

Rw/96

February 1, 2005

Mr. Barney Chan
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

RECEIVED
FEB 04 2005

RE: Groundwater Monitoring Report - Fourth Quarter 2004

Chiu Property
800 Franklin Street
Oakland, California 94607



Dear Mr. Chan:

On behalf of Mr. Tommy Chiu, Cambria Environmental Technology, Inc (Cambria) is submitting the *Groundwater Monitoring Report – Fourth Quarter 2004*. Presented in the report are the fourth quarter 2004 activities and results, and the anticipated first quarter 2005 activities.

If you have any questions or comments regarding this report, please call me at (510) 420-3314.

Sincerely,

Cambria Environmental Technology, Inc.

Matt Meyers
Project Manager

Enclosures: *Groundwater Monitoring Report – Fourth Quarter 2004*

cc: Ms. Anny Chiu, P.O. Box 28194, Oakland, California 94606
Ms. Lu Anne Rolland, UST Cleanup Fund, 1001 "F" Street, Sacramento, California 95812

**Cambria
Environmental
Technology, Inc.**

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

C A M B R I A

GROUNDWATER MONITORING REPORT – FOURTH QUARTER 2004

Chiu Property
800 Franklin Street
Oakland, California
Cambria Project No. 589-1000

February 1, 2005



Prepared for:

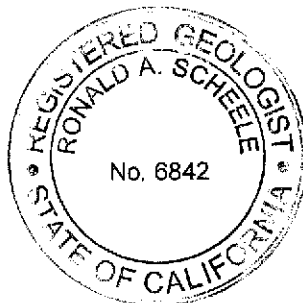
Mr. Tommy Chiu
P.O. Box 28194
Oakland, California 94606

Prepared by:

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, California 94608

Written by:

Lindsay Furuyama
Senior Staff Scientist



Ron Scheele, R.G.
Senior Geologist

GROUNDWATER MONITORING REPORT - FOURTH QUARTER 2004

Chiu Property
800 Franklin Street
Oakland, California
Cambria Project No. 589-1000

February 1, 2005



INTRODUCTION

This report describes the fourth quarter 2004 groundwater monitoring activities performed at 800 Franklin Street, Oakland, California (Figure 1). This groundwater monitoring event was conducted at the request of the Alameda County Department of Environmental Health (ACDEH). This report presents a summary of field activities, groundwater flow conditions, groundwater analytical data, and a presentation of activities anticipated for the first quarter 2005.

FOURTH QUARTER 2004 ACTIVITIES

Monitoring Activities

On December 21, 2004, Cambria conducted quarterly groundwater monitoring activities at the site. Cambria measured groundwater levels and collected groundwater samples from monitoring wells MW-1, MW-2, and MW-4 through MW-6 (Figure 2). Well MW-3 was inaccessible and therefore was not included in the monitoring program during this quarter. Copies of the field data sheets are included as Appendix A.

Water Level Measurements: Depth to groundwater measurements were recorded to the nearest 0.01-foot, relative to a previously established reference elevation. Measurements were collected using an electric, conductance-actuated well sounder. The groundwater level data are presented in Table 1.

Groundwater Sampling: Cambria collected groundwater samples from wells MW-1, MW-2, and MW-4 through MW-6. Field activities associated with the sampling included well purging, measuring groundwater parameters, sample collection, and equipment decontamination.

Prior to sampling, the wells were purged to remove standing water in the well casings and promote inflow of representative groundwater from the surrounding formation. The wells were purged by repeated bailing using a disposable Teflon bailer. Field measurements of the pH, specific conductance, and temperature of the purged groundwater were measured initially and after the

extraction of each successive casing volume or at regular volume intervals. Casing volumes were calculated based on the well diameter and the height of the water column in the well casing. Typically, well purging continued until three or more casing volumes had been removed from the well and consecutive pH, specific conductance, and temperature measurements were within 10 percent. Field water quality measurements, purge volumes and sample collection data were recorded on field sampling data forms (Appendix A).



Groundwater samples were collected from each of the wells using disposable bailers. The samples were decanted from the bailers into 40-ml glass containers supplied by McCampbell Analytical, Inc. (McCampbell) of Pacheco, California. Immediately after collection, the sample containers were labeled and placed on ice in a cooler. Chain-of-custody procedures were followed at all times from sample collection to transfer to McCampbell (Appendix B).

Equipment Decontamination: To minimize the potential for cross-contamination, the groundwater monitoring equipment was decontaminated prior to being deployed in the first monitoring well and between successive wells. The probe of the electric well sounder used for water level measurements was rinsed thoroughly with distilled water prior to first use and between subsequent water level measurements. The disposable bailers were discarded after use at each well.

Sample Analysis: The groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified United States Environmental Protection Agency (EPA) Method 8015C. Samples were also analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary-butyl ether (MTBE) by EPA Method 8021B. The analyses were performed by McCampbell. The laboratory analytical report is included in Appendix B. Groundwater analytical results are summarized on Figure 1 and in Table 1.

Monitoring Results

Groundwater Flow Direction and Gradient: Depth-to-water measurements collected on December 21, 2004, ranged from 20.65 to 22.93 feet below top of casing. Groundwater elevations were calculated by subtracting the depth to water measurements from the surveyed top of casing elevations. The groundwater elevations were plotted on a site plan and contoured. Based on depth-to-water data collected during Cambria's December 21, 2004 site visit, groundwater beneath the site flows towards the northeast at a gradient of 0.027 feet/foot. Depth-to-water and groundwater elevation data for the site are summarized in Table 1 and shown on Figure 2.

Groundwater Analytical Results: Hydrocarbons were detected in one of the five wells sampled during the fourth quarter of 2004. TPHg and BTEX compounds were detected in the sample collected from well MW-2 at concentrations of 13,000 micrograms per liter ($\mu\text{g/L}$), 500 $\mu\text{g/L}$, 310 $\mu\text{g/L}$, 34 $\mu\text{g/L}$ and 1,600 $\mu\text{g/L}$, respectively. MTBE was not detected in any of the wells sampled during the fourth quarter of 2004. Analytical results are summarized in Table 1. Copies of the laboratory analytical reports are included in Appendix B.

GeoTracker Confirmation



Cambria has requested authorization from the State Water Resources Control Board (SWRCB) to upload relevant data to the GeoTracker database on behalf of Mr. Tommy Chiu. Upon receiving SWRCB authorization, Cambria will upload the necessary data. A confirmation document will be provided in the *Groundwater Monitoring Report- First Quarter 2005*.

ANTICIPATED FIRST QUARTER 2005 ACTIVITIES

Meeting Request

Cambria would like to request a meeting with the ACDEH to develop an approach that addresses all agency concerns relating to the site. Specifically, the discussion would address groundwater monitoring frequency, the status of well MW-3, and the pathway to site closure.

ATTACHMENTS

Figure 1 – Vicinity Map

Figure 2 – Groundwater Elevation Contours and Hydrocarbon Concentration Map

Table 1 – Groundwater Elevation and Analytical Data

Appendix A – Groundwater Monitoring Field Data Sheets

Appendix B – Laboratory Analytical Reports

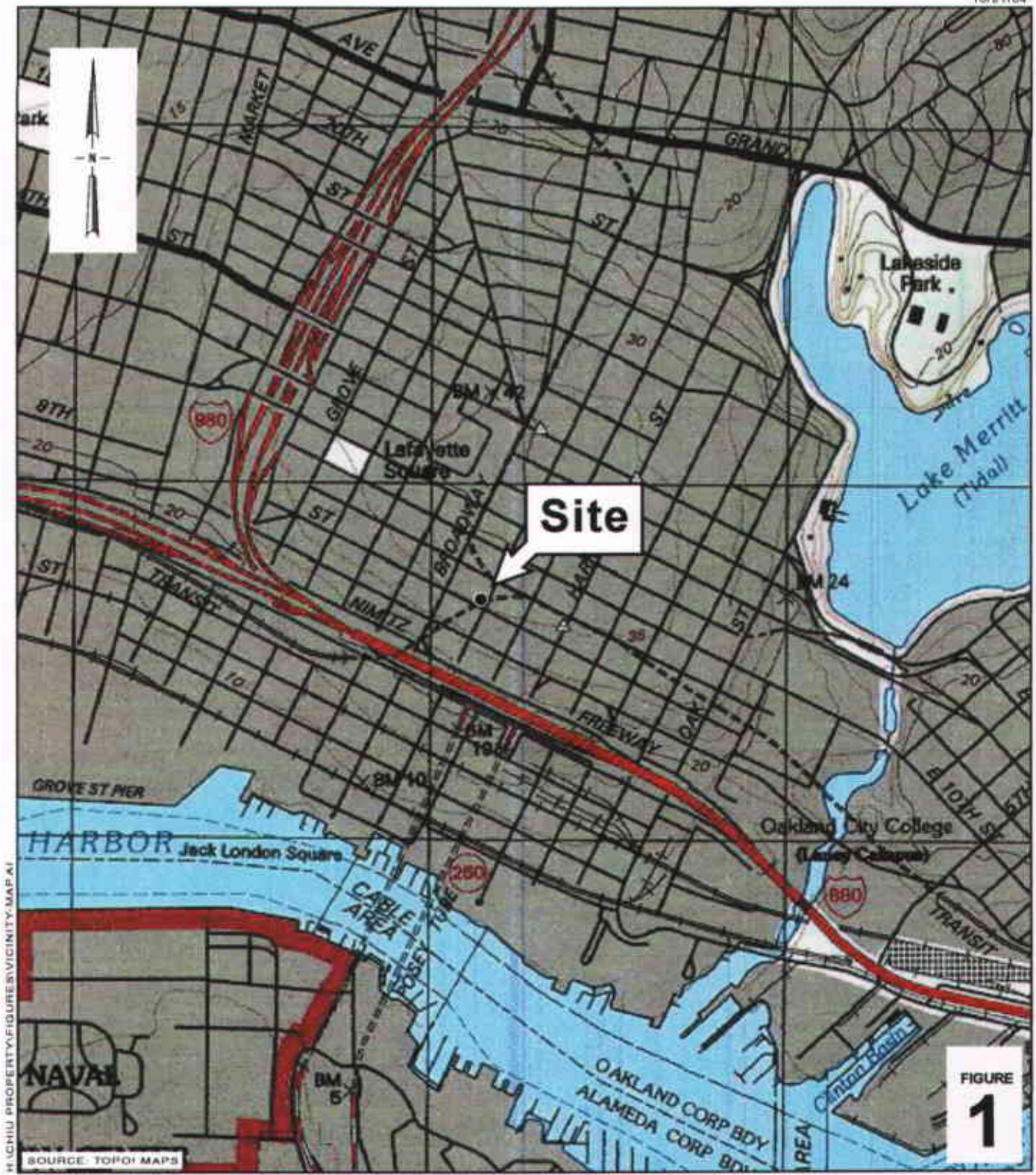


FIGURE 1

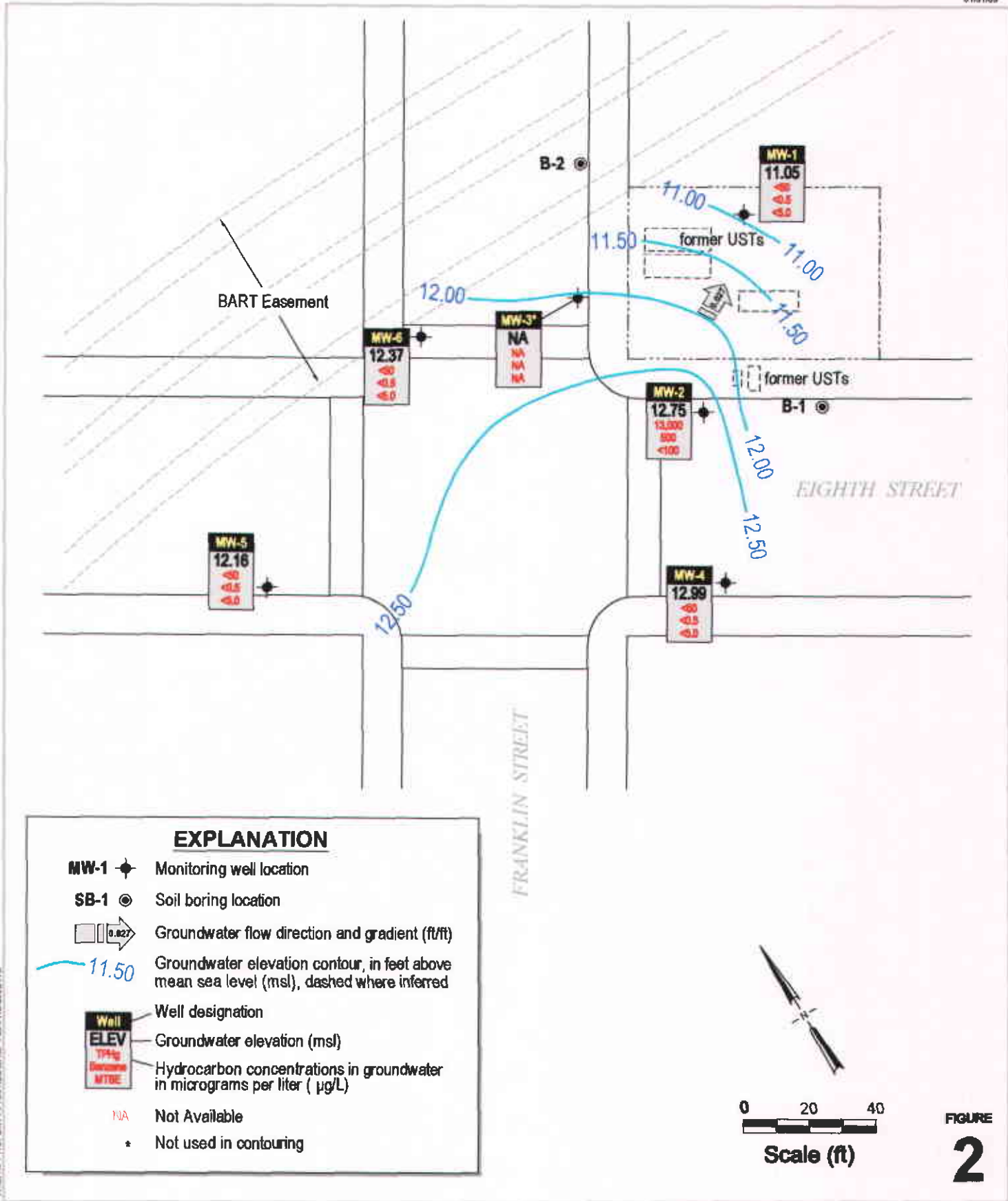
0 1/8 1/4 1/2 1
SCALE : 1" = 1/4 MILE

Chiu Property
800 Franklin Street
Oakland, California



C A M B R I A

Vicinity Map



MICHIGAN PROPERTY FIGURE 8014-1054-HC-04-DWG

Chiu Property
 800 Franklin Street
 Oakland, California



C A M B R I A

**Groundwater Elevation Contour and
 Hydrocarbon Concentration Map**

December 21, 2004

CAMBRIA

Table 1. Groundwater Analytical and Elevation Data: Petroleum Hydrocarbons - Chiu Property, 800 Franklin Street, Oakland, California

Sample ID TOC (ft)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (feet amsl)	← μg/L →					
				TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-1 33.98	8/10/2004 9/28/2004 ⁺ 12/21/2004	23.35 -- 22.93	10.63 -- 11.05	<50 -- <50	<0.5 -- <0.5	<0.5 -- <0.5	<0.5 -- <0.5	<0.5 -- <0.5	<5.0 -- <5.0
MW-2 33.66	8/10/2004 9/28/2004 12/21/2004	21.03 22.95 20.91	12.63 10.71 12.75	47,000 (a) -- 13,000 (a)	4,200 -- 500	4,900 -- 310	1,400 -- 34	6,000 -- 1600	<500 -- <100
MW-3 34.23	9/28/2004 12/21/2004	<i>Well is damaged. Unable to measure depth to water or collect sample.</i>							
MW-4 33.64	9/28/2004 12/21/2004	22.72 20.65	10.92 12.99	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<5.0 <5.0
MW-5 33.56	9/28/2004 12/21/2004	23.70 21.40	9.86 12.16	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	1.5 <0.5	<5.0 <5.0
MW-6 33.98	9/28/2004 12/21/2004	24.00 21.61	9.98 12.37	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<5.0 <5.0

Abbreviations:

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

Benzene, Toluene, Ethylbenzene, and Xylenes by EPA Method 8021B.

MTBE = methyl tertiary-butyl ether by EPA Method 8021B.

ft = feet

TOC = Top of casing

amsl = above mean sea level

μg/L = micrograms per liter = parts per billion = ppb.

< n = Chemical not present at a concentration in excess of detection limit shown.

-- = Not available, not sampled, or does not apply.

+ = Unable to access well due to denial by current tenant.

Notes:

(a) = unmodified or weakly modified gasoline is significant

APPENDIX A

Groundwater Monitoring Field Data Sheets

CAMBRIA
COPY

WELL DEPTH MEASUREMENTS

Well ID	Time	Product Depth	Water Depth	Product Thickness	Well Depth	Comments
MW-1	1:25		22.93			
MW-2	7:20		20.91			
MW-3		Well obstructed				
MW-4	7:15		20.65			
MW-5	7:10		21.40			
MW-6	5:45		21.61			

Project Name: Chipp
 Measured By: J. Hill

Project Number: 589-1000 / 004
 Date: 12/21/04

WELL SAMPLING FORM

Project Name: <u>Chiu</u>	Cambria Mgr: <u>EP</u>	Well ID: <u>MW-1</u>
Project Number: <u>589-1000</u>	Date: <u>12-21-04</u>	Well Yield:
Site Address: <u>800 Franklin St. Oakland, CA</u>	Sampling Method: <u>disposable bailer</u>	Well Diameter: <u>2</u>
		Technician(s): <u>SG</u>
Initial Depth to Water: <u>22.93</u>	Total Well Depth: <u>33.25</u>	Water Column Height: <u>10.32</u>
Volume/ft: <u>0.16</u>	1 Casing Volume: <u>1.65</u>	3 Casing Volumes: <u>4.95</u>
Purging Device: <u>disposable bailer</u>	Did Well Dewater?: <u>no</u>	Total Gallons Purged: <u>5</u>
Start Purge Time: <u>1:35</u>	Stop Purge Time: <u>1:49</u>	Total Time: <u>14mins</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>1:40</u>	<u>1.5</u>	<u>19.0</u>	<u>7.20</u>	<u>529</u>	
<u>1:45</u>	<u>3</u>	<u>19.2</u>	<u>7.08</u>	<u>733</u>	
<u>1:50</u>	<u>5</u>	<u>19.1</u>	<u>7.12</u>	<u>750</u>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<u>MW-1</u>	<u>12-21-04</u>	<u>1:55</u>				

WELL SAMPLING FORM

Project Name: <u>Chiu</u>	Cambria Mgr: <u>EP</u>	Well ID: <u>MW-2</u>
Project Number: <u>589-1000</u>	Date: <u>12-21-04</u>	Well Yield:
Site Address: <u>800 Franklin St.</u> <u>Oakland, CA</u>	Sampling Method: <u>disposable bailer</u>	Well Diameter: <u>2</u>
		Technician(s): <u>SG</u>
Initial Depth to Water: <u>20.91</u>	Total Well Depth: <u>34.30</u>	Water Column Height: <u>13.39</u>
Volume/ft: <u>0.16</u>	1 Casing Volume: <u>2.14</u>	3 Casing Volumes: <u>6.42</u>
Purging Device: <u>disposable bailer</u>	Did Well Dewater?: <u>no</u>	Total Gallons Purged: <u>6</u>
Start Purge Time: <u>12:10</u>	Stop Purge Time: <u>12:34</u>	Total Time: <u>24mins</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>12:15</u>	<u>2</u>	<u>18.9</u>	<u>6.84</u>	<u>429</u>	
<u>12:25</u>	<u>4</u>	<u>18.7</u>	<u>6.92</u>	<u>470</u>	
<u>12:35</u>	<u>6</u>	<u>18.7</u>	<u>6.90</u>	<u>510</u>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<u>MW-2</u>	<u>12-21-04</u>	<u>12:40</u>				

WELL SAMPLING FORM

Project Name: <i>Chiu</i>	Cambria Mgr: <i>EP</i>	Well ID: <i>MW-4</i>
Project Number: <i>589-1000</i>	Date: <i>12-21-04</i>	Well Yield:
Site Address: <i>800 Franklin St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2</i>
		Technician(s): <i>SC</i>
Initial Depth to Water: <i>20.65</i>	Total Well Depth: <i>33.40</i>	Water Column Height: <i>12.75</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>2.04</i>	3 Casing Volumes: <i>6.12</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>6</i>
Start Purge Time: <i>9:40</i>	Stop Purge Time: <i>10:09</i>	Total Time: <i>29 mins</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>9:50</i>	<i>2</i>	<i>18.5</i>	<i>6.80</i>	<i>724</i>	
<i>10:00</i>	<i>4</i>	<i>18.2</i>	<i>6.85</i>	<i>839</i>	
<i>10:10</i>	<i>6</i>	<i>18.1</i>	<i>6.89</i>	<i>898</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-4</i>	<i>12-21-04</i>	<i>10:15</i>				

WELL SAMPLING FORM

Project Name: <i>Chiu</i>	Cambria Mgr: <i>EP</i>	Well ID: <i>MW-5</i>
Project Number: <i>589-1000</i>	Date: <i>12-21-04</i>	Well Yield:
Site Address: <i>800 Franklin St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2</i>
		Technician(s): <i>SC</i>
Initial Depth to Water: <i>21.40</i>	Total Well Depth: <i>34.50</i>	Water Column Height: <i>13.10</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>2.09</i>	3 Casing Volumes: <i>6.12</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>6</i>
Start Purge Time: <i>8:15</i>	Stop Purge Time: <i>8:44</i>	Total Time: <i>29 mins</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>8:25</i>	<i>2</i>	<i>18.3</i>	<i>6.81</i>	<i>649</i>	
<i>8:35</i>	<i>4</i>	<i>18.5</i>	<i>6.89</i>	<i>675</i>	
<i>8:45</i>	<i>6</i>	<i>18.5</i>	<i>6.93</i>	<i>703</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-5</i>	<i>12-21-04</i>	<i>8:50</i>				

WELL SAMPLING FORM

Project Name: <i>Chiu</i>	Cambria Mgr: <i>EP</i>	Well ID: <i>MW-6</i>
Project Number: <i>589-1000</i>	Date: <i>12-21-04</i>	Well Yield:
Site Address: <i>800 Franklin St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2" pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>21.61</i>	Total Well Depth: <i>32.85</i>	Water Column Height: <i>11.24</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.79</i>	3 Casing Volumes: <i>5.39</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>5</i>
Start Purge Time: <i>6:00</i>	Stop Purge Time: <i>6:29</i>	Total Time: <i>29mins</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>6:10</i>	<i>1.5</i>	<i>19.4</i>	<i>6.90</i>	<i>820</i>	
<i>6:20</i>	<i>3</i>	<i>18.9</i>	<i>6.97</i>	<i>945</i>	
<i>6:30</i>	<i>5</i>	<i>18.7</i>	<i>7.02</i>	<i>974</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-6</i>	<i>12-21-04</i>	<i>6:35</i>				

APPENDIX B

Laboratory Analytical Reports



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #589-1000; Chiu	Date Sampled: 12/21/04
		Date Received: 12/22/04
	Client Contact: Eugene Pak	Date Reported: 12/29/04
	Client P.O.:	Date Completed: 12/29/04

WorkOrder: 0412458

December 29, 2004

Dear Eugene:

Enclosed are:

- 1). the results of 5 analyzed samples from your #589-1000; Chiu 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. McC Campbell 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,

Angela Rydelius, Lab Manager



Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #589-1000; Chiu	Date Sampled: 12/21/04
		Date Received: 12/22/04
	Client Contact: Eugene Pak	Date Extracted: 12/25/04-12/27/04
	Client P.O.:	Date Analyzed: 12/25/04-12/27/04

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0412458

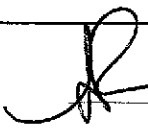
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	ND	ND	ND	ND	ND	ND	1	106
002A	MW-2	W	13,000,a	ND<100	500	310	34	1600	20	110
003A	MW-4	W	ND	ND	ND	ND	ND	ND	1	99
004A	MW-5	W	ND	ND	ND	ND	ND	ND	1	101
005A	MW-6	W	ND	ND	ND	ND	ND	ND	1	100

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.

 Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0412458

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 14445			Spiked Sample ID: 0412451-017A			
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex) [£]	ND	60	97.8	98.7	0.963	104	99.2	4.95	70 - 130	70 - 130
MTBE	ND	10	80.4	97	18.7	98.3	96.3	2.09	70 - 130	70 - 130
Benzene	ND	10	94.3	101	6.86	109	91.5	17.7	70 - 130	70 - 130
Toluene	ND	10	98.4	111	12.0	102	84.9	18.5	70 - 130	70 - 130
Ethylbenzene	ND	10	107	113	5.57	112	94.6	16.9	70 - 130	70 - 130
Xylenes	ND	30	96.3	100	3.74	107	91	15.9	70 - 130	70 - 130
%SS:	111	10	106	118	10.5	103	96	7.67	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

QA/QC Officer

McC Campbell Analytical, Inc.

110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0412458

ClientID: CETE

Report to:

Eugene Pak
Cambria Env. Technology
5900 Hollis St, Suite A
Emeryville, CA 94608

TEL: (510) 420-0700
FAX: (510) 420-9170
ProjectNo: #589-1000; Chiu
PO:

Bill to:

Accounts Payable
Cambria Env. Technology
5900 Hollis St, Ste. A
Emeryville, CA 94608

Requested TAT:

5 days

Date Received: 12/22/2004*Date Printed:* 12/22/2004

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)																
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
0412458-001	MW-1	Water	12/21/04 1:55:00	<input type="checkbox"/>	A	A															
0412458-002	MW-2	Water	12/21/04 12:40:00	<input type="checkbox"/>	A																
0412458-003	MW-4	Water	12/21/04 10:15:00	<input type="checkbox"/>	A																
0412458-004	MW-5	Water	12/21/04 8:50:00	<input type="checkbox"/>	A																
0412458-005	MW-6	Water	12/21/04 6:35:00	<input type="checkbox"/>	A																

Test Legend:

1	G-MBTX_W
6	
11	

2	PREF REPORT
7	
12	

3	
8	
13	

4	
9	
14	

5	
10	
15	

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

0412458

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME:
RUSH 24 HOUR 48 HOUR 5 DAY

EDF Required? Yes No

Report To: Eugene Pak Bill To: Cambria Env. Tech

Company: Cambria Environmental Technology Inc.

5900 Hollis Street STE-A
Emeryville, CA 94608 E-mail:

Tele: 510-420-3360 Fax: 510-420-9170

Project #: 589-1001 Project Name: Chiu

Project Location: 800 Franklin 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&FB&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 (7240/421/239.2/6010)
- RCI

(+) (+) (+) (+)

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED							
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other				
MW-1		12-21-04	1:55	3	voa	X						X	X					
MW-2			12:40															
MW-4			10:15															
MW-5			8:50															
MW-6		X	6:35	X	X	X						X	X					X

Relinquished By: [Signature] Date: 12-22-04 Time: 4:00 Received By: secure location

Relinquished By: Lashley Mosha Date: 12-22-04 Time: 1:35 Received By: [Signature]

Relinquished By: [Signature] Date: 12/23/04 Time: 2:30 Received By: Map Vall

Remarks: KCV
 GOOD CONDITION
 HEAD SPACE ABSENT
 DECHLORINATED IN LAB
 PRESERVATION
 APPROPRIATE CONTAINERS
 PRESERVED IN LAB
 VOAS O&G METALS OTHER