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ENVIRONMENTAL
PROTECTION

April 2, 1999

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

99 APR -5 PM 4:10

Re: **First Quarter 1999 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 1999 ground water monitoring results for the site referenced above. Presented below are the first quarter 1999 activities, the current ground water flow direction, the current hydrocarbon distribution in ground water, and the anticipated second quarter 1999 activities.

FIRST QUARTER 1999 ACTIVITIES

Quarterly Ground Water Sampling: On February 17, 1999 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 received an Authority to Construct from the Bay Area Air Quality Management District for construction of a soil-vapor extraction (SVE) system at the site.

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

GROUND WATER FLOW DIRECTION

Based on the February 17, 1999 depth-to-water measurements, ground water flow appears to be predominantly toward the northeast (see Figure 1). 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 measured in wells MW-2 and MW-5. A maximum benzene concentration of 200 parts per billion (ppb) and a maximum MTBE concentration of 57 ppb were detected in well MW-1. Table 1 summarizes the ground water analytical results. The laboratory reports are included as Attachment A. The water sampling field sheets are included as Attachment B.

**ANTICIPATED SECOND QUARTER 1999 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 will install and start up the SVE system during the second quarter of 1999. A SVE start up report and periodic remedial update reports will be presented in separate reports.

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.



Jacquelyn Jones
Jacquelyn Jones
Staff Geologist

Owen Ratchye
Owen Ratchye, P.E.
Project Engineer



H:\SB-2004\Oak1 - Hooshi's\QM1Q99.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



**Ground Water Elevation
 Contour Map**
 February 17, 1999

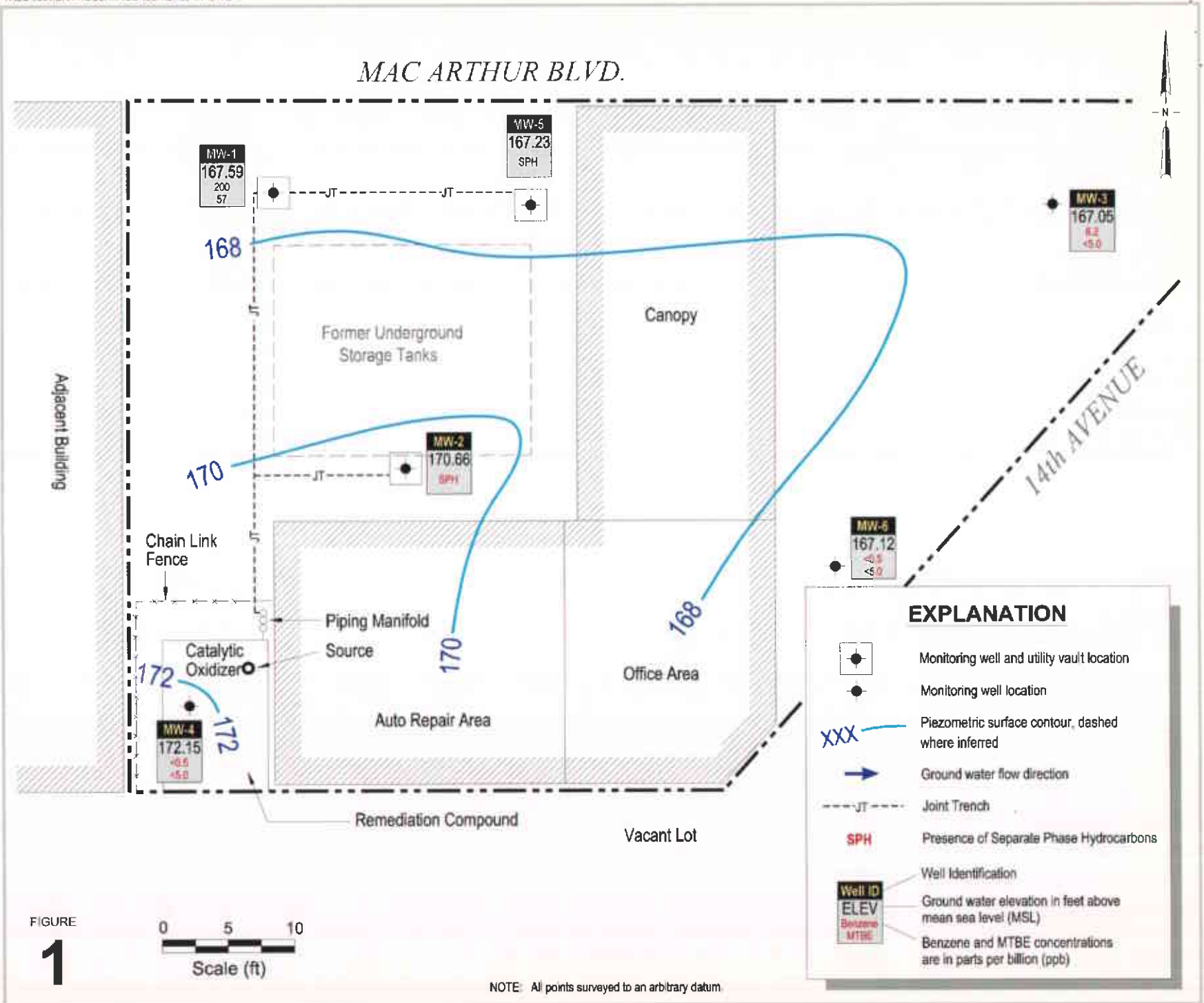


Table 1. Ground Water Elevations and Analytical Data

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)	TPHg ←	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE	Notes
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
	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
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	0.02	--	--	--	--	--	--	
	11/4/98	12.61	167.86	0.02	--	--	--	--	--	--	
	2/17/99	9.82	170.66	0.04	--	--	--	--	--	--	
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
	11/4/98	13.31	166.63	--	770	1.6	4.4	2.0	6.9	<30	j
	2/17/99	12.89	167.05	--	650	6.2	3.4	1.5	2.6	<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	
	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	

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ATTACHMENT A

Analytical Results for Ground Water Sampling



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; Hooshi's	Date Sampled: 02/17/99
		Date Received: 02/17/99
	Client Contact: Jacquelyn Jones	Date Extracted: 02/17/99
	Client P.O:	Date Analyzed: 02/17/99

02/25/99

Dear Jacquelyn:

Enclosed are:

- 1). the results of 4 samples from your #129-0741; Hooshi's 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 1144 65 th Street, Suite C Oakland, CA 94608	Client Project ID: #129-0741; Hooshi's	Date Sampled: 02/17/99
	Client Contact: Jacquelyn Jones	Date Received: 02/17/99
	Client P.O:	Date Extracted: 02/18-02/22/99
		Date Analyzed: 02/18-02/22/99

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	Ethylbenzene	Xylenes	% Recovery Surrogate
03634	MW1	W	320,a	57	200	47	72	75	113
03635	MW3	W	650,b,j	ND	6.2	3.4	1.5	2.6	---
03636	MW4	W	ND	ND	ND	ND	ND	ND	99
03637	MW6	W	ND	ND	ND	ND	ND	ND	99
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: 02/18/99

Matrix: WATER

Analyte	Concentration (mg/L)			Amount Spiked	% Recovery		RPD
	Sample (#03450)	MS	MSD		MS	MSD	
TPH (gas)	0.0	95.9	98.2	100.0	95.9	98.2	2.4
Benzene	0.0	9.5	9.7	10.0	95.0	97.0	2.1
Toluene	0.0	9.7	10.1	10.0	97.0	101.0	4.0
Ethyl Benzene	0.0	10.3	10.0	10.0	103.0	100.0	3.0
Xylenes	0.0	30.3	30.0	30.0	101.0	100.0	1.0
TPH(diesel)	0.0	152	156	150	101	104	2.6
TRPH (oil & grease)	0	21900	22700	23700	92	96	3.6

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

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

14043XC408

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: *Cambridge*
Company: Cambria Environmental Technology
1144 65th Street, Suite C
Oakland, CA 94608
Tele: (510) 420-0700 Fax: (510) 420-9170
Project #: *141-0141* Project Name: *Hankin's*
Project Location: *1499 MacArthur Blvd Oakland*
Sampler Signature: _____

Analysis Request														Other	Comments	
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		

SAMPLE ID	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED					
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other		
MW1		2/17	1045	4	WA	X					X	X				
MW3			955	1												
MW4			1005	1												
MW6			920	1												

03634
03635
03636
03637

Relinquished By: _____ Date: 2/17/99 Time: 1433 Received By: *[Signature]*
Relinquished By: *[Signature]* Date: 2/17/99 Time: 1910 Received By: *[Signature]*
Relinquished By: _____ Date: _____ Time: _____ Received By: _____

Remarks: ICEM PRESERVATION VOAS O&G METALS OTHER
 GOOD CONDITION APPROPRIATE
 HEAD SPACE ABSENT CONTAINERS

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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
MW1	8:35	—	13.41	—	20.05	
MW2	8:55	9:91	9.82	0.04	—	
MW3	8:31	—	12.89	—	21.0	
MW4	8:48	—	8.39	—	19.98	
MW5	8:54	13.00	13.02	0.02	—	
MW6	8:29	—	12.91	—	22.20	

Measured By: JS/RL

Date: 2/17/99

WELL SAMPLING FORM

Project Name: Hooshi's	Cambria Mgr: OR	Well ID: MW1
Project Number: 129-0741	Date: 2/17/99	Well Yield: —
Site Address: 1499 MacArthur Blvd. Oakland, California	Sampling Method: Disposable bailer	Well Diameter: 2 " pvc
		Technician(s): JJ/BC
Initial Depth to Water: 13.41	Total Well Depth: 20.05	Water Column Height: 6.64
Volume/ft: 0.16	1 Casing Volume: 1.06	3 Casing Volumes: 3.18
Purging Device: disposable bailer	Did Well Dewater?: No	Total Gallons Purged: 4.00 gal
Start Purge Time: 10:10	Stop Purge Time: 10:35	Total Time: 25 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
10:17	1	17.80	6.7	60	Pittman
10:30	2	18.50	6.6	67	pH meter
10:35	3	18.30	6.6	56	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW1	2/17/99	10:35	4 voa's	HCL	TPHg, BTEX, MTBE	8020 8015

WELL SAMPLING FORM

Project Name: Hooshi's	Cambria Mgr: OR	Well ID: MW 3
Project Number: 129-0741	Date: 2/17/99	Well Yield:
Site Address: 1499 MacArthur Blvd. Oakland, California	Sampling Method: Disposable bailer	Well Diameter: 2 " pvc
		Technician(s): JJ/BC
Initial Depth to Water: 12.89	Total Well Depth: 21.0	Water Column Height: 8.11
Volume/ft: 0.16	1 Casing Volume: 1.20 gal	3 Casing Volumes: 3.89
Purging Device: disposable bailer	Did Well Dewater?: NO	Total Gallons Purged: 4 gal
Start Purge Time: 9:29	Stop Purge Time: 9:48	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
9:33	1	18.6°C	7.8	88	Strong odor
9:39	2	17.4°C	7.9	82	
9:47	3	17.8°C	7.8	84	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-3	2/17/99	9:55	4 voa's	HCL	TPHg, BTEX, MTBE	8020 8015

WELL SAMPLING FORM

Project Name: Hooshi's	Cambria Mgr: OR	Well ID: MW 4
Project Number: 129-0741	Date: 2/17/99	Well Yield: ---
Site Address: 1499 MacArthur Blvd. Oakland, California	Sampling Method: Disposable bailer	Well Diameter: 2 " pvc
		Technician(s): JJ/BC
Initial Depth to Water: 8.38	Total Well Depth: 19.96	Water Column Height: 11.66
Volume/ft: 0.16	1 Casing Volume: 1.87 gal	3 Casing Volumes: 5.60 gal
Purging Device: disposable bailer	Did Well Dewater?: no	Total Gallons Purged: 6 gal
Start Purge Time: 933	Stop Purge Time: 945	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
933	1	15.0	6.9	130	
939	2	14.4	6.8	138	
942	3	14.8	6.9	144	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW4	2/17/99	1005	4 voa's	HCL	TPHg, BTEX, MTBE	8020 8015

WELL SAMPLING FORM

Project Name: Hooshi's	Cambria Mgr: OR	Well ID: MW6
Project Number: 129-0741	Date: 2/17/99	Well Yield: —
Site Address: 1499 MacArthur Blvd. Oakland, California	Sampling Method: Disposable bailer	Well Diameter: 2 " pvc
		Technician(s): JJ/BC
Initial Depth to Water: 12.91	Total Well Depth: 22.20	Water Column Height: 9.29
Volume/ft: 0.16	1 Casing Volume: 1.49	3 Casing Volumes: 4.46 gal
Purging Device: disposable bailer	Did Well Dewater?: NO	Total Gallons Purged: 5 gal
Start Purge Time: 902	Stop Purge Time: 911	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.	pH	Cond.	Comments
902	1	18.1	7.4	0.38	
907	2	18.6	7.8	0.65	
911	3	18.0	7.8	0.76	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW6	2/17/99	920	4 voa's	HCL	TPHg, BTEX, MTBE	8020 8015