CAMBRIA

May 25, 1999

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

Re: **First Quarter 1999 Monitoring Report**
Former Exxon Service Station
3055 35th Avenue
Oakland, California
Cambria Project #130-0105-109

Dear Mr. Chan:

On behalf of Mr. Lynn Worthington of Golden Empire Properties, Cambria Environmental Technology, Inc., (Cambria) has prepared this first quarter 1999 ground water monitoring report for the site referenced above. Presented below are the first quarter 1999 activities and results as well as the anticipated second quarter 1999 activities.

FIRST QUARTER 1999 ACTIVITIES AND RESULTS

Ground Water Monitoring

On March 29, 1999, Cambria gauged, inspected for separate-phase hydrocarbons (SPH), and collected ground water samples from 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). Cambria also measured dissolved oxygen (DO) concentrations in the wells. The ground water analytical data are summarized in Table 1. The analytical report is included in Attachment A.

Ground Water Flow Direction

Depth-to-water measurements collected on March 29, 1999, indicated a ground water gradient of 0.014 ft/ft toward the south (Figure 1). Since 1994, the primary ground water flow direction has

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Sonoma, CA
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Cambria Environmental Technology, Inc.

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been toward the northwest with a change toward the southwest usually occurring during the fourth quarter. Ground water elevation data are presented in Table 1.

Hydrocarbon Distribution in Ground Water

No SPH were detected in any of the wells. TPHd concentrations ranged from 2,400 parts per billion (ppb) in MW-4 to 7,500 ppb in MW-2. TPHg concentrations ranged from 28,000 ppm in MW-2 to 48,000 ppm in MW-4. Benzene concentrations ranged from 4,400 ppb in MW-1 to a maximum concentration of 15,000 ppb in MW-4. The maximum MTBE concentration was 1,300 ppb in well MW-4 by EPA Method 8020. These analytical results are consistent with historic results.

ANTICIPATED SECOND QUARTER 1999 ACTIVITIES

Ground Water Monitoring: Cambria will gauge the site wells, measure DO concentrations, check the wells for SPH, and collect water samples from the wells. Cambria will tabulate the data and incorporate the results into a ground water monitoring report.

Corrective Action: Cambria is designing and permitting a Dual-Phase Vacuum Extraction remediation system. Upon completion of the system design, Cambria plans to commence preparation of a bid package for system installation.

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CLOSING

If you have any questions or comments regarding this report or anticipated site activities, please call Bob Clark-Riddell at (510) 420-3303.

Sincerely,
Cambria Environmental Technology, Inc.

Jacquelyn Jones
Staff Geologist

Bob Clark-Riddell

Bob Clark-Riddell, P.E.
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
ROBERT G. CLARK-RIDDELL
No. C 049629
Exp. Sept 2000
CIVIL
STATE OF CALIFORNIA

Attachments: Figure 1- Ground Water Elevation Contours

Table 1- Ground Water Elevation and Analytical Data

Attachment A - Analytical Report and Field Data Sheets

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

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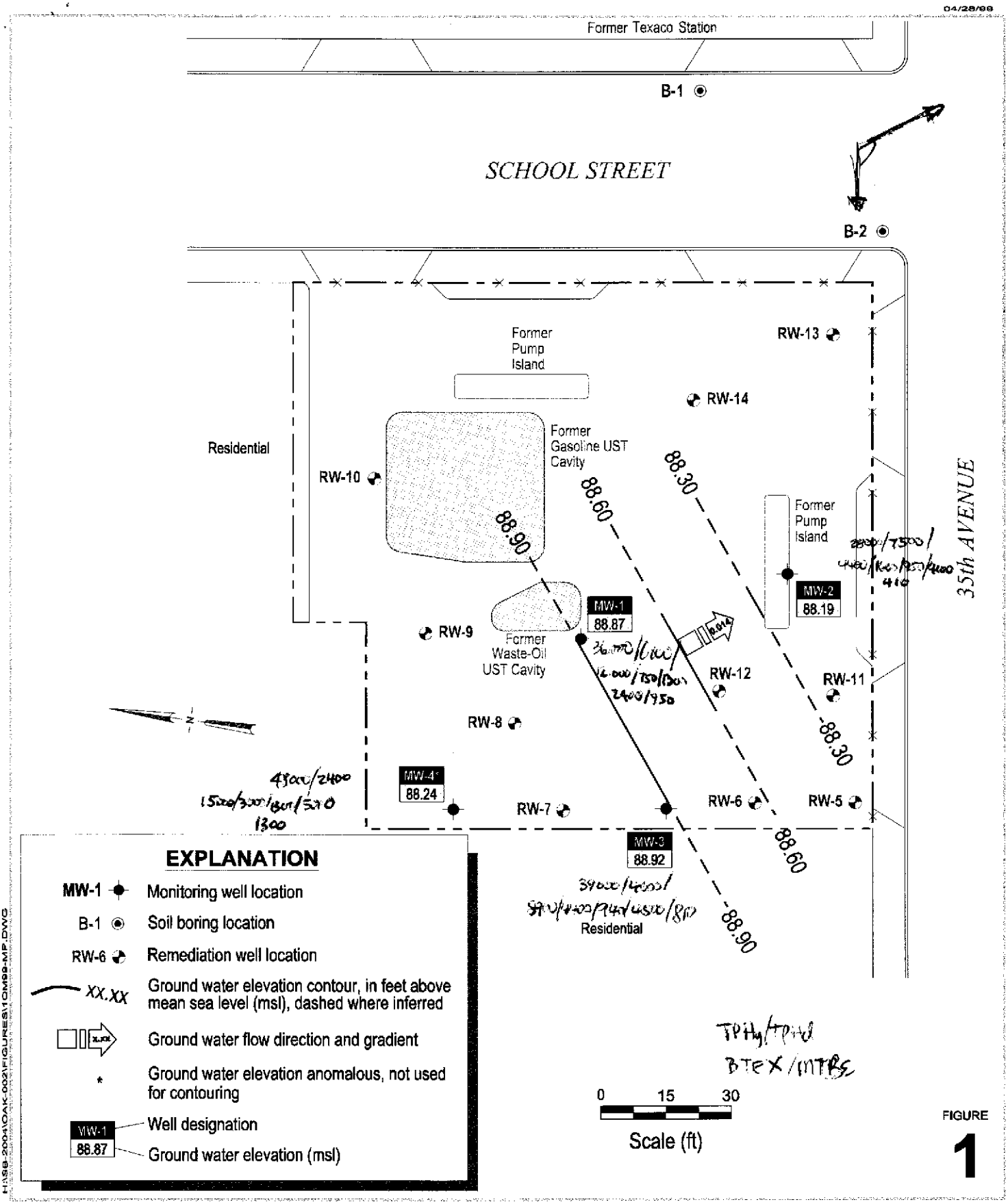

FIGURE
1

H:\SG-2004\OAK-002\FIGURES\1GM99-MP.DWG

Former Exxon Station
3055 35th Avenue
Oakland, California

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Ground Water Elevation Contour Map
March 29, 1999

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Table 1. Ground Water Elevation and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	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	---	---
TOC = 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**
MW-2	05/25/94	15.65	---	84.35	61,000	6,900	<5,000	9,900	7,400	960	4,600	---	---
TOC = 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	---	---

Table 1. Ground Water Elevation and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	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) ---------->								
	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**
MW-3	05/25/94	13.93	Sheen	82.94	56,000	14,000	<50,000	14,000	14,000	1,300	11,000	---	---
TOC = 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	---	---

Table 1. Ground Water Elevation and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	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) ---------->								
	11/29/95	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**
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
TOC = 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. Ground Water Elevation and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California

Well ID	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**	**---**

Abbreviations:

TOC = Top of casing elevation relative to an aribitrary datum

GW = Ground water

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

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

g = lighter than water immiscible sheen is present

h = one to a few isolated peaks present

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

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ATTACHMENT A

Analytical Report and Field Data Sheets

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: 03/29/99
		Date Received: 03/30/99
	Client Contact: Jacquelyn Jones	Date Extracted: 03/30/99
	Client P.O:	Date Analyzed: 03/30/99

04/06/99

Dear Jacquelyn:

Enclosed are:

1). the results of **5** 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

McCAMPBELL ANALYTICAL INC.
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Cambria Environmental Technology	Client Project ID: #130-0105; Worthington	Date Sampled: 03/29/99
1144 65th Street, Suite C		Date Received: 03/30/99
Oakland, CA 94608	Client Contact: Jacquelyn Jones	Date Extracted: 03/31/99
	Client P.O:	Date Analyzed: 03/31/99

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
08223	MW1	W	36,000,a	950	12,000	750	1300	2400	108
08224	MW2	W	28,000,a	410	4400	1600	950	4100	---#
08225	MW3	W	39,000,a	810	8900	4400	940	4500	106
08226	MW4	W	48,000,a	1300	15,000	3000	1300	5000	104
08227	Trip Blank	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.
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Telephone : 925-798-1620 Fax : 925-798-1622
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Cambria Environmental Technology	Client Project ID: #130-0105; Worthington	Date Sampled: 03/29/99
1144 65th Street, Suite C		Date Received: 03/30/99
Oakland, CA 94608	Client Contact: Jacquelyn Jones	Date Extracted: 03/30/99
	Client P.O:	Date Analyzed: 03/31-04/02/99

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
08223	MW1	W	6800,d	100
08224	MW2	W	7500,d,b	101
08225	MW3	W	4600,d	99
08226	MW4	W	2400,d,b,f	102
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.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 925-798-1620 Fax: 925-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 03/31/99 Matrix: WATER

Analyte	Concentration (ug/L) Sample (#05350)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.0	99.1	105.1	100.0	99.1	105.1	5.9
Benzene	0.0	10.0	10.1	10.0	100.0	101.0	1.0
Toluene	0.0	10.1	10.3	10.0	101.0	103.0	2.0
Ethyl Benzene	0.0	10.3	10.4	10.0	103.0	104.0	1.0
Xylenes	0.0	30.6	31.1	30.0	102.0	103.7	1.6
TPH(diesel)	0.0	8521	8602	7500	114	115	0.9
TRPH (oil & grease)	0	23104	23516	23700	97	99	1.8

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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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: Jacquelyn Jones Bill To: Cambria
Company: Cambria Environmental Technology
1144 65th Street, Suite C
Oakland, CA 94608
Tele: (510) 420-0700 Fax: (510) 420-9170
Project #: 130-0105 Project Name: Worthington
Project Location: 3055 35th Street, Oakland
Sampler Signature: [signature]

	SAMPLE ID	LOCATION	Sampling Date	Sampling Time	# Containers	Type Containers	Matrix: Water	Soil	Air	Sludge	Other	Method Preserved: Ice	HCl	HNO_3	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
+	MW1		3/29/99	455	4	4 VOA	X					X	X			X	X															08223
(+)	MW2		↓	240	↓	↓	↓					↓	↓			↓	↓															08224
+	MW3		↓	320	↓	↓	↓					↓	↓			↓	↓															08225
(+)	MW4		↓	350	↓	↓	↓					↓	↓			↓	↓															08226
✓	tripblank		↓		1	VOA	↓					↓	↓			↓																08227

Relinquished By:	Date:	Time:	Received By:
[signature]	3-30	7:40	[signature] AERO-2587
[signature] AERO-2587	3-30-99	11:20 PM	[signature] (MAI)

Remarks:

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

VOAS	O&G	METALS	OTHER
✓			

LW

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WELL DEPTH MEASUREMENTS

Well ID	Time	Product Depth	Water Depth	Product Thickness	Well Depth	Comments
MW1	1:19	—	11.98	—	27.26	
MW2	1:16	—	11.81	—	27.40	
MW3	1:23	—	7.95	—	25.84	
MW4	1:20	—	9.10	—	30.04	

Measured By: _____

Date: 3/29/99

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WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS**	Well ID: MW1
Project Number: **130-0105**	Date: 3/29	Well Yield: —
Site Address: **3055 Rose Street Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 4 **" pvc**
		Technician(s): SJ
Initial Depth to Water: 11.98	Total Well Depth: 27.26	Water Column Height: 15.28
Volume/ft: 0.65	1 Casing Volume: 9.93	3 Casing Volumes: 29.80
Purging Device: **disposable bailer**	Did Well Dewater?: NO	Total Gallons Purged: 30 gal
Start Purge Time: 4:28	Stop Purge Time: 4:50	Total Time: 22 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.	pH	Cond.	Comments
4:28	1	14.4	6.8	540	
4:35	2	14.5	6.6	949	
4:40	2	15.0	6.9	1025	
4:50	3	15.3	6.9	1052	

D.O. = 0.50 ppm

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW1	3/29	4:55	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**
✓	✓	✓	**1 amber**	**none**	**TPHd**	

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WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS**	Well ID: MW2
Project Number: **130-0105**	Date: 3/29/99	Well Yield: —
Site Address: **3055 Rose Street Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 4 **" pvc**
		Technician(s): DF
Initial Depth to Water: 11.81	Total Well Depth: 27.40	Water Column Height: 15.59
Volume/ft: 0.65	1 Casing Volume: 10.13	3 Casing Volumes: 30.04
Purging Device: **disposable bailer**	Did Well Dewater?: no	Total Gallons Purged: 30.5
Start Purge Time: 202	Stop Purge Time: 224	Total Time: 22 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
202	1	18.8	7.0	1444	
207	2	18.4	7.0	1497	
214	2	18.2	6.9	1539	
278	3	18.1	6.9	1211	
222	3	18.5	6.9	1126	

D.O. = 1.86 ppm

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW2	3/29/99	240	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**
"	"	"	**1 amber**	**none**	**TPHd**	

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WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS**	Well ID: MW3
Project Number: **130-0105**	Date: 3/29/99	Well Yield: ——
Site Address: **3055 Rose Street Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 4 **" pvc**
		Technician(s): SS
Initial Depth to Water: 7.95	Total Well Depth: 25.84	Water Column Height: 17.89
Volume/ft: 0.65	1 Casing Volume: 11.63	3 Casing Volumes: 34.88
Purging Device: **disposable bailer**	Did Well Dewater?: NO	Total Gallons Purged: 35
Start Purge Time: 258	Stop Purge Time: 317	Total Time: 19 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.	pH	Cond.	Comments
258	1	17.6	7.2	1452	
304	2	16.9	7.2	1451	
311	3	17.5	7.2	1359	
314	3	17.4	7.1	957	

D.O. = 0.56 ppm

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW3	3/29/99	320	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**
V	V	V	**1 amber**	**none**	**TPHd**	

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WELL SAMPLING FORM

Project Name: **Worthington**	Cambria Mgr: **RAS**	Well ID: MW4
Project Number: **130-0105**	Date: 3/29/99	Well Yield: —
Site Address: **3055 Rose Street Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 2 **" pvc**
		Technician(s): SJ
Initial Depth to Water: 9.10	Total Well Depth: 30.04	Water Column Height: 20.94
Volume/ft: 3.16	1 Casing Volume: 3.35	3 Casing Volumes: 10.05
Purging Device: **disposable bailer**	Did Well Dewater?:	Total Gallons Purged: 10 gal
Start Purge Time: 2337	Stop Purge Time: 349	Total Time: 12 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.	pH	Cond.	Comments
339	1	15.1	6.9	792	
342	2	15.7	6.9	1034	
347	3	16.0	6.7	1056	

D.O. = 1.32 ppm

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW4	3/29/99	350	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**
✓	✓	350	**1 amber**	**none**	**TPHd**	

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