22	---	87.12	40,000 ^d	3,100 ^{e,f}	---	11,000	1,600	910	3,100	690	---	
	9/7/00	16.40	---	80.94	43,000 ^d	5,900 ^e	---	10,000	1,100	1,100	3,400	<450	1.04	
	12/5/00	15.55	---	81.79	69,000 ^{d,g}	2,600 ^{e,g}	---	16,000	1,300	1,300	3,400	<200	0.35	Not operating
	3/20/01	14.03	---	83.31	46,000	---	---	13,000	1,000	900	2,800	<350	0.39	Not operating
	6/6/01	15.49	---	81.85	75,000	5,400	---	22,000	1,800	1,900	6,400	<1,200	2.22	Not operating
	8/30/01	18.00	---	79.34	43,000 ^a	3,200 ^d	---	6,400	630	510	2,600	<200	0.32	Operating
	12/7/01	23.45	---	73.89	32,000 ^{d,g}	11,000 ^{e,f,g}	---	4,500	740	310	2,300	<200	0.21	Operating
	3/11/02	14.95	---	82.39	15,000 ^d	1,600 ^{e,f,k}	---	3,700	500	92	790	<500	0.30	Operating
	6/10/02	22.30	---	75.04	9,400 ^d	3,400 ^e	---	1,400	50	<5.0	690	<200	---	Operating
	9/26/02	17.93	---	79.41	21,000 ^d	800 ^e	---	3,300	1,300	450	2,900	<500	0.24	Operating
	11/21/02	17.55	---	79.79	5,700 ^d	2,400 ^{e,k}	---	1,400	290	63	640	550	---	Operating
	1/13/03	11.75	---	85.59	35,000 ^{d,g}	15,000 ^{e,f,g,k}	---	5,100	1,500	510	4,500	<800	0.28	Not operating
	4/25/03	19.37	---	77.97	6,600 ^d	2,200 ^{e,f}	---	960	130	100	560	<170	---	Operating
	5/30/03	13.56	---	83.78	---	---	---	---	---	---	---	---	---	Not operating
	9/3/03	21.65	---	75.69	29,000 ^d	27,000 ^{e,f}	---	2,200	380	280	2,300	65	---	Operating
	12/2/03	19.17	---	78.17	13,000 ^d	5,800 ^{e,f}	---	1,300	180	120	1,900	<250	---	Operating
	3/18/04	14.92	---	82.42	5,300 ^d	1,500 ^e	---	1,300	55	37	440	<180	---	Operating
163.49	6/16/04	16.02	---	147.47	9,100 ^d	3,400 ^{e,f}	---	940	96	120	800	<50	---	Not operating
	9/27/04	19.93	---	143.56	1,300 ^d	980 ^{e,f,k}	---	140	10	11	81	<50	0.68	Not operating
	12/27/04	14.79	---	148.70	10,000 ^{d,g}	5,300 ^{e,f,g,k}	---	1,000	99	34	1,600	<50	0.74	Not operating
	3/7/05	7.81	Sheen	155.68	15,000 ^{d,k}	9,300 ^{e,f,g}	---	1,100	140	88	1,900	<100	0.65	Not operating
RW-5	6/16/04	14.73	---	147.61	---	---	---	---	---	---	---	---	---	Not operating
162.34	9/27/04	25.55**	---	136.79	---	---	---	---	---	---	---	---	---	Operating
	12/27/04	10.45	---	151.89	---	---	---	---	---	---	---	---	---	Not operating
	3/7/05	4.42	Sheen	157.92	7,000 ^d	6,100 ^{e,f,k}	---	720	63	97	670	<400	0.93	Not operating
RW-6	6/16/04	14.80	---	147.56	---	---	---	---	---	---	---	---	---	Not operating
162.36	9/27/04	18.46	---	143.90	---	---	---	---	---	---	---	---	---	Not operating
	12/27/04	9.82	---	152.54	---	---	---	---	---	---	---	---	---	Not operating
	3/7/05	6.05	---	156.31	---	---	---	---	---	---	---	---	---	Not operating
RW-7	6/16/04	15.22	---	147.50	---	---	---	---	---	---	---	---	---	Not operating
162.72	9/27/04	18.98	---	143.74	---	---	---	---	---	---	---	---	---	Not operating
	12/27/04	9.85	---	152.87	---	---	---	---	---	---	---	---	---	Not operating
	3/7/05	5.82	---	156.90	---	---	---	---	---	---	---	---	---	Not operating

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

Well ID	Date	GW	SPH	GW	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	TPE System
TOC		Depth (ft)	(ft)	Elev. (ft)	Concentrations in micrograms per liter (µg/L)								(mg/L)	Status
RW-8	6/16/04	16.41	---	147.72	---	---	---	---	---	---	---	---	---	Not operating
164.13	9/27/04	19.74	---	144.39	---	---	---	---	---	---	---	---	---	Not operating
	12/27/04	12.32	---	151.81	---	---	---	---	---	---	---	---	---	Not operating
	3/7/05	8.10	---	156.03	---	---	---	---	---	---	---	---	---	Not operating
RW-9	6/16/04	16.03	---	147.83	---	---	---	---	---	---	---	---	---	Not operating
163.86	9/27/04	19.83	---	144.03	---	---	---	---	---	---	---	---	---	Not operating
	12/27/04	24.88	---	138.98	---	---	---	---	---	---	---	---	---	Not operating
	3/7/05	7.87	---	155.99	9,000 ^d	510 ^e	---	2,600	69	200	550	<500	0.91	Not operating
RW-10	6/16/04	15.03	---	147.99	---	---	---	---	---	---	---	---	---	Not operating
163.02	9/27/04	18.35	---	144.67	---	---	---	---	---	---	---	---	---	Not operating
	12/27/04	19.39	---	143.63	---	---	---	---	---	---	---	---	---	Not operating
	3/7/05	6.40	---	156.62	---	---	---	---	---	---	---	---	---	Not operating
RW-11	6/16/04	14.75	---	147.82	---	---	---	---	---	---	---	---	---	Not operating
162.57	9/27/04	18.44	---	144.13	---	---	---	---	---	---	---	---	---	Not operating
	12/27/04	10.07	---	152.50	---	---	---	---	---	---	---	---	---	Not operating
	3/7/05	5.95	---	156.62	---	---	---	---	---	---	---	---	---	Not operating
RW-12	6/16/04	15.30	---	147.76	---	---	---	---	---	---	---	---	---	Not operating
163.06	9/27/04	19.09	---	143.97	---	---	---	---	---	---	---	---	---	Not operating
	12/27/04	10.85	---	152.21	---	---	---	---	---	---	---	---	---	Not operating
	3/7/05	6.59	---	156.47	---	---	---	---	---	---	---	---	---	Not operating
RW-13	6/16/04	15.83	---	148.51	---	---	---	---	---	---	---	---	---	Not operating
164.34	9/27/04	19.55	---	144.79	---	---	---	---	---	---	---	---	---	Not operating
	12/27/04	18.12	---	146.22	---	---	---	---	---	---	---	---	---	Not operating
	3/7/05	6.90	---	157.44	---	---	---	---	---	---	---	---	---	Not operating
RW-14	6/16/04	15.41	---	148.35	---	---	---	---	---	---	---	---	---	Not operating
163.76	9/27/04	19.20	---	144.56	---	---	---	---	---	---	---	---	---	Not operating
	12/27/04	12.62	---	151.14	---	---	---	---	---	---	---	---	---	Not operating
	3/7/05	6.61	---	157.15	---	---	---	---	---	---	---	---	---	Not operating
Trip Blank	7/14/98	---	---	---	<50	<50	---	<0.5	<0.5	<0.5	<0.5	<5.0	---	
	9/30/98	---	---	---	<50	<50	---	<0.5	<0.5	<0.5	<0.5	<5.0	---	
	12/8/98	---	---	---	<50	---	---	<0.5	<0.5	<0.5	<0.5	<5.0	---	

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

Well ID	Date	GW	SPH	GW	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	TPE System
TOC		Depth (ft)	(ft)	Elev. (ft)	Concentrations in micrograms per liter (µg/L)								(mg/L)	Status
	3/29/99	---	---	---	<50	---	---	<0.5	<0.5	<0.5	<0.5	<5.0	---	
	6/29/99	---	---	---	<50	---	---	<0.5	<0.5	<0.5	<0.5	<5.0	---	
	3/23/00	---	---	---	<50	---	---	<0.5	<0.5	<0.5	<0.5	<5.0	---	
	9/7/00	---	---	---	<50	---	---	<0.5	1.1	<0.5	1.1	<5.0	---	

Methods and Abbreviations:

TOC = Top of casing elevation measured in feet relative to surveyor's datum.
 All site wells were re-surveyed by Virgil Chavez Land Surveying on June 2, 2004 to the CA State Coordinate System, Zone III (NAD83). Benchmark elevation = 177.397 feet (NGVD 29)
 GW Depth = Groundwater depth measured from TOC.
 GW Elev. = Groundwater elevation
 ft = Measured in feet
 SPH = Separate-phase hydrocarbons depth measured from TOC.
 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, Toluene, Ethylbenzene, and Xylenes by EPA Method 8021
 MTBE = Methyl tertiary-butyl ether by EPA Method 8021
 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
 TPE = Two-phase extraction
 --- = Not observed/not analyzed
 * = Well inaccessible during site visit
 ** = No water in well due to system operating in well, value reflects total well depth.
 # = abnormally high reading due to added hydrogen peroxide

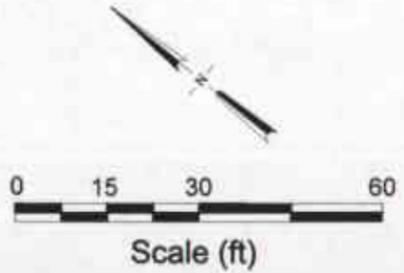
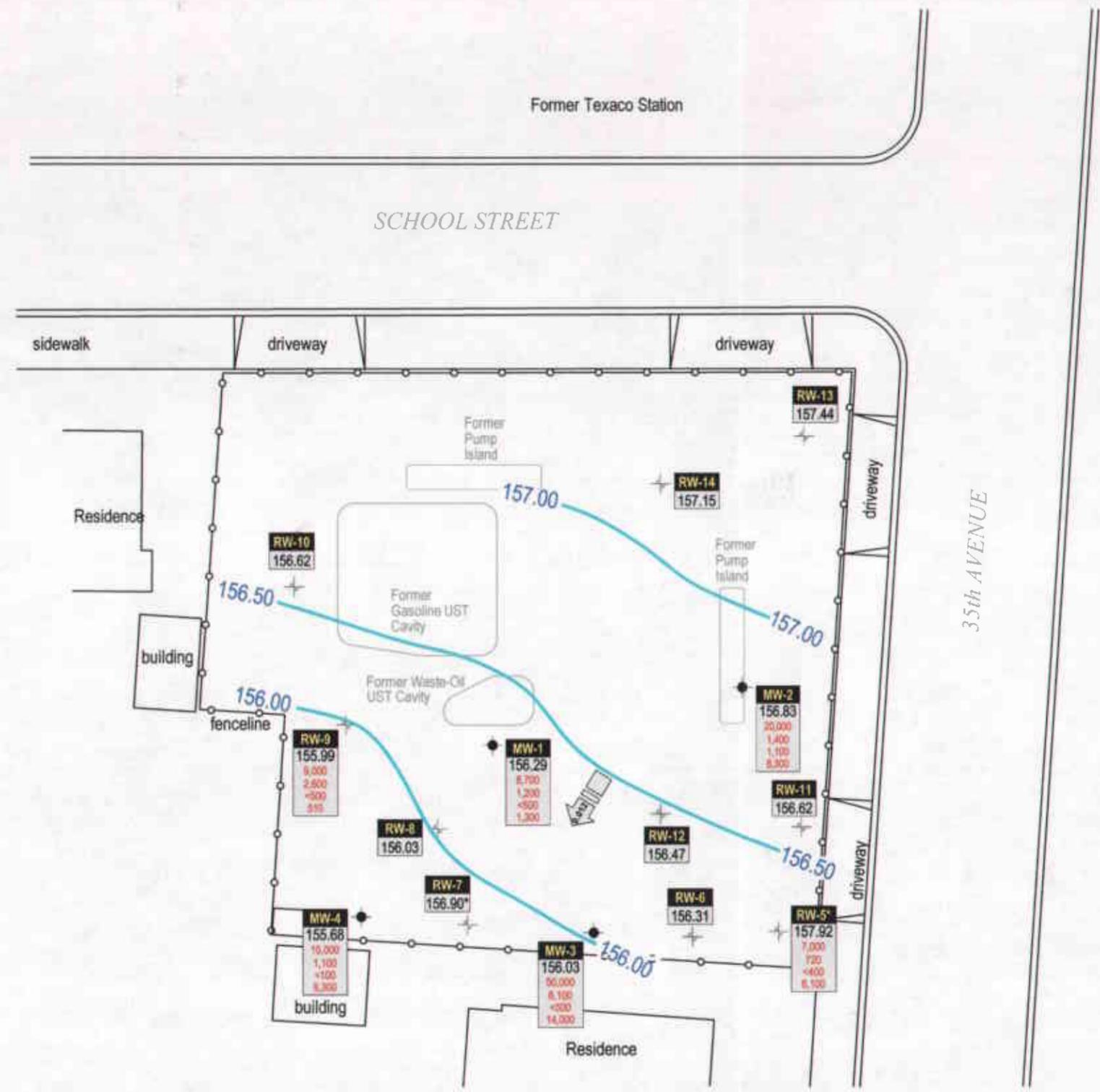
Notes:

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



EXPLANATION

- MW-1 ◆ Monitoring well location
- RW-6 ✦ Remediation well location
- xx.xx Groundwater elevation contour, in feet above mean sea level (msl), dashed where inferred
- ← Gradient Groundwater flow direction and gradient
- Well ID: ELEV, TPH, Benzene, MTBE, TPHz
- Groundwater elevation (msl)
- Hydrocarbon concentrations in groundwater, in micrograms per liter (µg/L)
- Groundwater elevation data anomalous, not used in contouring



Source: Virgil Chavez Land Surveying

FIGURE 1

APPENDIX A

Groundwater Monitoring Field Data Sheets



WELL GAUGING SHEET

Client: Cambria Environmental Technology

Site

Address: 3055 35th Avenue Oakland, CA

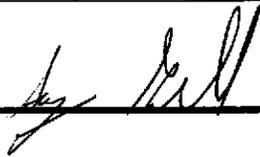
Date: 3/7/2005

Signature: 

Well ID	Time	Depth to SPH	Depth to Water	SPH Thickness	Depth to Bottom	Comments
MW-1	9:00		10.73		27.35	
MW-2	9:05		9.31		27.61	
MW-3	9:15		6.91		25.10	
MW-4	9:10		7.81		30.24	
RW-5	8:55		4.42		25.68	
RW-6	8:45		6.05		25.35	
RW-7	8:35		5.82		29.15	
RW-8	8:30		8.10		29.00	
RW-9	8:50		7.87		25.20	
RW-10	8:20		6.40		24.95	
RW-11	8:40		5.95		24.97	

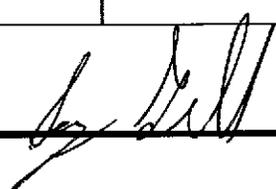


WELL SAMPLING FORM

Date:		3/7/2005				
Client:		Cambria Environmental Technology				
Site Address:		3055 35th Avenue Oakland, CA				
Well ID:		MW-1				
Well Diameter:		4"				
Purging Device:		4" PVC Bailer				
Sampling Method:		Disposable Bailer				
Total Well Depth:		27.35	Fe= mg/L			
Depth to Water:		10.73	ORP= mV			
Water Column Height:		16.62	DO= 0.91 mg/L			
Volume/ft:		0.65				
1 Casing Volume (gal):		10.80	COMMENTS:			
3 Casing Volumes (gal):		32.41				
TIME:	CASING VOLUME (gal)	TEMP (Celsius)			pH	COND. (microns)
1:20	10.80	24.6			7.25	695
1:35	21.61	24.4			7.17	839
2:00	32.41	24.5	7.14	870		
Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-1	3/7/2005	2:05	Voa	Amber	TPHd, BTEX, MTBE, TPHd with Silica Gel <i>Clean up</i>	8015, 8020
				Signature:		



WELL SAMPLING FORM

Date:		3/7/2005				
Client:		Cambria Environmental Technology				
Site Address:		3055 35th Avenue Oakland, CA				
Well ID:		MW-2				
Well Diameter:		4"				
Purging Device:		4" PVC Bailer				
Sampling Method:		Disposable Bailer				
Total Well Depth:		27.61	Fe= mg/L			
Depth to Water:		9.31	ORP= mV			
Water Column Height:		18.30	DO= 0.88 mg/L			
Volume/ft:		0.65				
1 Casing Volume (gal):		11.90	COMMENTS: Sheen, black water, no measurable SPH			
3 Casing Volumes (gal):		35.69				
TIME:	CASING VOLUME (gal)	TEMP (Celsius)			pH	COND. (microns)
2:15	11.90	24.6	7.13	690		
2:35	23.79	24.8	7.16	648		
2:50	35.69	24.9	7.14	625		
Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-2	3/7/2005	2:55	Voa	Amber	TPHd, BTEX, MTBE, TPHd with Silica Gel Clean up	8015, 8020
Signature: 						



WELL SAMPLING FORM

Date:		3/7/2005				
Client:		Cambria Environmental Technology				
Site Address:		3055 35th Avenue Oakland, CA				
Well ID:		MW-3				
Well Diameter:		2"				
Purging Device:		Disposable Bailer				
Sampling Method:		Disposable Bailer				
Total Well Depth:		25.10	Fe= mg/L			
Depth to Water:		6.91	ORP= mV			
Water Column Height:		18.19	DO= 0.62 mg/L			
Volume/ft:		0.16				
1 Casing Volume (gal):		2.91	COMMENTS: Sheen, odor, no measurable SPH			
3 Casing Volumes (gal):		8.73				
TIME:	CASING VOLUME (gal)	TEMP (Celsius)			pH	COND. (microns)
1:40	2.91	24.6	7.11	510		
1:45	5.82	24.3	7.06	535		
1:50	8.73	24.3	7.09	529		
Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-3	3/7/2005	1:55	Voa	Amber	TPHd, BTEX, MTBE, TPHd with Silica Gel Clean up	8015, 8020
Signature:						



WELL SAMPLING FORM

Date:		3/7/2005				
Client:		Cambria Environmental Technology				
Site Address:		3055 35th Avenue Oakland, CA				
Well ID:		MW-4				
Well Diameter:		2"				
Purging Device:		Disposable Bailer				
Sampling Method:		Disposable Bailer				
Total Well Depth:		30.24	Fe= mg/L			
Depth to Water:		7.81	ORP= mV			
Water Column Height:		22.43	DO= 0.65 mg/L			
Volume/ft:		0.16				
1 Casing Volume (gal):		3.59	COMMENTS: Sheen			
3 Casing Volumes (gal):		10.77				
TIME:	CASING VOLUME (gal)	TEMP (Celsius)			pH	COND. (microns)
12:15	3.59	24.3			6.95	1092
12:20	7.18	24.7	6.99	1051		
12:25	10.77	24.8	6.98	1047		
Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-4	3/7/2005	12:30	Voa	Amber	TPHd, BTEX, MTBE, TPHd with Silica Gel Clean up	8015, 8020
Signature:						



WELL SAMPLING FORM

Date:		3/7/2005				
Client:		Cambria Environmental Technology				
Site Address:		3055 35th Avenue Oakland, CA				
Well ID:		RW-5				
Well Diameter:		4"				
Purging Device:		4" PVC Bailer				
Sampling Method:		Disposable Bailer				
Total Well Depth:		25.68	Fe= mg/L			
Depth to Water:		4.42	ORP= mV			
Water Column Height:		21.26	DO= 0.93 mg/L			
Volume/ft:		0.65				
1 Casing Volume (gal):		13.82	COMMENTS: Very slow recharge, sheen			
3 Casing Volumes (gal):		41.46				
TIME:	CASING VOLUME (gal)	TEMP (Celsius)			pH	COND. (microns)
11:00	13.82	24.9			6.98	531
11:35	27.64	24.9	7.04	570		
12:45	41.46	24.8	7.02	559		
Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
RW-5	3/7/2005	12:50	Voa	Amber	TPHd, BTEX, MTBE, TPHd with Silica Gel Clean up	8015, 8020
				Signature:		

APPENDIX B

Analytical Results for Groundwater Sampling



McC Campbell Analytical, Inc.

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

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #130-0105; Worthington	Date Sampled: 03/07/05
		Date Received: 03/07/05
	Client Contact: Subbarao Nagulapaty	Date Reported: 03/14/05
	Client P.O.:	Date Completed: 03/14/05

WorkOrder: 0503111

March 14, 2005

Dear Subbarao:

Enclosed are:

- 1). the results of 6 analyzed samples from your #130-0105; 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. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0503111

EPA Method: SW8021B/8015Cm		Extraction: SW5030B			BatchID: 15253			Spiked Sample ID: 0503112-010A		
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex) [£]	ND	60	101	103	1.71	99.8	99.9	0.157	70 - 130	70 - 130
MTBE	ND	10	95.1	93	2.14	108	115	6.51	70 - 130	70 - 130
Benzene	ND	10	104	105	1.18	107	113	5.53	70 - 130	70 - 130
Toluene	ND	10	104	105	1.69	107	112	4.40	70 - 130	70 - 130
Ethylbenzene	ND	10	112	113	1.32	113	117	3.59	70 - 130	70 - 130
Xylenes	ND	30	100	100	0	100	100	0	70 - 130	70 - 130
%SS:	116	10	110	110	0	110	114	3.12	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 15253 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0503111-001A	3/07/05 2:05 PM	3/07/05 5:04 PM	3/08/05 7:58 AM	0503111-002A	3/07/05 2:55 PM	3/07/05 5:04 PM	3/08/05 9:03 AM
0503111-003A	3/07/05 1:55 PM	3/07/05 5:04 PM	3/09/05 2:31 AM	0503111-004A	3/07/05 12:30 PM	3/07/05 5:04 PM	3/11/05 4:47 PM
0503111-005A	3/07/05 12:50 PM	3/07/05 5:04 PM	3/09/05 9:48 PM	0503111-006A	3/07/05 10:45 AM	3/07/05 5:04 PM	3/09/05 4:41 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

QA/QC Officer



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0503111

EPA Method: SW8015C		Extraction: SW3510C			BatchID: 15248			Spiked Sample ID: N/A		
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(d)	N/A	1000	N/A	N/A	N/A	110	117	5.70	N/A	70 - 130
%SS:	N/A	2500	N/A	N/A	N/A	104	106	1.77	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 15248 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0503111-001B	3/07/05 2:05 PM	3/07/05 5:05 PM	3/08/05 12:15 PM	0503111-002B	3/07/05 2:55 PM	3/07/05 5:05 PM	3/08/05 12:15 PM
0503111-003B	3/07/05 1:55 PM	3/07/05 5:05 PM	3/08/05 9:37 PM	0503111-004B	3/07/05 12:30 PM	3/07/05 5:05 PM	3/09/05 2:11 AM
0503111-005B	3/07/05 12:50 PM	3/07/05 5:05 PM	3/08/05 11:55 PM	0503111-006B	3/07/05 10:45 AM	3/07/05 5:05 PM	3/08/05 1:21 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS - Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

 QA/QC Officer

rete

0503111

McCAMPBELL ANALYTICAL, INC.

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

Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DA

EDF Required? Yes No

Report To: Subhaso Nagulapati Bill To: Cambria Env. Tech
 Company: Cambria Environmental Technology
5900 Hollis St.
Oakland, CA
 Tele: 510-420-3361 E-Mail: SNagulapati@cambriaenv.com
 Project #: 130-0105 Project Name: Northwington
 Project Location: 3055 35th Ave Oakland, CA
 Sampler Signature: J.W. Muskan Environmental Sampling

Analysis Request Other Comment

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED									
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other						
MW-1		3-7-05	2:05	2	Voa. Bomb	X					X	X								
MW-2			2:55			X					X	X								
MW-3			1:55			X					X	X								
MW-4			12:30			X					X	X								
RW-5			12:50			X					X	X								
RW-9			10:45	*	X	X					X	X								
TB		X		1	Voa.	X					X	X								

MTBE / BTEX & TPH as Gas (602 / 8021 + 8015)	MTBE / BTEX ONLY (EPA 602 / 8021)	TPH as Diesel (8015) <i>with 511 (K-9)</i>	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	EPA 505 / 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	Fuel Additives (MTBE, ETBE, TAME, DIPE, TBA, 1,2-DCA, 1,2-EDB, ethanol) by 8260B	TPHg by 8015 M	VOCs and fuel additives by 8260	TPHg / BTEX & MTBE by (8015 / 8020)
X	X	X												
X	X	X												
X	X	X												
X	X	X												
X	X	X												
X	X	X												

Filter Samples for Metals analysis: Yes / No

Hold

Relinquished By: [Signature] Date: 3-7-05 Time: 4:10pm Received By: [Signature]
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____

ICBP GOOD CONDITION APPROPRIATE CONTAINERS
 HEAD SPACE ABSENT DECHLORINATED IN LAB PRESERVED IN LAB
 PRESERVATION VOAS O&G METALS OTHER

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0503111

ClientID: CETE

Report to:		Bill to:	Requested TAT:
Subbarao Nagulapaty	TEL: (510) 420-0700	Accounts Payable	5 days
Cambria Env. Technology	FAX: (510) 420-9170	Cambria Env. Technology	
5900 Hollis St, Suite A	ProjectNo: #130-0105; Worthington	5900 Hollis St, Ste. A	<i>Date Received:</i> 03/07/2005
Emeryville, CA 94608	PO:	Emeryville, CA 94608	<i>Date Printed:</i> 03/07/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0503111-001	MW-1	Water	3/7/05 2:05:00 PM	<input type="checkbox"/>	A	A	B												
0503111-002	MW-2	Water	3/7/05 2:55:00 PM	<input type="checkbox"/>	A		B												
0503111-003	MW-3	Water	3/7/05 1:55:00 PM	<input type="checkbox"/>	A		B												
0503111-004	MW-4	Water	3/7/05 12:30:00 PM	<input type="checkbox"/>	A		B												
0503111-005	RW-5	Water	3/7/05 12:50:00 PM	<input type="checkbox"/>	A		B												
0503111-006	RW-9	Water	3/7/05 10:45:00 AM	<input type="checkbox"/>	A		B												

Test Legend:

1	G-MBTX_W	2	PREF REPORT	3	TPH(D)WSG_W	4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: **Melissa Valles**

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

APPENDIX C

GeoTracker Electronic Delivery Confirmations

Electronic Submittal Information

Main Menu | View/Add Facilities | Upload EDD | Check EDD

Your EDF file has been successfully uploaded!

Confirmation Number: 4327664375
Date/Time of Submittal: 4/8/2005 2:44:36 PM
Facility Global ID: T0600100538
Facility Name: EXXON
Submittal Title: 1st Qtr 2005, GW Analytical Data
Submittal Type: GW Monitoring Report

[Click here](#) to view the detections report for this upload.

EXXON 3055 35TH AVE OAKLAND, CA 94619	Regional Board - Case #: 01-0585 SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) Local Agency (lead agency) - Case #: 515 ALAMEDA COUNTY LOP - (AG)
--	--

CONF #	TITLE	QUARTER
4327664375	1st Qtr 2005, GW Analytical Data	Q1 2005
SUBMITTED BY	SUBMIT DATE	STATUS
Matt Meyers	4/8/2005	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	6
# FIELD POINTS WITH DETECTIONS	6
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	6
SAMPLE MATRIX TYPES	WATER

METHOD QA/QC REPORT

METHODS USED	SW8015B,SW8021F
TESTED FOR REQUIRED ANALYTES?	N
MISSING PARAMETERS NOT TESTED:	
- SW8015B REQUIRES ETBE TO BE TESTED	
- SW8015B REQUIRES TAME TO BE TESTED	
- SW8015B REQUIRES DIPE TO BE TESTED	
- SW8015B REQUIRES TBA TO BE TESTED	
- SW8015B REQUIRES DCA12 TO BE TESTED	
- SW8015B REQUIRES EDB TO BE TESTED	
- SW8021F REQUIRES ETBE TO BE TESTED	
- SW8021F REQUIRES TAME TO BE TESTED	
- SW8021F REQUIRES DIPE TO BE TESTED	
- SW8021F REQUIRES TBA TO BE TESTED	
- SW8021F REQUIRES DCA12 TO BE TESTED	
- SW8021F REQUIRES EDB TO BE TESTED	
LAB NOTE DATA QUALIFIERS	N

QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	Y
- LAB METHOD BLANK	Y

- MATRIX SPIKE	N
- MATRIX SPIKE DUPLICATE	N
- BLANK SPIKE	Y
- SURROGATE SPIKE - NON-STANDARD SURROGATE USED	Y

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	N
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

SOIL SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	n/a
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

FIELD QC SAMPLES

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS > REPDL</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as CAMBRIA-EM (AUTH_RP)

CONTACT SITE ADMINISTRATOR.

Electronic Submittal Information

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

UPLOADING A GEO_WELL FILE

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

Submittal Title: 1st Qtr 2005 GW Depth Data for 3055 35th Avenue,
Oakland

Submittal Date/Time: 4/8/2005 2:47:11 PM

**Confirmation
Number:** 7186878800

[Back to Main Menu](#)

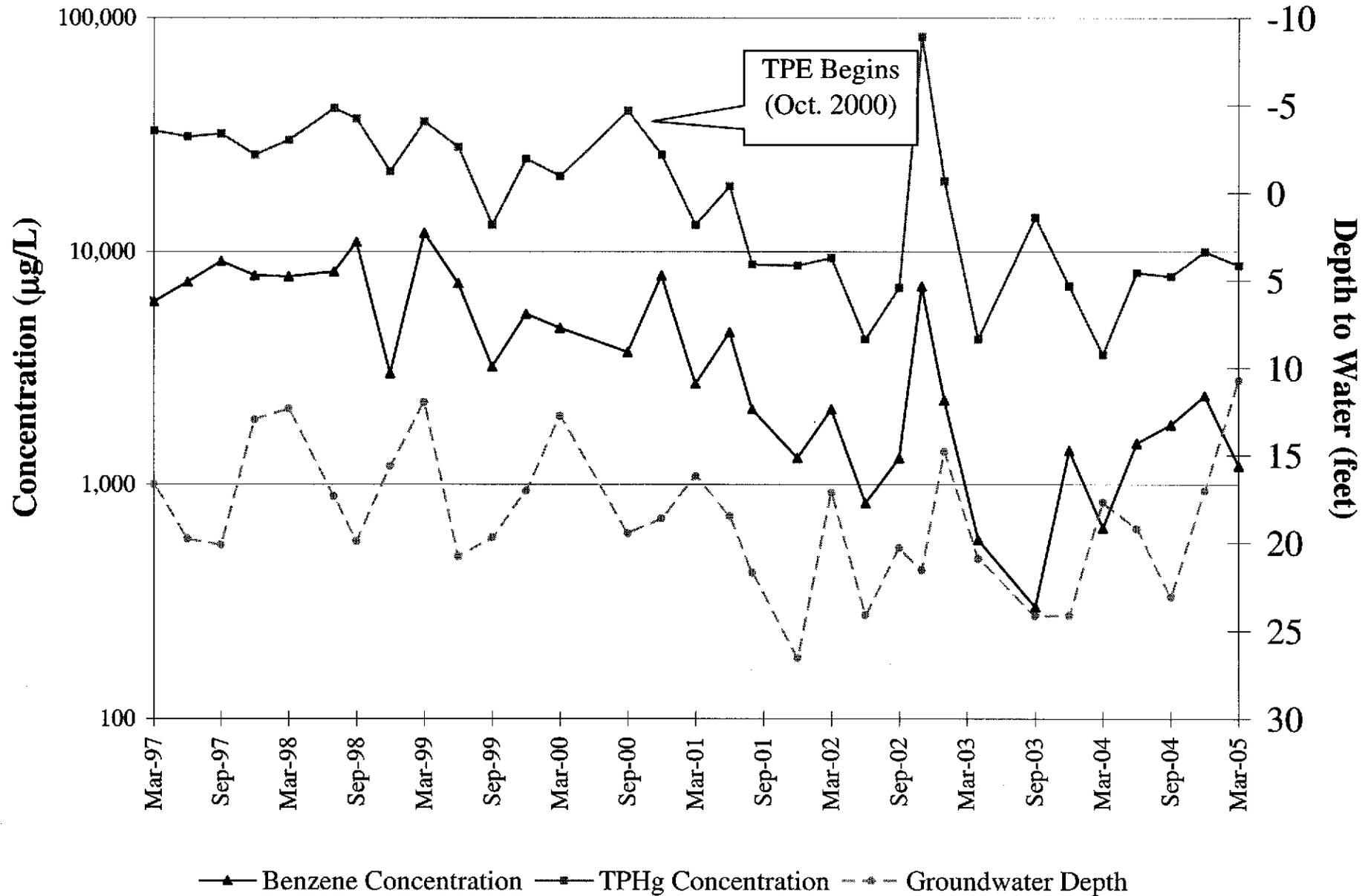
Logged in as CAMBRIA-EM (AUTH_RP)

[CONTACT SITE ADMINISTRATOR.](#)

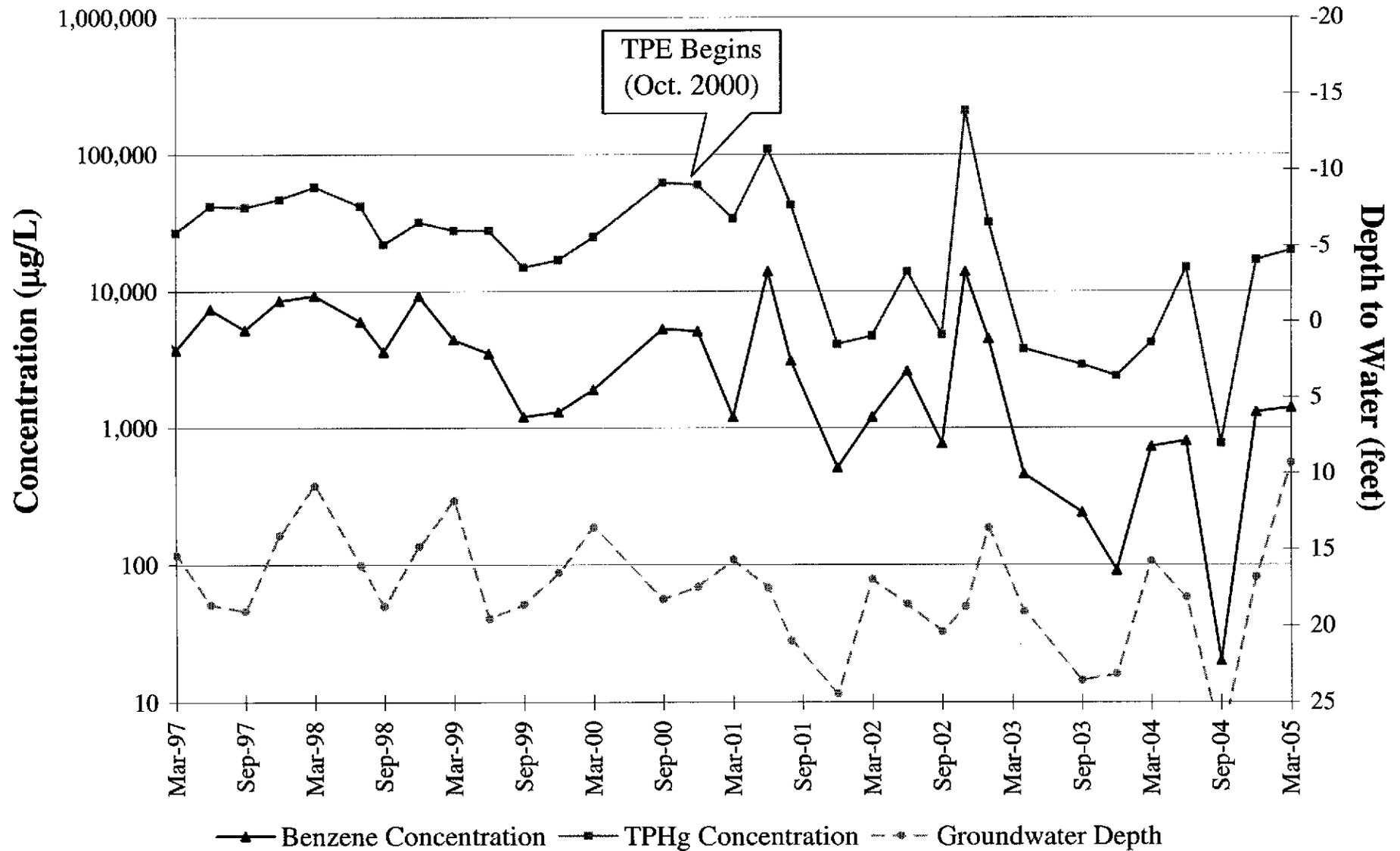
APPENDIX D

TPHg and Benzene Concentration Trend Graphs

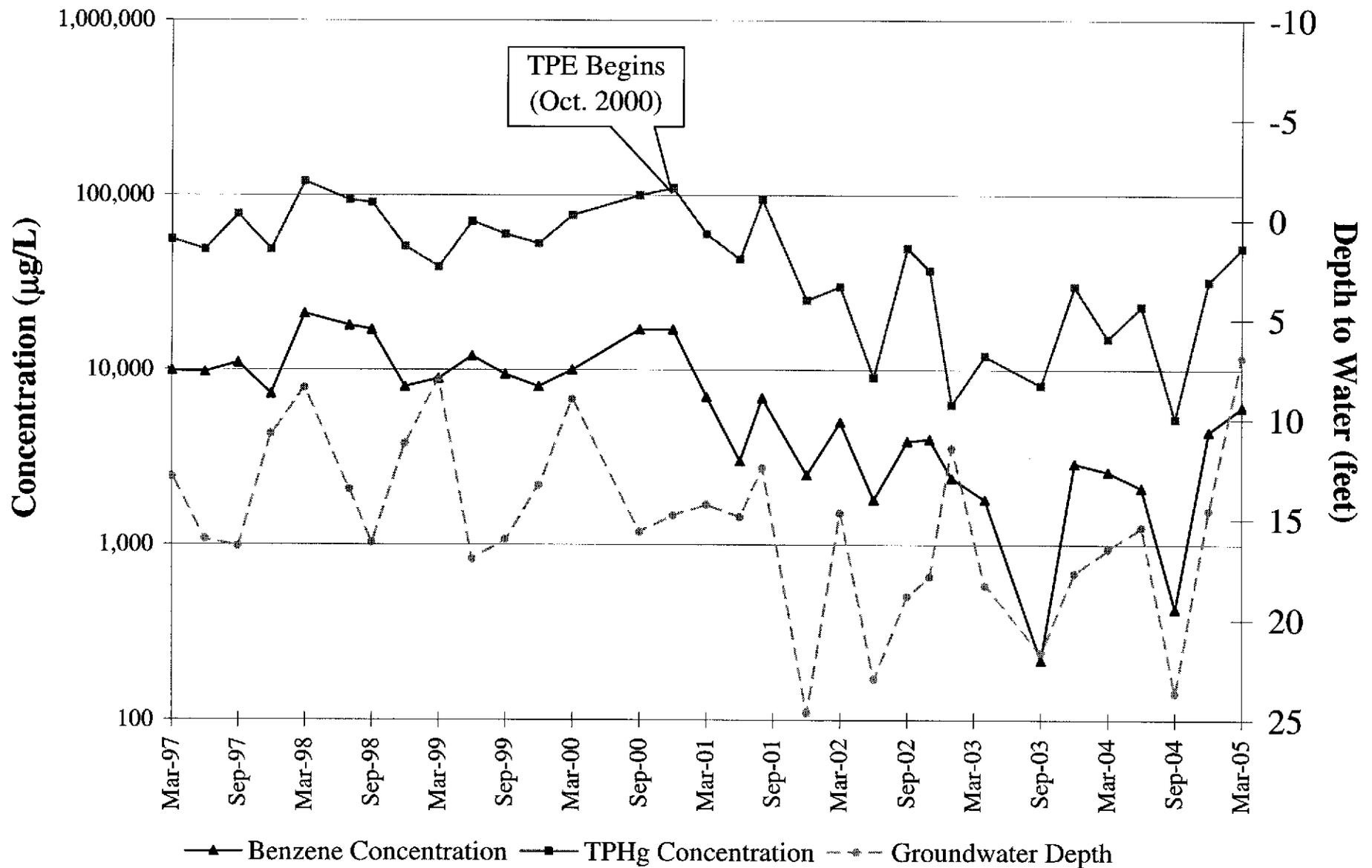
TPHg and Benzene Concentration Trends Well MW-1 (March 1997 to Present)



TPHg and Benzene Concentration Trends Well MW-2 (March 1997 to Present)



TPHg and Benzene Concentration Trends Well MW-3 (March 1997 to Present)



TPHg and Benzene Concentration Trends Well MW-4 (March 1997 to Present)

