

CAMBRIA

4070

January 30, 2001

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

Re: **Fourth Quarter 2000 Monitoring Report**
Douglas Parking
1721 Webster Street
Oakland, California
Cambria Project No. 580-0197

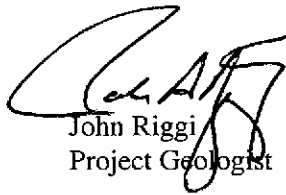


Dear Mr. Douglas:

This report summarizes the fourth quarter 2000 groundwater monitoring results for the above-referenced site. Presented in the report are the fourth quarter 2000 activities and the anticipated first quarter 2001 activities.

If you have any questions or comments, please call Bob Clark-Riddell at (510) 420-3303 or myself at (510) 420-3340.

Sincerely,
Cambria Environmental Technology, Inc.


John Riggi
Project Geologist

Attachments: Fourth Quarter 2000 Monitoring Report

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

cc: Mr. Larry Seto, Alameda County Department of Environmental Health, 1131 Harbor Bay Parkway, 2nd Floor, Alameda, CA 94502
Mr. Hari Patel, Technical Review Unit, UST Cleanup Fund, 1001 I Street, Sacramento, CA 94244

**Cambria
Environmental
Technology, Inc.**

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
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C A M B R I A

FOURTH QUARTER 2000 MONITORING REPORT

Douglas Parking
1721 Webster Street
Oakland, California
Cambria Project No. 580-0917

January 30, 2001

Prepared for:

Mr. Lee Douglas
1721 Webster Street
Oakland, California 94612


Prepared by:

Cambria Environmental Technology, Inc.
1144 65th Street, Suite B
Oakland, California 94608





Jason Olson
Senior Staff Environmental Scientist



Bob Clark-Riddell, PE
Principal Engineer

FOURTH QUARTER 2000 MONITORING REPORT

Douglas Parking
1721 Webster Street
Oakland, California
Cambria Project No. 580-0917

January 30, 2001

INTRODUCTION



On behalf of Douglas Parking, Cambria Environmental Technology, Inc. (Cambria) is submitting this fourth quarter 2000 groundwater monitoring report for the above-referenced site. Presented below are the fourth quarter 2000 activities and the anticipated first quarter 2001 activities.

FOURTH QUARTER 2000 ACTIVITIES

Monitoring Activities

Field Activities: On October 3, 2000, Cambria gauged water levels, inspected for separate-phase hydrocarbons (SPH), and monitored dissolved oxygen (DO) concentrations in monitoring wells MW-1 through MW-5. Groundwater samples were obtained from the monitoring wells that did not contain SPH. Well MW-1 is not part of the sampling schedule. Field data sheets are presented as Appendix A.

Sample Analyses: The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) using modified EPA Method 8015, and benzene, toluene, ethylbenzene and xylene (BTEX) and methyl tert-butyl ether (MTBE) using EPA Method 8020 by McCampbell Analytical, Inc. of Pacheco, California. Any MTBE detected in wells MW-2 or MW-4 was confirmed by EPA Method 8260. The laboratory analytical report is included as Appendix B.

Monitoring Results

Groundwater Flow Direction: Based on depth-to-water data collected during Cambria's October 3, 2000 site visit, groundwater beneath the site flows predominantly toward the northeast with an average gradient of 0.006 ft/ft (see Figure 1). This flow direction is consistent with the historical groundwater flow direction for this site. Depth-to-water and groundwater elevation data are presented in Table 1.

Hydrocarbon Distribution in Groundwater: Hydrocarbon distribution in groundwater for the fourth quarter 2000 is consistent with historic site data. No SPH was detected in any of the wells. The maximum detected TPHg and benzene concentrations were 27,000 micrograms per liter ($\mu\text{g/l}$) and 2,500 $\mu\text{g/l}$, respectively, in well MW-2. Benzene was also detected in well MW-4 at 42 $\mu\text{g/l}$. No MTBE concentrations were present in any of the wells. The analytical results are summarized on Table 1. TPHg and benzene in groundwater isoconcentration contour maps are shown in Figures 2 and 3, respectively.



ANTICIPATED FIRST QUARTER 2001 ACTIVITIES

Monitoring Activities

Cambria will gauge the site wells, check the wells for SPH, and collect groundwater samples from all wells not containing SPH. If MTBE is detected in wells MW-2 or MW-4, concentrations will be confirmed using EPA Method 8260. Following field activities, Cambria will tabulate the data, contour site groundwater elevations, prepare TPHg and benzene isoconcentration maps, and prepare a groundwater monitoring report.

Corrective Action Activities

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.

Appendixes

Figure 1 – Groundwater Elevation Contours and Hydrocarbon Concentration Map

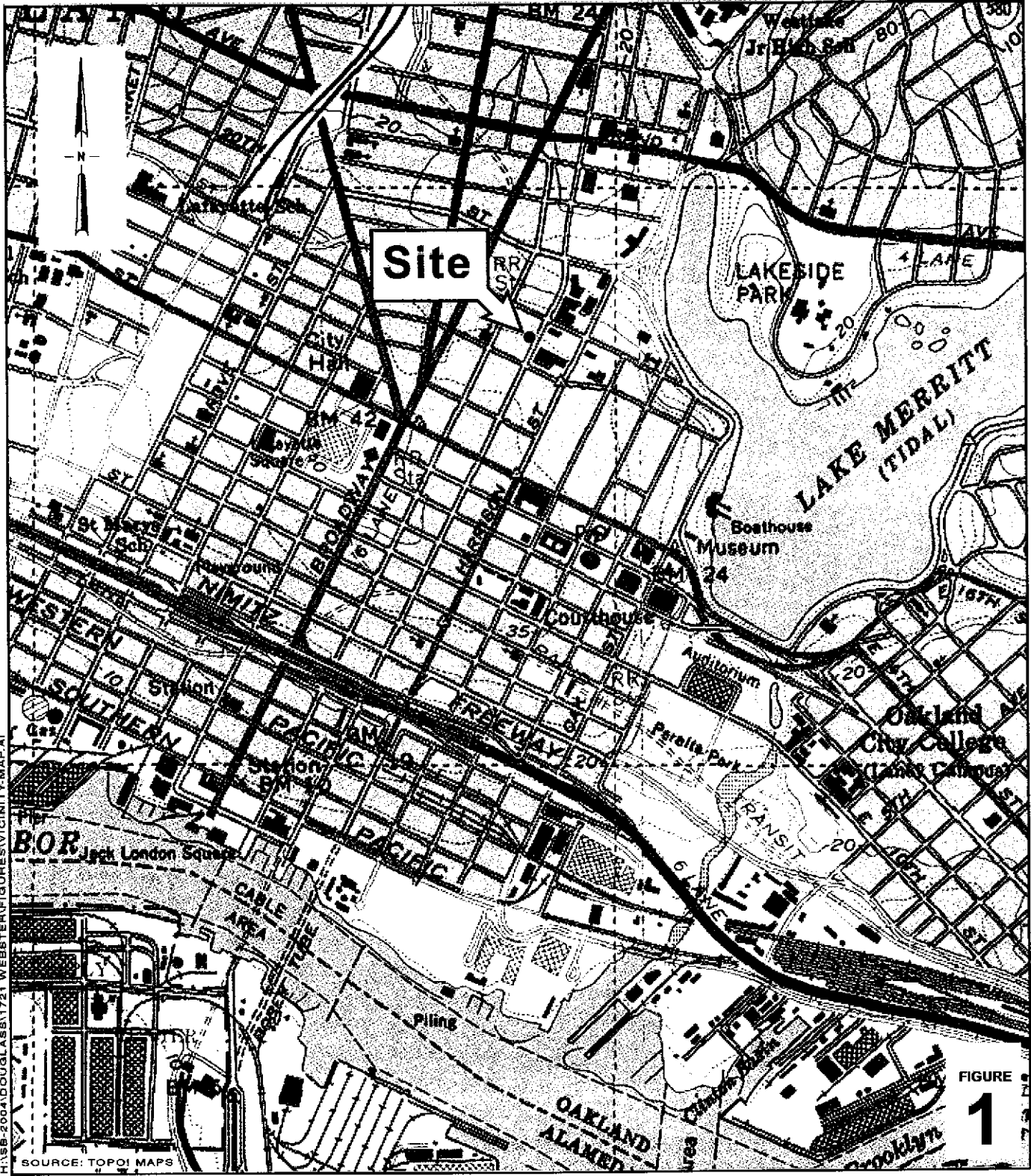
Figure 2 – TPHg in Groundwater Isoconcentration Contour Map

Figure 3 – Benzene in Groundwater Isoconcentration Contour Map

Table 1 - Groundwater Elevation and Analytical Data

Appendix A – Field Data Sheets

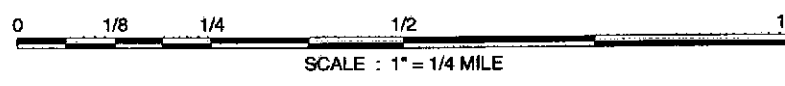
Appendix B – Laboratory Analytical Reports



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SOURCE: TOPOI MAPS

FIGURE 1



Douglas Parking Facility
 1721 Webster Street
 Oakland, California



C A M B R I A

Vicinity Map

EXPLANATION

- Groundwater Monitoring Well
- SB-A ● Soil Boring Location
- MW-2
27,000 Well ID
TPHG Concentration in Groundwater in parts per billion (ppb)
- 100 TPHg Concentration Contour
Dashed where inferred

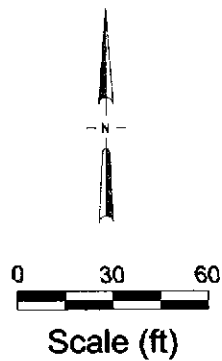
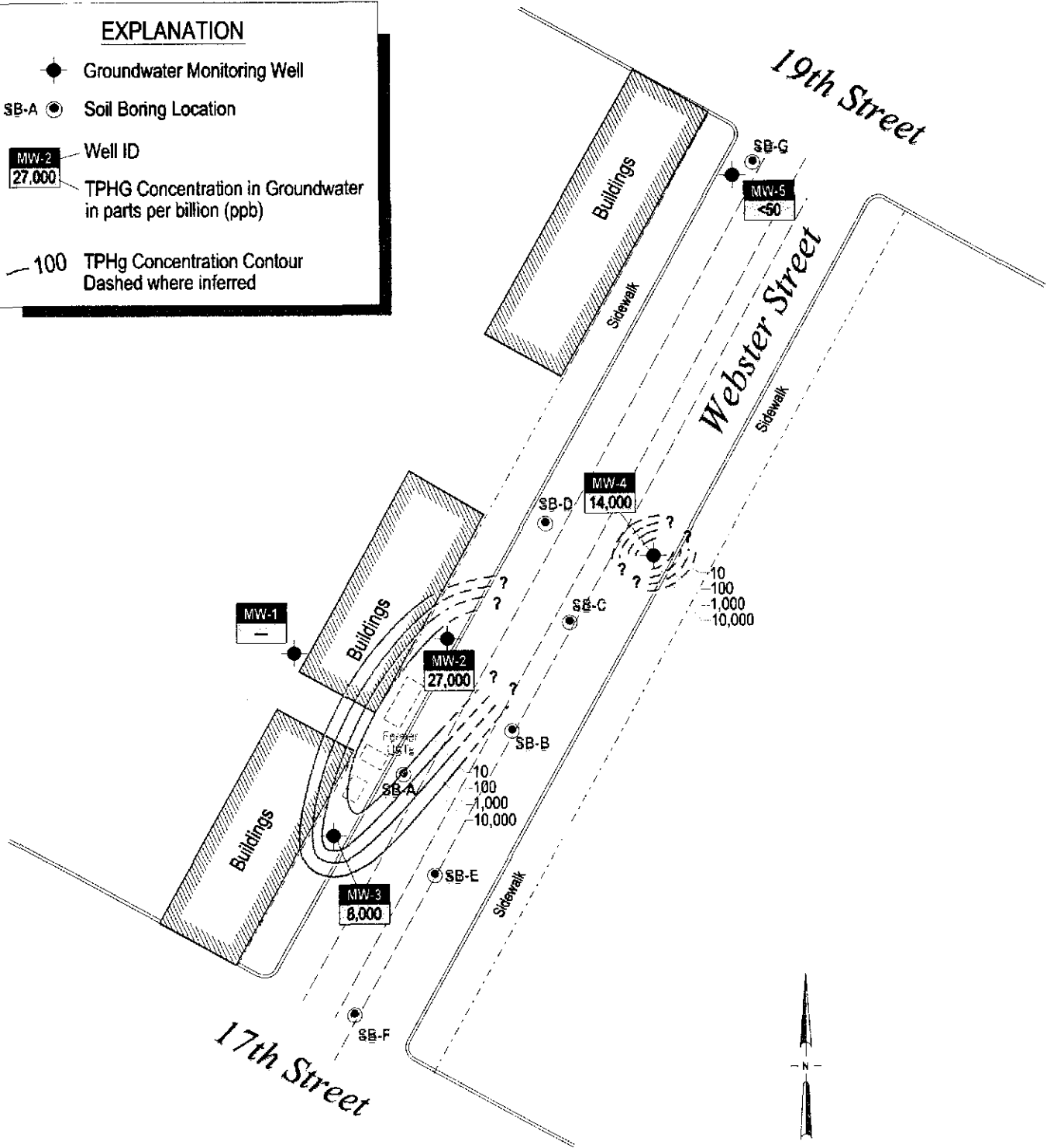


FIGURE 2

H:\19-2004\DOUGLAS\1721 Webster\FIGURES\4Q-TPHG-00-MP.DWG






Base map from Piers Environmental Services

Douglas Parking Facility
 1721 Webster Street
 Oakland, California



**TPHg in Groundwater
 Isoconcentration Contour Map**
 October 3, 2000

EXPLANATION

-  Groundwater Monitoring Well
- SB-A  Soil Boring Location
-  Well ID
-  Benzene Concentration in Groundwater in parts per billion (ppb)
-  100 Benzene Concentration Contour Dashed where inferred

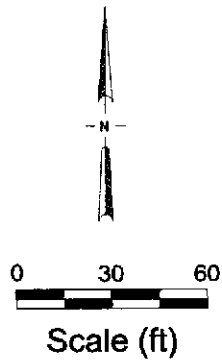
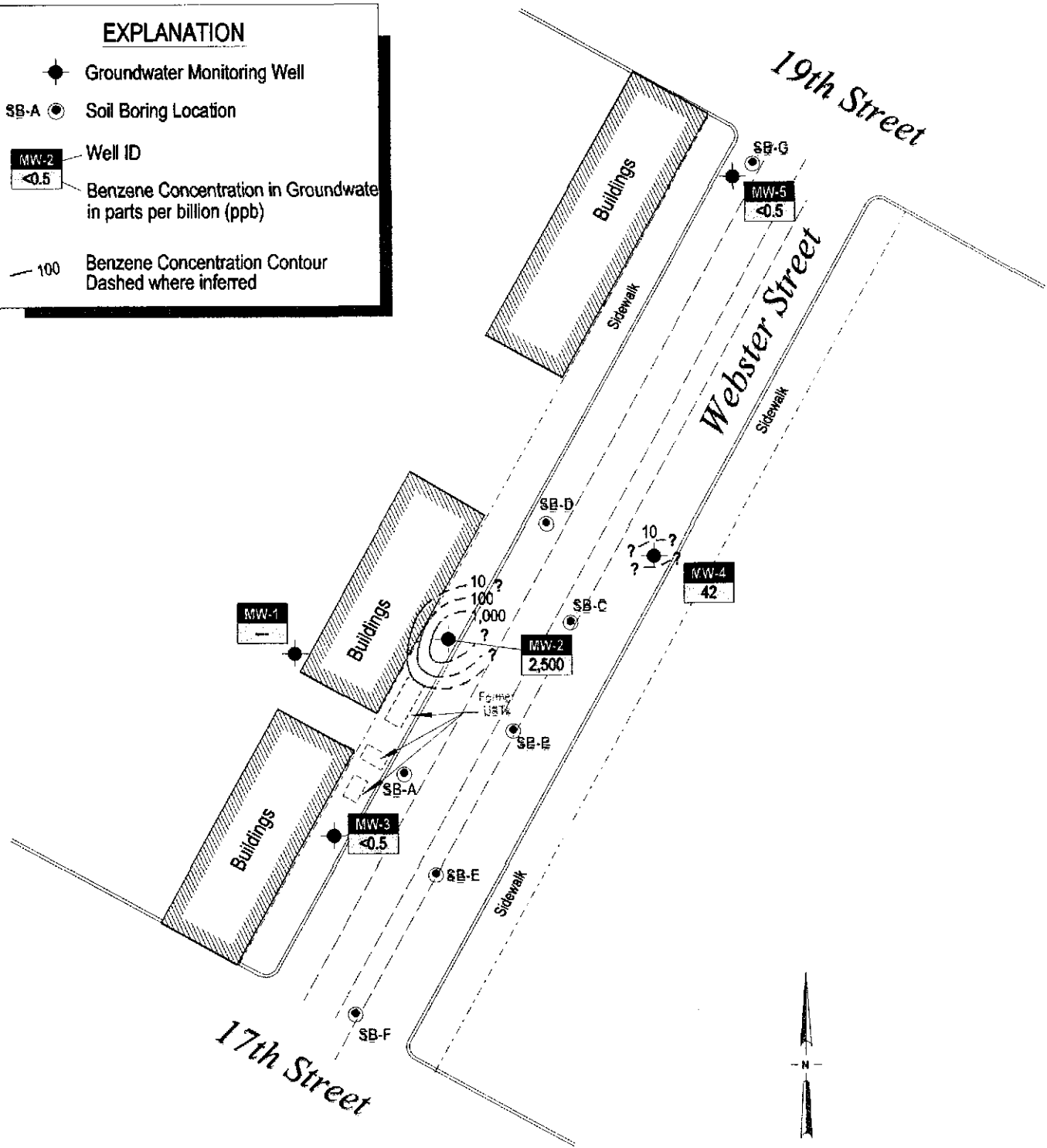


FIGURE 3

H:\SB-2004\DCU\GLAS\1721 Webster\FIGURES\40-BENZ-00-MP.DWG

Base map from Piers Environmental Services

Douglas Parking Facility
 1721 Webster Street
 Oakland, California



**Benzene in Groundwater
 Isoconcentration Contour Map**
 October 3, 2000

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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
MW-1	12/2/94	29.25	19.42	9.83	nd	nd	nd	nd	nd	-	-	1
	3/6/95	29.73	20.69	9.04	nd	nd	nd	nd	nd	-	-	1
	7/11/95	29.81	20.65	9.16	nd	nd	nd	nd	nd	-	-	
	5/10/96	29.81	20.80	9.01	nd	nd	nd	nd	nd	-	-	
	10/2/96	29.81	21.35	8.46	-	-	-	-	-	-	-	2
	2/28/97	29.81	20.57	9.24	-	-	-	-	-	-	-	2
	9/16/97	29.81	21.50	8.31	-	-	-	-	-	-	-	2
	2/5/98	29.81	20.91	8.90	-	-	-	-	-	-	1.90	2
	8/11/98	29.81	20.50	9.31	-	-	-	-	-	-	0.06	2
	2/8/99	29.81	21.42	8.39	-	-	-	-	-	-	6.00	2, 3
	2/24/99	29.81	22.99	6.82	-	-	-	-	-	-	2.00	2, 3
	3/3/99	29.81	20.84	8.97	-	-	-	-	-	-	3.80	2, 3
	3/10/99	29.81	20.89	8.92	-	-	-	-	-	-	3.40	2, 3
	3/17/99	29.81	20.84	8.97	-	-	-	-	-	-	2.80	2, 3
	5/4/99	29.81	20.80	9.01	-	-	-	-	-	-	3.50	2
	7/20/99	29.81	21.25	8.56	-	-	-	-	-	-	3.07	2
	10/5/99	29.81	21.37	8.44	-	-	-	-	-	-	5.40	2
	1/7/00	29.81	21.65	8.16	-	-	-	-	-	-	2.10	2
	4/6/00	29.81	21.05	8.76	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.90	4
	7/31/00	29.81	21.13	8.68	-	-	-	-	-	-	1.80	2
10/3/00	29.81	21.69	8.12	-	-	-	-	-	-	1.42	2	
MW-2	12/2/94	27.10	19.50	7.60	61,300	3,000	3,900	160	4,500	-	-	1
	3/6/95	27.10	18.49	8.61	98,000	8,400	16,000	2,000	2,600	-	-	1
	7/11/95	27.40	18.45	8.95	38,000	3,100	7,500	940	3,700	-	-	
	5/10/96	27.40	18.56	8.84	63,000	7,400	16,000	1,500	6,000	-	-	
	10/2/96	27.40	19.15	8.25	21,000	2,200	3,400	430	1,600	-	-	
	2/28/97	27.40	18.43	8.97	39,000	4,700	9,600	950	4,200	nd	-	
	9/16/97	27.40	19.26	8.14	29,000	3,300	5,800	690	2,900	<620	-	
	2/5/98	27.40	18.66	8.74	10,000	1,000	2,000	170	860	<330	7.90	
	8/11/98	27.40	18.41	8.99	12,000	1,200	2,300	260	1,400	300	5.40	
	2/8/99	27.40	19.84	7.56	5,500	740	1,200	150	780	60	3.70	
	2/17/99	27.40	18.94	8.46	-	-	-	-	-	-	>20	3, 5
	2/24/99	27.40	20.76	6.64	-	-	-	-	-	-	>20	3, 5
	3/3/99	27.40	18.55	8.85	-	-	-	-	-	-	>20	3, 5

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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		
	3/10/99	27.40	20.74	6.66	-	-	-	-	-	-	>20	3, 5
	3/17/99	27.40	18.57	8.83	-	-	-	-	-	-	>20	3, 5
	5/4/99	27.40	18.55	8.85	90,000	9,200	21,000	1,600	10,000	560	3.20	
	7/20/99	27.40	18.98	8.42	28,000	2,100	3,700	900	4,200	<860	0.64	
	10/5/99	27.40	19.10	8.30	11,000	870	180	30	1,400	<110	0.58	
	1/7/00	27.40	19.41	7.99	15,000	1,300	2,100	440	1,800	<14	0.94	
	4/6/00	27.40	18.80	8.60	17,000	1,800	3,100	500	2,200	<50	0.64	
	7/31/00	27.40	18.87	8.53	17,000	1,500	2,700	430	2,100	<200	0.50	
	10/3/00	27.40	19.45	7.95	27,000	2,500	4,000	660	2,900	<50	0.16	
MW-3	12/2/94	29.50	22.15	7.35	394,000	1,200	nd	1,800	4,000	-	-	1
	3/6/95	29.25	20.09	9.16	21,000	400	150	24	62	-	-	1
	7/11/95	29.56	19.99	9.57	12,000	nd	10	16	99	-	-	
	5/10/96	29.56	20.24	9.32	8,600	nd	7.6	16	84	-	-	
	10/2/96	29.56	20.90	8.66	11,000	nd	7.4	19	92	-	-	
	2/28/97	29.56	20.12	9.44	6,000	nd	4.4	17	88	50	-	
	9/16/97	29.56	20.97	8.59	6,500	<0.5	1	1	7	<5.0	-	
	2/5/98	29.56	20.39	9.17	5,400	<0.5	6.3	15	86	<63	1.90	
	8/11/98	29.56	19.95	9.61	2,700	<0.5	3.5	3.2	12	<10	0.05	
	2/8/99	29.56	20.58	8.98	6,100	<0.5	8.1	18	80	<140	2.20	
	2/17/99	29.56	20.53	9.03	-	-	-	-	-	-	>20	3, 5
	2/24/99	29.56	22.53	7.03	-	-	-	-	-	-	>20	3, 5
	3/3/99	29.56	20.28	9.28	-	-	-	-	-	-	>20	3, 5
	3/10/99	29.56	22.45	7.11	-	-	-	-	-	-	>20	3, 5
	3/17/99	29.56	20.26	9.30	-	-	-	-	-	-	>20	3, 5
	5/4/99	29.56	20.24	9.32	11,000	<2	<2	9.8	140	<10	3.10	
	7/20/99	29.56	20.68	8.88	11,000	<0.5	3.1	13	88	<80	0.75	
	10/5/99	29.56	20.81	8.75	31,000	62	<0.5	21	170	<90	0.68	
	1/7/00	29.56	21.09	8.47	13,000	<0.5	<2	21	140	<80	1.96	
	4/6/00	29.56	20.48	9.08	5,300	1.5	1.4	9.8	60	<30	4.15	
7/31/00	29.56	20.62	8.94	7,100	3.5	1.0	12	66	<5.0	0.35		
	10/3/00	29.56	21.13	8.43	8,000	<0.5	3.3	11	70	<40	3.66	
MW-4	5/10/96	25.29	16.98	8.31	14,000	nd	1,200	720	3,100	-	-	
	10/2/96	25.29	17.65	7.64	12,000	nd	650	580	2,200	-	-	
	2/28/97	25.29	16.80	8.49	13,000	nd	1,100	750	2,700	110	-	

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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		
	9/17/97	25.29	17.93	7.36	13,000	<2.5	820	750	2,900	<190	-	
	2/5/98	25.29	16.78	8.51	13,000	<1.0	690	690	2,900	<170	2.10	
	8/11/98	25.29	16.59	8.70	15,000	<5	360	520	1,900	280	2.80	
	2/8/99	25.29	17.10	8.19	9,800	<5	680	770	2,200	300	1.80	3
	2/24/99	25.29	18.95	6.34	-	-	-	-	-	-	2.20	3
	3/3/99	25.29	16.80	8.49	-	-	-	-	-	-	4.60	3
	3/10/99	25.29	16.86	8.43	-	-	-	-	-	-	3.70	3
	3/17/99	25.29	16.82	8.47	-	-	-	-	-	-	4.30	3
	5/4/99	25.29	16.86	8.43	11,000	46	600	620	1,900	<100	4.10	
	7/20/99	25.29	17.30	7.99	13,000	<0.5	470	7.0	2,000	<150	0.38	
	10/5/99	25.29	17.43	7.86	18,000	4.4	720	800	2,100	<120	0.71	
	1/7/00	25.29	17.78	7.51	18,000	<2	930	990	2,700	<30	0.98	
	4/6/00	25.29	17.17	8.12	8,000	31	390	530	1,300	<10	1.33	
	7/31/00	25.29	17.21	8.08	6,200	13	170	460	850	<10	0.50	
	10/3/00	25.29	18.00	7.29	14,000	42	820	730	2,000	<50	0.54	
MW-5	5/10/96	21.97	14.60	7.37	nd	nd	nd	nd	nd	-	-	
	10/2/96	21.97	15.25	6.72	nd	nd	nd	nd	nd	-	-	
	2/28/97	21.97	14.31	7.66	nd	nd	nd	nd	nd	nd	-	
	9/17/97	21.97	15.18	6.79	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	-	
	2/5/98	21.97	13.64	8.33	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.80	
	8/11/98	21.97	13.92	8.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.05	
	2/8/99	21.97	14.19	7.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.00	
	2/24/99	21.97	16.18	5.79	-	-	-	-	-	-	4.90	3
	3/3/99	21.97	14.23	7.74	-	-	-	-	-	-	3.40	3
	3/10/99	21.97	14.32	7.65	-	-	-	-	-	-	3.60	3
	3/17/99	21.97	14.25	7.72	-	-	-	-	-	-	3.90	3
	5/4/99	21.97	14.41	7.56	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.20	
	7/20/99	21.97	14.44	7.53	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.99	
	10/5/99	21.97	14.79	7.18	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.52	
	1/7/00	21.97	15.23	6.74	-	-	-	-	-	-	-	Well inaccessible
	4/6/00	21.97	14.74	7.23	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.67	
	7/31/00	21.97	14.52	7.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.55	
	10/3/00	21.97	15.37	6.60	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.51	

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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)							(mg/L)	
<------(Concentrations in µg/l)----->												
Trip Blank	10/03/00	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	

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.

ATTACHMENT A

Field Data Sheets

WELL DEPTH MEASUREMENTS

P. 05/06

Well ID	Time	Product Depth	Water Depth	Product Thickness	Well Depth	Comments
MW-2	13:35		21.69		26.55	DO = 1.42
MW-2	12:55		19.45		26.05	DO = 0.16
MW-3	13:51		21.13		26.81	DO = 3.66
MW-4	12:47		18.00		29.25	DO = 0.54
MW-5	13:42		15.37		24.45	DO = 1.51

CAMBER LR

SEP-25-2000 16:15

Project Name: Douglas Parking
 Measured By: [Signature]

Project Number: 580-0197
 Date: 10-03-00

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WELL SAMPLING FORM

Project Name: <i>Douglas Park</i>	Cambria Mgr: <i>SR</i>	Well ID: MW- <i>MW-2</i>
Project Number: <i>580-0197</i>	Date: <i>10-03-00</i>	Well Yield: -----
Site Address: <i>1721 Webster St Oakland, Ca</i>	Sampling Method:	Well Diameter: <i>2" pvc</i>
	Disposable bailer	Technician(s): <i>SG</i>
Initial Depth to Water: <i>19.45</i>	Total Well Depth: <i>26.05</i>	Water Column Height: <i>6.60</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.05</i>	3 Casing Volumes: <i>3.15</i>
Purging Device: <i>Disposable bailer</i>	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time: <i>15:20</i>	Stop Purge Time: <i>15:23</i>	Total Time: <i>3</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. C	pH	Cond. uS	Comments
<i>15:21</i>	<i>1 1</i>	<i>18.6</i>	<i>7.61</i>	<i>428</i>	
<i>15:22</i>	<i>2 2</i>	<i>18.6</i>	<i>7.19</i>	<i>443</i>	<i>Order</i>
<i>15:24</i>	<i>3 3</i>	<i>18.5</i>	<i>7.05</i>	<i>452</i>	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW- 2</i>	<i>10-03-00</i>	<i>15:28</i>	<i>4 vov</i>	<i>HCl</i>	<i>TPH's CTE & MTE</i>	<i>603 10/15/2020 3760</i>
<i>MW-</i>						

CAMBRIA

WELL SAMPLING FORM

Project Name: <i>Douglas Parking</i>	Cambria Mgr: <i>JR</i>	Well ID: <i>MW-3</i>
Project Number: <i>586-0197</i>	Date: <i>10-03-00</i>	Well Yield: <i>----</i>
Site Address: <i>1721 Webster St Oakland, CA</i>	Sampling Method:	Well Diameter: <i>2" pvc</i>
	<i>Disposable bailer</i>	Technician(s): <i>SC</i>
Initial Depth to Water: <i>21.13</i>	Total Well Depth: <i>26.31</i>	Water Column Height: <i>5.68</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>0.90</i>	3 Casing Volumes: <i>2.70</i>
Purging Device: <i>disposable nipples</i>	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time: <i>15:45</i>	Stop Purge Time: <i>15:49</i>	Total Time: <i>4 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. C	pH	Cond. uS	Comments
<i>15:47</i>	<i>1</i>	<i>19.1</i>	<i>7.64</i>	<i>319</i>	
<i>15:48</i>	<i>2</i>	<i>18.9</i>	<i>7.50</i>	<i>323</i>	
<i>15:50</i>	<i>3</i>	<i>18.7</i>	<i>7.10</i>	<i>297</i>	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-3</i>	<i>10-03-00</i>	<i>15:55</i>	<i>LI VOG</i>	<i>HCl</i>	<i>TPH, BTEX, MTBE</i>	<i>602/8015/8020 3260</i>
<i>MW-</i>						

CAMBRIA

WELL SAMPLING FORM

Project Name: <i>Douglas Park</i>	Cambria Mgr: <i>JR</i>	Well ID: <i>MW- 4</i>
Project Number: <i>530-0157</i>	Date: <i>10-03-00</i>	Well Yield: <i>----</i>
Site Address: <i>1721 Webster St Oakland, CA</i>	Sampling Method: Disposable bailer	Well Diameter: 2" pvc
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>18.00</i>	Total Well Depth: <i>29.25</i>	Water Column Height: <i>11.25</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.80</i>	3 Casing Volumes: <i>5.40</i>
Purging Device: <i>disposable</i>	Did Well Dewater?: <i>NO</i>	Total Gallons Purged: <i>5.5</i>
Start Purge Time: <i>14:54</i>	Stop Purge Time: <i>15:07</i>	Total Time: <i>6min</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. C	pH	Cond. uS	Comments
<i>14:56</i>	<i>1 2</i>	<i>19.8</i>	<i>7.10</i>	<i>481</i>	<i>Notes</i>
<i>14:58</i>	<i>2 4</i>	<i>19.5</i>	<i>7.07</i>	<i>461</i>	
<i>15:03</i>	<i>3 5.5</i>	<i>19.1</i>	<i>7.12</i>	<i>458</i>	
					<i>Replaced cap</i>

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW- 4</i>	<i>10-03-00</i>	<i>15:08</i>	<i>4 VOC</i>	<i>1001</i>	<i>TPH, BTEX MTBE</i>	<i>303/2070/2013 1255</i>
<i>MW-</i>						

CAMBRIA

WELL SAMPLING FORM

Project Name: <i>Douglas Parkir</i>	Cambria Mgr: <i>SR</i>	Well ID: <i>MW- 5</i>
Project Number: <i>580-0197</i>	Date: <i>10-03-00</i>	Well Yield: <i>----</i>
Site Address: <i>1721 Webster St Oakland, Ca</i>	Sampling Method:	Well Diameter: <i>2" pvc</i>
	Disposable bailer	Technician(s): <i>SG</i>
Initial Depth to Water: <i>15.37</i>	Total Well Depth: <i>24.45</i>	Water Column Height: <i>9.08</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.45</i>	3 Casing Volumes: <i>4.35</i>
Purging Device: <i>disposable bailers</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>4.5</i>
Start Purge Time: <i>14:30</i>	Stop Purge Time: <i>14:36</i>	Total Time: <i>6min</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. C	pH	Cond. uS	Comments
<i>14:32</i>	<i>1 1.5</i>	<i>19.9</i>	<i>7.51</i>	<i>545</i>	
<i>14:34</i>	<i>2 3</i>	<i>19.4</i>	<i>7.61</i>	<i>432</i>	
<i>14:37</i>	<i>3 4.5</i>	<i>19.1</i>	<i>7.37</i>	<i>439</i>	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW- 5</i>	<i>10-03-00</i>	<i>14:41</i>	<i>4 Vog</i>	<i>HCl</i>	<i>FAH, CTS, MTR</i>	<i>60713074/3015 3760</i>
<i>MW-</i>						

ATTACHMENT B

Laboratory Analytical Report



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: 10/06/00-10/07/00 Matrix: Water

Extraction: N/A

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

SampleID: 40793

Instrument: GC-3

Surrogate1	0.000	103.0	101.0	100.00	103	101	2.0
Xylenes	0.000	305.0	294.0	300.00	102	98	3.7
Ethyl Benzene	0.000	101.0	98.0	100.00	101	98	3.0
Toluene	0.000	105.0	101.0	100.00	105	101	3.9
Benzene	0.000	106.0	101.0	100.00	106	101	4.8
MTBE	0.000	109.0	116.0	100.00	109	116	6.2
GAS	0.000	860.7	853.0	1000.00	86	85	0.9

SampleID: 10600

Instrument: MB-1

Oil & Grease	0.000	20.0	20.2	20.00	100	101	1.0
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SampleID: 10400

Instrument: GC-6 B

Surrogate1	0.000	85.0	87.0	100.00	85	87	2.3
TPH (diesel)	0.000	352.0	341.0	300.00	117	114	3.2

SampleID: 10600

Instrument: IR-1

Surrogate1	0.000	108.0	110.0	100.00	108	110	1.8
TRPH	0.000	24.4	25.1	23.70	103	106	2.8

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

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

RPD means Relative Percent Deviation

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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: Ron Scheele Bill To: Cambria Env. Tech.

Company: Cambria Environmental Technology

6262 Hollis Street

Emeryville, CA 94608

Tele: (510) 450-1983

Fax: (510) 450-8295

Project #: 580-0197

Project Name: Douglas Parking

Project Location: 1721 Webster St. Oakland, Ca

Sampler Signature: *[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
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SAMPLE ID	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED			
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other
MW-2		10-03-00	15:28	4	VOL	X					X	X		X
MW-3		10-03-00	15:55	4	VOL	X					X	X		X
MW-4		10-03-00	15:08	4	VOL	X					X	X		X
MW-5		10-03-00	14:41	4	VOL	X					X	X		X
TB		10-03-00		2	VOL	X					X	X		X

49601
49602
49603
49604
49605

HEAD SPACE ADJ PRESERVATION APPROPRIATE
CONTAINERS NO GAS / ORGANIC METALS / OTHER

Relinquished By: <i>[Signature]</i>	Date: 10/4	Time: 2:00	Received By: <i>[Signature]</i>
Relinquished By: <i>[Signature]</i>	Date: 10/4	Time: 5:30	Received By: <i>[Signature]</i> 10/4
Relinquished By:	Date:	Time:	Received By:

Remarks: Confirm all MTBE hits by 8260

[Signature]