

5510 3597

CAMBRIA

ENVIRONMENTAL
PROTECTION
October 7, 1998
98 OCT 13 PM 6:19

Mr. Tom Peacock
Alameda County Department of
Environmental Health
UST Local Oversight Program
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Re: **Third Quarter 1998 Monitoring Report**
Hooshi's Auto Service
1499 MacArthur Blvd.
Oakland, California 94602



Dear Mr. Peacock:

On behalf of Ms. Naomi English, Cambria Environmental Technology, Inc. (Cambria) has prepared this report presenting the third quarter 1998 ground water monitoring results for the site referenced above. Presented below are the third quarter 1998 activities, the current ground water flow direction, the current hydrocarbon distribution in ground water, and the anticipated fourth quarter 1998 activities.

THIRD QUARTER 1998 ACTIVITIES

Quarterly Ground Water Sampling: On August 17, 1998 Cambria gauged and sampled all onsite and offsite ground water monitoring wells. The thickness of separate-phase hydrocarbons (SPH), when detected, was measured. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tert-butyl ether (MTBE).

Remediation System: Cambria submitted an application for an air permit from the Bay Area Air Quality Management District for construction and operation of a soil-vapor extraction (SVE) system at the site on February 23, 1998. Once a permit has been granted, Cambria will begin installation of the SVE system.

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

GROUND WATER FLOW DIRECTION

Based on the August 17, 1998 depth-to-water measurements, ground water mounded in the vicinity of the former underground storage tanks (Figure 1). The ground water flow appears to be to the predominantly toward the north. Table 1 summarizes the ground water elevation data.

**Cambria
Environmental
Technology, Inc.**

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

HYDROCARBON DISTRIBUTION IN GROUND WATER

Separate phase hydrocarbons were detected in wells MW-2 and MW-5. TPHg concentrations of 1,700 parts per billion (ppb) and 870 ppb were detected in wells MW-1 and MW-3, respectively. Benzene concentrations of 160 ppb and 2.8 ppb were detected in wells MW-1, and MW-3. No benzene was detected in wells MW-4 and MW-6. MTBE was detected in well MW-1 at a concentration of 39 ppb. Table 1 summarizes the ground water analytical results. The laboratory reports are included in Attachment A. The water sampling field sheets are included as Attachment B.



ANTICIPATED FOURTH QUARTER 1998 ACTIVITIES

Quarterly Ground Water Sampling: As requested by the Alameda County Department of Environmental Health, Cambria will gauge and collect water samples from each ground water monitoring well, and measure the thickness of any detected SPH. Samples will be analyzed for TPHg, BTEX, and MTBE. Cambria will tabulate the data, contour ground water elevations, and prepare a quarterly monitoring report.


Remediation System: Cambria plans to install and begin operating a SVE system at the site within the next two months, depending on permit approval. A SVE start-up report and updates will be presented in separate remediation reports.


Mr. Tom Peacock
October 7, 1998

CLOSING

Cambria appreciates the opportunity to provide environmental services to Ms. Naomi English.
Please call me at (510) 420-3316 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.


John Riggi
Staff Geologist


Owen Ratchye, P.E.
Project Engineer



H:\SB-2004\Oak1 - Hooshi's\QM\3Q98.wpd

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

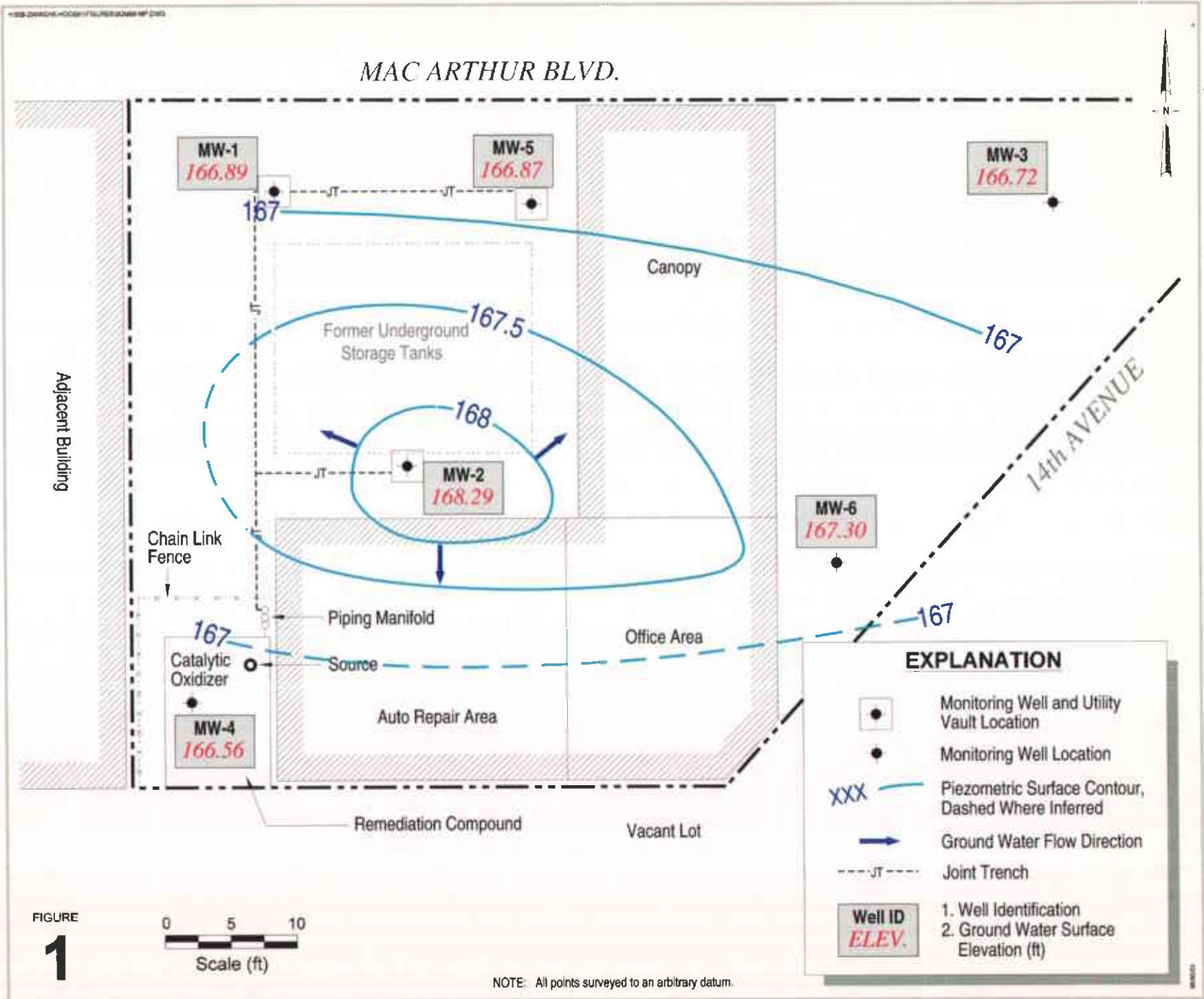
cc: Ms. Naomi English, 1545 Scenic View Dr., San Leandro, CA 94577

Hooshi's Auto Service
 1499 MacArthur Boulevard
 Oakland, California

C A M B R I A



**Ground Water Elevation
 Contours**
 August 17, 1998



ATTACHMENT A

Analytical Results for Ground Water Sampling

CAMBRIA

Table 1. Ground Water Elevations and Analytical Data

Hooshi's Auto Service, 1499 MacArthur Boulevard
Oakland, California

Well ID <i>TOC</i> <i>(ft*)</i>	Date	Depth to Ground Water (ft)	Ground Water Elevation (ft*)	Separate Phase Hydrocarbons (ft)	(µg/L)						Notes
					TPHg ←	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE →	
MW-1 <i>181.00</i>	6/27/96	14.11	166.89	--	3,300	260	34	59	170	80	
	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
MW-2 <i>180.45</i>	6/27/96	12.61	167.84	1.00	--	--	--	--	--	--	
	5/8/98	10.81	169.64	0.03	--	--	--	--	--	--	
	8/17/98	12.16	168.29	0.02	--	--	--	--	--	--	
MW-3 <i>179.94</i>	6/27/96	13.20	166.74	--	2	22	2.9	11	7.4	56	
	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	bj
MW-4 <i>180.54</i>	6/27/96	17.03	163.51	--	720	2	0.5	2.5	23	3.2	
	5/8/98	11.46	168.48	--	<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	
MW-5 <i>180.23</i>	6/27/96	13.62	166.61	0.16	--	--	--	--	--	--	
	5/8/98	13.15	166.79	0.04	--	--	--	--	--	--	
	8/17/98	13.36	166.87	0.02	--	--	--	--	--	--	
MW-6 <i>180.03</i>	6/27/96	18.55	161.48	--	ND	ND	ND	ND	ND	--	
	5/8/98	11.62	168.32	--	<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	
Trip Blank	5/8/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
MCLs	--	--	--	--	NE	1	150	700	1,750	NE	

Table 1. Ground Water Elevations and Analytical Data

Hooshi's Auto Service, 1499 MacArthur Boulevard
Oakland, California

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

DO = Dissolved oxygen

µg/L = Micrograms per liter

mg/L = Milligrams per liter

TOC = Top of casing elevation

Abbreviations and Methods (Cont'd):

* = elevations surveyed to an arbitrary datum

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.



McCAMPBELL ANALYTICAL INC.

110 Second 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	Date Sampled: 08/17/98
		Date Received: 08/18/98
	Client Contact: John Riggi	Date Extracted: 08/21/98
	Client P.O:	Date Analyzed: 08/21-08/24/98

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
93649	MW-6	W	ND	ND	ND	ND	ND	ND	87
93650	MW-3	W	870,b,j	ND	2.8	ND	ND	3.7	---#
93651	MW-4	W	ND	ND	ND	ND	ND	0.50	88
93652	MW-1	W	1700,a	39	160	18	32	27	---#
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.

QC REPORT FOR HYDROCARBON ANALYSES

Date: 08/21/98

Matrix: WATER

Analyte	Concentration (mg/L)			Amount Spiked	% Recovery		RPD
	Sample (#93743)	MS	MSD		MS	MSD	
TPH (gas)	0.0	109.1	112.6	100.0	109.1	112.6	3.1
Benzene	0.0	10.2	10.3	10.0	102.0	103.0	1.0
Toluene	0.0	10.8	10.9	10.0	108.0	109.0	0.9
Ethyl Benzene	0.0	10.5	10.7	10.0	105.0	107.0	1.9
Xylenes	0.0	31.4	31.7	30.0	104.7	105.7	1.0
TPH(diesel)	0.0	169	174	150	113	116	2.8
TRPH (oil & grease)	0	23800	25000	23700	100	105	4.9

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

QC REPORT FOR HYDROCARBON ANALYSES

Date: 08/24/98-08/25/98

Matrix: WATER

Analyte	Concentration (mg/L)			Amount Spiked	% Recovery		RPD
	Sample (#94042)	MS	MSD		MS	MSD	
TPH (gas)	0.0	92.2	94.9	100.0	92.2	94.9	2.8
Benzene	0.0	9.6	9.4	10.0	96.0	94.0	2.1
Toluene	0.0	9.8	9.6	10.0	98.0	96.0	2.1
Ethyl Benzene	0.0	9.9	9.8	10.0	99.0	98.0	1.0
Xylenes	0.0	29.9	29.4	30.0	99.7	98.0	1.7
TPH(diesel)	0.0	169	162	150	113	108	4.0
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

13085 x 2309

McCAMBELL 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: John Riggi
Company: Cambria Environmental Technology
1144 65th Street, Suite C
Oakland, CA 94608
Tele: (510) 420-0700
Project #: 129-0741
Project Location: OAKLAND - 1499 MacArthur Blvd.
Sampler Signature:

Analysis Request														Other	Comments																					
SAMPLE ID	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX				METHOD PRESERVED				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								
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃																		Other					
MW-6	Hositi's	8/17/8	135	4	WA	X																														93649
MW-3	↓	↓	200	↓	↓	X																														93650
MW-4	↓	↓	230	↓	↓	X																														93651
MW-1	↓	↓	300	↓	↓	X																													93652	

Relinquished By: Ambrey K Cool
Date: 8-18
Time: 9:50
Received By: EDWARDS
Relinquished By: [Signature]
Date: 8-18
Time: 10:00
Received By: [Signature]

Remarks:
ICE:
GOOD CONDITION:
HEAD SPACE ABSENT:
PRESERVATION APPROPRIATE:
CONTAINERS:
VOL: O&G: METALS: OTHER:

ATTACHMENT B

Water Sampling Field Notes

WELL SAMPLING FORM

Project Name: <i>Hood's</i>	Cambria Mgr: <i>OR</i>	Well ID: <i>MW-6</i>
Project Number: <i>129-0741</i>	Date: <i>8/17/93</i>	Well Yield: <i>—</i>
Site Address: <i>1471 MacArthur Oakland CA</i>	Sampling Method: <i>200' deep sampler</i>	Well Diameter: <i>2"</i>
		Technician(s): <i>JR</i>
Initial Depth to Water: <i>12.66</i>	Total Well Depth: <i>22.20</i>	Water Column Height: <i>9.54</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.53</i>	3 Casing Volumes: <i>4.59</i>
Purging Device: <i>Whirlie</i>	Did Well Dewater?:	Total Gallons Purged: <i>4.59</i>
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"	0.63
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
<i>110</i>		<i>24.2</i>	<i>6.8</i>	<i>196</i>	
<i>115</i>		<i>21.4</i>	<i>6.2</i>	<i>935</i>	
<i>125</i>		<i>27.1</i>	<i>6.2</i>	<i>457</i>	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-6</i>	<i>8/16/93</i>	<i>135</i>	<i>4VOA'S</i>	<i>HCL</i>	<i>TPH, BTEX, MTBE</i>	<i>8020</i>

WELL SAMPLING FORM

Project Name: <i>HUSH'S</i>	Cambria Mgr: <i>DR</i>	Well ID: <i>MW-3</i>
Project Number: <i>129-0741</i>	Date: <i>9/17/99</i>	Well Yield: <i>/</i>
Site Address: <i>1479 Madison Ormond St</i>	Sampling Method: <i>dry footer</i>	Well Diameter: <i>2"</i>
		Technician(s): <i>JL</i>
Initial Depth to Water: <i>13.22</i>	Total Well Depth: <i>21.0</i>	Water Column Height: <i>7.78</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.25</i>	3 Casing Volumes: <i>3.75</i>
Purging Device: <i>Whaler</i>	Did Well Dewater?: <i>Yes</i>	Total Gallons Purged: <i>3.75</i>
Start Purge Time: <i>140</i>	Stop Purge Time: <i>155</i>	Total Time: <i>15 Min.</i>

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
<i>140</i>	<i>1</i>	<i>25.2</i>	<i>7.2</i>	<i>169</i>	<i>/</i>
<i>150</i>	<i>2</i>	<i>24.6</i>	<i>10.7</i>	<i>111</i>	
<i>155</i>	<i>3</i>	<i>21.9</i>	<i>6.8</i>	<i>168</i>	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-3</i>	<i>9/16/99</i>	<i>200</i>	<i>2/VOA'S</i>	<i>H2O</i>	<i>PH, ORP, MP</i>	<i>9020</i>

WELL SAMPLING FORM

Project Name: HOOSHI'S	Cambria Mgr: CR	Well ID: MW-4
Project Number: 129-0741	Date:	Well Yield: /
Site Address: 1499 1/2 Casanova Oakland, CA	Sampling Method: dry barrel	Well Diameter: 2"
		Technician(s): JR
Initial Depth to Water: 13.98	Total Well Depth: 19.98	Water Column Height: 6.0
Volume/ft: 0.16	1 Casing Volume: .96	3 Casing Volumes: 2.88
Purging Device: W	Did Well Dewater?: YES	Total Gallons Purged: 2.88
Start Purge Time: 2:15	Stop Purge Time: 2:35	Total Time: 20 min

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

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

Time	Casing Volume	Temp.	pH	Cond.	Comments
2:15	1	23.5	7.3	115	
2:20	2	20.9	7.2	526	
2:25	3	20.1	7.0	419	

2:30 sample

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
HOOSHI'S MW-4	8/17/98	2:30	4 WA'S	HVL	TPH, STX, MTBE	8020

WELL SAMPLING FORM

Project Name: <i>Hood's</i>	Cambria Mgr: <i>OR</i>	Well ID: <i>MW-1</i>
Project Number: <i>129-0741</i>	Date: <i>8/17/99 Mon</i>	Well Yield: _____
Site Address: <i>1499 MacArthur Oakland CA</i>	Sampling Method: <i>drop bailer</i>	Well Diameter: <i>2"</i>
		Technician(s): <i>JR</i>
Initial Depth to Water: <i>14.11</i>	Total Well Depth: <i>20.05</i>	Water Column Height: <i>5.94</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>.95</i>	3 Casing Volumes: <i>2.85</i>
Purging Device: <i>Wholer</i>	Did Well Dewater?: <i>Yes</i>	Total Gallons Purged: <i>2.95</i>
Start Purge Time: <i>2:45</i>	Stop Purge Time: <i>2:55</i>	Total Time: <i>10 min</i>

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
<i>2:45</i>	<i>1</i>	<i>21.3</i>	<i>7.4</i>	<i>228</i>	<i>Blank - 1st</i>
<i>2:50</i>	<i>2</i>	<i>21.03</i>	<i>6.9</i>	<i>903</i>	<i>Strong Odor</i>
<i>2:55</i>	<i>3</i>	<i>20.1</i>	<i>6.8</i>	<i>800</i>	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-1</i>	<i>8/17/99</i>	<i>3:00</i>	<i>4 VOA'S</i>	<i>HCL</i>	<i>TPH, BTEX, MTBE</i>	<i>8020</i>

CAMBRIA

Table 1. Ground Water Elevations and Analytical Data

Hooshi's Auto Service, 1499 MacArthur Boulevard
Oakland, California

Well ID TOC (ft*)	Date	Depth to Ground Water (ft)	Ground Water Elevation (ft*)	Separate Phase Hydrocarbons (ft)	← (µg/L) →						Notes
					TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-1 181.00	6/27/96	14.11	166.89	--	3,300	260	34	59	170	80	
	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
MW-2 180.45	6/27/96	12.61	167.84	1.00	--	--	--	--	--	--	
	5/8/98	10.81	169.64	0.02	--	--	--	--	--	--	
	8/17/98	12.16	168.29	0.02	--	--	--	--	--	--	
MW-3 179.94	6/27/96	13.20	166.74	--	2	22	2.9	11	7.4	56	
	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,j
MW-4 180.54	6/27/96	17.03	163.51	--	720	2	0.5	2.5	23	3.2	
	5/8/98	11.46	168.48	--	<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	
MW-5 180.23	6/27/96	13.62	166.61	0.16	--	--	--	--	--	--	
	5/8/98	13.15	166.79	0.02	--	--	--	--	--	--	
	8/17/98	13.36	166.87	0.02	--	--	--	--	--	--	
MW-6 180.03	6/27/96	18.55	161.48	--	ND	ND	ND	ND	ND	--	
	5/8/98	11.62	168.32	--	<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	
Trip Blank	5/8/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
MCLs	--	--	--	--	NE	1	150	700	1,750	NE	

↓ next page

Table 1. Ground Water Elevations and Analytical Data

Hooshi's Auto Service, 1499 MacArthur Boulevard
Oakland, California

Well ID <i>TOC</i> (ft*)	Date	Depth to Ground Water (ft)	Ground Water Elevation (ft*)	Separate Phase Hydrocarbons (ft)	←————— (µg/L) —————→						Notes
					TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-1	6/27/96	14.11	166.89	--	3,300	260	34	59	170	80	
<i>181.00</i>	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
MW-2	6/27/96	12.61	167.84	1.00	--	--	--	--	--	--	
<i>180.45</i>	5/8/98	10.81	169.64	0.03	--	--	--	--	--	--	
	8/17/98	12.16	168.29	0	--	--	--	--	--	--	
MW-3	6/27/96	13.20	166.74	--	2	22	2.9	11	7.4	56	
<i>179.94</i>	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,j
MW-4	6/27/96	17.03	163.51	--	720	2	0.5	2.5	23	3.2	
<i>180.54</i>	5/8/98	11.46	168.48	--	<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	
MW-5	6/27/96	13.62	166.61	0.16	--	--	--	--	--	--	
<i>180.23</i>	5/8/98	13.15	166.79	0.04	--	--	--	--	--	--	
	8/17/98	13.36	166.87	0	--	--	--	--	--	--	
MW-6	6/27/96	18.55	161.48	--	ND	ND	ND	ND	ND	--	
<i>180.03</i>	5/8/98	11.62	168.32	--	<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	
Trip Blank	5/8/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	

MCLs -- -- -- -- NE 1 150 700 1,750 NE

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

DO = Dissolved oxygen

µg/L = Micrograms per liter

mg/L = Milligrams per liter

TOC = Top of casing elevation

Abbreviations and Methods (Cont'd):

* = elevations surveyed to an arbitrary datum

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.
