

C A M B R I A

ENVIRONMENTAL
PROTECTION

March 28, 2000

00 APR 14 PM 4:39

Ms. Juliet Shin
Alameda County Department of
Environmental Health
UST Local Oversight Program
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Re: **First Quarter 2000 Monitoring Report**
Hooshi's Auto Service
1499 MacArthur Blvd.
Oakland, California 94602



Dear Ms. Shin:

On behalf of Ms. Naomi English, Cambria Environmental Technology, Inc. (Cambria) has prepared this report presenting the first quarter 2000 groundwater monitoring results for the above-referenced site. Presented below are the first quarter 2000 activities, the current groundwater flow direction, the current hydrocarbon distribution in groundwater, and the anticipated second quarter 2000 activities.

FIRST QUARTER 2000 ACTIVITIES

Quarterly Groundwater Sampling: On February 17, 2000, Cambria gauged and sampled all onsite groundwater monitoring wells. The thickness of separate-phase hydrocarbons (SPH), when detected, was measured. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015, benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tert-butyl ether (MTBE) by EPA Method 8020. When MTBE was detected by EPA Method 8020, the result was confirmed by EPA Method 8260.

Remediation System: During the first quarter 2000, Cambria attempted to start the newly installed remediation system. However, the heater coil for the catalytic oxidizer was broken and needed to be removed and sent to the factory for repair. Cambria is currently awaiting the return of the heater coil.

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

Based on the February 17, 1999 depth-to-water measurements, the groundwater flow direction was to the north-east with a gradient of 0.08 ft/ft (Figure 1). The groundwater elevation data is summarized in Table 1.

HYDROCARBON DISTRIBUTION IN GROUNDWATER



Up to 0.26 feet of SPHs were measured in wells MW-2 and MW-5. The maximum TPHg and benzene concentrations of 1,300 micrograms per liter ($\mu\text{g/L}$) and 60 $\mu\text{g/L}$ were detected in well MW-1, respectively. However, no benzene was detected in wells MW-3, MW-4 or MW-6. Table 1 summarizes the groundwater analytical results. The analytical laboratory reports are included as Attachment A. The water sampling field notes are included as Attachment B.

ANTICIPATED SECOND QUARTER 2000 ACTIVITIES

Quarterly Groundwater Sampling: As requested by the Alameda County Department of Environmental Health, Cambria will gauge and collect groundwater samples from each monitoring well, and measure the thickness of any detected SPH. Samples will be analyzed for TPHg, BTEX, and MTBE. All samples containing MTBE will be further analyzed by EPA Method 8260. Cambria will tabulate the data, contour groundwater elevations, and prepare a quarterly monitoring report.

Remediation System: Cambria will start and maintain the remediation system during the second quarter of 2000. A system start up report and periodic remedial update reports will be presented under separate cover.

Ms. Juliet Shin
March 28, 2000

CLOSING

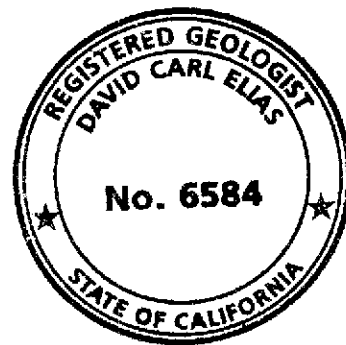
Cambria appreciates the opportunity to provide environmental services to Ms. Naomi English. if you have any questions or comments regarding this report, please call me at (510) 420-3328 or David Elias at (510) 420-3307

Sincerely,
Cambria Environmental Technology, Inc.



Mark Erickson
Staff Engineer

David C. Elias, R.G.
Senior Geologist



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Attachments: A - Analytical Results for Groundwater Sampling
B - Water Sampling Field Notes

cc: Ms. Naomi English, 1545 Scenic View Dr., San Leandro, CA 94577

CAMBRIA

Table 1. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID <i>TOC (ft*)</i>	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	Separate Phase Hydrocarbons (ft)	TPHg ←	Benzene	Toluene	Ethylbenzene Xylenes MTBE →			Notes
								(µg/L)			
MW-1	1/4/93	--	--	--	539	130	12	22	13	--	
<i>181.00</i>	4/22/93	--	--	--	1,130	75	8.0	38	11	--	
	12/27/94	--	--	--	770	22	6.6	14	21	--	
	6/27/96	14.11	166.89	--	3,300	260	34	59	170	80	
	12/10/96	13.71	167.29	--	1,500	84	11	22	32	34	
	5/8/98	13.85	167.15	--	3,200	300	12	62	36	<120	a
	8/17/98	14.11	166.89	--	1,700	160	18	32	27	39	a
	11/4/98	14.28	166.72	--	1,100	11	4.3	3.6	6.5	<50	a
	2/17/99	13.41	167.59	--	320	200	47	72	75	57	a
	5/27/99	14.16	166.84	--	2,500	81	12	29	41	<80	a
	8/19/99	14.18	166.82	--	780	19	<0.5	5.7	4.5	28	a
<i>180.83</i>	11/23/99	14.43	166.40	--	1,300	24	0.64	1.8	3.3	<100	a
	2/17/00	13.85	166.98	--	1,300	60	9.1	22	19	22 (16)	a,b
MW-2	1/4/93	--	--	--	149,000	21,700	25,000	ND	7,760	--	
<i>180.45</i>	4/22/93	--	--	--	136,300	9,900	15,870	15,300	2,190	--	
	12/27/94	--	--	--	94,000	11,000	18,000	2,700	16,000	--	
	6/27/96	12.61	168.64	1.00	--	--	--	--	--	--	
	12/10/99	11.10	169.55	0.25	--	--	--	--	--	--	
	5/8/98	10.81	169.66	0.03	--	--	--	--	--	--	
	8/17/98	12.16	168.31	0.02	--	--	--	--	--	--	
	11/4/98	12.61	167.86	0.02	--	--	--	--	--	--	
	2/17/99	9.82	170.66	0.04	--	--	--	--	--	--	
	5/27/99	11.07	169.48	0.13	--	--	--	--	--	--	
	8/19/99	12.79	167.68	0.02	--	--	--	--	--	--	
<i>180.24</i>	11/23/99	12.14	168.20	0.12	--	--	--	--	--	--	
	2/17/00	10.01	170.37	0.18	--	--	--	--	--	--	

CAMBRIA

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Well ID <i>TOC (ft*)</i>	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	Separate Phase Hydrocarbons (ft)	TPHg ←	Benzene	Toluene	Ethylbenzene			Xylenes	MTBE	Notes
								(µg/L) →					
MW-3	1/4/93	--	--	--	1,610	772	14	11	ND	--			
179.94	4/22/93	--	--	--	3,040	980	34	19	16				
	12/27/94	--	--	--	2,600	180	9.0	7.2	13				
	6/27/96	13.20	166.74	--	2,000	22	2.9	11	7.4	56			
	12/10/96	13.13	166.81	--	970	<0.5	<0.5	<0.5	<0.5	24			
	5/8/98	13.03	166.91	--	780	3.7	2.1	1.1	2.4	<32			a
	8/17/98	13.22	166.72	--	870	2.8	<0.5	<0.5	3.7	<5.0			b,c
	11/4/98	13.31	166.63	--	770	1.6	4.4	2.0	6.9	<30			c
	2/17/99	12.89	167.05	--	650	6.2	3.4	1.5	2.6	<5.0			b,c
	5/27/99	12.32	167.62	--	570	1.5	1.2	0.72	1.1	<20			a
	8/19/99	13.19	166.75	--	830	<0.5	1.9	<0.5	1.3	<20			c,d
179.55	11/23/99	13.26	166.29	--	900	<0.5	1.8	0.56	1.4	<20			c,d
	2/17/00	12.78	166.77	--	250	<0.5	1.5	<0.5	0.62	<5.0			d
MW-4	6/27/96	17.03	163.51	--	720	2	0.5	2.5	23	3.2			
180.54	12/10/96	8.50	172.04	--	80	2.4	<0.5	<0.5	6.6	<2.0			
	5/8/98	11.46	169.08	--	<50	0.60	<0.5	<0.5	<0.5	<5.0			
	8/17/98	13.98	166.56	--	<50	<0.5	<0.5	<0.5	0.5	<5.0			
	11/4/98	14.36	166.18	--	96	9.7	8.1	4.8	18	<5.0			a
	2/17/99	8.39	172.15	--	<50	<0.5	<0.5	<0.5	0.5	<5.0			
	5/27/99	12.80	167.74	--	<50	<0.5	1.0	<0.5	2.9	<5.0			
	8/19/99	14.42	166.12	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0			
180.12	11/23/99	14.63	165.49	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0			
	2/17/00	8.15	171.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0			
MW-5	6/27/96	13.62	166.74	0.16	--	--	--	--	--	--			
180.23	12/10/96	13.26	167.77	1.00	--	--	--	--	--	--			
	5/8/98	13.15	167.11	0.04	--	--	--	--	--	--			
	8/17/98	13.36	166.89	0.02	--	--	--	--	--	--			
	11/4/98	13.52	166.73	0.02	--	--	--	--	--	--			

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Table 1. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID <i>TOC (ft*)</i>	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft**)	Separate Phase Hydrocarbons (ft)	←----- (µg/L) -----→						Notes
					TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
180.09	2/17/99	13.02	167.23	0.02	--	--	--	--	--	--	
	5/27/99	13.80	166.71	0.35	--	--	--	--	--	--	
	8/19/99	13.45	166.86	0.10	--	--	--	--	--	--	
	11/23/99	14.03	166.35	0.36	--	--	--	--	--	--	
	2/17/00	13.28	167.02	0.26	--	--	--	--	--	--	
MW-6	6/27/96	18.55	161.48	--	ND	ND	ND	ND	ND	--	
180.03	12/10/99	11.79	168.24	--	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	
	5/8/98	11.62	168.41	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/17/98	12.66	167.37	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	11/4/98	13.56	166.47	--	68	3.8	3.7	2.8	11	<5.0	a
	2/17/99	12.91	167.12	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
179.63	5/27/99	13.03	167.00	--	<50	1.0	1.7	0.82	4.9	<5.0	
	8/19/99	13.10	166.93	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	11/23/99	13.58	166.05	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/17/00	10.72	168.91	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	Trip Blank	5/8/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	11/4/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	5/27/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	11/23/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
MCLs	--	--	--	--	NE	1	150	700	1,750	NE	

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Table 1. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)**	Separate Phase Hydrocarbons (ft)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
TOC (ft*)					← (µg/L) →						

Abbreviations and Methods:

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

Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8020

MTBE = Methyl tert-butyl ether by EPA Method 8020

µg/L = Micrograms per liter

TOC = Top of casing elevation

SPH = Separate Phase Hydrocarbons

* = wells surveyed to an arbitrary datum

** = Calculated groundwater elevation corrected for SPH by the relation:

$$\text{Groundwater Elevation} = \text{Well Elevation} - \text{Depth to Water} + (0.8 \times \text{SPH thickness (ft)})$$

Abbreviations and Methods (Cont'd):

MCLs = California primary maximum contaminant levels for drinking water (22 CCR 64444)

NE = MCLs not established

ND = Compound not detected, detection limit unknown

Notes:

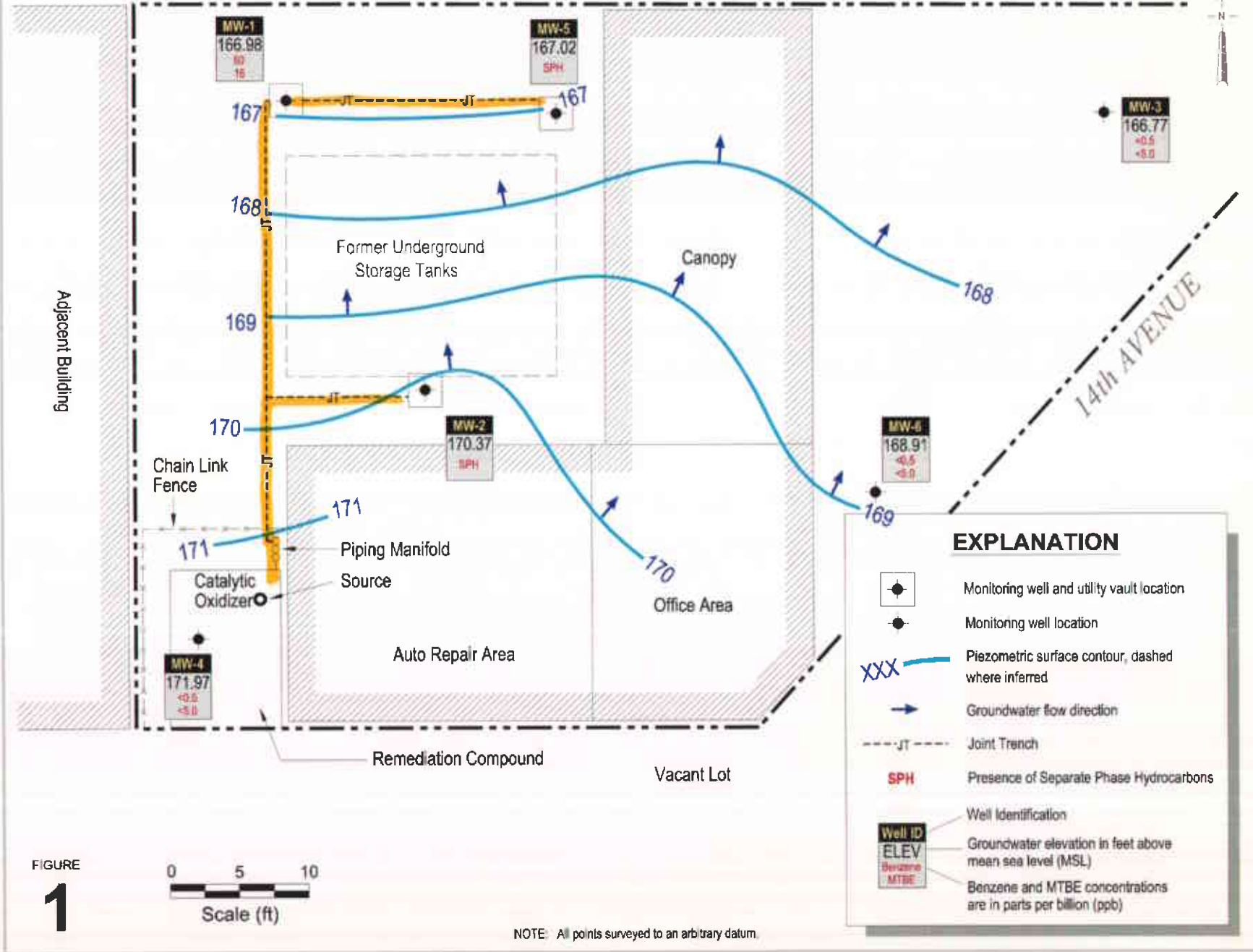
a - The analytical laboratory noted that unmodified or weakly modified gasoline is significant.

b - The analytical laboratory noted that lighter than water immiscible sheen is present.

c - The analytical laboratory noted no recognizable pattern.

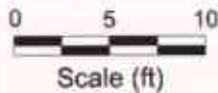
d - The analytical laboratory noted heavier gasoline range compounds are significant (aged gasoline?).

MAC ARTHUR BLVD.



FIGURE

1



NOTE: All points surveyed to an arbitrary datum.

Hooshi's Auto Service
 1499 MacArthur Boulevard
 Oakland, California



C A M B R I A

**Groundwater Elevation
 Contour Map**
 February 17, 2000

C A M B R I A



ATTACHMENT A

Analytical Results for Groundwater Sampling



McCAMPBELL ANALYTICAL INC.

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

Cambria Environmental Technology 1144 65 th Street, Suite C Oakland, CA 94608	Client Project ID: #129-0741; English Naomi	Date Sampled: 02/17/00
	Client Contact: Mark Erickson	Date Received: 02/24/00
	Client P.O:	Date Analyzed: 02/24-02/25/00
		Date Extracted: 02/24-02/25/00

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	Ethylbenzene	Xylenes	% Recovery Surrogate
31655	MW-1	W	1300,a,h	22	60	9.1	22	19	106
31656	MW-3	W	250,b	ND	ND	1.5	ND	0.62	101
31657	MW-4	W	ND	ND	ND	ND	ND	ND	95
31658	MW-6	W	ND	ND	ND	ND	ND	ND	97
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.



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

Cambria Environmental Technology 1144 65 th Street, Suite C Oakland, CA 94608	Client Project ID: #129-0741; English Naomi	Date Sampled: 02/17/00
	Client Contact: Mark Erickson	Date Received: 02/24/00
	Client P.O:	Date Extracted: 03/01/00
		Date Analyzed: 03/01/00

Methyl tert-Butyl Ether *

EPA method 8260 modified

Lab ID	Client ID	Matrix	MTBE*	% Recovery Surrogate
31655	MW-1	W	16,h	100
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W	1.0 ug/L		
	S	5.0 ug/kg		

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

h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) sample diluted due to high organic content.



McCAMPBELL ANALYTICAL INC.

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QC REPORT

Date: 02/24/00 Matrix: Water
 Extraction: N/A

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

SampleID: 22300

Instrument: GC-3

Surrogate1	0.000	101.0	102.0	100.00	101	102	1.0
Xylenes	0.000	331.0	310.0	300.00	110	103	6.6
Ethyl Benzene	0.000	109.0	102.0	100.00	109	102	6.6
Toluene	0.000	111.0	107.0	100.00	111	107	3.7
Benzene	0.000	113.0	112.0	100.00	113	112	0.9
MTBE	0.000	89.0	89.0	100.00	89	89	0.0
GAS	0.000	1012.4	958.1	1000.00	101	96	5.5

SampleID: 22400

Instrument: MB-1

Oil & Grease	0.000	24.2	24.3	20.00	121	122	0.5
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SampleID: 22400

Instrument: GC-2 A

Surrogate1	0.000	112.0	112.0	100.00	112	112	0.0
TPH (diesel)	0.000	292.0	296.0	300.00	97	99	1.4

SampleID: 22400

Instrument: IR-1

Surrogate1	0.000	96.4	96.3	100.00	96	96	0.1
TRPH	0.000	26.9	26.5	23.70	114	112	1.5

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

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



McCAMPBELL ANALYTICAL INC.

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QC REPORT

VOCs (EPA 8240/8260)

Date: 03/01/00-03/02/00 Matrix: Water

Extraction: N/A

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

SampleID: 30400

Instrument GC-10

Surrogate	0.000	104.0	108.0	100.00	104	108	3.8
tert-Amyl Methyl Ether	0.000	94.0	90.0	100.00	94	90	4.3
Methyl tert-Butyl Ether	0.000	103.0	94.0	100.00	103	94	9.1
Ethyl tert-Butyl Ether	0.000	119.0	115.0	100.00	119	115	3.4
Di-isopropyl Ether	0.000	112.0	113.0	100.00	112	113	0.9
Toluene	0.000	100.0	102.0	100.00	100	102	2.0
Benzene	0.000	101.0	101.0	100.00	101	101	0.0
Chlorobenzene	0.000	105.0	106.0	100.00	105	106	0.9
Trichloroethane	0.000	95.0	93.0	100.00	95	93	2.1
1,1-Dichloroethene	0.000	106.0	105.0	100.00	106	105	0.9

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

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

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ATTACHMENT B

Water Sampling Field Notes

WELL DEPTH MEASUREMENTS

Well ID	Time	Product Depth	Water Depth	Product Thickness	Well Depth	Comments
MW-1	10:19		13.85'			
MW-2	10:23	9.83'	10.01	.18'		SPH
MW-3	10:17		12.78'			
MW-4	10:10		8.15'			
MW-5	10:26	13.02'	13.28'	.26'		SPH
MW-6	10:07		10.72'			

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Project Name: HOOSIERS

Project Number: 129-0741

Measured By: ME

Date: 2/17/00

WELL SAMPLING FORM

Project Name: Hooshi's	Cambria Mgr: DCE	Well ID: MW-1
Project Number: 129-0741	Date: 2/17/00	Well Yield: ---
Site Address: 1499 MacArthur Boulevard Oakland, California	Sampling Method: Disposable bailer	Well Diameter: 2 " pvc
		Technician(s): ME
Initial Depth to Water: 13.85'	Total Well Depth: 20.05'	Water Column Height: 6.12'
Volume/ft: 0.16	1 Casing Volume: 0.987 gal	3 Casing Volumes: ~3.0 gal
Purging Device: disposable bailer	Did Well Dewater?: NO.	Total Gallons Purged: 3.25 gal
Start Purge Time: 11:32	Stop Purge Time: 11:41	Total Time: 9 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. µS	Comments
11:33	1	17.8	6.8	621	GREYISH WATER
11:37	2	18.2	6.4	465	ODOROUS
11:40	3	18.6	6.2	693	"

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-1	2/17/00	12:30	4 voa's	HCL	TPHg, BTEX, MTBE	8020 8015

WELL SAMPLING FORM

Project Name: English, Naomi	Cambria Mgr: DCE	Well ID: MW-3
Project Number: 129-0741	Date: 2/17/00	Well Yield: ---
Site Address: 1499 Mac Arthur Blvd. Oakland, CA.	Sampling Method:	Well Diameter: 2" pvc
	Disposable bailer	Technician(s): ME
Initial Depth to Water: 12.78'	Total Well Depth: 21.0'	Water Column Height: 8.22'
Volume/ft: 0.16'	1 Casing Volume: 1.31 gal	3 Casing Volumes: ~4.0 gal
Purging Device: disposable bailer	Did Well Dewater?: NO	Total Gallons Purged: 4.25 gal
Start Purge Time: 11:12	Stop Purge Time: 11:23	Total Time: 11 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.	Comments
11:16	1	18.3	6.8	MS 332	GREYISH WATER
11:19	2	19.0	6.2	563	"
11:22	3	19.0	6.8	565	"

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-3	2/17/00	12:20	4 voa's	HCL	TPHg, BTEX, MTBE* Confirm hits <u>only</u>	8020 8015 8260

WELL SAMPLING FORM

Project Name: English, Naomi	Cambria Mgr: DCE	Well ID: MW-4
Project Number: 129-0741	Date: 2/17/00	Well Yield: —
Site Address: 1499 Mac Arthur Blvd. Oakland, CA.	Sampling Method: Disposable bailer	Well Diameter: 2 " pvc
		Technician(s): ME
Initial Depth to Water: 8.15'	Total Well Depth: 19.98'	Water Column Height: 11.83'
Volume/ft: 0.16	1 Casing Volume: 1.89 gal	3 Casing Volumes: 5.68 gal
Purging Device: disposable bailer	Did Well Dewater?: NO	Total Gallons Purged: 6 gal
Start Purge Time: 11:48	Stop Purge Time: 12:03	Total Time: 15 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. <i>°C</i>	pH	Cond. <i>µS</i>	Comments
11:52	1	15.6	6.4	559	GREYISH WATER
11:57	2	15.5	6.9	560	"
12:02	3	15.0	6.6	592	"

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-4	2/17/00	12:40	4 voa's	HCL	TPHg, BTEX, MTBE* Confirm hits <u>only</u>	8020 8015 8260

WELL SAMPLING FORM

Project Name: Hooshi's	Cambria Mgr: DCE	Well ID: MW-6
Project Number: 129-0741	Date: 2/17/00	Well Yield: —
Site Address: 1499 MacArthur Boulevard Oakland, California	Sampling Method: Disposable bailer	Well Diameter: 2 " pvc
		Technician(s):
Initial Depth to Water: 10.72'	Total Well Depth: 22.2'	Water Column Height: 11.48'
Volume/ft: 0.16	1 Casing Volume: 1.83 gal	3 Casing Volumes: 5.51 gal
Purging Device: disposable bailer	Did Well Dewater?: NO	Total Gallons Purged: 5.75 gal
Start Purge Time: 10:53	Stop Purge Time: 11:06	Total Time: 13 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. µS	Comments
10:55	1	18.4	6.0	782	
10:58	2	19.2	5.8	388	
11:02	3	18.9	6.6	777	
11:04	4	19.6	6.3	718	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-6	2/17/00	12:10	4 voa's	HCL	TPHg, BTEX, MTBE	8020 8015