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CAMBRIA

October 28, 2004

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

RE: Groundwater Monitoring Report - Third 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 – Third Quarter 2004*. Cambria has been retained to address environmental compliance issues pertaining to the above-referenced site. Cambria's immediate objective is to ensure the case is brought into compliance with the Alameda County Department of Environmental Health (ACDEH) and the State Underground Storage Tank Cleanup Fund (UST Fund). The third quarter 2004 monitoring activities are intended to re-establish a baseline of data and assist in determining the course of future activities at the site. The *Groundwater Monitoring Report – Third Quarter 2004* summarizes the activities conducted by Cambria and presents the results of the groundwater monitoring event.

If you have any questions or comments regarding this report, please call me at (510) 420-3360.

Sincerely,
Cambria Environmental Technology, Inc.

Eugene Pak
Project Manager

Enclosures: *Groundwater Monitoring Report – Third Quarter 2004*

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

Cambria Environmental Technology, Inc.

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

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GROUNDWATER MONITORING REPORT – THIRD QUARTER 2004

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

October 28, 2004

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:

Eugene Pak
Project Manager

Ron Scheele, R.G.
Senior Geologist

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GROUNDWATER MONITORING REPORT - THIRD QUARTER 2004

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

October 28, 2004

INTRODUCTION

This report describes the third 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 fourth quarter 2004.

THIRD QUARTER 2004 ACTIVITIES

Monitoring Activities

On August 10 and September 28, 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 not included in the monitoring program during this quarter. The well box for MW-3 was observed to be without a cover. Additionally, the cap to the casing was missing and the well was filled in with dirt and/or debris. Cambria removed the infilling material with a small diameter hand auger but was unable to remove any of the material below approximately 19 feet below ground surface. As a temporary measure, Cambria applied a slip cap to the well casing and filled in the well box with cold patch asphalt to minimize the potential danger to pedestrian traffic. 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, field water quality measurements, 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 September 28, 2004, ranged from 22.72 to 24.00 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 (Figure 2). The contours

indicate that groundwater flowed northwesterly at a gradient of approximately 0.008 feet per foot, which is generally consistent with historical conditions. 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 wells MW-2 and MW-5 during the third quarter of 2004. TPHg and BTEX compounds were detected in the sample collected from well MW-2 at concentrations of 47,000 micrograms per liter (µg/L), 4,200 µg/L, 4,900 µg/L, 1,400 µg/L and 1,600 µg/L, respectively. Xylenes were detected in the sample collected from well MW-5 at a concentration of 1.5 µg/L. MTBE was not detected in any of the wells sampled during the third quarter of 2004. Analytical results are summarized in Table 1. TPHg, benzene, and MTBE concentrations are summarized on Figure 2.

ANTICIPATED FOURTH QUARTER 2004 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

H:\Chiu - 800 Franklin, Oakland\3q04\3q04 QMR.doc

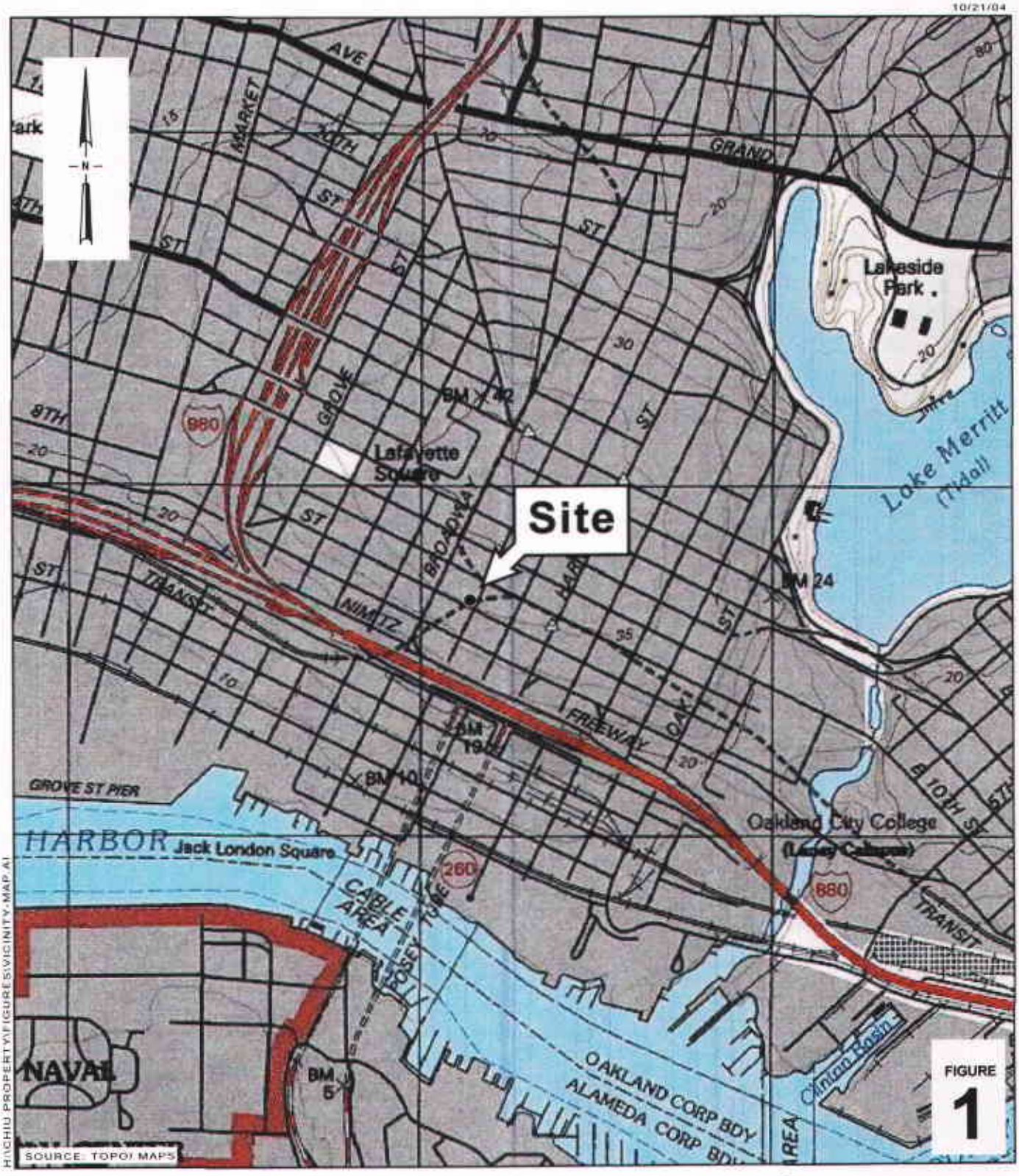

FIGURE 1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Chiu Property

800 Franklin Street

Oakland, California

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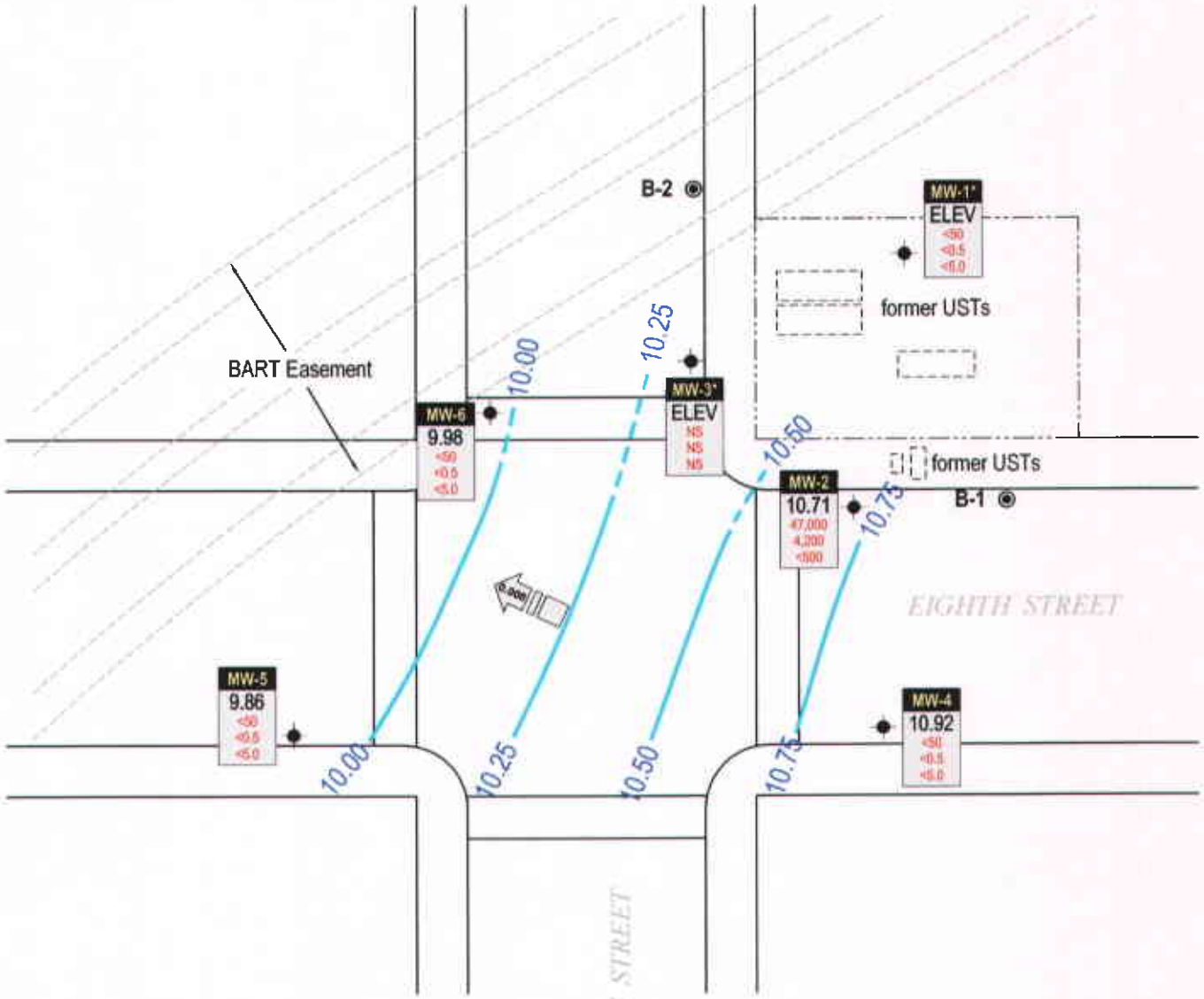
Vicinity Map



EXPLANATION

- MW-1 — Monitoring well location
- SB-1 — Soil boring location
- Groundwater flow direction and gradient (ft/ft)
- 10.50 — Groundwater elevation contour, in feet above mean sea level (msl), dashed where inferred
- Well / ELEV / TPHg / Benzene / MTBE — Well designation; Groundwater elevation (msl); Hydrocarbon concentrations in groundwater in micrograms per liter (µg/L)
- NS — Not Sampled
- * — Not used in contouring

N

0 20 40

Scale (ft)

FIGURE

2

H:\CHIU PROPERTY\FIGURES\CHIU-3004-GW.DWG

Chiu Property

800 Franklin Street

Oakland, California

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Groundwater Elevation Contour and Hydrocarbon Concentration Map

August 10 and September 28, 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)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				←			µg/L		→
MW-1	8/10/2004	23.35	10.63	<50	<0.5	<0.5	<0.5	<0.5	<5.0
33.98	9/28/2004+	--	--	--	--	--	--	--	--
MW-2	8/10/2004	21.03	12.63	**47,000 (a)**	**4,200**	**4,900**	**1,400**	**6,000**	**<500**
33.66	9/28/2004	22.95	10.71	--	--	--	--	--	--
MW-3	9/28/2004			*Well is damaged. Unable to measure depth to water or collect sample.*					
34.23									
MW-4	9/28/2004	22.72	10.92	<50	<0.5	<0.5	<0.5	<0.5	<5.0
33.64									
MW-5	9/28/2004	23.70	9.86	<50	<0.5	<0.5	<0.5	**1.5**	<5.0
33.56									
MW-6	9/28/2004	24.00	9.98	<50	<0.5	<0.5	<0.5	<0.5	<5.0
33.98									

Abbreviations:

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

ft = feet

amsl = above mean sea level

TOC = Top of casing

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

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

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

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

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

MTBE = methyl tertiary-butyl ether

Notes:

(a) = unmodified or weakly modified gasoline is significant

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Groundwater Monitoring Field Sheet

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
MW-1	10:30		23.35	33.25			2"	
MW-2	9:10 PM		21.03	34.30			2"	
MW-3	9:00	Lid missing well obstructed with dirt					2"	
MW-4	unable to locate							
MW-5	unable to locate							

Project Name: Chui

Project Number/Task: 589-1000-001

Technician: J. Hall

Date: 8-10-04

\\10AKDC\IR\IR GROUP INFO\FORMS (OFFICE AND FIELD)\FIELD\GW MONITORING.WPD

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WELL SAMPLING FORM

Project Name: Chui	Cambria Mgr: MM	Well ID: MW-1
Project Number: 589-1000	Date: 8-10-04	Well Yield:
Site Address: 800 Franklin Rd Oakland, CA	Sampling Method: disposable bailer	Well Diameter: 2 ☐ pvc
		Technician(s): SG
Initial Depth to Water: 23.35	Total Well Depth: 33.25	Water Column Height: 9.9
Volume/ft: 0.16	1 Casing Volume: 1.58	3 Casing Volumes: 4.75
Purging Device: disposable bailer	Did Well Dewater?: NO	Total Gallons Purged: 5
Start Purge Time: 10:45	Stop Purge Time:	Total Time:

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
10:55	1.5	18.6	7.12	820	
11:05	3	18.9	7.06	542	
11:15	5	18.9	7.01	519	

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

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-1	8-10-04	11:25				

D:\TEMPLATE\FORMS\FIELD\WELLSAMP2.WPD
NSM 5/31/94

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WELL SAMPLING FORM

Project Name: Chui	Cambria Mgr: MM	Well ID: MW-2
Project Number: 589-1000	Date: 8-10-04	Well Yield:
Site Address: 800 Franklin Rd Oakland, CA	Sampling Method: disposable bailer	Well Diameter: 2 0 pvc
		Technician(s): SG
Initial Depth to Water: 21.03	Total Well Depth: 34.30	Water Column Height: 13.27
Volume/ft: 0.16	1 Casing Volume: 2.13	3 Casing Volumes: 6.36
Purging Device: disposable bailer	Did Well Dewater?: no	Total Gallons Purged: 6
Start Purge Time: 9:30 PM	Stop Purge Time:	Total Time:

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
9:40 PM	2	18.3	7.05	620	
9:50 PM	4	18.6	6.99	559	
10:00 PM	6	18.8	7.02	609	

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

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-2	8-10-04	10:05 PM				

CHAIN OF CUSTODY RECORD

McCAMPBELL ANALYTICAL INC.
110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

EDF Required? ☒ Yes ☐ No

Report To: Matt Meyers Bill To: Cambria

Company: Cambria Environmental Technology, Inc.

5900 Hollis Street, Suite A

Emeryville, Ca 94608 E-mail: mmeyers@cambria-env.com

Tele: (510) 420-3314 Fax: (510) 420-9170

Project #: 589-1000-001 Project Name: Chiu

Project Location: 800 Franklin Street, Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	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	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015)/ MTBE	Other	Comments
MW-1		8-10-04	1:25	3	VOA	X					X	X			X		
MW-2		8-10-04	10:05 PM	3	VOA	X					X	X			X		

Relinquished By:	Date:	Time:	Received By:
	8-11-04	9:45	secure location
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Remarks:
Lowest possible detection limits.
Please email results.

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Groundwater Monitoring Field Sheet

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
MW-2	7:10		22.95					
MW-3	7:00	—	—	—	—	—	—	obstruction at 21' cleaned well casing 19.65
MW-4	11:00		22.72	33.40				
MW-5	9:45		23.70	34.50				
MW-6	8:00		24.00	32.85				

Project Name: Chiu

Technician: J. Hall

Project Number/Task: 589-1000/001

Date: 9-28-04

CAMBRIA

WELL SAMPLING FORM

Project Name: Chiu	Cambria Mgr: EP	Well ID: MW-4
Project Number: 589-1000	Date: 9-28-04	Well Yield:
Site Address: 800 Franklin St Oakland, CA	Sampling Method: disposable bailer	Well Diameter: 2" pvc
		Technician(s): SG
Initial Depth to Water: 22.72	Total Well Depth: 33.40	Water Column Height: 10.68
Volume/ft: 0.16	1 Casing Volume: 1.70	3 Casing Volumes: 5.12
Purging Device: disposable bailer	Did Well Dewater?: no	Total Gallons Purged: 5
Start Purge Time: 11:30	Stop Purge Time: 12:04	Total Time: 34 mins

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
11:40	1.5	19.2	7.10	840	
11:50	3	19.4	6.95	1071	
12:05	5	19.5	6.98	1095	

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

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-4	9-28-04	12:10	3 VOA	HCl		

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WELL SAMPLING FORM

Project Name: Chiu	Cambria Mgr: EP	Well ID: MW-5
Project Number: 589-1000	Date: 9-28-04	Well Yield:
Site Address: 800 Franklin St Oakland, CA	Sampling Method: disposable bailer	Well Diameter: 2" pvc
		Technician(s): SG
Initial Depth to Water: 23.70	Total Well Depth: 34.50	Water Column Height: 10.8
Volume/ft: 0.16	1 Casing Volume: 1.72	3 Casing Volumes: 5.18
Purging Device: disposable bailer	Did Well Dewater?: no	Total Gallons Purged: 5
Start Purge Time: 9:50	Stop Purge Time: 10:24	Total Time: 34 mins

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
10:05	1.5	18.8	6.99	350	
10:15	3	19.2	7.03	708	
10:25	4	19.3	7.07	769	

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

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-5	9-28-04	10:30	3 VOA	HCl		

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WELL SAMPLING FORM

Project Name: Chiu	Cambria Mgr: EP	Well ID: MW-6
Project Number: 589-1000	Date: 9-28-04	Well Yield:
Site Address: 800 Franklin St Oakland, CA	Sampling Method: disposable bailer	Well Diameter: 2" pvc
		Technician(s): SG
Initial Depth to Water: 24.00	Total Well Depth: 32.85	Water Column Height: 8.85
Volume/ft: 0.16	1 Casing Volume: 1.41	3 Casing Volumes: 4.23
Purging Device: disposable bailer	Did Well Dewater?: no	Total Gallons Purged: 4
Start Purge Time: 7:55	Stop Purge Time: 8:24	Total Time: 29 mins

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
8:05	1.5	19.0	7.13	1270	
8:15	3	18.6	7.08	1055	
8:25	4	18.8	7.09	940	

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

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-6	9-28-04	8:30	3 VOA	HCl		

CHAIN OF CUSTODY RECORD

McCAMPBELL ANALYTICAL INC.
110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

EDF Required? (Yes) No

Report To: Matt Meyers Bill To: Cambria

Company: Cambria Environmental Technology, Inc.

5900 Hollis St. Emeryville, CA

E-mail: mmeyers@cambria-env.com

Tele: 510-420-3314 Fax: 510-420-9170

Project #: 589-1000-001 Project Name: Chiu

Project Location: 800 Franklin St. Oakland, CA

Sampler Signature:

SAMPLE ID (Field Point Name)	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	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	Other	Comments
MW-4		9-28-04	12:10	3	VOA	X					X	X			X																
MW-5		"	10:30	"	"	X					X	X			X																
MW-6		"	8:30	"	"	X					X	X			X																

Relinquished By:	Date:	Time:	Received By:
	9-29-04	12:35	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Remarks:

McCampbell Analytical, Inc.

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

Cambria Env. Technology	Client Project ID: #589-1000-001; Chiu	Date Sampled: 08/10/04
5900 Hollis St, Suite A		Date Received: 08/12/04
Emeryville, CA 94608	Client Contact: Matt Meyers	Date Reported: 08/17/04
	Client P.O.:	Date Completed: 08/17/04

WorkOrder: 0408179

August 17, 2004

Dear Matt:

Enclosed are:

1). the results of **2** analyzed samples from your **#589-1000-001; 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. 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,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

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

Cambria Env. Technology	Client Project ID: #589-1000-001; Chiu	Date Sampled: 08/10/04
5900 Hollis St, Suite A		Date Received: 08/12/04
Emeryville, CA 94608	Client Contact: Matt Meyers	Date Extracted: 08/13/04
	Client P.O.:	Date Analyzed: 08/13/04

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0408179

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	96.3
002A	MW-2	W	47,000,a	ND<500	4200	4900	1400	6000	100	103

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 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 (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.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

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

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W WorkOrder: 0408179

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 12675 Spiked Sample ID: 0408166-004A

	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex)£	ND	60	101	99.7	1.13	100	94.2	6.01	70	130
MTBE	ND	10	105	103	1.83	90.6	93.6	3.26	70	130
Benzene	ND	10	112	108	3.40	95.7	96.5	0.791	70	130
Toluene	ND	10	108	103	4.13	97.7	97.6	0.0624	70	130
Ethylbenzene	ND	10	109	106	3.03	104	105	0.763	70	130
Xylenes	ND	30	96.3	95	1.39	91.7	91.7	0	70	130
%SS:	96.4	10	103	103	0	103	102	1.04	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.

DHS Certification No. 1644

QA/QC Officer

CETE

0408179

CHAIN OF CUSTODY RECORD

McCAMPBELL ANALYTICAL INC.
110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

EDF Required? ☒ Yes ☐ No

Report To: Matt Meyers	Bill To: Cambria
Company: Cambria Environmental Technology, Inc.	
5900 Hollis Street, Suite A	
Emeryville, Ca 94608	E-mail: mmeyers@cambria-env.com
Tele: (510) 420-3314	Fax: (510) 420-9170
Project #: 589-1000-001	Project Name: Chiu
Project Location: 800 Franklin Street, Oakland	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	Analysis Request: BTEX & TPH as Gas (8020 + 8015)/ MTBE
MW-1		8-10-04	1:25	3	VOA	X					X	X			X
MW-2		8-10-04	10:05 PM	3	VOA	X					X	X			X

Analysis Request — Other — Comments

Relinquished By:	Date:	Time:	Received By:
	8-11-04	9:45	Secure location
	08/12/04	11:10	
Scott Brown	08/12/04	3:15	

Remarks:
Lowest possible detection limits. ✓
Please email results.

ICE/T: GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB

PRESERVATION	VOAS	O&G	METALS	OTHER
	✓			

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0408179 **ClientID: CETE**

Report to:
Matt Meyers
Cambria Env. Technology
5900 Hollis St, Suite A
Emeryville, CA 94608
TEL: (510) 420-0700
FAX: (510) 420-9170
ProjectNo: #589-1000-001; Chiu
PO:

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

Requested TAT: 5 days
Date Received: 8/12/04
Date Printed: 8/12/04

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
0408179-001	MW-1	Water	8/10/04 11:25:00	☐	A	A													
0408179-002	MW-2	Water	8/10/04 10:05:00	☐	A														

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Elisa Venegas

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.

McCampbell Analytical, Inc.

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

Cambria Env. Technology	Client Project ID: #589-1000-001; Chiu	Date Sampled: 09/28/04
5900 Hollis St, Suite A		Date Received: 09/29/04
Emeryville, CA 94608	Client Contact: Matt Meyers	Date Reported: 10/05/04
	Client P.O.:	Date Completed: 10/05/04

WorkOrder: 0409457

October 05, 2004

Dear Matt:

Enclosed are:

1). the results of 3 analyzed samples from your **#589-1000-001; 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. 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,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

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

Cambria Env. Technology	Client Project ID: #589-1000-001; Chiu	Date Sampled: 09/28/04
5900 Hollis St, Suite A		Date Received: 09/29/04
Emeryville, CA 94608	Client Contact: Matt Meyers	Date Extracted: 10/02/04-10/04/04
	Client P.O.:	Date Analyzed: 10/02/04-10/04/04

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0409457

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-4	W	ND	ND	ND	ND	ND	ND	1	101
002A	MW-5	W	ND	ND	ND	ND	ND	1.5	1	103
003A	MW-6	W	ND	ND	ND	ND	ND	ND	1	102

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 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 (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.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

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

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W WorkOrder: 0409457

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13380 Spiked Sample ID: 0409457-001A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex) £	ND	60	89.2	95	6.23	91.2	92.9	1.85	70	130
MTBE	ND	10	101	106	5.03	89.4	94	5.02	70	130
Benzene	ND	10	99.9	105	5.07	94.8	95.2	0.424	70	130
Toluene	ND	10	93.9	103	9.06	106	106	0	70	130
Ethylbenzene	ND	10	90.5	103	12.4	116	116	0	70	130
Xylenes	ND	30	84.7	89.7	5.74	117	120	2.82	70	130
%SS:	101	10	100	104	4.08	98	97	1.24	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.

DHS Certification No. 1644

QA/QC Officer

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0409457 **ClientID: CETE**

Report to:
Matt Meyers
Cambria Env. Technology
5900 Hollis St, Suite A
Emeryville, CA 94608
TEL: (510) 420-0700
FAX: (510) 420-9170
ProjectNo: #589-1000-001; Chiu
PO:

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

Requested TAT: 5 days
Date Received: 9/29/04
Date Printed: 9/29/04

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
0409457-001	MW-4	Water	9/28/04 12:10:00	☐	A	A													
0409457-002	MW-5	Water	9/28/04 10:30:00	☐	A														
0409457-003	MW-6	Water	9/28/04 8:30:00 AM	☐	A														

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12		13		14		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.

CETC

040957

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: Matt Meyers Bill To: Cambria

Company: Cambria Environmental Technology, Inc.
5900 Hollis St. Emeryville, CA

E-mail: mmeyers@cambria-env.com

Tele: 510-420-3314 Fax: 510-420-9170

Project #: 589-1000-001 Project Name: Chiu

Project Location: 800 Franklin St. Oakland, CA

Sampler Signature:

SAMPLE ID (Field Point Name)	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
MW-4		9-28-04	12:10	3	VOA	X					X	X		
MW-5		"	10:30	"	"	X					X	X		
MW-6		"	8:30	"	"	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														
X														

Other: 1

Comments:

Relinquished By:	Date:	Time:	Received By:
	9-29-04	1235	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Remarks:

ICE/t°
GOOD CONDITION ✓ APPROPRIATE ✓
HEAD SPACE ABSENT ✓ CONTAINERS
DECHLORINATED IN LAB PRESERVED IN LAB

PRESERVATION	VOAS	O&G	METALS	OTHER