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**TRANSMITTAL**

DATE: October 18, 2010 REFERENCE NO.: 581000

PROJECT NAME: 800 Franklin Street, Oakland

To: Mr. Jerry Wickham  
Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

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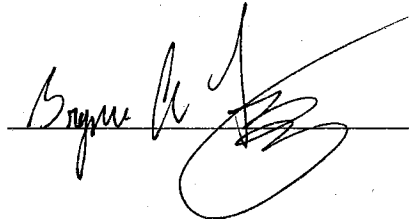
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**COMMENTS:**

Should you have any questions regarding the contents of the document, please contact Bryan Fong at (510) 420-3369.

Copy to: Ms. Anny Chiu

Completed by: Bryan Fong  
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Signed: 

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With respect to:

*Groundwater Monitoring Report - Second Half 2010*

Dated October 18, 2010

Fuel Leak Case No. RO0000196

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Tommy Chiu  
Mr. Tommy Chiu

10-19-10  
Date



# **GROUNDWATER MONITORING REPORT - SECOND HALF 2010**

**CHIU PROPERTY  
800 FRANKLIN STREET  
OAKLAND, CALIFORNIA**

**AGENCY CASE NO.      RO0000196**

**OCTOBER 18, 2010  
REF. NO. 581000 (6)**

This report is printed on recycled paper.

**Prepared by:  
Conestoga-Rovers  
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## 1.0 INTRODUCTION

On behalf of Mr. Tommy Chiu, Conestoga-Rovers & Associates (CRA) is submitting this *Groundwater Monitoring Report – Second Half 2010*. This report presents a summary of Second Half 2010 groundwater monitoring and sampling event activities, analytical results, and activities anticipated during the First Half 2011 event for the site located at 800 Franklin Street, Oakland, California (Figure 1). This groundwater monitoring event was conducted as required by Alameda County Department of Environmental Health (ACEH).

### 1.1 SITE INFORMATION

<b>Site Address</b>	800 Franklin Street, Oakland
<b>Site Use</b>	Commercial Building
<b>Client and Contact</b>	Tommy Chiu
<b>Consultant and Contact Person</b>	CRA, Bryan A. Fong
<b>Lead Agency and Contact</b>	Alameda County Environmental Health, Jerry Wickham, P.G.
<b>Agency Case No.</b>	RO0000196

## 2.0 SITE ACTIVITIES AND RESULTS

### 2.1 CURRENT SAMPLING EVENT ACTIVITIES

On September 3, 2010, Muskan Environmental Sampling (MES) conducted semi-annual groundwater monitoring and sampling activities at the subject site. MES measured groundwater levels and collected groundwater samples from monitoring wells MW-1, MW-2, MW-3A, MW-4, MW-5 and MW-6 (Figure 2). Well construction details are provided in Table 1. CRA's standard field procedures are presented as Appendix A. The laboratory analytical report and sample chain-of-custody (COC) documents are presented as Appendix B, and copies of the field data sheets are included as Appendix C.

### **2.1.1 WATER LEVEL MEASUREMENTS**

Depth to groundwater measurements were recorded to the nearest 0.01-foot from the surveyed reference elevation on the top of the well casing (TOC). Measurements were collected using a conductance-actuated well sounder. The groundwater elevation and depth data are presented in Table 2.

### **2.1.2 GROUNDWATER SAMPLING**

MES collected groundwater samples from wells MW-1, MW-2, MW-3A, MW-4, MW-5 and MW-6. Field activities associated with groundwater sampling included low flow well purging, measuring groundwater parameters and sample collection. Field equipment was decontaminated before and between use in each well.

Each well was purged prior to sampling by placing the intake tube of a clean peristaltic pump approximately 1 foot below the initial water level. Depth to groundwater was measured prior to, during, and at termination of low-flow purging, and also immediately prior to sample collection. Temperature, pH, specific conductivity, oxygen reduction potential (ORP) and dissolved oxygen (DO) were measured initially and at regular volume intervals. Well purging continued until consecutive pH, specific conductivity and temperature measurements were relatively stable. Field measurements, purge volumes and sample collection data were recorded on field sampling data sheets, presented in Appendix C.

Groundwater samples were collected from each well using a clean peristaltic pump. The samples were collected in 40-milliliter (mL) glass volatile organic analysis (VOA) vials and 1-liter amber glass containers supplied by McCampbell Analytical, Inc. (McCampbell) of Pittsburg, California. Sample containers were labeled, sealed in a plastic bag, and placed on ice in a chilled cooler. The COC used for this monitoring event is provided in Appendix B.

### **2.1.3 EQUIPMENT DECONTAMINATION**

To minimize the potential for cross-contamination, the groundwater monitoring equipment was decontaminated prior to being deployed in the first well and between successive wells. The probe of the well sounder used for water level measurements was rinsed thoroughly with distilled water prior to its first use and between subsequent

water level measurements. The tubing for the peristaltic pump was discarded after use at each well.

#### **2.1.4 SAMPLE ANALYSIS**

Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method SW8015Bm. Samples were also analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) by EPA Method SW8260B. In addition, groundwater samples were analyzed for TPH as diesel (TPHd) by EPA Method SW8015B with silica gel cleanup, and chloroform and 1,2-dichloroethane (1,2-DCA) by EPA Method SW8260B. The results for all compounds in the Basic Target List by EPA Method SW8260B are included in the laboratory analytical report. The analyses were performed by McCampbell and the laboratory analytical report is included in Appendix B. Groundwater analytical results are summarized on Figure 2 and presented in Table 2.

#### **2.2 CURRENT SAMPLING EVENT RESULTS**

<b>Groundwater Flow Direction</b>	Northwest
<b>Hydraulic Gradient</b>	0.006
<b>Range of Measured Water Depth from Top of Casing in Monitoring Wells</b>	22.21 to 23.19 feet
<b>Were Measureable Separate Phase Hydrocarbons Observed</b>	No

#### **2.2.1 GROUNDWATER FLOW DIRECTION AND GRADIENT**

Depth-to-water measurements collected on September 3, 2010 ranged from 22.21 to 23.19 feet below TOC. Groundwater elevations were calculated by subtracting the depth-to-water measurements from the surveyed TOC elevations. Groundwater elevations were plotted on a site plan and contoured. Based on depth-to-water data collected during the site visit, groundwater appears to flow towards the northwest at a gradient of 0.006. Depth-to-water and groundwater elevation data for the site are summarized in Table 2 and presented on Figure 2.



## **2.2.2 GROUNDWATER ANALYTICAL RESULTS**

Concentrations of analytes were detected in five of the six wells sampled during the Second Half 2010, as follows:

- TPHg was detected in the samples collected from wells MW-2, MW-3A and MW-6 at concentrations ranging from 4,600 (MW-6) to 35,000 micrograms per liter ( $\mu\text{g/L}$ ) (MW-3A). Benzene concentrations were also detected in wells MW-2, MW-3A and MW-6 at concentrations ranging from 320 (MW-2) to 5,300  $\mu\text{g/L}$  (MW-6). Toluene, ethylbenzene and xylenes were detected in wells MW-2, MW-3A, and MW-6. Toluene was detected in MW-2, MW-3A, and MW-6 at 290, 6,500, and 33  $\mu\text{g/L}$ , respectively; ethylbenzene at 140, 1,100, and 35  $\mu\text{g/L}$ , respectively; and total xylenes at 970, 5,100, and 79  $\mu\text{g/L}$ , respectively. Laboratory analysis noted that unmodified or weakly modified gasoline is significant in samples collected from wells MW-2, MW-3A, and MW-6.
- No MTBE was detected above laboratory reporting limits in any of the wells.
- TPHd range hydrocarbons were detected in samples from wells MW-2, MW-3A and MW-6 at concentrations of 1,500, 1,600, and 710  $\mu\text{g/L}$ , respectively. Laboratory analysis noted that the TPH chromatogram suggested gasoline range compounds were significant in these samples.
- Chloroform was detected in wells MW-1 and MW-5 at concentrations of 1.2 and 7.2  $\mu\text{g/L}$ , respectively.
- 1,2-DCA was not detected above laboratory reporting limits in any of the wells.

## **2.2.3 WASTE DISPOSAL**

On September 3, 2010 approximately 20 gallons of drummed purged groundwater from the Second Half 2010 monitoring event was transported for disposal by American Integrated Services, Inc., to Crosby & Overton, Inc in Long Beach, CA.

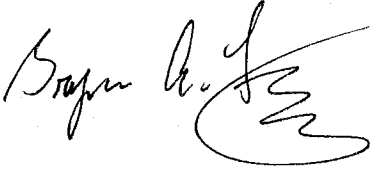
## **2.2.4 GEOTRACKER SUBMITTAL**

CRA uploaded relevant data to the GeoTracker database on behalf of Mr. Tommy Chiu. CRA has uploaded Second Half 2010 groundwater depth data, analytical results, and this report to the State's GeoTracker database.

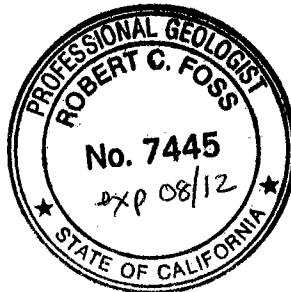
**2.3            PROPOSED ACTIVITIES FOR  
                  THE FIRST 2011 SEMI-ANNUAL EVENT**

As approved by ACEH, the subject site will be monitored semi-annually during first and third quarters. CRA will measure water levels and collect groundwater samples from wells MW-1 through MW-6. Groundwater samples will be analyzed for TPHd with silica gel cleanup and TPHg by modified EPA Method SW8015Bm; and for BTEX, MTBE, chloroform and 1,2-DCA by EPA Method SW8260B (Basic Target List). CRA will prepare a groundwater monitoring report summarizing the monitoring activities and results.

All of Which is Respectfully Submitted,  
CONESTOGA-ROVERS & ASSOCIATES



Bryan A. Fong



Robert Foss, P.G.

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## FIGURES

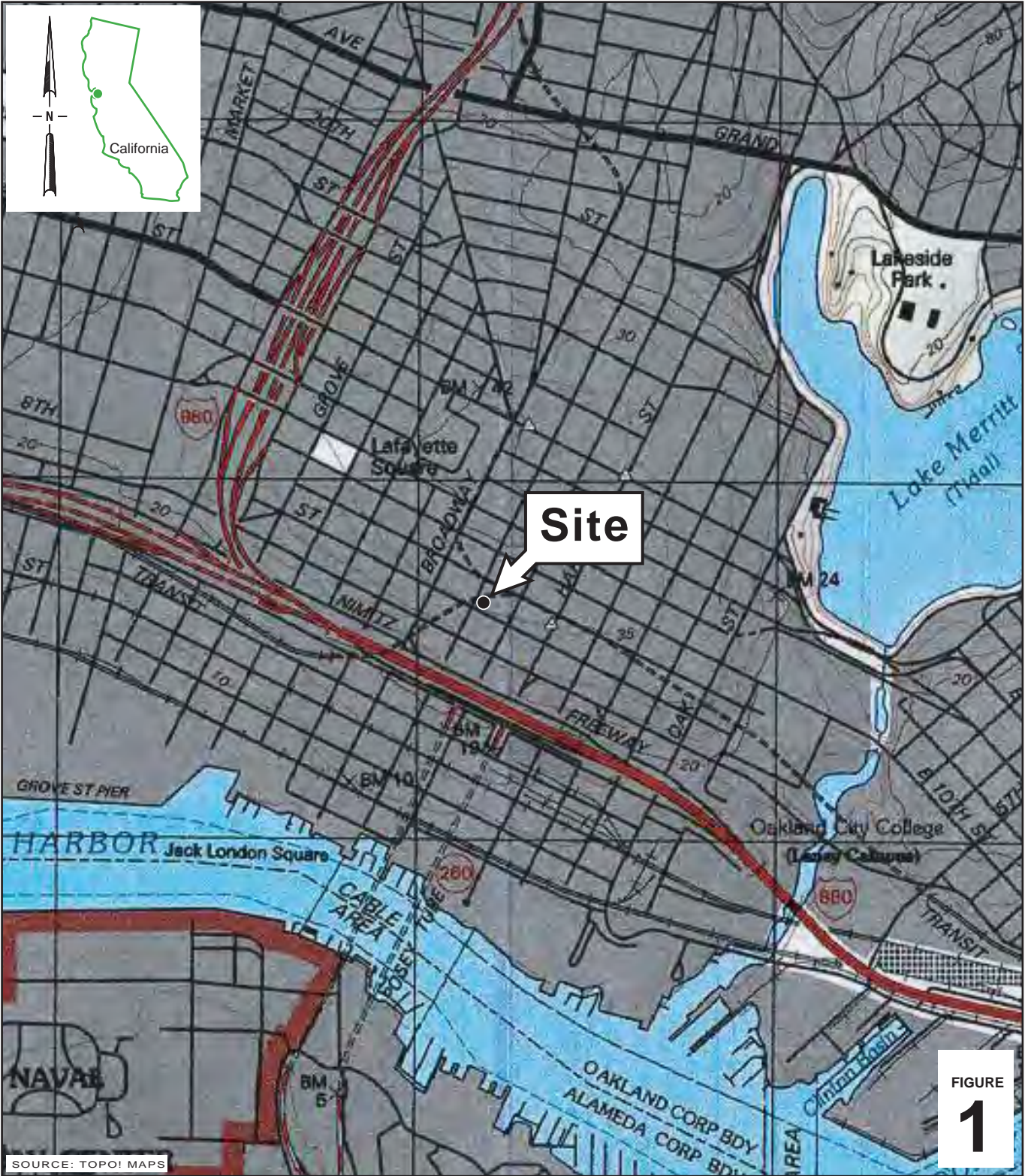


FIGURE 1

I:\SFO-S1\SHARED\IR\CHIU PROPERTY\FIGURES\VICINITY-MAP.A1

SOURCE: TOPOI MAPS

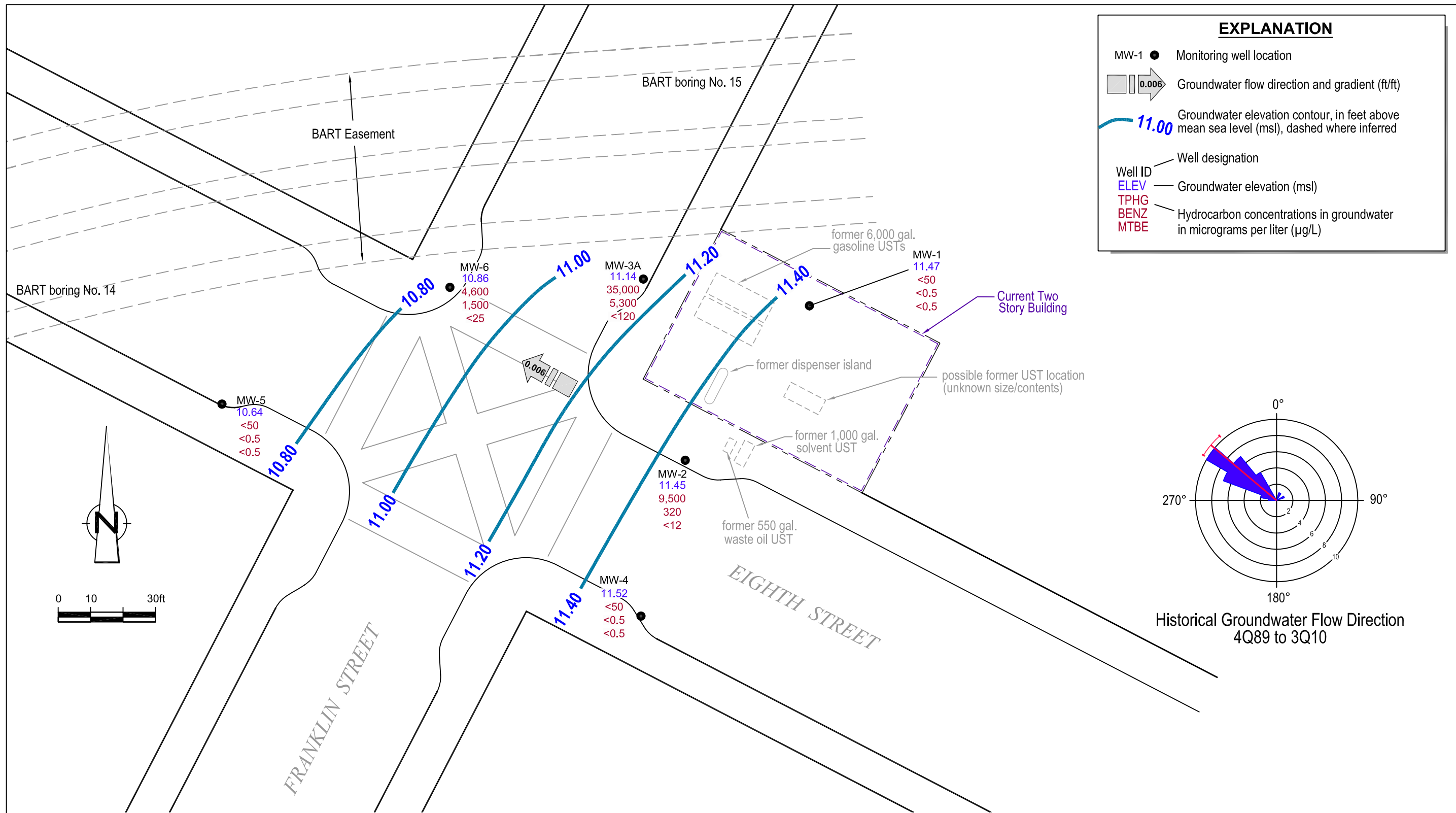
0 1/8 1/4 1/2 1  
SCALE : 1" = 1/4 MILE

**Chiu Property**  
800 Franklin Street  
Oakland, California



**Vicinity Map**





**FIGURE 2**  
**GROUNDWATER ELEVATION CONTOUR AND HYDROCARBON CONCENTRATION MAP**  
 CHIU PROPERTY  
 800 FRANKLIN STREET  
 Oakland, California  
 September 3, 2010



## TABLES

**WELL CONSTRUCTION DETAILS  
CHIU PROPERTY  
800 FRANKLIN STREET  
OAKLAND, CALIFORNIA**

<i>Well ID</i>	<i>Date Installed</i>	<i>Borehole Depth (ft)</i>	<i>Borehole Diameter (in)</i>	<i>Casing Diameter (in)</i>	<i>Screen Interval (ft bgs)</i>	<i>Screen Size (in)</i>	<i>Filter Pack (ft bgs)</i>	<i>Bentonite Seal (ft bgs)</i>	<i>Cement Seal (ft bgs)</i>	<i>TOC Elevation (ft msl)</i>
MW-1	1989	35.0	8.0	2	20.0 - 35.0	0.010	18.0 - 35.0	16.0 - 18.0	0 - 16.0	33.42
MW-2	1989	35.0	8.0	2	20.0 - 35.0	0.010	18.0 - 35.0	16.0 - 18.0	0 - 16.0	33.66
MW-3*	Installed: 1989 Destroyed: 1/29/07	35.0	8.0	2	20.0 - 35.0	0.010	18.0 - 35.0	16.0 - 18.0	0 - 16.0	34.23
MW-3A	2/8/2007	35.0	10.0	4	20.0 - 35.0	0.010	19.0 - 35.0	17.0 - 19.0	0 - 17.0	34.16
MW-4	10/2/1991	35.0	8.0	2	20.0 - 35.0	0.010	18.0 - 35.0	-	0 - 18.0	33.64
MW-5	10/3/1991	35.0	8.0	2	20.0 - 35.0	0.010	18.0 - 35.0	-	0 - 18.0	33.56
MW-6	5/15/1997	35.0	8.0	2	14.5 - 36.25	0.010	14.5 - 36.25	12.5 - 14.5 (?)	0 - 12.5	33.98

**Abbreviations/Notes**

ft = feet

in = inches

ft bgs = feet below grade surface

ft msl = feet above mean sea level

TOC = top of casing

\* = Monitoring well MW-3 properly destroyed on January 29, 2007 by Cambria.



TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS  
 CHIU PROPERTY  
 800 FRANKLIN STREET  
 OAKLAND, CALIFORNIA

Well ID	TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (feet msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene µg/L	Xylenes	MTBE	Chloroform	1,2-DCA
<b>MW-1</b>		10/12/1989	22.87	10.55	ND	--	--	ND	ND	ND	ND	--	0.8	8.6
33.42		10/31/1991	--	--	630	960	1,700	3.2	ND<0.5	ND<0.5	130	--	--	0.0098
34.89		10/21/1992	23.48	11.41	520	--	--	78	38	ND<0.5	120	--	--	ND
		2/25/1993	22.51	12.38	1,600	--	--	160	190	34	350	--	--	--
		4/27/1993	22.36	12.53	380	--	--	5.2	ND<0.5	ND<0.5	74	--	--	--
		10/7/1993	--	12.10	1,000	--	--	81	150	47	230	--	--	--
33.98		3/28/1994	--	11.91	460	--	--	14	25	14	39	--	--	--
		4/29/1994	--	--	--	--	--	--	--	--	--	--	--	--
		6/10/1994	--	11.66	--	--	--	--	--	--	--	--	--	--
		7/8/1994	--	11.62	--	--	--	--	--	--	--	--	--	--
		7/26/1994	--	11.48	--	--	--	--	--	--	--	--	--	--
		8/25/1994	--	11.47	--	--	--	--	--	--	--	--	--	--
		10/27/1994	22.51	11.47	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
		1/6/1995	--	12.08	--	--	--	--	--	--	--	--	--	--
		2/1/1995	--	12.79	--	--	--	--	--	--	--	--	--	--
		3/29/1995	--	12.75	--	--	--	--	--	--	--	--	--	--
		10/31/1995	--	12.48	1,400	--	--	15	38	49	510	19	--	--
		5/21/1997	--	12.49	150	--	--	2.9	1.5	8.6	26	ND<5.0	--	--
		8/10/2004	23.35	10.63	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		9/28/2004E	--	--	--	--	--	--	--	--	--	--	--	--
		12/21/2004	22.93	11.05	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		3/11/2005E	--	--	--	--	--	--	--	--	--	--	--	--
		6/16/2005	20.68	13.30	ND<50	--	--	0.64	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		9/1/2005	20.74	13.24	ND<50	--	--	1.2	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		12/16/2005	20.95	13.03	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		3/10/2006	20.34	13.64	ND<50	--	--	0.60	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		9/15/2006	21.51	12.47	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	6.4	ND<0.5
		3/8/2007	21.81	12.17	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	0.72	ND<0.5	ND<5.0	6.9	ND<0.5
		9/17/2007	22.08	11.90	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	2.3	ND<0.5	ND<0.5	4.7	ND<0.5
		3/4/2008	21.72	12.26	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.3	ND<0.5
		9/3/2008	22.70	11.28	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.98	ND<0.5
		3/4/2009	22.49	11.49	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.65
		9/8/2009	22.80	11.18	ND<50	ND<50	ND<250	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5	ND<0.5
		3/19/2010	22.25	11.73	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5	0.58
		<b>9/3/2010</b>	<b>22.51</b>	<b>11.47</b>	<b>ND&lt;50</b>	<b>ND&lt;50</b>	--	<b>(ND&lt;0.5)</b>	<b>(ND&lt;0.5)</b>	<b>(ND&lt;0.5)</b>	<b>(ND&lt;0.5)</b>	<b>(ND&lt;0.5)</b>	<b>1.2</b>	<b>ND&lt;0.5</b>
<b>MW-2</b>		10/12/1989	23.25	10.40	38,000	--	3,900	1,300	1,200	ND	4,700	--	--	--
33.66		10/31/1991	--	--	10,000	1,500	--	1,800	1,200	270	960	--	--	0.17
		11/6/1991	24.02	9.64	--	--	--	--	--	--	--	--	--	--
		10/21/1992	22.42	11.24	270,000	--	--	9,700	4,500	9,600	56,000	--	--	15.4

TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS  
 CHIU PROPERTY  
 800 FRANKLIN STREET  
 OAKLAND, CALIFORNIA

Well ID	TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (feet msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Chloroform	1,2-DCA
					←					µg/L				→
<b>MW-2 (cont.)</b>		2/25/1993	21.50	12.16	49,000	--	--	4,300	11,000	1,300	9,100	--	--	--
		4/27/1993	21.26	12.40	39,000	--	--	1,400	4,000	220	5,200	--	--	--
		10/7/1993	--	12.04	50,000	--	--	2,700	8,100	940	7,800	--	--	--
		3/28/1994	--	11.88	20,000	--	--	360	1,300	220	1,800	--	--	--
		4/29/1994	--	11.87	--	--	--	--	--	--	--	--	--	--
		6/10/1994	--	11.44	--	--	--	--	--	--	--	--	--	--
		7/8/1994	--	11.42	--	--	--	--	--	--	--	--	--	--
		7/26/1994	--	11.22	--	--	--	--	--	--	--	--	--	--
		8/25/1994	--	11.01	--	--	--	--	--	--	--	--	--	--
		10/27/1994	22.66	11.00	21,000	--	--	1,200	3,700	600	4,300	--	--	--
		1/6/1995	--	11.66	--	--	--	--	--	--	--	--	--	--
		2/1/1995	--	12.21	--	--	--	--	--	--	--	--	--	--
		3/29/1995	--	12.66	--	--	--	--	--	--	--	--	--	--
		10/31/1995	--	11.51	45,000	--	--	3,100	8,800	1,200	8,400	810	--	--
		5/21/1997	--	12.65	18,000	--	--	1,400	4,200	680	3,600	370	--	--
		8/10/2004	21.03	12.63	47,000 (a)	--	--	4,200	4,900	1,400	6,000	ND<500	--	--
		9/28/2004	22.95	10.71	--	--	--	--	--	--	--	--	--	--
		12/21/2004	20.91	12.75	13,000 (a)	--	--	500	310	34	1,600	ND<100	--	--
		3/11/2005	11.35	22.31	32,000 (a)	--	--	970	2,400	890	4,200	ND<1,000	--	--
		6/16/2005	20.50	13.16	43,000 (a,i)	--	--	1,500	3,400	1,200	5,400	ND<1,200	--	--
		9/1/2005	20.60	13.06	20,000 (a)	--	--	640	1,700	460	2,200	ND<200	--	--
		12/16/2005	20.83	12.83	32,000 (a,i)	--	--	1,000	3,100	760	3,800	ND<500	--	--
		3/10/2006	20.05	13.61	20,000 (a)	--	--	460	1,900	440	2,400	ND<400	--	--
		9/15/2006	21.31	12.35	43,000 (a)	3,100 (d)	ND<250	1,600	4,400	1,100	5,100	ND<500	16	ND<10
		3/8/2007	21.62	12.04	30,000 (a,h)	4,600 (d,h)	ND<1,200	1,200	3,400	890	4,500	ND<500	ND<50	ND<50 (j,h)
		9/17/2007	21.92	11.74	31,000 (a)	6,600 (d,b)	340	790	3,000	700	3,100	ND<100	ND<100	ND<100
		3/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
		9/3/2008	22.50	11.16	46,000 (a)	5,100 (d)	370	1,700	8,600	1,400	7,500	ND<250	ND<250	ND<250
		3/4/2009	22.25	11.41	56,000 (a)	13,000 (d)	1,100	1,500	5,300	990	4,500	ND<10	ND<10	ND<10
		9/8/2009	22.60	11.06	42,000 (a)	11,000 (d)	1,200	1,400 (1,200)	5,200 (4,900)	970 (890)	5,500 (4,900)	ND<100 (ND<100)	ND<0.5	ND<100
33.75	3/19/2010 **	21.96	11.70	30,000 (a,h)	12,000 (d,h)	--	(1,000)	(3,500)	(980)	(4,500)	(ND<50)	ND<5.0	ND<5.0	
	9/3/2010	22.30	11.45	9,500 (a)	1,500 (d)	--	(320)	(290)	(140)	(970)	(ND<12)	ND<12	ND<12	
<b>MW-3</b>		10/12/1989	24.02	10.21	87,000	--	4,500	3,200	8,800	ND	6,500	--	--	70.0
	34.23	10/31/1991	--	--	310,000	25,000	--	9,300	25,000	5,600	27,000	--	--	0.058
		11/6/1991	23.52	10.71	--	--	--	--	--	--	--	--	--	--
		10/21/1992	23.32	10.91	22,000	--	--	10,000	4,300	790	2,100	--	--	ND
		2/25/1993	22.51	11.72	29,000	--	--	8,400	5,400	1,300	3,300	--	--	--
		4/27/1993	22.37	11.86	50,000	--	--	8,200	8,700	1,000	5,400	--	--	--
		10/7/1993	--	14.19	1,700	--	--	3,100	3,700	400	1,700	--	--	--

TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS  
 CHIU PROPERTY  
 800 FRANKLIN STREET  
 OAKLAND, CALIFORNIA

Well ID TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (feet msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene µg/L	Xylenes	MTBE	Chloroform	1,2-DCA
				←									
MW-3 (cont.)	3/28/1994	--	11.52	53,000	--	--	3,900	4,600	710	2,500	--	--	--
	4/29/1994	--	11.34	--	--	--	--	--	--	--	--	--	--
	6/10/1994	--	11.13	--	--	--	--	--	--	--	--	--	--
	7/8/1994	--	11.09	--	--	--	--	--	--	--	--	--	--
	7/26/1994	--	10.94	--	--	--	--	--	--	--	--	--	--
	8/25/1994	--	10.80	--	--	--	--	--	--	--	--	--	--
	10/27/1994	23.56	10.67	8,500	--	--	2,700	2,700	490	2,000	--	--	--
	1/6/1995	--	11.33	--	--	--	--	--	--	--	--	--	--
	2/1/1995	--	11.79	--	--	--	--	--	--	--	--	--	--
	3/29/1995	--	12.10	--	--	--	--	--	--	--	--	--	--
	10/31/1995	--	11.23	19,000	--	--	4,400	4,600	720	2,900	410	--	--
	5/21/1997	--	11.68	4,000	--	--	810	840	190	690	ND<100	--	--
	9/28/2004						Well is damaged. Unable to measure depth to water or collect sample.						
	12/21/2004						Well is damaged. Unable to measure depth to water or collect sample.						
	3/11/2005						Well is damaged. Unable to measure depth to water or collect sample.						
	6/16/2005						Well is damaged. Unable to measure depth to water or collect sample.						
	9/1/2005						Well is damaged. Unable to measure depth to water or collect sample.						
	12/16/2005						Well is damaged. Unable to measure depth to water or collect sample.						
	3/10/2006						Well is damaged. Unable to measure depth to water or collect sample.						
9/15/2006						Well is damaged. Unable to measure depth to water or collect sample.							
1/29/2007						Well properly destroyed by Cambria.							
MW-3A	1/29/2007					MW-3A replaces MW-3							
34.16	3/8/2007	22.42	11.74	30,000 (a,i)	1,700 (d,i)	ND<250	2,600	4,400	710	4,600	ND<1,000	ND<50	ND<50 (j)
	9/17/2007	22.65	11.51	9,800 (a)	980 (d)	ND<250	1,100	1,800	270	1,100	ND<25	ND<25	ND<25
	3/4/2008	22.31	11.85	21,000 (a,i)	1,700 (d,i)	ND<250	2,600	5,000	810	3,500	ND<50	ND<50	ND<50
	9/3/2008	23.11	11.05	13,000 (a)	880 (d)	ND<250	1,400	2,100	370	1,500	ND<50	ND<50	ND<50
	3/4/2009	22.98	11.18	12,000 (a)	810 (d)	ND<250	1,000	1,700	330	1,200	ND<5.0	7.9	7.2
	9/8/2009	23.25	10.91	8,900 (a)	780 (d)	ND<250	870 (830)	1300 (1,200)	260 (200)	1100 (880)	ND<25 (ND<25)	6.3	ND<25
	3/19/2010	22.79	11.37	16,000 (a)	1,700 (d)	--	(1,900)	(3,200)	(620)	(2,800)	(ND<50)	ND<5.0	10
	9/3/2010	23.02	11.14	35,000 (a)	1,600 (d)	--	(5,300)	(6,500)	(1,100)	(5,100)	(ND<120)	ND<120	ND<120
	MW-4	10/31/1991	--	--	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	2.6
33.64	11/6/1991	23.32	10.32	--	--	--	--	--	--	--	--	--	--
	10/21/1992	22.10	11.54	410	--	--	3.1	29	6.8	47	--	--	ND
	2/25/1993	21.13	12.51	170	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	4/27/1993	20.74	12.90	100	--	--	ND<0.5	ND<0.5	ND<0.5	0.9	--	--	--
	10/7/1993	--	12.52	240	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	3/28/1994	--	12.34	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	4/29/1994	--	11.33	--	--	--	--	--	--	--	--	--	--

TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS  
 CHIU PROPERTY  
 800 FRANKLIN STREET  
 OAKLAND, CALIFORNIA

Well ID	TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (feet msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Chloroform	1,2-DCA
					←					µg/L				→
MW-4 (cont.)		6/10/1994	--	11.55	--	--	--	--	--	--	--	--	--	--
		7/8/1994	--	11.54	--	--	--	--	--	--	--	--	--	--
		7/26/1994	--	11.30	--	--	--	--	--	--	--	--	--	--
		8/25/1994	--	11.09	--	--	--	--	--	--	--	--	--	--
		10/27/1994	22.69	10.95	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
		1/6/1995	--	11.70	--	--	--	--	--	--	--	--	--	--
		2/1/1995	--	12.34	--	--	--	--	--	--	--	--	--	--
		3/29/1995	--	12.76	--	--	--	--	--	--	--	--	--	--
		10/31/1995	--	11.61	80	--	--	ND<0.5	0.6	ND<0.5	1.0	ND<0.5	--	--
		5/21/1997	--	12.08	ND<50	--	--	11	120	27	180	ND<5.0	--	--
		9/28/2004	22.72	10.92	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		12/21/2004	20.65	12.99	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		3/11/2005	20.20	13.44	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		6/16/2005	20.38	13.26	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		9/1/2005	20.48	13.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		12/16/2005	20.78	12.86	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		3/10/2006	19.81	13.83	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
		9/15/2006	21.16	12.48	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	28	ND<0.5
		3/8/2007	21.52	12.12	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	23	ND<0.5
		9/17/2007	21.84	11.80	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	ND<0.5
		3/4/2008	21.41	12.23	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	ND<0.5
		9/3/2008	22.50	11.14	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12	ND<0.5
		3/4/2009	22.15	11.49	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	14	ND<0.5
	9/8/2009	22.56	11.08	ND<50	ND<50	ND<250	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	11	ND<0.5	
33.73		3/19/2010 *	21.88	11.76	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	10	ND<0.5
		9/3/2010	22.21	11.52	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	ND<0.5	ND<0.5
MW-5		10/31/1991	--	--	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	1.1	--
	33.51		11/6/1991	24.00	9.51	ND	--	--	ND	ND	ND	--	--	--
		10/21/1992	23.24	10.27	840	--	--	17	120	39	180	--	--	--
	33.56		2/25/1993	22.40	11.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	--	--	--
		4/27/1993	22.15	11.41	260	--	--	53	19	1.2	2.4	--	--	--
		10/7/1993	--	11.06	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
		3/28/1994	--	10.95	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
		4/29/1994	--	10.91	--	--	--	--	--	--	--	--	--	--
		6/10/1994	--	10.68	--	--	--	--	--	--	--	--	--	--
		7/8/1994	--	10.60	--	--	--	--	--	--	--	--	--	--
		7/26/1994	--	10.45	--	--	--	--	--	--	--	--	--	--
		8/25/1994	--	10.28	--	--	--	--	--	--	--	--	--	--
	10/27/1994	23.50	10.06	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	

TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS  
 CHIU PROPERTY  
 800 FRANKLIN STREET  
 OAKLAND, CALIFORNIA

Well ID	TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (feet msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Chloroform	1,2-DCA	
					←					µg/L				→	
MW-5 (cont.)		1/6/1995	--	10.78	--	--	--	--	--	--	--	--	--	--	
		2/1/1995	--	11.25	--	--	--	--	--	--	--	--	--	--	
		3/29/1995	--	11.63	--	--	--	--	--	--	--	--	--	--	
		10/31/1995	--	10.64	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	
		5/21/1997	--	11.04	260	--	--	2.4	33	7.7	56	ND<5.0	--	--	
		9/28/2004	23.70	9.86	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	1.5	ND<5.0	--	--	
		12/21/2004	21.40	12.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	
		3/11/2005	21.40	12.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	
		6/16/2005	21.63	11.93	ND<50 (i)	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	
		9/1/2005	21.65	11.91	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	
		12/16/2005	21.94	11.62	ND<50 (i)	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	
		3/10/2006	21.11	12.45	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	
		9/15/2006	22.20	11.36	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	10	ND<0.5	
		3/8/2007	22.44	11.12	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	18	ND<0.5	
		9/17/2007	22.73	10.83	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	14	ND<0.5	
		3/4/2008	22.32	11.24	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	19	ND<0.5	
		9/3/2008	23.13	10.43	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	17	ND<0.5	
		3/4/2009	22.95	10.61	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	14	ND<0.5	
		9/8/2009	23.21	10.35	ND<50	ND<50	ND<250	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	11	ND<0.5	
	33.67		3/19/2010 *	22.72	10.84	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	14	ND<0.5
		9/3/2010	23.03	10.64	ND<50	ND<50	--	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	(ND<0.5)	7.2	ND<0.5	
MW-6		5/21/1997	--	11.26	760	--	--	2.5	1.7	ND<0.50	25	10	--	--	
	33.98		9/28/2004	24.00	9.98	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	
		12/21/2004	21.61	12.37	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	
		3/11/2005	21.60	12.38	340 (a)	--	--	1.9	2.6	0.68	0.61	ND<5.0	--	--	
		6/16/2005	21.81	12.17	1,300 (a)	--	--	58	8.3	6.1	4.0	ND<25	--	--	
		9/1/2005	21.82	12.16	1,900 (a)	--	--	150	19	18	76	ND<12	--	--	
		12/16/2005	22.03	11.95	3,600 (a,i)	--	--	560	63	33	230	ND<50	--	--	
		3/10/2006	21.46	12.52	2,200 (a)	--	--	240	10	20	87	ND<50	--	--	
		9/15/2006	22.46	11.52	1,800 (a)	480 (d)	ND<250	10	6.7	9.9	42	ND<17	3.2	ND<0.5	
		3/8/2007	22.64	11.34	4,300 (a)	890 (d)	ND<250	260	36	29	140	ND<60	ND<10	ND<10 (j)	
		9/17/2007	22.88	11.10	7,000 (a)	970 (d)	ND<250	760	28	46	270	ND<10	ND<10	ND<10	
		3/4/2008	22.51	11.47	400 (a)	74 (d)	ND<250	46	ND<1.0	1.0	6.0	ND<1.0	ND<1.0	ND<1.0	
		9/3/2008	23.24	10.74	280 (a)	69 (d, b)	ND<250	2.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
		3/4/2009	23.14	10.84	670 (a)	150 (d)	ND<250	68	13	ND<2.5	12	ND<2.5	ND<2.5	ND<2.5	
		9/8/2009	23.38	10.60	8,000 (a)	1,400 (d)	ND<250	870 (770)	16 (ND<12)	34 (17)	1500 (1,200)	ND<12 (ND<12)	ND<0.5	ND<12	
	34.05		3/19/2010 *	22.93	11.05	8,900 (a)	1,200 (d)	--	(2,900)	(ND<100)	(ND<100)	(ND<100)	(ND<5.0)	ND<5.0	15
			9/3/2010	23.19	10.86	4,600 (a)	710 (d)	--	(1,500)	(33)	(35)	(79)	(ND<25)	ND<25	ND<25

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS  
 CHIU PROPERTY  
 800 FRANKLIN STREET  
 OAKLAND, CALIFORNIA

Well ID	Date Sampled	Depth to Water	Groundwater Elevation	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Chloroform	1,2-DCA
TOC Elevation (ft msl)		(ft below TOC)	(feet msl)	←					μg/L				→

**Abbreviations and Notes:**

TOC Elevation = Top of well casing elevation measured in feet above mean sea level

msl = Above mean sea level

μg/L = Micrograms per liter

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method SW8015C.

TPHd = Total petroleum hydrocarbons as diesel by EPA Method SW8015C with silica gel cleanup.

TPHmo = Total petroleum hydrocarbons as motor oil by EPA Method SW8015C with silica gel cleanup.

Benzene, toluene, ethylbenzene, and xylenes by EPA Method SW8021B (SW8260B).

MTBE = Methyl tertiary-butyl ether by EPA Method SW8021B by (8260B)

Chloroform by EPA Method SW8260B.

1,2-DCA = 1,2-Dichloroethane by EPA Method SW8260B.

Sheen = A sheen was observed on the water's surface.

Field = Observed in the field.

Lab = Observed in analytical laboratory.

(a) = unmodified or weakly modified gasoline is significant

(b) = diesel range compounds are significant; no recognizable pattern

(d) = gasoline range compounds are significant

(h) = lighter than water immiscible sheen/product is present

(i) = liquid sample that contains ~1 vol. % sediment

(j) = sample diluted due to high organic content/matrix interference

ND<5.0 = Not detected above detection limit.

-- = Not available, not analyzed, or not applicable

\* = Surveyed September 7, 2006; updated to table May 24, 2010

\*\* = Surveyed March 8, 2007; updated to table May 24, 2010

É = Unable to access well due to denial by current tenant

APPENDIX A

STANDARD FIELD PROCEDURES FOR  
GROUNDWATER MONITORING AND SAMPLING

# Conestoga–Rovers & Associates

## STANDARD FIELD PROCEDURES FOR GROUNDWATER MONITORING AND SAMPLING

This document presents standard field methods for groundwater monitoring, purging and sampling, and well development. These procedures are designed to comply with Federal, State and local regulatory guidelines. Conestoga-Rovers and Associate's field procedures are summarized below.

### **Groundwater Elevation Monitoring**

Prior to performing monitoring activities, the historical monitoring and analytical data of each monitoring well shall be reviewed to determine if any of the wells are likely to contain non-aqueous phase liquid (NAPL) and to determine the order in which the wells will be monitored (i.e. cleanest to dirtiest). Groundwater monitoring should not be performed when the potential exists for surface water to enter the well (i.e. flooding during a rainstorm).

Prior to monitoring, each well shall be opened and the well cap removed to allow water levels to stabilize and equilibrate. The condition of the well box and well cap shall be observed and recommended repairs noted. Any surface water that may have entered and flooded the well box should be evacuated prior to removing the well cap. In wells with no history of NAPL, the static water level and total well depth shall be measured to the nearest 0.01 foot with an electronic water level meter. Wells with the highest contaminant concentrations shall be measured last. In wells with a history of NAPL, the NAPL level/thickness and static water level shall be measured to the nearest 0.01 foot using an electronic interface probe. The water level meter and/or interface probe shall be thoroughly cleaned and decontaminated at the beginning of the monitoring event and between each well. Monitoring equipment shall be washed using soapy water consisting of Liqui-nox™ or Alconox™ followed by one rinse of clean tap water and then two rinses of distilled water.

### **Groundwater Purging and Sampling**

Prior to groundwater purging and sampling, the historical analytical data of each monitoring well shall be reviewed to determine the order in which the wells should be purged and sampled (i.e. cleanest to dirtiest). No purging or groundwater sampling shall be performed on wells with a measurable thickness of NAPL or floating NAPL globules. If a sheen is observed, the well should be purged and a groundwater sample collected only if no NAPL is present.

Wells shall be purged according to low flow protocol using an aboveground peristaltic pump. Groundwater wells shall be purged at a low flow rate not to exceed 500 milliliters per minute (mL/min) until groundwater parameters of conductivity and/or dissolved oxygen have stabilized to within 10% for three consecutive readings. Temperature, pH, and conductivity shall also be measured and recorded approximately every 3 to 5 minutes. The total volume of groundwater removed shall be recorded along with any other notable physical characteristic such as color and odor. If required, field parameters such as turbidity shall also be measured prior to collection of each groundwater sample.



# Conestoga–Rovers & Associates

Groundwater samples shall be collected after well parameters have stabilized at a low flow rate not to exceed 500 mL/min. Groundwater samples shall be decanted into clean containers supplied by the analytical laboratory. New latex gloves and Teflon lined tubing shall be used for sampling each well.

## **Sample Handling**

Except for samples that will be tested in the field, or that require special handling or preservation, samples shall be stored in coolers chilled to 4° C for shipment to the analytical laboratory. Samples shall be labeled, placed in protective foam sleeves or bubble wrap as needed, stored on crushed ice at or below 4° C, and submitted under chain-of-custody (COC) to the laboratory. The laboratory shall be notified of the sample shipment schedule and arrival time. Samples shall be shipped to the laboratory within a time frame to allow for extraction and analysis to be performed within the standard sample holding times.

Sample labels shall be filled out using indelible ink and must contain the site name; field identification number; the date, time, and location of sample collection; notation of the type of sample; identification of preservatives used; remarks; and the signature of the sampler. Field identification must be sufficient to allow easy cross-reference with the field datasheet.

All samples submitted to the laboratory shall be accompanied by a COC record to ensure adequate documentation. A copy of the COC shall be retained in the project file. Information on the COC shall consist of the project name and number; project location; sample numbers; sampler/recorder's signature; date and time of collection of each sample; sample type; analyses requested; name of person receiving the sample; and date of receipt of sample.

Laboratory-supplied trip blanks shall accompany the samples and be analyzed to check for cross-contamination, if requested by the project manager.

## **Waste Handling and Disposal**

Groundwater extracted during sampling shall be stored onsite in sealed U.S. DOT H17 55-gallon drums and shall be labeled with the contents, date of generation, generator identification, and consultant contact. Extracted groundwater may be disposed offsite by a licensed waste handler or may be treated and discharged via an operating onsite groundwater extraction/treatment system.

APPENDIX B

CERTIFIED ANALYTICAL REPORTS AND  
CHAIN-OF-CUSTODY DOCUMENTATION



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #581000; Chiu	Date Sampled: 09/03/10
		Date Received: 09/03/10
	Client Contact: Bryan Fong	Date Reported: 09/10/10
	Client P.O.:	Date Completed: 09/10/10

**WorkOrder: 1009107**

September 10, 2010

Dear Bryan:

Enclosed within are:

- 1) The results of the **6** analyzed samples from your project: **#581000; Chiu,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice 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 or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
Laboratory Manager  
McC Campbell Analytical, Inc.



# McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD  
PITTSBURG, CA 94565-1701

Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
Telephone: (877) 252-9262 Fax: (925) 252-9269

1009107

Bryan Feng ex email

## CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH  24 HR  48 HR  72 HR  5 DAY

GeoTracker EDF  PDF  Excel  Write On (DW)

Check if sample is effluent and "J" flag is required

Report To: Bob Foss Bill To: Conestoga Rivers & Associates

Company: Conestoga Rivers & Associates

5900 HOLLIS ST., Ste. A  
Emeryville, CA

E-Mail: bloss@crworld.com  
chee@crworld.com

Tele: (510) 420-3348

Fax: (510) 420-9170

Project #: 581000

Project Name: Chiu

Project Location: 800 Franklin St., Oakland, CA

Sampler Signature: Muskan Environmental Sampling

### Analysis Request

### Other

### Comments

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED		Filter sample for DISSOLVED metals analysis	Other	Comments	
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL				HNO <sub>3</sub>
✓ MW-1		9-3-10	10:57	4	CO2 Amb	X						X	X			**Indicate here if these samples are potentially dangerous to handle:  VOC basic target list 8260B
✓ MW-2			8:42	2												
✓ MW-3A			7:48													
✓ MW-4			4:54													
✓ MW-5			5:47													
✓ MW-6			6:44	*	X							X	X			
✓ TB				1	VAMP							X	X		Hold	

\*\*MAI client MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: <u>[Signature]</u>	Date: <u>9/3/10</u>	Time: <u>1315</u>	Received By: <u>[Signature]</u>
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICER 4-80  
 GOOD CONDITION ✓  
 HEAD SPACE ABSENT ✓  
 DECHLORINATED IN LAB ✓  
 APPROPRIATE CONTAINERS ✓  
 PRESERVED IN LAB ✓  
 VOAS O&G METALS OTHER  
 PRESERVATION pH<2

COMMENTS:  
 lower reporting limits  
 (closer to 0.5 ug/L) for  
 VOCs (vinyl chloride, TCE, chloroform)  
 by 8260B

**McC Campbell Analytical, Inc.**



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

**CHAIN-OF-CUSTODY RECORD**

**WorkOrder: 1009107**

**ClientCode: CETE**

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**

Bryan Fong  
Conestoga-Rovers & Associates  
5900 Hollis St, Suite A  
Emeryville, CA 94608  
(510) 420-3369    FAX (510) 420-9170

Email: bfong@craworld.com  
cc:  
PO:  
ProjectNo: #581000; Chiu

**Bill to:**

Accounts Payable  
Conestoga-Rovers & Associates  
5900 Hollis St, Ste. A  
Emeryville, CA 94608

**Requested TAT: 5 days**

**Date Received: 09/03/2010**

**Date Printed: 09/07/2010**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1009107-001	MW-1	Water	9/3/2010 10:57	<input type="checkbox"/>	B	A	A										
1009107-002	MW-2	Water	9/3/2010 8:42	<input type="checkbox"/>	B	A											
1009107-003	MW-3A	Water	9/3/2010 7:48	<input type="checkbox"/>	B	A											
1009107-004	MW-4	Water	9/3/2010 4:54	<input type="checkbox"/>	B	A											
1009107-005	MW-5	Water	9/3/2010 5:47	<input type="checkbox"/>	B	A											
1009107-006	MW-6	Water	9/3/2010 6:44	<input type="checkbox"/>	B	A											

**Test Legend:**

1	8260B_W	2	G-MBTEX_W	3	PREFD REPORT	4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A contain testgroup.

**Prepared by: Melissa Valles**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
Hazardous samples will be returned to client or disposed of at client expense.



**Sample Receipt Checklist**

Client Name: **Conestoga-Rovers & Associates**

Date and Time Received: **9/3/2010 3:04:39 PM**

Project Name: **#581000; Chiu**

Checklist completed and reviewed by: **Melissa Valles**

WorkOrder N°: **1009107** Matrix Water

Carrier: Client Drop-In

**Chain of Custody (COC) Information**

- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Sample IDs noted by Client on COC? Yes  No
- Date and Time of collection noted by Client on COC? Yes  No
- Sampler's name noted on COC? Yes  No

**Sample Receipt Information**

- Custody seals intact on shipping container/cooler? Yes  No  NA
- Shipping container/cooler in good condition? Yes  No
- Samples in proper containers/bottles? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No

**Sample Preservation and Hold Time (HT) Information**

- All samples received within holding time? Yes  No
  - Container/Temp Blank temperature Cooler Temp: 4.8°C NA
  - Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted
  - Sample labels checked for correct preservation? Yes  No
  - Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA
  - Samples Received on Ice? Yes  No
- (Ice Type: WET ICE )

\* NOTE: If the "No" box is checked, see comments below.

-----

Client contacted:

Date contacted:

Contacted by:

Comments:



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Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #581000; Chiu	Date Sampled: 09/03/10
		Date Received: 09/03/10
	Client Contact: Bryan Fong	Date Extracted: 09/07/10
	Client P.O.:	Date Analyzed: 09/07/10

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1009107

Lab ID	1009107-001B
Client ID	MW-1
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	2.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	Chloroform	1.2	1.0	0.5
Chloromethane	ND	1.0	0.5	2-Chlorotoluene	ND	1.0	0.5
4-Chlorotoluene	ND	1.0	0.5	Dibromochloromethane	ND	1.0	0.5
1,2-Dibromo-3-chloropropane	ND	1.0	0.2	1,2-Dibromoethane (EDB)	ND	1.0	0.5
Dibromomethane	ND	1.0	0.5	1,2-Dichlorobenzene	ND	1.0	0.5
1,3-Dichlorobenzene	ND	1.0	0.5	1,4-Dichlorobenzene	ND	1.0	0.5
Dichlorodifluoromethane	ND	1.0	0.5	1,1-Dichloroethane	ND	1.0	0.5
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5	1,1-Dichloroethene	ND	1.0	0.5
cis-1,2-Dichloroethene	ND	1.0	0.5	trans-1,2-Dichloroethene	ND	1.0	0.5
1,2-Dichloropropane	ND	1.0	0.5	1,3-Dichloropropane	ND	1.0	0.5
2,2-Dichloropropane	ND	1.0	0.5	1,1-Dichloropropene	ND	1.0	0.5
cis-1,3-Dichloropropene	ND	1.0	0.5	trans-1,3-Dichloropropene	ND	1.0	0.5
Diisopropyl ether (DIPE)	ND	1.0	0.5	Ethylbenzene	ND	1.0	0.5
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Freon 113	ND	1.0	10
Hexachlorobutadiene	ND	1.0	0.5	Hexachloroethane	ND	1.0	0.5
2-Hexanone	ND	1.0	0.5	Isopropylbenzene	ND	1.0	0.5
4-Isopropyl toluene	ND	1.0	0.5	Methyl-t-butyl ether (MTBE)	ND	1.0	0.5
Methylene chloride	ND	1.0	0.5	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5
Naphthalene	ND	1.0	0.5	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,1,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

### Surrogate Recoveries (%)

%SS1:	106	%SS2:	99
%SS3:	88		

### Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



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Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #581000; Chiu	Date Sampled: 09/03/10
		Date Received: 09/03/10
	Client Contact: Bryan Fong	Date Extracted: 09/07/10
	Client P.O.:	Date Analyzed: 09/07/10

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1009107

Lab ID	1009107-002B
Client ID	MW-2
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<250	25	10	tert-Amyl methyl ether (TAME)	ND<12	25	0.5
Benzene	320	25	0.5	Bromobenzene	ND<12	25	0.5
Bromochloromethane	ND<12	25	0.5	Bromodichloromethane	ND<12	25	0.5
Bromoform	ND<12	25	0.5	Bromomethane	ND<12	25	0.5
2-Butanone (MEK)	ND<50	25	2.0	t-Butyl alcohol (TBA)	ND<50	25	2.0
n-Butyl benzene	15	25	0.5	sec-Butyl benzene	ND<12	25	0.5
tert-Butyl benzene	ND<12	25	0.5	Carbon Disulfide	ND<12	25	0.5
Carbon Tetrachloride	ND<12	25	0.5	Chlorobenzene	ND<12	25	0.5
Chloroethane	ND<12	25	0.5	Chloroform	ND<12	25	0.5
Chloromethane	ND<12	25	0.5	2-Chlorotoluene	ND<12	25	0.5
4-Chlorotoluene	ND<12	25	0.5	Dibromochloromethane	ND<12	25	0.5
1,2-Dibromo-3-chloropropane	ND<5.0	25	0.2	1,2-Dibromoethane (EDB)	ND<12	25	0.5
Dibromomethane	ND<12	25	0.5	1,2-Dichlorobenzene	ND<12	25	0.5
1,3-Dichlorobenzene	ND<12	25	0.5	1,4-Dichlorobenzene	ND<12	25	0.5
Dichlorodifluoromethane	ND<12	25	0.5	1,1-Dichloroethane	ND<12	25	0.5
1,2-Dichloroethane (1,2-DCA)	ND<12	25	0.5	1,1-Dichloroethene	ND<12	25	0.5
cis-1,2-Dichloroethene	ND<12	25	0.5	trans-1,2-Dichloroethene	ND<12	25	0.5
1,2-Dichloropropane	ND<12	25	0.5	1,3-Dichloropropane	ND<12	25	0.5
2,2-Dichloropropane	ND<12	25	0.5	1,1-Dichloropropene	ND<12	25	0.5
cis-1,3-Dichloropropene	ND<12	25	0.5	trans-1,3-Dichloropropene	ND<12	25	0.5
Diisopropyl ether (DIPE)	ND<12	25	0.5	Ethylbenzene	140	25	0.5
Ethyl tert-butyl ether (ETBE)	ND<12	25	0.5	Freon 113	ND<250	25	10
Hexachlorobutadiene	ND<12	25	0.5	Hexachloroethane	ND<12	25	0.5
2-Hexanone	ND<12	25	0.5	Isopropylbenzene	43	25	0.5
4-Isopropyl toluene	ND<12	25	0.5	Methyl-t-butyl ether (MTBE)	ND<12	25	0.5
Methylene chloride	ND<12	25	0.5	4-Methyl-2-pentanone (MIBK)	ND<12	25	0.5
Naphthalene	71	25	0.5	n-Propyl benzene	71	25	0.5
Styrene	ND<12	25	0.5	1,1,1,2-Tetrachloroethane	ND<12	25	0.5
1,1,1,2-Tetrachloroethane	ND<12	25	0.5	Tetrachloroethene	ND<12	25	0.5
Toluene	290	25	0.5	1,2,3-Trichlorobenzene	ND<12	25	0.5
1,2,4-Trichlorobenzene	ND<12	25	0.5	1,1,1-Trichloroethane	ND<12	25	0.5
1,1,2-Trichloroethane	ND<12	25	0.5	Trichloroethene	ND<12	25	0.5
Trichlorofluoromethane	ND<12	25	0.5	1,2,3-Trichloropropane	ND<12	25	0.5
1,2,4-Trimethylbenzene	570	25	0.5	1,3,5-Trimethylbenzene	120	25	0.5
Vinyl Chloride	ND<12	25	0.5	Xylenes	970	25	0.5

### Surrogate Recoveries (%)

%SS1:	104	%SS2:	98
%SS3:	97		

#### Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor





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Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #581000; Chiu	Date Sampled: 09/03/10
		Date Received: 09/03/10
	Client Contact: Bryan Fong	Date Extracted: 09/09/10
	Client P.O.:	Date Analyzed: 09/09/10

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1009107

Lab ID	1009107-003B
Client ID	MW-3A
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<2500	250	10	tert-Amyl methyl ether (TAME)	ND<120	250	0.5
Benzene	5300	250	0.5	Bromobenzene	ND<120	250	0.5
Bromochloromethane	ND<120	250	0.5	Bromodichloromethane	ND<120	250	0.5
Bromoform	ND<120	250	0.5	Bromomethane	ND<120	250	0.5
2-Butanone (MEK)	ND<500	250	2.0	t-Butyl alcohol (TBA)	ND<500	250	2.0
n-Butyl benzene	ND<120	250	0.5	sec-Butyl benzene	ND<120	250	0.5
tert-Butyl benzene	ND<120	250	0.5	Carbon Disulfide	ND<120	250	0.5
Carbon Tetrachloride	ND<120	250	0.5	Chlorobenzene	ND<120	250	0.5
Chloroethane	ND<120	250	0.5	Chloroform	ND<120	250	0.5
Chloromethane	ND<120	250	0.5	2-Chlorotoluene	ND<120	250	0.5
4-Chlorotoluene	ND<120	250	0.5	Dibromochloromethane	ND<120	250	0.5
1,2-Dibromo-3-chloropropane	ND<50	250	0.2	1,2-Dibromoethane (EDB)	ND<120	250	0.5
Dibromomethane	ND<120	250	0.5	1,2-Dichlorobenzene	ND<120	250	0.5
1,3-Dichlorobenzene	ND<120	250	0.5	1,4-Dichlorobenzene	ND<120	250	0.5
Dichlorodifluoromethane	ND<120	250	0.5	1,1-Dichloroethane	ND<120	250	0.5
1,2-Dichloroethane (1,2-DCA)	ND<120	250	0.5	1,1-Dichloroethene	ND<120	250	0.5
cis-1,2-Dichloroethene	ND<120	250	0.5	trans-1,2-Dichloroethene	ND<120	250	0.5
1,2-Dichloropropane	ND<120	250	0.5	1,3-Dichloropropane	ND<120	250	0.5
2,2-Dichloropropane	ND<120	250	0.5	1,1-Dichloropropene	ND<120	250	0.5
cis-1,3-Dichloropropene	ND<120	250	0.5	trans-1,3-Dichloropropene	ND<120	250	0.5
Diisopropyl ether (DIPE)	ND<120	250	0.5	Ethylbenzene	1100	250	0.5
Ethyl tert-butyl ether (ETBE)	ND<120	250	0.5	Freon 113	ND<2500	250	10
Hexachlorobutadiene	ND<120	250	0.5	Hexachloroethane	ND<120	250	0.5
2-Hexanone	ND<130	250	0.5	Isopropylbenzene	ND<120	250	0.5
4-Isopropyl toluene	ND<120	250	0.5	Methyl-t-butyl ether (MTBE)	ND<120	250	0.5
Methylene chloride	ND<120	250	0.5	4-Methyl-2-pentanone (MIBK)	ND<120	250	0.5
Naphthalene	160	250	0.5	n-Propyl benzene	ND<120	250	0.5
Styrene	ND<120	250	0.5	1,1,1,2-Tetrachloroethane	ND<120	250	0.5
1,1,1,2-Tetrachloroethane	ND<120	250	0.5	Tetrachloroethene	ND<120	250	0.5
Toluene	6500	250	0.5	1,2,3-Trichlorobenzene	ND<120	250	0.5
1,2,4-Trichlorobenzene	ND<120	250	0.5	1,1,1-Trichloroethane	ND<120	250	0.5
1,1,2-Trichloroethane	ND<120	250	0.5	Trichloroethene	ND<120	250	0.5
Trichlorofluoromethane	ND<120	250	0.5	1,2,3-Trichloropropane	ND<120	250	0.5
1,2,4-Trimethylbenzene	580	250	0.5	1,3,5-Trimethylbenzene	130	250	0.5
Vinyl Chloride	ND<120	250	0.5	Xylenes	5100	250	0.5

### Surrogate Recoveries (%)

%SS1:	101	%SS2:	99
%SS3:	87		

### Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



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Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #581000; Chiu	Date Sampled: 09/03/10
		Date Received: 09/03/10
	Client Contact: Bryan Fong	Date Extracted: 09/07/10
	Client P.O.:	Date Analyzed: 09/07/10

## Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1009107

Lab ID	1009107-004B
Client ID	MW-4
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	2.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	Chloroform	ND	1.0	0.5
Chloromethane	ND	1.0	0.5	2-Chlorotoluene	ND	1.0	0.5
4-Chlorotoluene	ND	1.0	0.5	Dibromochloromethane	ND	1.0	0.5
1,2-Dibromo-3-chloropropane	ND	1.0	0.2	1,2-Dibromoethane (EDB)	ND	1.0	0.5
Dibromomethane	ND	1.0	0.5	1,2-Dichlorobenzene	ND	1.0	0.5
1,3-Dichlorobenzene	ND	1.0	0.5	1,4-Dichlorobenzene	ND	1.0	0.5
Dichlorodifluoromethane	ND	1.0	0.5	1,1-Dichloroethane	ND	1.0	0.5
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5	1,1-Dichloroethene	ND	1.0	0.5
cis-1,2-Dichloroethene	ND	1.0	0.5	trans-1,2-Dichloroethene	ND	1.0	0.5
1,2-Dichloropropane	ND	1.0	0.5	1,3-Dichloropropane	ND	1.0	0.5
2,2-Dichloropropane	ND	1.0	0.5	1,1-Dichloropropene	ND	1.0	0.5
cis-1,3-Dichloropropene	ND	1.0	0.5	trans-1,3-Dichloropropene	ND	1.0	0.5
Diisopropyl ether (DIPE)	ND	1.0	0.5	Ethylbenzene	ND	1.0	0.5
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Freon 113	ND	1.0	10
Hexachlorobutadiene	ND	1.0	0.5	Hexachloroethane	ND	1.0	0.5
2-Hexanone	ND	1.0	0.5	Isopropylbenzene	ND	1.0	0.5
4-Isopropyl toluene	ND	1.0	0.5	Methyl-t-butyl ether (MTBE)	ND	1.0	0.5
Methylene chloride	ND	1.0	0.5	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5
Naphthalene	ND	1.0	0.5	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,1,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

### Surrogate Recoveries (%)

%SS1:	98	%SS2:	96
%SS3:	98		

### Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



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Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #581000; Chiu	Date Sampled: 09/03/10
		Date Received: 09/03/10
	Client Contact: Bryan Fong	Date Extracted: 09/07/10
	Client P.O.:	Date Analyzed: 09/07/10

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1009107

Lab ID	1009107-005B
Client ID	MW-5
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	2.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	Chloroform	7.2	1.0	0.5
Chloromethane	ND	1.0	0.5	2-Chlorotoluene	ND	1.0	0.5
4-Chlorotoluene	ND	1.0	0.5	Dibromochloromethane	ND	1.0	0.5
1,2-Dibromo-3-chloropropane	ND	1.0	0.2	1,2-Dibromoethane (EDB)	ND	1.0	0.5
Dibromomethane	ND	1.0	0.5	1,2-Dichlorobenzene	ND	1.0	0.5
1,3-Dichlorobenzene	ND	1.0	0.5	1,4-Dichlorobenzene	ND	1.0	0.5
Dichlorodifluoromethane	ND	1.0	0.5	1,1-Dichloroethane	ND	1.0	0.5
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5	1,1-Dichloroethene	ND	1.0	0.5
cis-1,2-Dichloroethene	ND	1.0	0.5	trans-1,2-Dichloroethene	ND	1.0	0.5
1,2-Dichloropropane	ND	1.0	0.5	1,3-Dichloropropane	ND	1.0	0.5
2,2-Dichloropropane	ND	1.0	0.5	1,1-Dichloropropene	ND	1.0	0.5
cis-1,3-Dichloropropene	ND	1.0	0.5	trans-1,3-Dichloropropene	ND	1.0	0.5
Diisopropyl ether (DIPE)	ND	1.0	0.5	Ethylbenzene	ND	1.0	0.5
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Freon 113	ND	1.0	10
Hexachlorobutadiene	ND	1.0	0.5	Hexachloroethane	ND	1.0	0.5
2-Hexanone	ND	1.0	0.5	Isopropylbenzene	ND	1.0	0.5
4-Isopropyl toluene	ND	1.0	0.5	Methyl-t-butyl ether (MTBE)	ND	1.0	0.5
Methylene chloride	ND	1.0	0.5	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5
Naphthalene	ND	1.0	0.5	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,1,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

#### Surrogate Recoveries (%)

%SS1:	99	%SS2:	95
%SS3:	97		

#### Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



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Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #581000; Chiu	Date Sampled: 09/03/10
		Date Received: 09/03/10
	Client Contact: Bryan Fong	Date Extracted: 09/07/10
	Client P.O.:	Date Analyzed: 09/07/10

### Volatile Organics by P&T and GC/MS (Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1009107

Lab ID	1009107-006B
Client ID	MW-6
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<500	50	10	tert-Amyl methyl ether (TAME)	ND<25	50	0.5
Benzene	1500	50	0.5	Bromobenzene	ND<25	50	0.5
Bromochloromethane	ND<25	50	0.5	Bromodichloromethane	ND<25	50	0.5
Bromoform	ND<25	50	0.5	Bromomethane	ND<25	50	0.5
2-Butanone (MEK)	ND<100	50	2.0	t-Butyl alcohol (TBA)	ND<100	50	2.0
n-Butyl benzene	ND<25	50	0.5	sec-Butyl benzene	ND<25	50	0.5
tert-Butyl benzene	ND<25	50	0.5	Carbon Disulfide	ND<25	50	0.5
Carbon Tetrachloride	ND<25	50	0.5	Chlorobenzene	ND<25	50	0.5
Chloroethane	ND<25	50	0.5	Chloroform	ND<25	50	0.5
Chloromethane	ND<25	50	0.5	2-Chlorotoluene	ND<25	50	0.5
4-Chlorotoluene	ND<25	50	0.5	Dibromochloromethane	ND<25	50	0.5
1,2-Dibromo-3-chloropropane	ND<10	50	0.2	1,2-Dibromoethane (EDB)	ND<25	50	0.5
Dibromomethane	ND<25	50	0.5	1,2-Dichlorobenzene	ND<25	50	0.5
1,3-Dichlorobenzene	ND<25	50	0.5	1,4-Dichlorobenzene	ND<25	50	0.5
Dichlorodifluoromethane	ND<25	50	0.5	1,1-Dichloroethane	ND<25	50	0.5
1,2-Dichloroethane (1,2-DCA)	ND<25	50	0.5	1,1-Dichloroethene	ND<25	50	0.5
cis-1,2-Dichloroethene	ND<25	50	0.5	trans-1,2-Dichloroethene	ND<25	50	0.5
1,2-Dichloropropane	ND<25	50	0.5	1,3-Dichloropropane	ND<25	50	0.5
2,2-Dichloropropane	ND<25	50	0.5	1,1-Dichloropropene	ND<25	50	0.5
cis-1,3-Dichloropropene	ND<25	50	0.5	trans-1,3-Dichloropropene	ND<25	50	0.5
Diisopropyl ether (DIPE)	ND<25	50	0.5	Ethylbenzene	35	50	0.5
Ethyl tert-butyl ether (ETBE)	ND<25	50	0.5	Freon 113	ND<500	50	10
Hexachlorobutadiene	ND<25	50	0.5	Hexachloroethane	ND<25	50	0.5
2-Hexanone	ND<25	50	0.5	Isopropylbenzene	36	50	0.5
4-Isopropyl toluene	ND<25	50	0.5	Methyl-t-butyl ether (MTBE)	ND<25	50	0.5
Methylene chloride	ND<25	50	0.5	4-Methyl-2-pentanone (MIBK)	ND<25	50	0.5
Naphthalene	130	50	0.5	n-Propyl benzene	80	50	0.5
Styrene	ND<25	50	0.5	1,1,1,2-Tetrachloroethane	ND<25	50	0.5
1,1,1,2-Tetrachloroethane	ND<25	50	0.5	Tetrachloroethene	ND<25	50	0.5
Toluene	33	50	0.5	1,2,3-Trichlorobenzene	ND<25	50	0.5
1,2,4-Trichlorobenzene	ND<25	50	0.5	1,1,1-Trichloroethane	ND<25	50	0.5
1,1,2-Trichloroethane	ND<25	50	0.5	Trichloroethene	ND<25	50	0.5
Trichlorofluoromethane	ND<25	50	0.5	1,2,3-Trichloropropane	ND<25	50	0.5
1,2,4-Trimethylbenzene	ND<25	50	0.5	1,3,5-Trimethylbenzene	ND<25	50	0.5
Vinyl Chloride	ND<25	50	0.5	Xylenes	79	50	0.5

#### Surrogate Recoveries (%)

%SS1:	97	%SS2:	96
%SS3:	98		

#### Comments:

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



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Conestoga-Rovers & Associates  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #581000; Chiu	Date Sampled: 09/03/10
		Date Received: 09/03/10
	Client Contact: Bryan Fong	Date Extracted: 09/07/10-09/08/10
	Client P.O.:	Date Analyzed 09/07/10-09/08/10

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline\*

Extraction method SW5030B

Analytical methods SW8015Bm

Work Order: 1009107

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001A	MW-1	W	ND	1	102	
002A	MW-2	W	9500	50	107	d1
003A	MW-3A	W	35,000	50	101	d1
004A	MW-4	W	ND	1	97	
005A	MW-5	W	ND	1	103	
006A	MW-6	W	4600	10	113	d1

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

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

# cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

%SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

d1) weakly modified or unmodified gasoline is significant



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Conestoga-Rovers & Associates  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #581000; Chiu	Date Sampled: 09/03/10
		Date Received: 09/03/10
	Client Contact: Bryan Fong	Date Extracted: 09/03/10
	Client P.O.:	Date Analyzed 09/04/10

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up\*

Extraction method SW3510C/3630C

Analytical methods: SW8015B

Work Order: 1009107

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
1009107-001A	MW-1	W	ND	1	103	
1009107-002A	MW-2	W	1500	1	104	e4
1009107-003A	MW-3A	W	1600	1	104	e4
1009107-004A	MW-4	W	ND	1	118	
1009107-005A	MW-5	W	ND	1	80	
1009107-006A	MW-6	W	710	1	114	e4

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

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

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract/matrix interference.

%SS = Percent Recovery of Surrogate Standard  
DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

e4) gasoline range compounds are significant.



**QC SUMMARY REPORT FOR SW8260B**

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 52944

WorkOrder 1009107

EPA Method SW8260B	Extraction SW5030B								Spiked Sample ID: 1009107-005B			
	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	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	92.3	92.9	0.662	88.7	92.9	4.63	70 - 130	30	70 - 130	30
Benzene	ND	10	111	111	0	104	110	5.85	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	92.5	92.4	0.103	86.6	89	2.69	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	103	104	1.21	99.8	105	4.89	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	102	102	0	95.8	100	4.25	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	112	113	0.897	103	109	5.19	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	95	96.4	1.53	89.4	93.8	4.81	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	116	116	0	106	111	4.61	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	110	111	0.0286	103	108	4.93	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	118	117	0.407	107	112	4.34	70 - 130	30	70 - 130	30
Toluene	ND	10	102	104	1.36	101	105	4.40	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	111	112	0.729	103	108	5.01	70 - 130	30	70 - 130	30
%SS1:	99	25	99	98	0.755	100	100	0	70 - 130	30	70 - 130	30
%SS2:	95	25	94	96	1.72	98	98	0	70 - 130	30	70 - 130	30
%SS3:	97	2.5	93	94	1.18	102	102	0	70 - 130	30	70 - 130	30

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

BATCH 52944 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1009107-001B	09/03/10 10:57 AM	09/07/10	09/07/10 3:29 PM	1009107-002B	09/03/10 8:42 AM	09/07/10	09/07/10 5:25 PM
1009107-003B	09/03/10 7:48 AM	09/09/10	09/09/10 3:44 PM	1009107-004B	09/03/10 4:54 AM	09/07/10	09/07/10 6:54 PM
1009107-005B	09/03/10 5:47 AM	09/07/10	09/07/10 5:28 PM	1009107-006B	09/03/10 6:44 AM	09/07/10	09/07/10 6:12 PM

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.

N/A = 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.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



**QC SUMMARY REPORT FOR SW8021B/8015Bm**

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 52911

WorkOrder 1009107

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 1009053-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	60	93.3	91.5	1.92	97.9	90.7	7.61	70 - 130	20	70 - 130	20
MTBE	ND	10	114	111	3.22	108	108	0	70 - 130	20	70 - 130	20
Benzene	ND	10	97.5	96	1.57	99.5	95.8	3.76	70 - 130	20	70 - 130	20
Toluene	ND	10	99.1	97.3	1.85	99.9	97.3	2.58	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	98.6	96.9	1.70	99.2	97	2.17	70 - 130	20	70 - 130	20
Xylenes	ND	30	101	99.7	1.73	102	99.8	1.81	70 - 130	20	70 - 130	20
%SS:	97	10	95	95	0	95	94	0.845	70 - 130	20	70 - 130	20

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

BATCH 52911 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1009107-001A	09/03/10 10:57 AM	09/08/10	09/08/10 2:27 AM	1009107-002A	09/03/10 8:42 AM	09/07/10	09/07/10 10:59 PM
1009107-003A	09/03/10 7:48 AM	09/07/10	09/07/10 11:32 PM	1009107-004A	09/03/10 4:54 AM	09/08/10	09/08/10 5:05 PM

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 enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or 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, or inconsistency in sample containers.





**QC SUMMARY REPORT FOR SW8021B/8015Bm**

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 52940

WorkOrder 1009107

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 1009119-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	60	98.4	99.1	0.741	96.5	100	3.96	70 - 130	20	70 - 130	20
MTBE	ND	10	119	120	0.798	111	117	5.43	70 - 130	20	70 - 130	20
Benzene	ND	10	108	111	2.30	111	108	2.53	70 - 130	20	70 - 130	20
Toluene	ND	10	97.3	98.9	1.62	99.2	96.1	3.16	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	95.9	97.1	1.22	98.3	95.1	3.30	70 - 130	20	70 - 130	20
Xylenes	ND	30	108	109	0.886	110	107	2.92	70 - 130	20	70 - 130	20
%SS:	104	10	105	102	2.40	105	109	3.52	70 - 130	20	70 - 130	20

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

BATCH 52940 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1009107-005A	09/03/10 5:47 AM	09/08/10	09/08/10 2:57 AM	1009107-006A	09/03/10 6:44 AM	09/08/10	09/08/10 2:14 AM

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 enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or 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, or inconsistency in sample containers.



### QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 52941

WorkOrder 1009107

EPA Method SW8015B		Extraction SW3510C/3630C							Spiked Sample ID: N/A			
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	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	107	106	1.22	N/A	N/A	70 - 130	30
%SS:	N/A	625	N/A	N/A	N/A	119	118	0.965	N/A	N/A	70 - 130	30

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

#### BATCH 52941 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1009107-001A	09/03/10 10:57 AM	09/03/10	09/04/10 3:20 PM	1009107-002A	09/03/10 8:42 AM	09/03/10	09/04/10 2:02 PM
1009107-003A	09/03/10 7:48 AM	09/03/10	09/04/10 7:12 PM	1009107-004A	09/03/10 4:54 AM	09/03/10	09/04/10 11:31 AM
1009107-005A	09/03/10 5:47 AM	09/03/10	09/04/10 12:46 PM	1009107-006A	09/03/10 6:44 AM	09/03/10	09/04/10 2:02 PM

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.

N/A = 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.

APPENDIX C

FIELD DATA SHEETS





### MICRO PURGE WELL SAMPLING FORM

Date: 9/3/10

Client: Conestoga-Rovers and Associates

Site Address: 800 Franklin Street, Oakland, CA

Well ID: MW-1

Well Diameter: 2"

Purging Device: Peristaltic Pump

Sampling Method: Peristaltic Pump

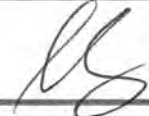
Total Well Depth from top of casing: 33.35

Water level at the start of purge from top of casing: 22.51

Approximate depth of water intake on pump from top of casing: 270

TIME:	Purged Rate (ml/min)	TEMP (Celsius)	pH	COND. (µS/cm)	ORP (mV)	DO (mg/L)	Drawdown Water Level (ft)	Turbidity (NTU)	Comments
10:38	250	--	--	--	--	--	22.51	—	
10:41	250	18.1	7.21	1460	3	1.09	22.56	71.9	
10:44	250	18.6	7.14	1410	6	1.02	22.58	68.4	
10:47	250	18.6	7.11	1405	8	0.74	22.61	61.5	
10:50	250	18.6	7.10	1405	8	0.71	22.63	61.5	
10:53	250	18.6	7.10	1402	8	0.70	22.63	61.2	
10:56	250	18.6	7.09	1402	8	0.70	22.64	60.4	
total purge volume = <u>4500</u> ml									

Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-1	9/3/10	10:57	1L Amber Glass, 40 ml VOA	HCl	TPHd, TPHg, VOCs	8015C, silica gel clean up, 8260 basic target list

Signature: 



## MICRO PURGE WELL SAMPLING FORM

Date: 9/3/10

Client: Conestoga-Rovers and Associates

Site Address: 800 Franklin Street, Oakland, CA

Well ID: MW-2

Well Diameter: 2"

Purging Device: Peristaltic Pump

Sampling Method: Peristaltic Pump

Total Well Depth from top of casing: 34.15

Water level at the start of purge from top of casing: 22.30

Approximate depth of water intake on pump from top of casing: 27.0

TIME:	Purged Rate (ml/min)	TEMP (Celsius)	pH	COND. (μS/cm)	ORP (mV)	DO (mg/L)	Drawdown Water Level (ft)	Turbidity (NTU)	Comments
8:20	250	--	--	--	--	--	22.30	—	
8:23	250	19.8	7.27	2034	-31	3.10	22.34	19.4	
8:26	250	19.9	7.21	2128	-27	1.17	22.35	22.6	
8:29	250	19.9	7.21	2140	-24	1.05	22.35	22.8	
8:32	250	20.4	7.19	2144	-24	0.71	22.37	22.8	
8:35	250	20.4	7.19	2145	-23	0.62	22.39	22.9	
8:38	250	20.4	7.19	2145	-23	0.60	22.40	22.8	
8:41	250	20.4	7.19	2146	-23	0.60	22.40	22.8	
									total purge volume = <u>5250</u> ml

Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
<u>MW-2</u>	<u>9/3/10</u>	<u>8:42</u>	<u>1L Amber Glass, 40 ml VOA</u>	<u>HCl</u>	<u>TPHd, TPHg, VOCs</u>	<u>8015C, silica gel clean up, 8260 basic target list</u>

Signature:



# MICRO PURGE WELL SAMPLING FORM

Date: <u>9/3/10</u>	
Client: <u>Conestoga-Rovers and Associates</u>	
Site Address: <u>800 Franklin Street, Oakland, CA</u>	
Well ID:	<u>MW-3A</u>
Well Diameter:	<u>4''</u>
Purging Device:	<u>Peristaltic Pump</u>
Sampling Method:	<u>Peristaltic Pump</u>
Total Well Depth from top of casing:	
	<u>34.25</u>
Water level at the start of purge from top of casing:	
	<u>23.02</u>
Approximate depth of water intake on pump from top of casing:	
	<u>27.0</u>

TIME:	Purged Rate (ml/min)	TEMP (Celsius)	pH	COND. (µS/cm)	ORP (mV)	DO (mg/L)	Drawdown Water Level (ft)	Turbidity (NTU)	Comments
<u>7:29</u>	<u>250</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>23.02</u>	<u>-</u>	
<u>7:32</u>	<u>250</u>	<u>17.8</u>	<u>7.06</u>	<u>1047</u>	<u>-86</u>	<u>2.75</u>	<u>23.02</u>	<u>4.7</u>	
<u>7:35</u>	<u>250</u>	<u>17.9</u>	<u>7.04</u>	<u>1019</u>	<u>-70</u>	<u>1.10</u>	<u>23.02</u>	<u>4.9</u>	
<u>7:38</u>	<u>250</u>	<u>18.2</u>	<u>6.60</u>	<u>1024</u>	<u>-120</u>	<u>0.75</u>	<u>23.03</u>	<u>4.7</u>	
<u>7:41</u>	<u>250</u>	<u>18.4</u>	<u>6.59</u>	<u>1021</u>	<u>-121</u>	<u>0.62</u>	<u>23.03</u>	<u>4.8</u>	
<u>7:44</u>	<u>250</u>	<u>18.4</u>	<u>6.59</u>	<u>1020</u>	<u>-121</u>	<u>0.60</u>	<u>23.3</u>	<u>25.0</u>	
<u>7:47</u>	<u>250</u>	<u>18.4</u>	<u>6.59</u>	<u>1019</u>	<u>-121</u>	<u>0.60</u>	<u>23.3</u>	<u>25.0</u>	
total purge volume = <u>4500</u> ml									

Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
<u>MW-3A</u>	<u>9/3/10</u>	<u>7:48</u>	<u>1L Amber Glass, 40 ml VOA</u>	<u>HCl</u>	<u>THM, THM<sub>2</sub>, VOCs</u>	<u>8015C, silica gel clean up, 8260 basic target list</u>

Signature: \_\_\_\_\_



## MICRO PURGE WELL SAMPLING FORM

Date:	<del>9/1/10</del> 9/3/10
Client:	Conestoga-Rovers and Associates
Site Address:	800 Franklin Street, Oakland, CA
Well ID:	MJ-4
Well Diameter:	2"
Purging Device:	Peristaltic Pump
Sampling Method:	Peristaltic Pump
Total Well Depth from top of casing:	33.60
Water level at the start of purge from top of casing:	22.20
Approximate depth of water intake on pump from top of casing:	27.0

TIME:	Purged Rate (ml/min)	TEMP (Celsius)	pH	COND. (μS/cm)	ORP (mV)	DO (mg/L)	Drawdown Water Level (ft)	Turbidity (NTU)	Comments
4:35	250	--	--	--	--	--	21.20	---	
4:38	250	<del>22.6</del>	6.64	901	54	1.94	21.21	40.6	
4:41	250	22.9	6.61	909	52	1.63	21.23	27.1	
4:44	250	22.9	6.60	909	51	1.41	21.23	22.1	
4:47	250	22.9	6.60	911	51	1.29	21.24	22.3	
4:50	250	22.9	6.59	913	51	1.26	21.24	22.1	
4:53	250	22.9	6.59	913	51	1.21	21.24	22.5	
									total purge volume = 4500 ml

Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MJ-4	9/3/10	4:54	1L Amber Glass, 40 ml VOA	HCl	TPHd, TPHg, VOCs	8015C, silica gel clean up, 8260 basic target list

Signature:





### MICRO PURGE WELL SAMPLING FORM

Date: ~~9/3/10~~ 9/3/10

Client: Conestoga-Rovers and Associates

Site Address: 800 Franklin Street, Oakland, CA

	Well ID: MW-5
	Well Diameter: 2"
	Purging Device: Peristaltic Pump
	Sampling Method: Peristaltic Pump
Total Well Depth from top of casing: 34.60	
Water level at the start of purge from top of casing: 23.02	
Approximate depth of water intake on pump from top of casing: 27.0	

TIME:	Purged Rate (ml/min)	TEMP (Celsius)	pH	COND. (µS/cm)	ORP (mV)	DO (mg/L)	Drawdown Water Level (ft)	Turbidity (NTU)	Comments
5:31	250	--	--	--	--	--	23.02	—	
5:34	250	18.7	7.39	426	86	2.19	23.08	37.4	
5:37	250	18.9	7.04	420	81	1.13	23.08	36.2	
5:40	250	18.9	7.01	423	80	0.83	23.09	31.5	
5:43	250	18.9	7.01	423	79	0.81	23.11	31.3	
5:46	250	18.9	7.01	425	79	0.81	23.13	31.7	
									total purge volume = 3750 ml

Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-5	9/3/10	5:47	1L Amber Glass, 40 ml VOA	HCl	TPHd, TPHg, VOCs	8015C, silica gel clean up, 8260 basic target list

Signature:



## MICRO PURGE WELL SAMPLING FORM

Date: <u>9/3/10</u>	
Client: Conestoga-Rovers and Associates	
Site Address: 800 Franklin Street, Oakland, CA	
Well ID:	MW-6
Well Diameter:	2"
Purging Device:	Peristaltic Pump
Sampling Method:	Peristaltic Pump
Total Well Depth from top of casing:	32.87
Water level at the start of purge from top of casing:	23.22
Approximate depth of water intake on pump from top of casing:	27.0

TIME:	Purged Rate (ml/min)	TEMP (Celsius)	pH	COND. (µS/cm)	ORP (mV)	DO (mg/L)	Drawdown Water Level (ft)	Turbidity (NTU)	Comments
6:25	250	--	--	--	--	--	23.22	—	
6:28	250	18.5	6.81	1237	103	3.12	23.27	40.3	
6:31	250	19.3	6.40	1249	87	0.71	23.28	23.4	
6:34	250	19.7	6.40	1249	72	0.59	23.30	23.6	
6:37	250	19.7	6.40	1248	71	0.51	23.30	23.7	
6:40	250	19.7	6.40	1248	71	0.51	23.30	23.7	
6:43	250	19.7	6.39	1248	70	0.49	23.31	22.9	
									total purge volume = 4500 ml

Sample ID:	Date:	Time	Container Type	Preservative	Analytes	Method
MW-6	9/3/10	6:44	1L Amber Glass, 40 ml VOA	HCl	TPHd, TPHg, VOCs	8015C, silica gel clean up, 8260 basic target list

Signature:

APPENDIX D  
WASTE MANIFESTS

**NON-HAZARDOUS  
WASTE MANIFEST**

1. Generator ID Number  
**NOT REQUIRED**

2. Page 1 of 1  
3. Emergency Response Phone  
**888-423-6060**

4. Waste Tracking Number  
**215578**

5. Generator's Name and Mailing Address  
**Chiu**  
**5900 Hollis Street, Suite A**  
Emeriville, CA 94608

Generator's Site Address (if different than mailing address)  
**Chiu**  
**800 Franklin St.**  
Oakland, CA 94607

6. Transporter 1 Company Name  
**American Integrated Services, Inc.**

U.S. EPA ID Number  
**CAR000148338**

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address  
**Crosby & Overton, Inc.**  
**1630 W. 16th Street**  
Long Beach, CA. 90813 562-432-5445

U.S. EPA ID Number  
**CAD028409019**

9a.	9b. U.S. DOT Description (including Proper Shipping Name)	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
		No.	Type		
1.	<b>Non-Hazardous Waste Liquid (Ground Water)</b>	1	DM	20	G
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information

**Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (888) 423-6060 (AIS Dispatcher).**

**Profile #: 27578**  
**Project #: 30038-82**

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Officer's Printed/Typed Name: *Calvin Lee Crean* Signature: \_\_\_\_\_ Month: \_\_\_\_\_ Day: \_\_\_\_\_ Year: \_\_\_\_\_

15. International Shipments  Import to U.S.  Export from U.S. Port of entry/exit: \_\_\_\_\_ Date leaving U.S.: \_\_\_\_\_

16. Transporter Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: *Rigo Valencia* Signature: \_\_\_\_\_ Month: *09* Day: *03* Year: *10*

Transporter 2 Printed/Typed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Month: \_\_\_\_\_ Day: \_\_\_\_\_ Year: \_\_\_\_\_

17. Discrepancy

17a Discrepancy Indication Space  Quantity  Type  Residue  Partial Rejection  Full Rejection

Manifest Reference Number: \_\_\_\_\_

17b. Alternate Facility (or Generator) \_\_\_\_\_ U.S. EPA ID Number \_\_\_\_\_

Facility's Phone: \_\_\_\_\_

17c. Signature of Alternate Facility (or Generator) \_\_\_\_\_ Month: \_\_\_\_\_ Day: \_\_\_\_\_ Year: \_\_\_\_\_

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Month: \_\_\_\_\_ Day: \_\_\_\_\_ Year: \_\_\_\_\_

GENERATOR  
INT'L  
TRANSPORTER  
DESIGNED FACILITY