CAMBRIA

August 11, 2000

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

515

Re: **Second Quarter 2000 Monitoring Report**
Former Exxon Service Station
3055 35th Avenue
Oakland, California
Cambria Project #130-0105-111

Dear Mr. Chan:

On behalf of Mr. Lynn Worthington of Golden Empire Properties, Cambria Environmental Technology, Inc., (Cambria) has prepared this second quarter 2000 groundwater monitoring report for the above-referenced site. Presented below are the second quarter 2000 activities and results, and anticipated third quarter activities.

SECOND QUARTER 2000 ACTIVITIES

Groundwater Monitoring

On June 30, 2000, Cambria gauged, inspected for separate-phase hydrocarbons (SPH), and collected groundwater samples from monitoring wells MW-1, MW-2, MW-3 and MW-4 (Figure 1). The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), benzene, toluene, ethylbenzene and xylenes (BTEX), and methyl tert-butyl ether (MTBE). The groundwater analytical data are summarized in Table 1. The analytical report is included in Attachment A.

Groundwater Analytic Results

No SPH were detected in any of the wells. TPHg concentrations in the sampled monitoring wells ranged from 18,000 parts per billion (ppb) in MW-1 to 100,000 ppb in MW-3. TPHd concentrations ranged from 330 ppb in MW-1 to 14,000 ppb in MW-3. Benzene concentrations ranged from 3,700 ppb in MW-2 to 15,000 ppb in MW-4. MTBE concentrations were below detection limits in all sampled wells. These analytical results are consistent with historical results.

Oakland, CA
Sonoma, CA
Portland, OR
Seattle, WA

Cambria Environmental Technology, Inc.

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

Groundwater Flow Direction

Depth-to-water measurements collected on June 30, 2000, indicated a groundwater gradient of 0.007 ft/ft toward the northwest (Figure 1). Since 1994, the primary groundwater flow direction has been toward the northwest with a change toward the southwest usually occurring during the fourth quarter. Groundwater elevation data are presented in Table 1.

Remedial System Startup

During the second quarter 2000, Cambria conducted system startup of just the soil vapor extraction portion of the remediation system. Due to low vapor extraction flow rates from the silt and clays and low soil vapor hydrocarbon concentrations, the system was shutdown. A recirculation valve was installed to facilitate system operation. Full system operation involving groundwater and soil vapor extraction was conducted for a short period of time however, problems with the transfer pump and float switches were encountered. The system was subsequently shutdown pending repair by the equipment vendor.

ANTICIPATED THIRD QUARTER ACTIVITIES

Groundwater Monitoring: Cambria will gauge the site wells, check the wells for SPH, and collect groundwater samples from all wells on a quarterly basis. Cambria will also analyze, tabulate, and report the data in a groundwater monitoring report.

Remediation System Operation: Cambria will arrange to have the groundwater extraction portion of the remediation system repaired and plans to begin full system operation during the third quarter. A system startup report will be prepared in accordance with the air and sewer permit requirements.

CLOSING

If you have any questions or comments regarding this report or anticipated site activities, please call me at (510) 420-3319 or call Ron Scheele at (510) 420-3318.

Sincerely,
Cambria Environmental Technology, Inc.

for
Cathy Bell
Staff Geologist

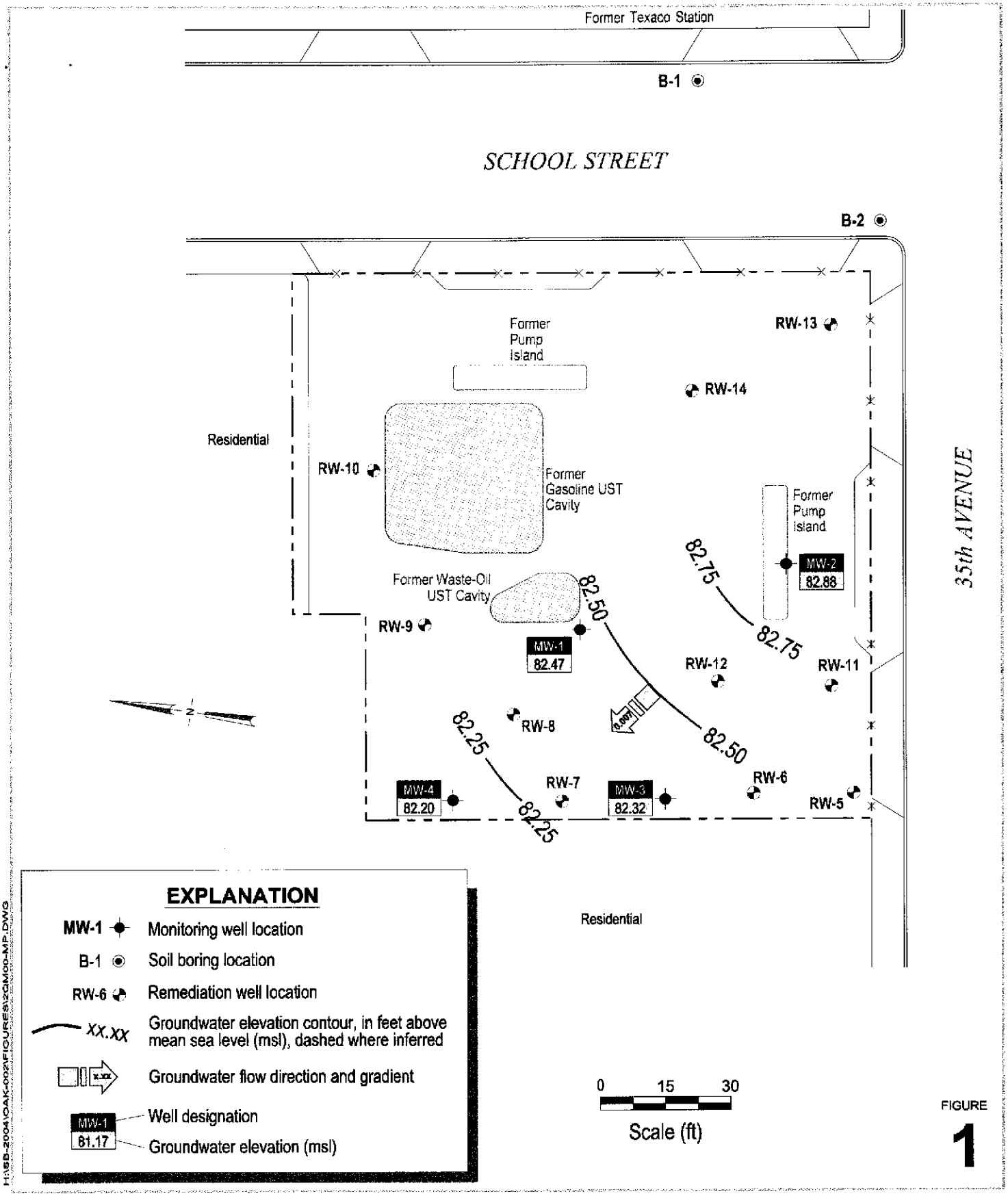
Ron Scheele RG
Senior Geologist

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

H:\Sb-2004 (UST Fund)\Oakl-002 - Lynn\Qm\Qm-2-00.wpd

Attachments: Figure 1- Groundwater Elevation Contours
Table 1 - Groundwater Elevation and Analytical Data
Attachment A - Laboratory Analytical Report
Attachment B - Field Data Sheets

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



H:\SB-2004\OAK-002\FIGURES\2QM00-MP.DWG

FIGURE **1**

Former Exxon Station

3055 35th Avenue

Oakland, California

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Groundwater Elevation Contour Map

June 30, 2000

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Table 1. Groundwater Elevation 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	---
	06/30/00	**18.38**	**---**	**82.47**	**18,000[d]**	**330[e]**	**---**	**4,500**	**130**	**320**	**800**	**<100**	**1.33**
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	---	---

Table 1. Groundwater Elevation 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) ---------->								
	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	---
	06/30/00	**17.12**	**---**	**82.88**	**40,000[d]**	**9,000[e,f]**	**---**	**3,700**	**1,700**	**950**	**5,800**	**<130**	**1.40**
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	---	---

Table 1. Groundwater Elevation 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) ---------->								
	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
	03/23/00	8.98	---	87.89	77,000[d,g]	11,000[g,j]	---	10,000	9,400	1,600	11,000	<430	---
	06/30/00	**14.55**	**---**	**82.32**	**100,000[d]**	**14,000[e]**	**---**	**14,000**	**11,000**	**1,900**	**12,000**	**<200**	**1.43**
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

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Table 1. Groundwater Elevation 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) ---------->								
	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	---
	06/30/00	**15.14**	**---**	**82.20**	**48,000[d]**	**1,900[e]**	**---**	**15,000**	**1,700**	**1,200**	**4,000**	**<100**	**0.60**
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**	**---**

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

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

ATTACHMENT A

Laboratory Analytical Report

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 1144 65th Street, Suite C Oakland, CA 94608	Client Project ID: #130-0105; Worthington	Date Sampled: 06/30/00
		Date Received: 07/03/00
	Client Contact: Jacquelyn Jones	Date Extracted: 07/03-07/05/00
	Client P.O:	Date Analyzed: 07/03-07/05/00

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
41930	MW-1	W	18,000,a	ND<100	4500	130	320	800	108
41931	MW-2	W	40,000,a	ND<130	3700	1700	950	5800	---#
41932	MW-3	W	100,000,a	ND<200	14,000	11,000	1900	12,000	---#
41933	MW-4	W	48,000,a	ND<100	15,000	1700	1200	4000	92
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.
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http://www.mccampbell.com E-mail: main@mccampbell.com

Cambria Environmental Technology 1144 65th Street, Suite C Oakland, CA 94608	Client Project ID: #130-0105; Worthington	Date Sampled: 06/30/00
		Date Received: 07/03/00
	Client Contact: Jacquelyn Jones	Date Extracted: 07/03/00
	Client P.O:	Date Analyzed: 07/03-07/10/00

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
41930	MW-1	W	330,d	100
41931	MW-2	W	9000,d,b	119
41932	MW-3	W	14,000,d	101
41933	MW-4	W	1900,d	99
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

McCAMPBELL ANALYTICAL INC.
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QC REPORT

Date: 07/02/00-07/03/00 Matrix: Water

Extraction: N/A

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 40793				Instrument: GC-3			
Surrogate1	0.000	99.0	98.0	100.00	99	98	1.0
Xylenes	0.000	279.0	274.0	300.00	93	91	1.8
Ethyl Benzene	0.000	94.0	92.0	100.00	94	92	2.2
Toluene	0.000	97.0	95.0	100.00	97	95	2.1
Benzene	0.000	100.0	98.0	100.00	100	98	2.0
MTBE	0.000	102.0	98.0	100.00	102	98	4.0
GAS	0.000	826.4	824.1	1000.00	83	82	0.3
SampleID: 7300				Instrument: GC-2 A			
Surrogate1	0.000	101.0	100.0	100.00	101	100	1.0
TPH (diesel)	0.000	289.0	279.0	300.00	96	93	3.5

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

$$RPD = \frac{(MS - MSD)}{(MS + MSD)} \cdot 200$$

RPD means Relative Percent Deviation

20900 20173

McCAMPBELL ANALYTICAL INC.

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CHAIN OF CUSTODY RECORD

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

Report To: Jacquelyn Jones	Bill To: CAMBRIA
Company: Cambria Environmental Technology	1144 65th St STE B
1144 65th Street, Suite C	Oakland, CA 94608
Oakland, CA 94608	510-420-0700
Tele: (510) 420-0700	Fax: (510) 420-9170
Project #: 130-0105	Project Name: Lithotype Washington
Project Location: 3050 35th ST, Oakland	
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
MW-1	-	6/30/00	11:15	4	VOA	X					X	X			X																41930
MW-1	-		11:15	1	AMBER											X															
MW-2	-		12:17	4	VOA							X			X																41931
MW-2	-		12:17	1	AMBER											X															
MW-3	-		12:45	4	VOA							X			X																41932
MW-3	-		12:45	1	AMBER											X															
MW-4			1:22	4	VOA							X			X																41933
MW-4			1:22	1	AMBER											X															

Relinquished By:	Date:	Time:	Received By:
Catherine M. Bell	7/3/00	1129	Glenna Carter
Glenna Carter	7/3/00	1400	Ken Coe 7/3/00 2:00pm
Relinquished By:	Date:	Time:	Received By:

Remarks:

VOAS | O&G | METALS | OTHER

ICE/t° ✓ PRESERVATION ✓
GOOD CONDITION ✓ APPROPRIATE
HEAD SPACE ABSENT ✓ CONTAINERS ✓

CVR

McCAMPBELL ANALYTICAL INC.
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Cambria Environmental Technology 1144 65th Street, Suite C Oakland, CA 94608	Client Project ID: #130-0105; Worthington	Date Sampled: 06/30/00
		Date Received: 07/03/00
	Client Contact: Jacquelyn Jones	Date Extracted: 07/03/00
	Client P.O:	Date Analyzed: 07/03/00

07/10/00

Dear Jacquelyn:

Enclosed are:

1). the results of 4 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. 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

CAMBRIA

WELL DEPTH MEASUREMENTS

	Well ID	Time	Product Depth	Water Depth TOC	Product Thickness	Well Depth	Comments
1	MW-1			18.38		27.26'	4"
2	MW-2			17.12		27.40'	4"
4	MW-3			14.55		24.98'	2"
3	MW-4			15.14		30.28'	2" Took 45mins to equilibrate

Project Name: Worthington

Project Number: 130-0105

Measured By: JO

Date: 6/30/00

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

CAMBRIA

WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS / BCR**	Well ID: MW- 1
Project Number: **130-0105**	Date: 6/30/00	Well Yield: ---------
Site Address: **3055 35th Ave Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 4 **" pvc**
		Technician(s): TO
Initial Depth to Water: 18.38	Total Well Depth: 27.26	Water Column Height: 8.88
Volume/ft: .65	1 Casing Volume: 5.77	3 Casing Volumes: 17.31
Purging Device: **sub. pump**	Did Well Dewater?:	Total Gallons Purged: 18 gall
Start Purge Time: 11:00	Stop Purge Time: 11:06	Total Time: 6 min

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

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

Time	Casing Volume	Temp. C	pH	Cond. uS	Comments
	12	18.4	7.1	1143	
	14	18.2	7.0	1068	
	16	18.3	7.0	1192	

D.O. = 1.33 ~~ppm~~ mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW- 1	6/30/00	11:15	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**
MW- 1	6/30/00	11:15	**1 amber**	**none**	**TPHd**	

CAMBRIA

WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS / BCR**	Well ID: **MW-** 2
Project Number: **130-0105**	Date: 6/30/00	Well Yield: ---------
Site Address: **3055 35 D Avenue Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 4 **" pvc**
		Technician(s): JO
Initial Depth to Water: 17.12	Total Well Depth: 27.40	Water Column Height: 10.28
Volume/ft: .65	1 Casing Volume: 6.70	3 Casing Volumes: 20.10
Purging Device: **sub. pump**	Did Well Dewater?:	Total Gallons Purged: 22
Start Purge Time: ~~11:56~~ 11:59	Stop Purge Time: ~~12:07~~ 12:07	Total Time: 8 min

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

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

Time	Casing Volume	Temp. C	pH	Cond. uS	Comments
	16	21.2	8.0	771	
	18		8.1		
	20		8.3		

D.O. = 1.40 ~~ppm~~ mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW- 2	6/30/00	12:17 ~~12:03~~	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**
MW- 2	↓	~~12:17~~ 12:05	**1 amber**	**none**	**TPHd**	

CAMBRIA

WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS / BCR**	Well ID: **MW-** 3
Project Number: **130-0105**	Date: 6/30/06	Well Yield: ---------
Site Address: **3055 35th Ave Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 2 **" pvc**
		Technician(s): JC
Initial Depth to Water: 14.55	Total Well Depth: 24.96	Water Column Height: 10.41
Volume/ft: .16	1 Casing Volume: 1.66	3 Casing Volumes: 4.98
Purging Device: **sub. pump**	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time:	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. C	pH	Cond. uS	Comments
	2	19.1	8.7	997	STRONG HC Smell
	3	19.0	8.5	856	
	4	19.3	8.6	1008	

D.O. = 1.43 ~~**ppm**~~ mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW- 3	6/30	12:45	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**
MW- 3	"	"	**1 amber**	**none**	**TPHd**	

CAMBRIA

WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS / BCR**	Well ID: **MW-** 4
Project Number: **130-0105**	Date: 6/30/00	Well Yield: ---------
Site Address: **3055 35th Ave Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 2 **" pvc**
		Technician(s): JO
Initial Depth to Water: 15.14	Total Well Depth: 30.28	Water Column Height: 15.14
Volume/ft: .16	1 Casing Volume: 2.42	3 Casing Volumes: 7.26
Purging Device: **sub. pump**	Did Well Dewater?:	Total Gallons Purged: 8
Start Purge Time: 1:08	Stop Purge Time: 1:12	Total Time: ~~4~~

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

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

Time	Casing Volume	Temp. C	pH	Cond. uS	Comments
	3	18.7	7.5	795	
	5	19.0	7.4	662	
	7	18.9	7.3	704	

D.O. = 0.60 ~~ppm~~ mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW- 4	6/30	1:22	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**
MW- 4	↓	1:22	**1 amber**	**none**	**TPHd**	