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CAMBRIA

ENVIRONMENTAL PROTECTION

March 16, 1999

99 MAR 19 PM 12:26

Mr. Lee Douglas
Douglas Parking
1721 Webster Street
Oakland, California 94612

Re: **First Quarter 1999 Monitoring Report**
Douglas Parking
1721 Webster Street
Oakland, California
Cambria Project# 580-0197

Dear Mr. Douglas:

This report summarizes the first quarter 1999 ground water monitoring results for the site referenced above (Figure 1). Described below are the first quarter 1999 activities, the anticipated future activities, and the current hydrocarbon distribution in ground water.

FIRST QUARTER 1999 ACTIVITIES

Ground Water Sampling: On February 8, 1999, Cambria collected and analyzed ground water samples from wells MW-2, MW-3, MW-4 and MW-5 for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tertiary butyl ether (MTBE). Cambria also gauged all site wells and checked for separate-phase hydrocarbons (SPH). No SPH were detected. The ground water elevation data and analytic data are summarized in Table 1. The analytical report for ground water is included in Attachment A. The water sampling field notes are included in Attachment B.

Oxygen Releasing Compound (ORC) Removal: The ORC socks installed during the first quarter 1998 were removed on February 8, 1999, due to hydrogen peroxide injection activities.

Hydrogen Peroxide Injection: On February 8, 1999, Cambria began injecting hydrogen peroxide into wells MW-2 and MW-3 in accordance with Cambria's November 11, 1999 *Remedial Work Plan.* Cambria will continue to add hydrogen peroxide on a weekly basis for a period of 6 weeks.

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

ANTICIPATED FUTURE ACTIVITIES

Ground Water Sampling: As requested by the Alameda County Department of Environmental Health, Cambria will perform ground water monitoring on a quarterly basis to evaluate the remedial effectiveness of the hydrogen peroxide injection plan. During each monitoring event, Cambria will gauge all site wells, check for SPH, and collect and analyze ground water samples from wells MW-2, MW-3, MW-4 and MW-5 for TPHg, BTEX and MTBE. Cambria will perform confirmation analysis of MTBE concentrations by EPA Method 8260 for wells MW-2 and MW-4. Cambria will prepare a report summarizing these activities.

DO Monitoring: Cambria will monitor DO concentrations in all wells weekly during hydrogen peroxide injection and during quarterly monitoring events to help assess the remedial effectiveness of the hydrogen peroxide activities.

HYDROCARBON DISTRIBUTION IN GROUND WATER

Ground water elevation data indicate that ground water flows towards the north-northeast with a gradient of 0.004 ft/ft (Figure 1). Consistent with historic data, hydrocarbons were detected in wells MW-2, MW-3 and MW-4. Benzene was only detected in well MW-2, which is located immediately downgradient of the former underground storage tank (UST) area. The extent of hydrocarbons in ground water is defined to below method reporting limits in the northern crossgradient direction by well MW-1 and in the downgradient direction by well MW-5.

Hydrocarbon concentrations continue to exhibit an overall decreasing trend in source area well MW-2 and in upgradient well MW-3. Most importantly, hydrocarbon concentrations are at an historic low in well MW-2, with a benzene concentration of 740 parts per billion (ppb). The dramatic hydrocarbon reduction in well MW-2 may be attributable to the installation of ORCs in that well.

CLOSING

We appreciate this opportunity to provide environmental consulting services to Douglas Parking. Please call if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

Jacquelyn Jones
Staff Geologist

Bob Clark-Riddell, PE
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
ROBERT G. CLARK-RIDDELL
No. C 049629
Exp. 9/1 2000
CIVIL
STATE OF CALIFORNIA

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

cc: Tom Peacock, ACDEH, UST Local Oversight Program, 1131 Harbor Bay Parkway, 2nd Floor, Alameda, CA 94502

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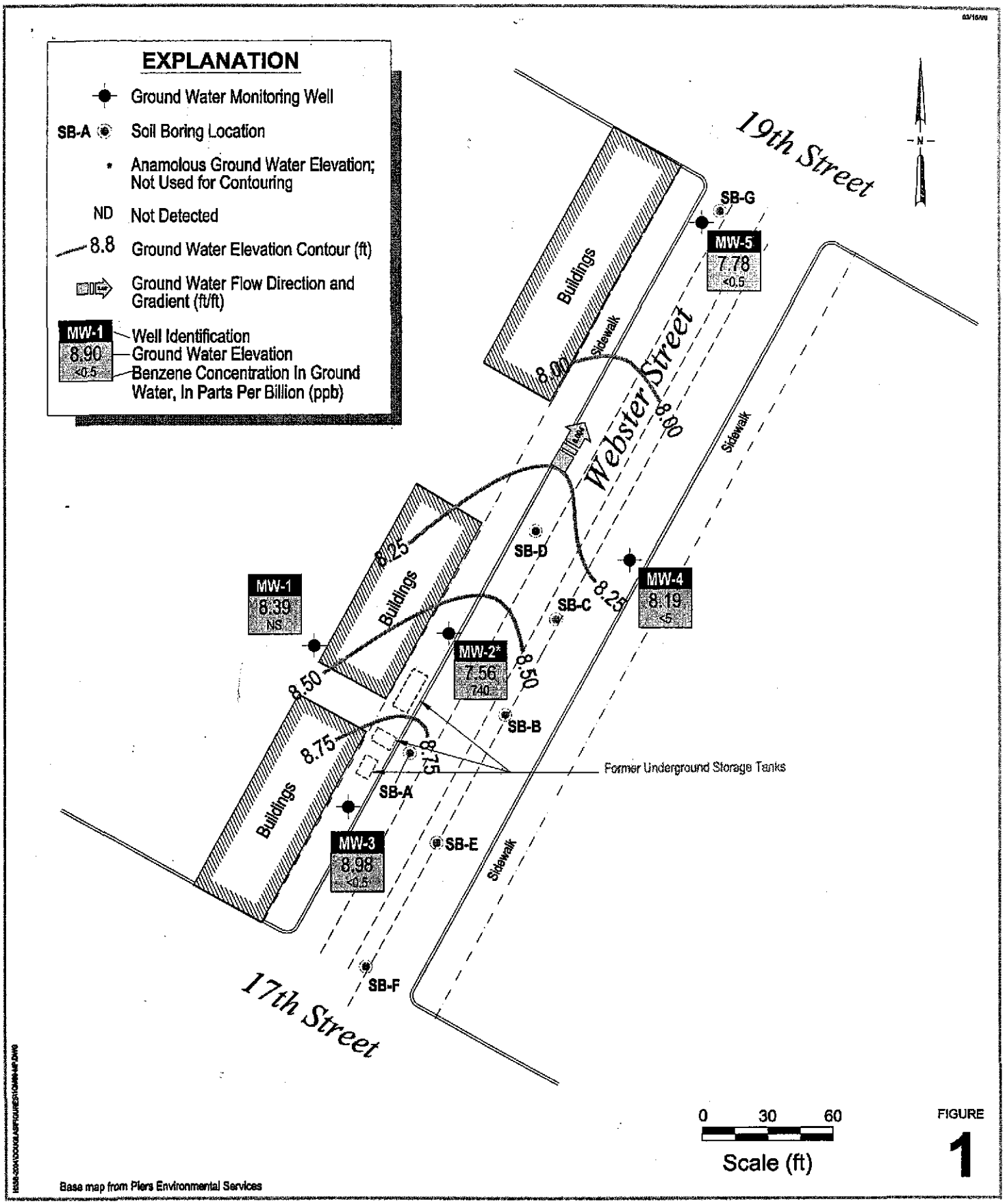

FIGURE 1

Douglas Parking Facility

1721 Webster Street
Oakland, California

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Ground Water Elevation Contours

February 8. 1999

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Table 1. Ground Water Elevation and Analytical Data - Douglas Parking Company, 1721 Webster Street, Oakland, CA

Well ID	Date	Well Elev. (ft)	G W Depth (ft)	G W Elev. (ft)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO (mg/L)	Notes
					← (Concentrations in µg/l) →							
MW-1	12/02/94	29.25	19.42	9.83	nd	nd	nd	nd	nd	-	-	1
	03/06/95	29.73	20.69	9.04	nd	nd	nd	nd	nd	-	-	1
	07/11/95	29.81	20.65	9.16	nd	nd	nd	nd	nd	-	-	
	05/10/96	29.81	20.80	9.01	nd	nd	nd	nd	nd	-	-	
	10/02/96	29.81	21.35	8.46	-	-	-	-	-	-	-	2
	02/28/97	29.81	20.57	9.24	-	-	-	-	-	-	-	2
	09/16/97	29.81	21.50	8.31	-	-	-	-	-	-	-	2
	02/05/98	29.81	20.91	8.90	-	-	-	-	-	-	1.9	2
	08/11/98	29.81	20.50	9.31	-	-	-	-	-	-	0.06	2
	02/08/99	**29.81**	**21.42**	**8.39**	-	-	-	-	-	-	**6.0**	**2, 3**
	02/24/99	29.81	22.99	6.82	-	-	-	-	-	-	2.0	3
	03/03/99	29.81	20.84	8.97	-	-	-	-	-	-	3.8	3
	03/10/99	29.81	20.89	8.92	-	-	-	-	-	-	3.4	3
MW-2	12/02/94	27.10	19.50	7.60	61,300	3,000	3,900	160	4,500	-	-	1
	03/06/95	27.10	18.49	8.61	98,000	8,400	16,000	2,000	2,600	-	-	1
	07/11/95	27.40	18.45	8.95	38,000	3,100	7,500	940	3,700	-	-	
	05/10/96	27.40	18.56	8.84	63,000	7,400	16,000	1,500	6,000	-	-	
	10/02/96	27.40	19.15	8.25	21,000	2,200	3,400	430	1,600	-	-	
	02/28/97	27.40	18.43	8.97	39,000	4,700	9,600	950	4,200	nd	-	
	09/16/97	27.40	19.26	8.14	29,000	3,300	5,800	690	2,900	<620	-	
	02/05/98	27.40	18.66	8.74	10,000	1,000	2,000	170	860	<330	7.9	
	08/11/98	27.40	18.41	8.99	12,000	1,200	2,300	260	1,400	300	5.4	
	02/08/99	**27.40**	**19.84**	**7.56**	**5,500**	**740**	**1,200**	**150**	**780**	**60**	**3.7**	**3**
	02/17/99	27.40	18.94	8.46	-	-	-	-	-	-	>20	3
	02/24/99	27.40	20.76	6.64	-	-	-	-	-	-	>20	3
	03/03/99	27.40	18.55	8.85	-	-	-	-	-	-	>20	3
	03/10/99	27.40	20.74	6.66	-	-	-	-	-	-	>20	3
MW-3	12/02/94	29.50	22.15	7.35	394,000	1,200	nd	1,800	4,000	-	-	1
	03/06/95	29.25	20.09	9.16	21,000	400	150	24	62	-	-	1
	07/11/95	29.56	19.99	9.57	12,000	nd	10	16	99	-	-	
	05/10/96	29.56	20.24	9.32	8,600	nd	7.6	16	84	-	-	

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Table 1. Ground Water Elevation and Analytical Data - Douglas Parking Company, 1721 Webster Street, Oakland, CA

Well ID	Date	Well Elev. (ft)	G W Depth (ft)	G W Elev. (ft)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO (mg/L)	Notes
					← (Concentrations in µg/l) →							
	10/02/96	29.56	20.90	8.66	11,000	nd	7.4	19	92	-	-	
	02/28/97	29.56	20.12	9.44	6,000	nd	4.4	17	88	50	-	
	09/16/97	29.56	20.97	8.59	6,500	<0.5	1	1	7	<5.0	-	
	02/05/98	29.56	20.39	9.17	5,400	<0.5	6.3	15	86	<63	1.9	
	08/11/98	29.56	19.95	9.61	2,700	<0.5	3.5	3.2	12	<10	0.05	
	02/08/99	**29.56**	**20.58**	**8.98**	**6,100**	**<0.5**	**8.1**	**18**	**80**	**<140**	**2.2**	**3**
	02/17/99	29.56	20.53	9.03	-	-	-	-	-	-	>20	3
	02/24/99	29.56	22.53	7.03	-	-	-	-	-	-	>20	3
	03/03/99	29.56	20.28	9.28	-	-	-	-	-	-	>20	3
	03/10/99	29.56	22.45	7.11	-	-	-	-	-	-	>20	3
MW-4	05/10/96	25.29	16.98	8.31	14,000	nd	1,200	720	3,100	-	-	
	10/02/96	25.29	17.65	7.64	12,000	nd	650	580	2,200	-	-	
	02/28/97	25.29	16.80	8.49	13,000	nd	1,100	750	2,700	110	-	
	09/17/97	25.29	17.93	7.36	13,000	<2.5	820	750	2,900	<190	-	
	02/05/98	25.29	16.78	8.51	13,000	<1.0	690	690	2,900	<170	2.1	
	08/11/98	25.29	16.59	8.70	15,000	<5	360	520	1,900	280	2.8	
	02/08/99	**25.29**	**17.10**	**8.19**	**9,800**	**<5**	**680**	**770**	**2,200**	**300**	**1.8**	**3**
	02/24/99	25.29	18.95	6.34	-	-	-	-	-	-	2.2	3
	03/03/99	25.29	16.80	8.49	-	-	-	-	-	-	4.6	3
	03/10/99	25.29	16.86	8.43	-	-	-	-	-	-	3.7	3
MW-5	05/10/96	21.97	14.60	7.37	nd	nd	nd	nd	nd	-	-	
	10/02/96	21.97	15.25	6.72	nd	nd	nd	nd	nd	-	-	
	02/28/97	21.97	14.31	7.66	nd	nd	nd	nd	nd	nd	-	
	09/17/97	21.97	15.18	6.79	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	02/05/98	21.97	13.64	8.33	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.8	
	08/11/98	21.97	13.92	8.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.05	
	02/08/99	**21.97**	**14.19**	**7.78**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**	**3.0**	**3**
	02/24/99	21.97	16.18	5.79	-	-	-	-	-	-	4.9	3
	03/03/99	21.97	14.23	7.74	-	-	-	-	-	-	3.4	3
	03/10/99	21.97	14.32	7.65	-	-	-	-	-	-	3.6	3

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Table 1. Ground Water Elevation and Analytical Data - Douglas Parking Company, 1721 Webster Street, Oakland, CA

Well ID	Date	Well Elev. (ft)	G W Depth (ft)	G W Elev. (ft)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO (mg/L)	Notes
					←		(Concentrations in µg/l)			→		

Notes and Abbreviations:

Benzene, Toluene, Ethylbenzene, and Xylenes by EPA Method 8020.

G W = Ground water

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

MTBE = methyl tertiary butyl ether by EPA Method 8020.

Elev. = Elevation

µg/L = micrograms per liter

mg/L = milligrams per liter

nd = not detected

DO = dissolved oxygen

1 = Data prior to 7/11/95 from Gen Tech and Piers Environmental Quarterly Groundwater Monitoring Reports dated December 2, 1994 and March 6, 1995, respectively.

2 = Per letter dated September 17, 1996 to Douglas Parking from ACDEH, sampling no longer required in well MW-1.

3 = DO monitoring event.

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ATTACHMENT A

Analytical Report 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 65th Street, Suite C Oakland, CA 94608	Client Project ID: #580-0197-012; Douglas Parking	Date Sampled: 02/08/99
		Date Received: 02/09/99
	Client Contact: Jacquelyn Jones	Date Extracted: 02/09/99
	Client P.O:	Date Analyzed: 02/09/99

02/16/99

Dear Jacquelyn:

Enclosed are:

1). the results of **5** samples from your **: #580-0197-012; Douglas Parking** 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.
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	Client Project ID: #580-0197-012; Douglas Parking	Date Sampled: 02/08/99
1144 65th Street, Suite C		Date Received: 02/09/99
Oakland, CA 94608	Client Contact: Jacquelyn Jones	Date Extracted: 02/09/99
	Client P.O:	Date Analyzed: 02/09/99

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
03148	MW2	W	5500,a	60	740	1200	150	780	110
03149	MW3	W	6100,b,j	ND<140	ND	8.1	18	80	117
03150	MW4	W	9800,b	300	ND<5	680	770	2200	106
03151	MW5	W	ND	ND	ND	ND	ND	ND	108
03152	Trip Blank	W	ND	ND	ND	ND	ND	ND	108
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.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 925-798-1620 Fax: 925-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 02/08/99-02/09/99 Matrix: WATER

Analyte	Concentration (mg/L) Sample (#02799)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.0	80.1	81.7	100.0	80.1	81.7	2.0
Benzene	0.0	10.9	10.1	10.0	109.0	101.0	7.6
Toluene	0.0	11.0	10.3	10.0	110.0	103.0	6.6
Ethyl Benzene	0.0	10.7	10.4	10.0	107.0	104.0	2.8
Xylenes	0.0	32.5	31.6	30.0	108.3	105.3	2.8
TPH(diesel)	0.0	144	148	150	96	99	3.1
TRPH (oil & grease)	0	22300	22800	23700	94	96	2.2

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

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

13942 XE407

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 #: 580-0197-012 Project Name: Bauglas Study

Project Location: 1721 Webster Street, 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
MW2		2/8	1240	4	VOA	X					X	X		
MW3		2/8	1215											
MW4		2/8	925											
MW5		2/8	1105	↓	↓						↓	↓		
trip blank		2/8	—	1	VOA	X					X	X		

Analysis Request

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
X														
X														

Other: | Comments:

03148
03149
03150
03151
03152

Relinquished By:	Date:	Time:	Received By:
	2/8	935AM	James D McLean Aeros
James D McLean	2-9	1144AM	
Relinquished By:	Date:	Time:	Received By:

Remarks:

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATION APPROPRIATE ✓
CONTAINERS ✓

VOAS ✓ | O&G | METALS | OTHER

TB. MV

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ATTACHMENT B

Water Sampling Field Notes

CAMBRIA

WELL DEPTH MEASUREMENTS

Well ID	Time	Product Depth	Water Depth	Product Thickness	Well Depth	Comments
MW4	8:55	—	17.10	—	29.88	
MW5	10:38	—	14.19	—	24.63	
MW3	1150	—	20.58	—	25.05	
MW2	12:35	—	19.84	—	27.08	
MW1	1:00	—	21.42	—	24.63	DO= 6.0

Measured By: JJ

Date: 2/8/99

CAMBRIA

WELL SAMPLING FORM

Project Name: **Douglas Parking**	Cambria Mgr: **RAS**	Well ID: MW2
Project Number: **580-0197**	Date: **2/8/99**	Well Yield: —
Site Address: **1721 Webster Street Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 2 " **pvc**
		Technician(s): **JJ**
Initial Depth to Water: 19.84	Total Well Depth: 27.08	Water Column Height:
Volume/ft: 0.16	1 Casing Volume: NO PURGE	3 Casing Volumes:
Purging Device: **disposable bailer**	Did Well Dewater?: —	Total Gallons Purged: 0 gal
Start Purge Time: —	Stop Purge Time: —	Total Time: —

1 Casing Volume = Water column height x Volume/ ft. DO = 3.7

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

Time	Casing Volume	Temp.	pH	Cond.	Comments

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW2	**2/8/99**	1240	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**

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NSM 5/31/94

CAMBRIA

WELL SAMPLING FORM

Project Name: **Douglas Parking**	Cambria Mgr: **RAS**	Well ID: MW3
Project Number: **580-0197**	Date: **2/8/99**	Well Yield: —
Site Address: **1721 Webster Street Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 2 **" pvc**
		Technician(s): **JJ**
Initial Depth to Water: 20.58	Total Well Depth: 28.05	Water Column Height: 7.47
Volume/ft: 0.16	1 Casing Volume: 1.19 gal	3 Casing Volumes: 3.59 gal
Purging Device: **disposable bailer**	Did Well Dewater?: ND	Total Gallons Purged: 4 gal
Start Purge Time: 1157	Stop Purge Time: 1207	Total Time: 10 min

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

Post purge DTW= 20.82 DO= 21.2 mg/L

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

Time	Casing Volume	Temp.	pH	Cond.	Comments
					PH meter not working

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW3	**2/8/99**	1215	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**

CAMBRIA

WELL SAMPLING FORM

Project Name: **Douglas Parking**	Cambria Mgr: **RAS**	Well ID: MW 4
Project Number: **580-0197**	Date: **2/8/99**	Well Yield:
Site Address: **1721 Webster Street Oakland, California**	Sampling Method: **Disposable bailer**	Well Diameter: 2 " **pvc**
		Technician(s): **JJ**
Initial Depth to Water: 17.10	Total Well Depth: 29.88	Water Column Height: 12.78
Volume/ft: 0.16	1 Casing Volume: 2.04	3 Casing Volumes: 6.13
Purging Device: **disposable bailer**	Did Well Dewater?: no	Total Gallons Purged: 6.5
Start Purge Time: 9 04	Stop Purge Time: 916	Total Time: 12 min

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

DO= 1.8 ppm

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

Time	Casing Volume	Temp.	pH	Cond.	Comments
904	1	16.4	7.5	53	
906	2	16.8	7.1	60	
914	3	16.8	7.1	69	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW4	**2/8/99**	925	**4 voa's**	**HCL**	**TPHg, BTEX, MTBE**	**8020 8015**

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NSM 5/31/94