

September 21, 2000

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

Re: **Third Quarter 2000 Monitoring Report**
Douglas Parking
1721 Webster Street
Oakland, California
Cambria Project# 580-0197



Dear Mr. Douglas:

This report summarizes the third quarter 2000 groundwater monitoring results for the above-referenced site. Described below are the third quarter 2000 activities, the hydrocarbon distribution in groundwater, and the anticipated fourth quarter activities.

THIRD QUARTER 2000 ACTIVITIES

Groundwater Sampling: On July 31, 2000, Cambria collected and analyzed groundwater samples from all site wells for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tertiary butyl ether (MTBE), and dissolved oxygen (DO) concentrations. Cambria also gauged all site wells and inspected the wells for separate-phase hydrocarbons (SPH). No SPH were detected. The groundwater elevation and analytical data are summarized in Table 1. The laboratory analytical report for groundwater is included as Attachment A. Well sampling forms are included as Attachment B.

HYDROCARBON DISTRIBUTION IN GROUNDWATER

Groundwater elevation data indicate that groundwater flows towards the north-northeast with a gradient of 0.005 ft/ft (Figure 1). Consistent with historical site data, hydrocarbons were detected in wells MW-2, MW-3 and MW-4. The maximum detected benzene concentration was 1,500 micrograms per liter (ug/l) in downgradient well MW-2. Benzene was also detected at 3.5 ug/l and 13 ug/l in wells MW-3 and MW-4, respectively. The hydrocarbon concentrations in these wells are comparable with those detected during the second quarter 2000 groundwater monitoring event.

Oakland, CA
San Ramon, CA
Sonoma, CA
Portland, OR


**Cambria
Environmental
Technology, Inc.**

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

ENVIRONMENTAL
PROTECTION

The extent of hydrocarbons in groundwater is defined to below method reporting limits by crossgradient well MW-1 and downgradient well MW-5.

ANTICIPATED FOURTH QUARTER ACTIVITIES



Groundwater Sampling: As requested by the ACDEH, Cambria will perform groundwater monitoring on a quarterly basis. During each monitoring event, Cambria will gauge all site wells, inspect for SPH, and collect and analyze groundwater samples from wells MW-2, MW-3, MW-4 and MW-5 for TPHg, BTEX, MTBE and DO. If MTBE is detected in wells MW-2 or MW-4, concentrations will be confirmed using EPA Method 8260. Cambria will summarize the quarterly monitoring activities in a written report.

Remedial Action: Cambria has prepared a *Feasibility Testing and Feasibility Study Proposal* for UST Cleanup Fund approval. Upon UST Cleanup Fund approval, Cambria will initiate a soil vapor extraction pilot test, and evaluate the feasibility of air sparging and soil vapor extraction at the subject site.

CLOSING

Cambria appreciates the opportunity to provide environmental services to Douglas Parking. If you have any questions or comments, please call John Riggi at (510) 420-3340 or Bob Clark-Riddell at (510) 420-3303.

Sincerely,
Cambria Environmental Technology, Inc.



Catherine M. Bell

Catherine M. Bell
Staff Geologist

Bob Clark-Riddell

Bob Clark-Riddell, PE
Principal Engineer



Attachments: A - Laboratory Analytical Report
B - Well Sampling Forms

cc: Larry Seto, Alameda County Department of Environmental Health, 1131 Harbor Bay Parkway, 2nd Floor, Alameda, CA 94502

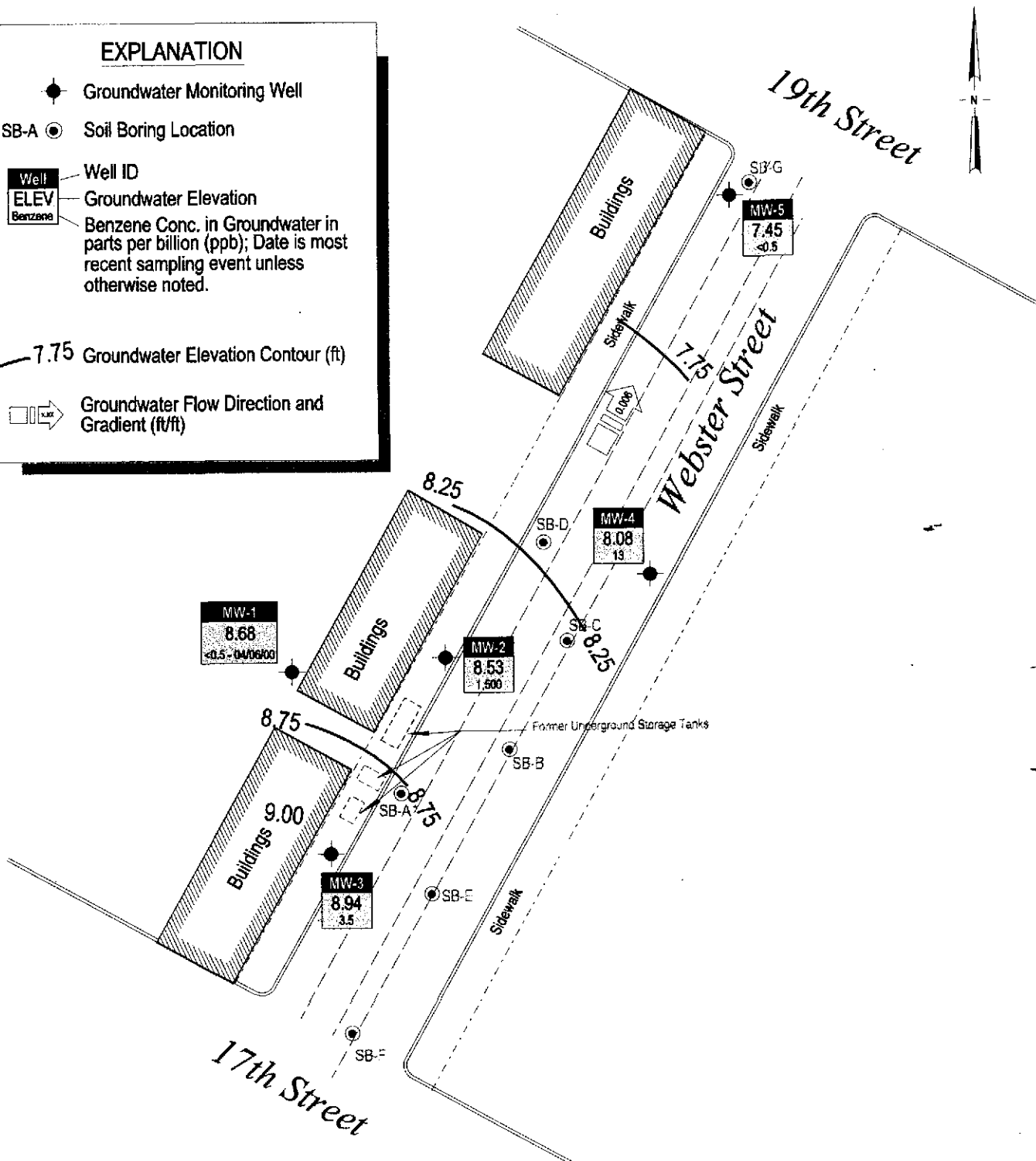
EXPLANATION

- ◆ Groundwater Monitoring Well
- SB-A ● Soil Boring Location

Well	Well ID
ELEV	Groundwater Elevation
Benzene	Benzene Conc. in Groundwater in parts per billion (ppb); Date is most recent sampling event unless otherwise noted.

— 7.75 Groundwater Elevation Contour (ft)

→ Groundwater Flow Direction and Gradient (ft/ft)



H:\SB-2004\DOUGLAS\1721 Webster\FIGURES\30M00-MP.DWG

Base map from Piers Environmental Services



FIGURE 1

Douglas Parking Facility
 1721 Webster Street
 Oakland, California



Groundwater Elevation Contour Map
 July 31, 2000

CAMBRIA

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

Well ID	Date	TOC Elevation (ft-msl)	Depth to Water (ft)	Groundwater Elevation (ft)	TPHg	------(Concentrations in µg/l)-----					DO (mg/L)	Notes
						Benzene	Toluene	Ethylbenzene	Xylenes	MTBE		
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	-	-	-	-	-	-	1.90	2
	08/11/98	29.81	20.50	9.31	-	-	-	-	-	-	0.06	2
	02/08/99	29.81	21.42	8.39	-	-	-	-	-	-	6.00	2, 3
	02/24/99	29.81	22.99	6.82	-	-	-	-	-	-	2.00	2, 3
	03/03/99	29.81	20.84	8.97	-	-	-	-	-	-	3.80	2, 3
	03/10/99	29.81	20.89	8.92	-	-	-	-	-	-	3.40	2, 3
	03/17/99	29.81	20.84	8.97	-	-	-	-	-	-	2.80	2, 3
	05/04/99	29.81	20.80	9.01	-	-	-	-	-	-	3.50	2
	07/20/99	29.81	21.25	8.56	-	-	-	-	-	-	3.07	2
	10/05/99	29.81	21.37	8.44	-	-	-	-	-	-	5.40	2
	01/07/00	29.81	21.65	8.16	-	-	-	-	-	-	2.10	2
04/06/00	29.81	21.05	8.76	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.90	4	
07/31/00	29.81	21.13	8.68	-	-	-	-	-	-	1.80	2	
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	7.90	
	08/11/98	27.40	18.41	8.99	12,000	1,200	2,300	260	1,400	300	5.40	
	02/08/99	27.40	19.84	7.56	5,500	740	1,200	150	780	60	3.70	
	02/17/99	27.40	18.94	8.46	-	-	-	-	-	-	>20	3, 5
	02/24/99	27.40	20.76	6.64	-	-	-	-	-	-	>20	3, 5
	03/03/99	27.40	18.55	8.85	-	-	-	-	-	-	>20	3, 5
03/10/99	27.40	20.74	6.66	-	-	-	-	-	-	>20	3, 5	

CAMBRIA

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

Well ID	Date	TOC Elevation (ft-msl)	Depth to Water (ft)	Groundwater Elevation (ft)	(Concentrations in µg/l)						DO (mg/L)	Notes
					TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE		
	03/17/99	27.40	18.57	8.83	-	-	-	-	-	-	>20	3, 5
	05/04/99	27.40	18.55	8.85	90,000	9,200	21,000	1,600	10,000	560	3.20	
	07/20/99	27.40	18.98	8.42	28,000	2,100	3,700	900	4,200	<860	0.64	
	10/05/99	27.40	19.10	8.30	11,000	870	180	30	1,400	<110	0.58	
	01/07/00	27.40	19.41	7.99	15,000	1,300	2,100	440	1,800	<14	0.94	
	04/06/00	27.40	18.80	8.60	17,000	1,800	3,100	500	2,200	<50	0.64	
	07/31/00	27.40	18.87	8.53	17,000	1,500	2,700	430	2,100	<200	0.50	
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	-	-	
	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	1.90	
	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	2.20	
	02/17/99	29.56	20.53	9.03	-	-	-	-	-	-	>20	3, 5
	02/24/99	29.56	22.53	7.03	-	-	-	-	-	-	>20	3, 5
	03/03/99	29.56	20.28	9.28	-	-	-	-	-	-	>20	3, 5
	03/10/99	29.56	22.45	7.11	-	-	-	-	-	-	>20	3, 5
	03/17/99	29.56	20.26	9.30	-	-	-	-	-	-	>20	3, 5
	05/04/99	29.56	20.24	9.32	11,000	<2	<2	9.8	140	<10	3.10	
	07/20/99	29.56	20.68	8.88	11,000	<0.5	3.1	13	88	<80	0.75	
	10/05/99	29.56	20.81	8.75	31,000	62	<0.5	21	170	<90	0.68	
	01/07/00	29.56	21.09	8.47	13,000	<0.5	<2	21	140	<80	1.96	
	04/06/00	29.56	20.48	9.08	5,300	1.5	1.4	9.8	60	<30	4.15	
	07/31/00	29.56	20.62	8.94	7,100	3.5	1.0	12	66	<5.0	0.35	
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	2.10	
	08/11/98	25.29	16.59	8.70	15,000	<5	360	520	1,900	280	2.80	

CAMBRIA

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

Well ID	Date	TOC Elevation	Depth to	Groundwater	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	Notes
		(ft-msl)	Water (ft)	Elevation (ft)								
	02/08/99	25.29	17.10	8.19	9,800	<5	680	770	2,200	300	1.80	3
	02/24/99	25.29	18.95	6.34	-	-	-	-	-	-	2.20	3
	03/03/99	25.29	16.80	8.49	-	-	-	-	-	-	4.60	3
	03/10/99	25.29	16.86	8.43	-	-	-	-	-	-	3.70	3
	03/17/99	25.29	16.82	8.47	-	-	-	-	-	-	4.30	3
	05/04/99	25.29	16.86	8.43	11,000	46	600	620	1,900	<100	4.10	
	07/20/99	25.29	17.30	7.99	13,000	<0.5	470	7.0	2,000	<150	0.38	
	10/05/99	25.29	17.43	7.86	18,000	4.4	720	800	2,100	<120	0.71	
	01/07/00	25.29	17.78	7.51	18,000	<2	930	990	2,700	<30	0.98	
	04/06/00	25.29	17.17	8.12	8,000	31	390	530	1,300	<10	1.33	
	07/31/00	25.29	17.21	8.08	6,200	13	170	460	850	<10	0.50	
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	2.80	
	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	3.00	
	02/24/99	21.97	16.18	5.79	-	-	-	-	-	-	4.90	3
	03/03/99	21.97	14.23	7.74	-	-	-	-	-	-	3.40	3
	03/10/99	21.97	14.32	7.65	-	-	-	-	-	-	3.60	3
	03/17/99	21.97	14.25	7.72	-	-	-	-	-	-	3.90	3
	05/04/99	21.97	14.41	7.56	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.20	
	07/20/99	21.97	14.44	7.53	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.99	
	10/05/99	21.97	14.79	7.18	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.52	
	01/07/00	21.97	15.23	6.74	-	-	-	-	-	-	-	Well inaccessible
	04/06/00	21.97	14.74	7.23	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.67	
	07/31/00	21.97	14.52	7.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.55	

CAMBRIA

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

Well ID	Date	TOC Elevation (ft-msl)	Depth to Water (ft)	Groundwater Elevation (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.

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

MTBE = methyl tertiary butyl ether by EPA Method 8020.

µg/L = micrograms per liter

mg/L = milligrams per liter

ft-msl = feet above mean sea level

TOC = top of casing

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 = Sampling no longer required in well MW-1 per September 17, 1996, ACDEH letter to Douglas Parking.

3 = DO monitoring event (no hydrocarbon analyses), as described in November 11, 1998 Remedial Workplan.

4 = Sampled well once to confirm well is still not impacted.

5 = Hydrogen peroxide injection occurring per our Remedial Workplan, dated November 11, 1998.

C A M B R I A



ATTACHMENT A

Laboratory Analytical Report



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: #580-0197; Douglas Parking	Date Sampled: 07/31/00
	Client Contact: Cathy Bell & John Riggi	Date Received: 08/01/00
	Client P.O:	Date Extracted: 08/01-08/03/00
		Date Analyzed: 08/01-08/03/00

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	Ethylben- zene	Xylenes	% Recovery Surrogate
44175	MW-2	W	17,000,a	ND<200	1500	2700	430	2100	97
44176	MW-3	W	7100,bj	ND	3.5	1.0	12	66	---
44177	MW-4	W	6200,bj	ND<10	13	170	460	850	100
44178	MW-5	W	ND	ND	ND	ND	ND	ND	102
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.



McCAMPBELL ANALYTICAL INC.

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

QC REPORT

Date: 08/01/00 Matrix: Water

Extraction: N/A

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

SampleID: 43311

Instrument: GC-7

Surrogate1	0.000	86.0	87.0	100.00	86	87	1.2
Xylenes	0.000	267.0	271.0	300.00	89	90	1.5
Ethyl Benzene	0.000	84.0	85.0	100.00	84	85	1.2
Toluene	0.000	84.0	85.0	100.00	84	85	1.2
Benzene	0.000	82.0	84.0	100.00	82	84	2.4
MTBE	0.000	94.0	95.0	100.00	94	95	1.1
GAS	0.000	936.1	957.4	1000.00	94	96	2.2

SampleID: 8100

Instrument: MB-1

Oil & Grease	0.000	20.4	20.6	20.00	102	103	1.0
--------------	-------	------	------	-------	-----	-----	-----

SampleID: 8100

Instrument: GC-2 A

Surrogate1	0.000	100.0	99.0	100.00	100	99	1.0
TPH (diesel)	0.000	322.0	272.0	300.00	107	91	16.8

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

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

RPD means Relative Percent Deviation

2130120184.doc

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: ~~John Bell~~ Cathy Bell / John Bell Bill To:
Company: Cambria Environmental Technology ← CAMBRIA
1144 65th Street, Suite C
Oakland, CA 94608
Tele: (510) 420-0700 Fax: (510) 420-9170
Project #: 580-0197 Project Name: Douglas Parking
Project Location: 1721 Webster, Oakland
Sampler Signature: [Signature]

Analysis Request

Other

Comments

SAMPLE ID	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED									
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other						
+ MW-2		7/31	10:01	4	VDA	X					X	X								
+ MW-3			10:31	4		X					X	X								
+ MW-4			9:32	4		X					X	X								
+ MW-5			9:05	4		X					X	X								

BTEX & TPH as Gas (602/8020 + 8015) MTBE																				
TPH as Diesel (8015)																				
Total Petroleum Oil & Grease (5520 E&P/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																				

* Confirm all MTBE detections by 8260.

44175
44176
44177
44178

Relinquished By: [Signature] Date: 8/1/00 Time: 8:45 Received By: David W. [Signature]
Relinquished By: David W. [Signature] Date: 8/1/00 Time: 12:15 Received By: Marion [Signature]
Relinquished By: [Blank] Date: [Blank] Time: [Blank] Received By: [Blank]

Remarks: IDEA GOOD CONDITION HEAD SPACE ABSENT PRESERVATION APPROPRIATE CONTAINERS VOLATILE ORGANICS METALS OTHER
TB.M.V.

C A M B R I A



ATTACHMENT B

Well Sampling Forms

WELL DEPTH MEASUREMENTS

DO

2 Drums
 1 Blue - UNlabel'd ??
 1 Purge H₂O 7/31/00
 1/3 Full

Well ID	Time	Product Depth	Water Depth	Product Thickness	Well Depth	Comments
2 MW-1	8:07		21.13	1.80	24.63	Gauge, DO only
4 MW-2	8:21		18.87	0.50	27.08	Post purge DO
5 MW-3	8:28		20.62	0.35	28.05	pre DO
3 MW-4	8:14		17.21	0.50	29.88	↓ TRAFFIC Control
1 MW-5	7:00		14.52	2.55	24.63	↓ TRAFFIC Control

Douglas Parking 580-097
 Measured By: JO

Date: 7/31/00

WELL SAMPLING FORM

Project Name: <u>Douglas Parking</u>	Cambria Mgr: <u>JR</u>	Well ID: <u>MW-2</u>
Project Number: <u>580-0197</u>	Date: <u>7/31/00</u>	Well Yield: <u>-</u>
Site Address: <u>1721 Webster Oakland</u>	Sampling Method: <u>Disp Dailer</u>	Well Diameter: <u>2"</u>
		Technician(s): <u>JO</u>
Initial Depth to Water: <u>18.87'</u>	Total Well Depth: <u>27.08'</u>	Water Column Height: <u>8.21'</u>
Volume/ft: <u>0.16'</u>	1 Casing Volume: <u>1.31 gal</u>	Casing Volumes: <u>3.93 gal</u>
Purging Device: <u>Disp Bailer</u>	Did Well Dewater?: <u>N</u>	Total Gallons Purged: <u>~4.5 gal</u>
Start Purge Time: <u>9:42</u>	Stop Purge Time: <u>9:52</u>	Total Time: <u>10 min</u>

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
9:45	2 gal	14.7	7.6	326	
9:49	3.5 gal	14.5	7.5	290	
9:51	4 gal	15.1	7.5	314	

~~Fe =~~

~~ORP =~~

DO = 0.50

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-2	7/31/00	10:01	4 Uoa	HCL	MTBE, BTEX, TPH _g	-

WELL SAMPLING FORM

Project Name: <u>Douglas Perkins</u>	Cambria Mgr: <u>JR</u>	Well ID: <u>MW-3</u>
Project Number: <u>380-0197</u>	Date: <u>7/31/00</u>	Well Yield: <u>—</u>
Site Address: <u>1721 Webster Oakland</u>	Sampling Method: <u>Dis bailer</u>	Well Diameter: <u>2"</u>
		Technician(s): <u>JO</u>
Initial Depth to Water: <u>20.62'</u>	Total Well Depth: <u>28.05'</u>	Water Column Height: <u>7.43'</u>
Volume/ft: <u>0.16'</u>	1 Casing Volume: <u>1.19 gal</u>	Casing Volumes: <u>3.57 gal</u>
Purging Device: <u>Dis Bailer</u>	Did Well Dewater?: <u>N</u>	Total Gallons Purged: <u>4.5 gal</u>
Start Purge Time: <u>10:11</u>	Stop Purge Time: <u>10:21</u>	Total Time: <u>10 min</u>

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
10:14	2 gal	17.0	8.1	392	
10:17	3 gal	16.9	8.0	380	
10:19	3.3 gal	17.1	8.0	420	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-3	7/31/00	10:31	4 UOA	HCL	MTBE, BTEX, TPH	

WELL SAMPLING FORM

Project Name: <u>Douglas Parking</u>	Cambria Mgr: <u>JR</u>	Well ID: <u>MW-4</u>
Project Number: <u>580-0197</u>	Date: <u>7/31/00</u>	Well Yield: -----
Site Address: <u>1721 Webster, Oakland</u>	Sampling Method:	Well Diameter: <u>2" pvc</u>
	Disposable bailer	Technician(s): <u>JO</u>
Initial Depth to Water: <u>17.21'</u>	Total Well Depth: <u>29.88'</u>	Water Column Height: <u>12.67'</u>
Volume/ft: <u>0.16'</u>	1 Casing Volume: <u>2.03 gal</u>	3 Casing Volumes: <u>6.09 gal</u>
Purging Device: <u>Dis. Bailer</u>	Did Well Dewater?: <u>N</u>	Total Gallons Purged: <u>~7</u>
Start Purge Time: <u>9:10</u>	Stop Purge Time: <u>9:22</u>	Total Time: <u>12 min</u>

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
<u>9:13</u>	<u>2 gal</u>	<u>17.7</u>	<u>7.1</u>	<u>772</u>	
<u>9:16</u>	<u>4 gal</u>	<u>17.7</u>	<u>7.0</u>	<u>824</u>	
<u>9:20</u>	<u>6 gal</u>	<u>17.5</u>	<u>6.9</u>	<u>714</u>	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<u>MW-4</u>	<u>7/31/00</u>	<u>9:32</u>	<u>4 Voa</u>	<u>HCL</u>	<u>MTBE, TPH, BTEX</u>	<u>-</u>

WELL SAMPLING FORM

Project Name: Douglas Parking	Cambria Mgr: JR	Well ID: MW-5
Project Number: 580-0197	Date: 7/31/00	Well Yield: —
Site Address: 1721 Webster Oakland	Sampling Method: Dis bailer	Well Diameter: 2"
		Technician(s): JO
Initial Depth to Water: 14.52'	Total Well Depth: 24.63'	Water Column Height: 10.11'
Volume/ft: 0.16'	1 Casing Volume: 1.62	Casing Volumes: 4.86 gal
Purging Device:	Did Well Dewater?:	Total Gallons Purged: ~ 5 gal
Start Purge Time: 8:45	Stop Purge Time: 8:55	Total Time: 10 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
8:49	2 gal	12.5	7.5	385	
8:51	4 ↓	13.0	7.6	442	
8:53	5 ↓	13.1	7.3	268	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-5	7/31	9:05	4 VoA	HCL	BTEX, MTBE, TPH ₂	—