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Reference No. 130105

Ms. Barbara Jakub Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Dear Ms. Jakub:

Re:

Revised Groundwater Monitoring Report - First Quarter 2009

Former Exxon Service Station

3055 35th Avenue Oakland, California

Agency Case No. RO0000271

On behalf of Golden Empire Properties, Inc., Conestoga-Rovers & Associates (CRA) is resubmitting the *Groundwater Monitoring Report – First Quarter* 2009, dated May 8, 2009. This copy includes changes to some of the tables and should replace the previously issued report.

If you have any questions or comments regarding this report, please call me at (510) 420-3307.

Sincerely,

**CONESTOGA-ROVERS & ASSOCIATES** 

SAC

Mark Jonas, P.G.

Mill Wen

MW/aa/5 Encl.

c.c.:

Mr. Lynn Worthington

Mr. Jeffrey Lawson Ms. Dawn Zemo



### REVISED GROUNDWATER MONITORING REPORT-FIRST QUARTER 2009

FORMER EXXON SERVICE STATION 3055 35<sup>th</sup> AVENUE OAKLAND, CALIFORNIA

AGENCY CASE NO. RO0271

Prepared by: Conestoga-Rovers & Associates

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#### 1.0 INTRODUCTION

On behalf of Golden Empire Properties, Inc., Conestoga-Rovers & Associates (CRA) has prepared this *Groundwater Monitoring Report – First Quarter 2009* for the referenced site (see Figure 1). Presented in the report are the first quarter 2009 activities and anticipated second quarter 2009 activities.

Figure 1 is a vicinity map. Figure 2 presents recent monitoring groundwater elevations and selected hydrocarbon data. Table 1 presents well construction details. Table 2 provides recent and historic groundwater level measurements and elevations, and hydrocarbon data. Table 3 provides third quarter 2008 through first quarter 2009 analytical data for oxygenated volatile organic compounds. Appendix A contains CRA's standard field procedures. Appendix B contains the laboratory analytical and sample chain-of-custody records. Appendix C contains field sheets. Appendix D is time-series plot with benzene and total petroleum hydrocarbons as gasoline (TPHg) concentrations and groundwater elevations.

#### 1.1 SITE INFORMATION

Site Address 3055 35th Avenue, Oakland, CA

Site Use Vacant Lot

Client and Contact Golden Empire Properties, Inc.

Mr. Lynn Worthington

**Consultant and Contact Person** CRA, Mark Jonas, P.G.

**Lead Agency and Contact Person**Alameda County Environmental Health

(ACEH), Barbara Jakub

#### 2.0 SITE ACTIVITIES AND RESULTS

#### 2.1 <u>CURRENT QUARTER'S ACTIVITIES</u>

#### 2.1.1 MONITORING ACTIVITIES

On March 14, 2009, CRA contracted Muskan Environmental Sampling (MES) to perform quarterly monitoring activities. MES gauged and inspected for separate-phase hydrocarbons (SPH) in all monitoring wells (Figure 2). Groundwater samples were collected from wells MW-1 through MW-4, RW-5, and RW-9. Groundwater monitoring field data sheets are presented in Appendix C. The monitoring data was submitted to the GeoTracker database.

Prior to groundwater sampling, groundwater levels were measured in all monitoring wells. Each monitoring well was then purged before sampling. MES purged at least three well-casing volumes of groundwater from each monitoring well. Field measurements of pH, conductivity, and temperature of purged groundwater were measured after the extraction of each successive casing volume. Well purging continued until consecutive pH, specific conductance, and temperature measurements appeared to stabilize. Field measurements, purge volumes, and sample collection data were recorded on field sampling data forms, presented in Appendix C.

Groundwater samples were collected using new disposable bailers, decanted into appropriate sampling containers supplied by the analytical laboratory. Samples were labeled, placed in protective foam sleeves, stored on crushed, water-based ice at or below 4 degrees Celsius and transported under a chain-of-custody (COC) to the laboratory. The COC used for this monitoring event is provided in Appendix B.

#### 2.1.2 SAMPLE ANALYSES

Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and total petroleum hydrocarbons as diesel (TPHd) with silica gel clean-up by modified EPA Method SW8015C; for benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method SW8021B; and for methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), 1,2-dichloroethane (1,2-DCA), 1,2 dibromomethane (EDB) and tertiary amyl methyl ether (TAME) by EPA Method SW8260B. Prior to TPHd analysis of selected samples, the laboratory used a modified Zemo & Associates' *Protocol for Gravity Separation of Groundwater Samples to Isolate the Water Phase* (gravity separation). TPHd results with

and without gravity separation were reported. Groundwater samples were also collected for field measurement of dissolved oxygen (DO) from each of the sampled wells. DO was recorded on field data sheets provided in Appendix C. The laboratory analytical report is presented as Appendix B. The analytical data has been submitted to the GeoTracker database.

#### 2.1.3 CORRECTIVE ACTION ACTIVITIES

No corrective action activities took place during the first quarter 2009.

#### 2.1.4 OFFSITE AND ONSITE CHARACTERIZATION

During the first quarter 2009, CRA submitted the *Site Characterization Report*, dated February 24, 2009, detailing the results of recent soil boring and soil vapor sampling data onsite and offsite. The report has been submitted to the GeoTracker database.

#### 2.2 <u>CURRENT QUARTER'S RESULTS</u>

**Groundwater Flow Direction** West

Hydraulic Gradient 0.018

**Range of Measured Water Depth** 6.82 to 12.57 feet

from Top of Casing in Monitoring Wells

Were Measureable Separate Phase No

**Hydrocarbons Observed** 

#### 2.2.1 GROUNDWATER FLOW DIRECTION

Based on depth to water measurements collected during MES's March 14, 2009, site visit, groundwater beneath the site flows towards the west with a gradient of 0.018 feet/foot (Figure 2). The groundwater gradient is generally consistent with historical static groundwater conditions. Groundwater monitoring data is presented in Tables 2 and 3.

#### 2.2.2 HYDROCARBON DISTRIBUTION IN GROUNDWATER

Hydrocarbon concentrations were detected in all six sampled wells. TPHg concentrations ranged from 2,000 micrograms per liter ( $\mu g/L$ ) to 41,000  $\mu g/L$ , with the highest concentration detected in well MW-3. Benzene concentrations ranged from 260  $\mu g/L$  to 4,900  $\mu g/L$ , with the highest concentration detected in well MW-3. TPHd concentrations without gravity separation ranged from 450  $\mu g/L$  to 8,700  $\mu g/L$ , with the highest concentration detected in well MW-3. TPHd concentrations with gravity separation ranged from 440  $\mu g/L$  to 8,100  $\mu g/L$ , with the highest concentration detected in well MW-3. MTBE concentrations ranged from 22  $\mu g/L$  to 120  $\mu g/L$ , with the highest concentration detected in well MW-2. Concentrations of TBA were detected in all six wells and ranged from 58  $\mu g/L$  to 210  $\mu g/L$ , with the highest concentrations detected in wells MW-3 and RW-9. No DIPE, ETBE, 1,2-DCA, EDB, or TAME concentrations were detected in any of the six wells. Analytical results are summarized in Tables 2 and 3 and shown on Figure 2.

#### 2.3 PROPOSED ACTIVITIES FOR NEXT QUARTER

#### 2.3.1 MONITORING ACTIVITIES

During the second quarter 2009, CRA will contract with MES to gauge the site wells, check the wells for SPH, and collect groundwater samples from monitoring wells MW-1 through MW-4, RW-5, and RW-9. All sampled wells will be field measured for DO. Groundwater samples will be analyzed for TPHg and TPHd with silica gel clean-up by Modified EPA Method SW8015C; for BTEX by EPA Method SW8021B; and for MTBE, TBA, DIPE, ETBE, 1,2-DCA, EDB, and TAME by EPA Method SW8260B. CRA will summarize groundwater monitoring activities and results in the *Groundwater Monitoring Report – Second Quarter* 2009.

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

Michael Werner

Mark Jonas, P.G.

Conestoga-Rovers & Associates, Inc. (CRA) prepared this document for use by our client and appropriate regulatory agencies. It is based partially on information available to CRA from outside sources and/or in the public domain, and partially on information supplied by CRA and its subcontractors. CRA makes no warranty or guarantee, expressed or implied, included or intended in this document, with respect to the accuracy of information obtained from these outside sources or the public domain, or any conclusions or recommendations based on information that was not independently verified by CRA. This document represents the best professional judgment of CRA. None of the work performed hereunder constitutes or shall be represented as a legal opinion of any kind or nature.

NONAL

#### **FIGURES**

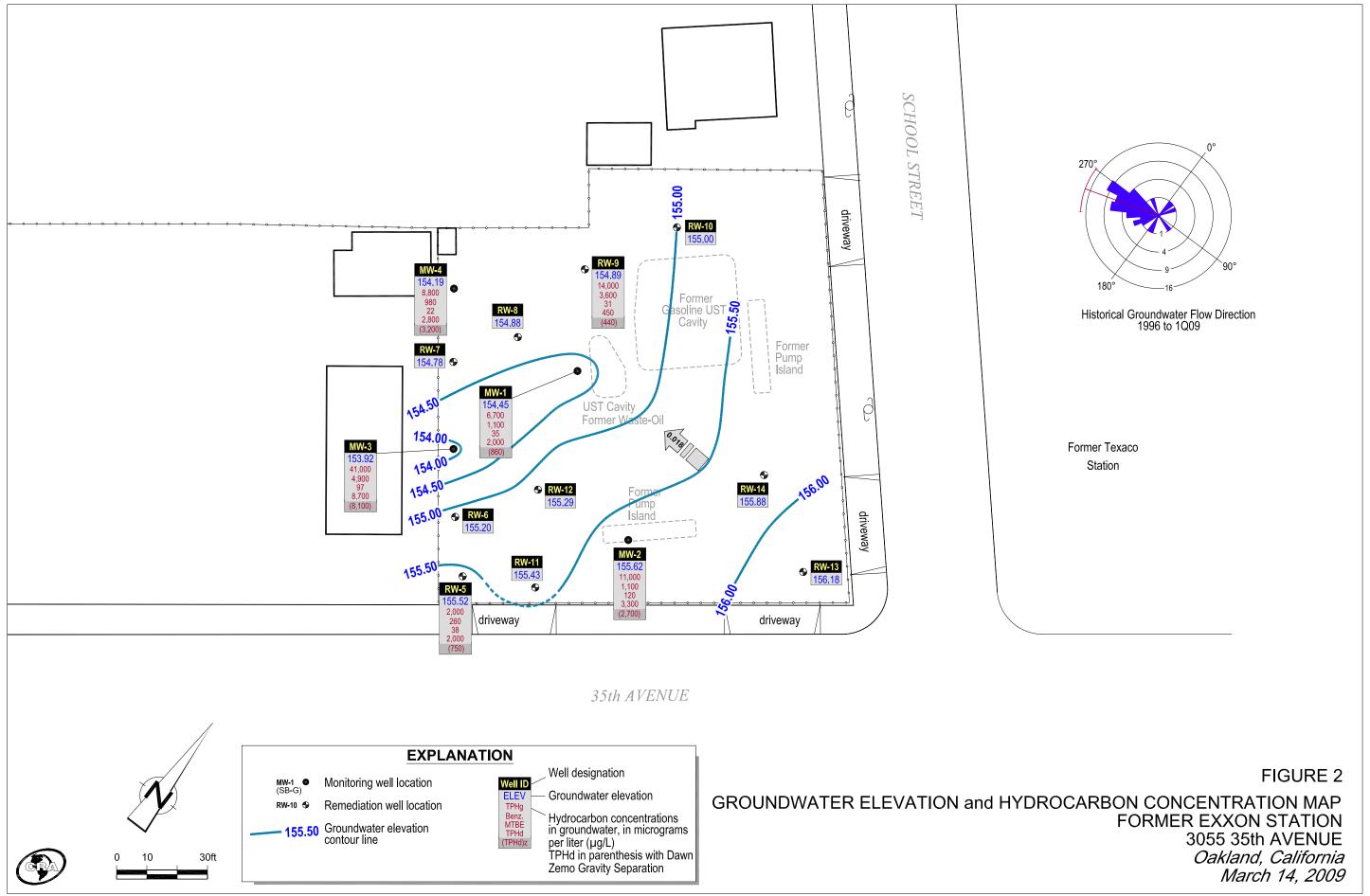


3035 35th Avenue Oakland, California



SCALE : 1" = 1/4 MILE

**Vicinity Map** 



**TABLES** 

TABLE 1

WELL CONSTRUCTION DETAILS
FORMER EXXON SERVICE STATION
3055 35<sup>th</sup> AVENUE, OAKLAND, CALIFORNIA

Well ID	Date Installed	Borehole Depth (ft)	Borehole Diameter (in)	Casing Diameter (in)	Screen Interval (ft bgs)	Screen Size (in)	Filter Pack (ft bgs)	Bentonite Seal (ft bgs)	Cement Seal (ft bgs)	TOC Elevation (ft msl)
<u></u>		() <sup>()</sup>	(111)	(111)	() ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	(111)	() t 080)	0,080	(11080)	()t mot)
MW-1	May 9, 1994	26.5	NA	4	10 - 25	0.010	9.5 - 25	7.5 - 9.5	0 - 7.5	167.02
MW-2	May 9, 1994	26.5	NA	4	10 - 25	0.010	9.5 - 25	7.5 - 8.5	0 - 7.5	166.14
MW-3	May 9, 1994	26.5	NA	2	10 - 25	0.010	9 - 25	7 - 9 25 - 26.5	0 - 7	162.94
MW-4	Feb. 26, 1997	30.0	NA	2	10 - 30	0.010	8 - 30	7 - 8	0 - 7	163.49
RW-5	Aug. 5, 1998	25.7	NA	4	5 - 25.5	0.010 (?)	4.5 - 25.7	2.5 - 4.5	0 - 2.5	162.34
RW-6	Aug. 5, 1998	25.5	NA	4	5 - 25.5	0.010 (?)	5 - 25.5	2.5 - 5	0 - 2.5	162.36
RW-7	Aug. 5, 1998	29.5	NA	4	5 - 29.5	0.010 (?)	5 - 29.5	3 - 5	0 - 3	162.72
RW-8	Aug. 5, 1998	29.5	NA	4	5 - 29.5	0.010 (?)	5 - 29.5	3 - 5	0 - 3	164.13
RW-9	Aug. 6, 1998	25.0	NA	4	5 - 25	0.010 (?)	5 - 25	3 - 5	0 - 3	163.86
RW-10	Aug. 6, 1998	25.0	NA	4	5 - 25	0.010 (?)	5 - 25	3 - 5	0 - 3	163.02
RW-11	Aug. 6, 1998	25.0	NA	4	5 - 25	0.010 (?)	5 - 25	3 - 5	0 - 3	162.57
RW-12	Aug. 6, 1998	27.0	NA	4	5 - 27	0.010 (?)	5 - 27	3 - 5	0 - 3	163.06
RW-13	Aug. 6, 1998	25.0	NA	4	5 - 25	0.010 (?)	5 - 25	3 - 5	0 - 3	164.34
RW-14	Aug. 6, 1998	25.0	NA	4	5 - 25	0.010 (?)	5 - 25	3 - 5	0 - 3	163.76

#### Abbreviations / Notes

ft = Feet

in = Inches

ft bgs = Feet below grade surface

ft msl = Feet above mean sea level

TOC = Top of casing

NA = Not available

TABLE 2

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5/23/1995         15.29          85.56           22,000         9,900         990         790         2,000             8/22/1995         20,90          79.95           23,000         6,900         340         1,200         1,900             11/29/1995         22.19          78.66           37,000         9,900         530         1,600         2,900             2/21/1996         11.69          89.16         4,300          33,000         10,000         480         1,000         1,800         3,300            8/22/1996         12.30          78.55         6,200          41,000         8,600         1,300         1,500         2,900         <200
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$3/18/1998$ 12.34 Sheen 88.51 $4,200^{\text{e,f}}$ $30,000^{\text{d}}$ 7,800 820 840 2,000 <1,100 1.3 7/14/1998 17.34 83.51 8,900 \(^{\text{e,f}} $41,000^{\text{d}}$ 8,200 1,100 1,200 3,000 <200 1.8 9/30/1998 19.90 80.95 3,300 37,000 11,000 950 1,200 2,800 <20 2.0 12/8/1998 15.62 85.23 3,700 22,000 3,000 1,200 730 3,100 <900 3/29/1999 11.98 88.87 6,800 \(^{\text{e}} 36,000 \(^{\text{d}} 12,000 750 1,300 2,400 950 0.50 6/29/1999 20.77 80.08 3,500 \(^{\text{e}} 28,000 \(^{\text{d}} 7,300 420 810 1,700 <1,300 0.10
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3/29/1999 11.98 88.87 6,800° 36,000 <sup>d</sup> 12,000 750 1,300 2,400 950 0.50 6/29/1999 20.77 80.08 3,500° 28,000 <sup>d</sup> 7,300 420 810 1,700 <1,300 0.10
6/29/1999 20.77 80.08 3,500° 28,000 <sup>d</sup> 7,300 420 810 1,700 <1,300 0.10
of 4
$9/28/1999$ 19.68 $81.17$ 3,600°.f $13,000^{d}$ 3,200 130 320 1,100 <210 0.55
12/10/1999 17.02 83.83 2,900 <sup>e,f</sup> 25,000 <sup>d</sup> 5,400 130 620 1,400 <1,000 1.03
$3/23/2000$ 12.76 $88.09$ $3,300^{\rm f}$ $21,000^{\rm d}$ 4,700 140 470 1,100 <350
$9/7/2000$ $19.45$ $81.40$ $12,000^{e,g}$ $40,000^{d,g}$ $3,700$ $1,400$ $910$ $4,900$ $<50$ $0.17$
$12/5/2000$ $18.60$ $82.25$ $3,400^{e}$ $26,000^{a}$ $7,900$ $150$ $580$ $810$ $<300$ $0.35$ Not operating
3/7/2001 16.19 84.66 2,400 13,000 2,700 43 69 300 <100 0.49 Not operating
6/6/2001 18.47 82.38 4,000 19,000 4,500 130 270 430 <400 0.39 Not operating
8/30/2001 21.70 79.15 1,400 <sup>d</sup> 8,800 <sup>a</sup> 2,100 45 91 240 <130 0.27 Operating
12/7/2001 26.55 74.30 1,900 <sup>e,f</sup> 8,700 <sup>d</sup> 1,300 160 38 730 <20 0.59 Operating
3/11/2002 17.13 83.72 1,400° 9,400 <sup>d</sup> 2,100 200 74 470 <20 0.39 Operating
6/10/2002 24.10 76.75 900 <sup>e,k</sup> 4,200 <sup>d</sup> 830 170 110 460 <100 Operating
9/26/2002 20.30 80.55 1,300 <sup>e,f,k</sup> 7,000 <sup>d</sup> 1,300 190 200 760 <100 0.70 Operating
$11/21/2002$ $21.55$ $79.30$ $200,000^{e,g}$ $83,000^{d,g}$ $7,100$ $1,700$ $3,000$ $13,000$ <1,000 0.49 Operating
1/13/2003 14.80 86.05 5,300 <sup>e,f</sup> 20,000 <sup>d</sup> 2,300 480 300 2,100 <500 0.33 Not operating

TABLE 2

Well ID TOC	Date	GW Depth (ft TOC)	SPH (ft)	GW Elev. (ft msl)	Note	<b>ΤΡΗd</b> (μg/L)	<b>ΤΡΗπο</b> (μg/L)	<b>ΤΡΗg</b> (μg/L)	Benzene (µg/L)	Toluene (μg/L)	Ethylbenzene (μg/L)	<b>Xylenes</b> (μg/L)	MTBE (μg/L)	DO (mg/L)	DPE System Status
MW-1	4/25/2003	20.90		79.95		320 <sup>e</sup>		4,200 <sup>d</sup>	580	81	59	470	<50		Operating
Continued	5/30/2003	16.65		84.20											Not operating
	9/3/2003	24.16		76.69		36,000 <sup>e,f</sup>		14,000 <sup>d</sup>	300	50	33	480	<50		Operating
	12/2/2003	24.12	Sheen <sup>Lab</sup>	76.73		9,300 <sup>e,f,g</sup>		7,100 <sup>d,g</sup>	1,400	230	160	820	<100		Operating
	3/18/2004	17.70		83.15		1,100 <sup>e,f</sup>		3,600 <sup>d</sup>	650	59	38	370	<90		Operating
	6/16/2004	19.20		147.82		2,300 <sup>e,f</sup>		8,100 <sup>d</sup>	1,500	69	22	1,000	<100		Not operating
167.02	9/27/2004	23.07		143.95		1,700 <sup>e</sup>		7,800 <sup>d</sup>	1,800	110	120	670	<180	0.28	Not operating
	12/27/2004	17.04		149.98		1,400 <sup>e</sup>		10,000 <sup>d</sup>	2,400	170	170	1,500	<120	0.41	Not operating
	3/7/2005	10.73		156.29		1,300 <sup>e,f,k</sup>		8,700 <sup>d</sup>	1,200	99	140	770	<500	0.91	Not operating
	6/21/2005	14.60		152.42		930 <sup>e,k</sup>		6,500 <sup>d</sup>	820	26	57	110	<250		Not operating
	9/21/2005	19.64		147.38		860 <sup>e,k,f</sup>		2,900 <sup>d</sup>	430	19	46	150	<50	1.14	Not operating
	12/14/2005	17.63	Sheen Field	149.39		4,000 <sup>e,f,k</sup>		6,200 <sup>d</sup>	570	32	72	420	<110	1.08	Not operating
	3/22/2006	10.52	Sheen Field	156.50		1,100 <sup>e,f,k</sup>		8,300 <sup>d</sup>	1,700	100	190	660	<150	0.84	Not operating
	6/30/2006	16.33	Sheen Field	150.69		1,500 <sup>m,k,l</sup>		2,100 <sup>d,1</sup>	320	6.1	<1.0	77	<90	0.66	Not operating
	9/5/2006	19.96	Sheen <sup>Lab</sup>	147.06		1,500 <sup>e,f,k,g</sup>		5,500 <sup>d,g</sup>	1,000	45	81	310	<120	0.38	Not operating
	12/6/2006	19.92	Sheen Lab	147.10		760 <sup>e,g</sup>		4,500 <sup>d,g</sup>	440	13	42	190	<60	0.55	Not operating
	3/16/2007	13.62		153.40		1,800 e,f		7,500 <sup>d</sup>	1,400	30	100	270	<150	0.58	Not operating
	6/15/2007	18.07	Sheen Field	148.95		1,500 e,k,f		5,600 <sup>d</sup>	1,200	29	84	190	56	0.74	Not operating
	9/6/2007	20.84		146.18		690 <sup>e,f</sup>		2,800 <sup>d</sup>	590	17	35	100	<80	0.90	Not operating
	12/8/2007	18.66	Sheen Field	148.36		520 <sup>e,f</sup>		4,500 <sup>d</sup>	570	13	57	200	<120	1.24	Not operating
	3/9/2008	12.98	Sheen Field	154.04	(Z)	(470 °)	(<250)	$(4,600^{d})$	(1,100)	(23)	(82)	(140)	(<50)	1.17	Not operating
	6/14/2008	18.98		148.04	(Z)	(410 <sup>e</sup> )	(<250)	(3,800 <sup>d</sup> )	(690)	(12)	(64)	(240)	(<80)	1.95	Not operating
	9/6/2008	20.66		146.36	$(Z^{TPHd})$	(420 <sup>e</sup> )		2,400 <sup>d</sup>	500	11	30	67	<75	1	Not operating
	12/28/2008	16.57	Sheen Field	150.45	$(Z^{TPHd})$	(2,800 °)	<250	5,700 <sup>d</sup>	660	17	110	320	41 °	1	Not operating
	3/14/2009	12.57	Sheen Field	154.45	$(Z^{TPHd})$	2,000 <sup>e,f,k</sup> (860 <sup>e</sup> )		6,700 <sup>d</sup>	1,100	23	100	180	35 °	1	Not operating
MW-2	5/25/1994	15.65		84.35		6,900	<5,000	61,000	9,900	7,400	960	4,600			
100.00	7/19/1994	19.81		80.19											
	8/18/1994	20.37		79.63				88,000	10,750	10,500	1,850	9,600			
	11/11/94	15.52		84.48				54,000	5,900	6,700	1,300	7,500			
	2/27/1995	14.46	Sheen	85.54				44,000	5,100	5,300	930	6,400			
	5/23/1995	14.17		85.83				33,000	8,200	5,600	900	6,600			
	8/22/1995	19.80		80.20				38,000	6,400	5,000	1,100	5,600			
	11/29/95	21.05		78.95				46,000	7,100	5,300	1,300	6,000			
	2/21/1996	10.53		89.47				59,000	8,000	6,000	1,800	8,900	4,500		

GROUNDWATER ELEVATIONS AND ANALYTICAL DATA

TABLE 2

#### FORMER EXXON SERVICE STATION 3055 35<sup>th</sup> AVENUE, OAKLAND, CALIFORNIA

Well ID	Date	GW Depth	SPH	GW Elev.	Note	TPHd	ТРНто	ТРНд	Benzene		Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		(ft TOC)	(ft)	(ft msl)		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	Status
MW-2	5/21/1996	13.47		86.53		3,400		51,000	8,200	5,200	1,300	6,600	2,400		
Continued	8/22/1996	19.12		80.88		5,700		37,000	5,100	3,500	960	4,500	<200	3.0	
	11/27/1996	16.61	Sheen	83.39		10,000		54,000	9,800	7,000	1,800	7,900	<2,000	3.1	
	3/20/1997	15.39		84.61		6,100		27,000	3,700	2,300	580	2,800	<400	8.1	
	6/25/1997	18.62		81.38		7,800 <sup>b</sup>		42,000	7,400	3,800	1,200	5,700	<200	0.9	
	9/17/1997	19.05	Sheen	80.95		8,900 <sup>e</sup>		41,000 <sup>d</sup>	5,200	3,400	1,300	5,900	<700	1.2	
	12/22/1997	14.09		85.91		6,100 <sup>e</sup>		47,000 <sup>d</sup>	8,500	4,600	1,800	8,400	<1,200	1.2	
	3/18/1998	10.83	Sheen	89.17		7,000 <sup>e,f</sup>		58,000 <sup>d</sup>	9,300	6,100	1,800	8,200	<1,100	1.1	
	7/14/1998	16.07		83.93		5,300 <sup>e,f</sup>		42,000 <sup>d</sup>	6,000	3,000	1,000	4,800	<200	1.5	
	9/30/1998	18.71		81.29		2,400		22,000	3,600	1,300	720	3,200	<30	1.8	
	12/8/1998	14.80		85.20		3,100		32,000	9,200	680	1,100	2,300	<2,000		
	3/29/1999	11.81		88.19		7,500 <sup>e,f</sup>		28,000 <sup>d</sup>	4,400	1,600	950	4,100	410	1.86	
	6/29/1999	19.54		80.46		3,300 <sup>e</sup>		28,000 <sup>d</sup>	3,500	1,100	690	3,100	<1,000	0.41	
	9/28/1999	18.61		81.39		3,400 <sup>e,f</sup>		15,000 <sup>d</sup>	1,200	540	230	2,300	<36	1.18	
	12/10/1999	16.53		83.47		2,500 <sup>e,f</sup>		17,000 <sup>d</sup>	1,300	780	420	2,700	<40	0.17	
	3/23/2000	13.56		86.44		3,100 <sup>i</sup>		25,000 <sup>d</sup>	1,900	1,100	660	3,700	< 500		
	9/7/2000	18.25		81.75		32,000 <sup>e,g</sup>		62,000 <sup>d,g</sup>	5,300	2,300	1,500	8,400	<100	0.39	
	12/5/2000	17.45		82.55		87,000 <sup>e,f,g</sup>		60,000 <sup>d,g</sup>	5,100	2,200	1,600	9,000	<200	0.31	Not operating
	3/7/2001	15.68		84.32		3,900		34,000	1,200	770	620	4,300	<200	0.44	Not operating
	6/6/2001	17.51		82.49		48,000		110,000	14,000	9,000	1,900	12,000	<950	0.24	Not operating
	8/30/2001	21.00		79.00		15,000 <sup>d,h</sup>		43,000 <sup>a,h</sup>	3,100	720	980	5,500	<200		Operating
	12/7/2001	24.45		75.55		750 <sup>e,f</sup>		4,100 <sup>d</sup>	510	88	8.2	580	<20	0.47	Operating
	3/11/2002	16.95		83.05		590 <sup>e</sup>		4,700 <sup>d</sup>	1,200	150	30	310	<50	0.24	Operating
	6/10/2002	18.59		81.41		2,000 <sup>e</sup>		14,000 <sup>d</sup>	2,600	710	150	2,000	<800		Operating
	9/26/2002	20.39		79.61		660 <sup>e</sup>		4,800 <sup>d</sup>	770	200	140	740	<50	0.29	Operating
	11/21/2002	18.75		81.25		350,000 <sup>e,g</sup>		210,000 <sup>d,g</sup>	14,000	23,000	4,400	28,000	<1,700	0.43	Operating
	1/13/2003	13.60	Sheen <sup>Lab</sup>	86.40		14,000 <sup>e,f,g,k</sup>		32,000 <sup>d,g</sup>	4,500	1,600	920	3,600	<1000	0.39	Not operating
	4/25/2003	19.05		80.95		310 <sup>e</sup>		3,800 <sup>d</sup>	460	78	72	410	310		Operating
	5/30/2003	15.23		84.77											Not operating
	9/3/2003	23.57		76.43		2,300 <sup>e</sup>		2,900 <sup>d</sup>	240	57	68	380	770		Operating
(Monument	12/2/2003	23.17	Sheen <sup>Lab</sup>	76.83		3,300 <sup>e,f,g</sup>		2,400 <sup>d,g</sup>	91	20	14	250	890		Operating
Well box)	3/18/2004	15.78		84.22		870 <sup>e,f</sup>		4,200 <sup>d</sup>	730	89	<5.0	480	2,300		Operating
166.14	6/16/2004	18.15		147.99		9,800 <sup>e,f</sup>		15,000 <sup>d</sup>	800	210	290	1,800	2,000		Not operating
	9/27/2004	27.55**		138.59		$1,000^{e,f,k}$		770 <sup>d</sup>	20	7.9	10	140	1,600	0.79	Operating
	12/27/2004	16.81		149.33		3,800 <sup>e,f</sup>		17,000 <sup>d</sup>	1,300	370	540	3,800	620	0.94	Not operating

GROUNDWATER ELEVATIONS AND ANALYTICAL DATA FORMER EXXON SERVICE STATION 3055 35<sup>th</sup> AVENUE, OAKLAND, CALIFORNIA

TABLE 2

Well ID	Date	GW Depth	SPH	GW Elev.	Note	ТРНА	ТРНто	ТРНд	Benzene		Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		(ft TOC)	(ft)	(ft msl)		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	Status
MW-2	3/7/2005	9.31	Sheen Field & Lab	156.83		8,300 <sup>e,f,k,g</sup>		20,000 <sup>d,g</sup>	1,400	330	430	2,600	1,100	0.88	Not operating
Continued	6/21/2005	13.42	Sheen <sup>Lab</sup>	152.72		15,000 <sup>e,f,g</sup>		36,000 <sup>d,g</sup>	1,700	310	460	3,100	1,200		Not operating
	9/21/2005	18.50	Sheen Field	147.64		1,100 <sup>e,f</sup>		4,600 <sup>d</sup>	370	62	110	740	1,100	0.86	Not operating
	12/14/2005	16.40	Sheen Field & Lab	149.74		49,000 <sup>e,f,k,g</sup>		29,000 <sup>d,g</sup>	1,700	260	600	3,700	1,000	0.99	Not operating
	3/22/2006	9.15	Sheen <sup>Lab</sup>	156.99		23,000 <sup>e,f,k,g</sup>		21,000 <sup>d,g</sup>	2,300	200	550	2,800	1,200	0.91	Not operating
	6/30/2006	16.78	Sheen Field & Lab	149.36		55,000 <sup>e,f,k,g</sup>		18,000 <sup>d,g</sup>	1,100	71	270	1,400	1,200	0.84	Not operating
	9/5/2006	18.96	Sheen <sup>Lab</sup>	147.18		19,000 <sup>e,f,k,g</sup>		15,000 <sup>d,g</sup>	680	70	260	1,400	<1,000	0.79	Not operating
	12/6/2006	18.01	Sheen Field & Lab	148.13		31,000 <sup>e,f,k,g</sup>		27,000 <sup>d,g</sup>	1,100	51	420	1,600	<900	0.48	Not operating
	3/16/2007	12.31	Sheen Field & Lab	153.83		49,000 e,f,k,g		44,000 <sup>d,g</sup>	1,800	71	670	2,200	<900	0.52	Not operating
	6/15/2007	17.31	Sheen Field & lab	148.83		21,000 <sup>e,k,f,g</sup>		18,000 <sup>d,g</sup>	700	22	290	740	<650	0.68	Not operating
	9/6/2007	19.28	Sheen Field & Lab	146.86		8,400 e,f,g		17,000 a,h	1,000	53	450	1,100	<700	0.72	Not operating
	12/8/2007	17.72	Sheen Field & Lab	148.42		3,600 <sup>e,f,g</sup>		14,000 d,g	640	13	220	520	<300	0.80	Not operating
	3/9/2008	12.09	Sheen Field	154.05	(Z)	(3,100 °)	(<250)	(7,900 <sup>d</sup> )	(840)	(24)	(280)	(380)	(<380)	0.68	Not operating
	6/14/2008	18.66	Sheen Field	147.48	(Z)	(2,500 °)	(<250)	(10,000 <sup>d</sup> )	(520)	(18)	(200)	(370)	(<350)	0.97	Not operating
	9/6/2008	19.41	Sheen Field & Lab	146.73	$(Z^{TPHd})$	(2,500 e,g)		10,000 <sup>d,g</sup>	430	17	270	370	<180	0.81	Not operating
	12/28/2008	15.73	Sheen Field	150.41	$(Z^{TPHd})$	(2,400 °)	<250	9,800 <sup>d</sup>	690	19	250	180	120 °	0.63	Not operating
	3/14/2009	10.52	Sheen Field	155.62	$(\mathbf{Z}^{\mathrm{TPHd}})$	3,300 <sup>e,f,k</sup> (2,700 <sup>e</sup> )		11,000 <sup>d</sup>	1,100	23	23	250	120 °	0.67	Not operating
MW-3	5/25/1994	13.93	Sheen	82.94		14,000	<50,000	56,000	14,000	14,000	1,300	11,000			
	7/19/1994	17.04		79.83											
96.87	8/18/1994	17.75		79.12				116,000	28,300	26,000	2,400	15,000			
	11/11/94	17.80		79.07				89,000	1,600	1,900	1,900	14,000			
	2/27/1995	11.86	Sheen	85.01				250,000	22,000	26,000	7,800	21,000			
	5/23/1995	11.60	Sheen	85.27				310,000	18,000	17,000	4,500	2,800			
	8/22/1995	17.10		79.77				74,000	14,000	13,000	1,900	11,000			
	11/29/1995	16.34		80.53				220,000	25,000	25,000	3,500	19,000			
	2/21/1996	7.92		88.95				60,000	10,000	7,800	1,500	8,800	3,400		
	5/21/1996	10.86	Sheen	86.01		13,000		69,000	17,000	9,400	1,700	9,400	2,600		
	8/22/1996	16.50		80.37		16,000		94,000	17,000	15,000	2,100	12,000	330	2.0	
	11/27/1996	13.47	Sheen	83.40		24,000		82,000	14,000	13,000	2,400	13,000	<1,000	2.4	
	3/20/1997	12.86		84.01		11,000		56,000	9,900	6,900	1,300	8,000	3,500	9.0	
	6/25/1997	15.98		80.89		7,700 <sup>b</sup>		49,000	9,700	7,100	1,300	7,000	220	5.8	
	9/17/1997	16.34	Sheen	80.53		15,000 <sup>e</sup>		78,000 <sup>d</sup>	11,000	9,900	1,800	10,000	<1,200	0.7	
	12/22/1997	10.71	Sheen	86.16		14,000 <sup>e</sup>		49,000 <sup>d</sup>	7,300	5,300	1,400	7,500	<1,100	3.1	
	3/18/1998	8.41	Sheen	88.46		20,000 <sup>e,f</sup>		120,000 <sup>d</sup>	21,000	19,000	2,600	15,000	<1,600	1.6	
	7/14/1998	13.51		83.36		65,000 <sup>e,f,g</sup>		94,000 <sup>d,g</sup>	18,000	14,000	1,900	11,000	<1,400	1.8	

TABLE 2

Well ID	Date	GW Depth	SPH	GW Elev.	Note	TPHd	ТРНто	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		(ft TOC)	(ft)	(ft msl)		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	Status
MW-3	9/30/1998	16.14		80.73		9,800		91,000	17,000	13,000	2,100	12,000	<1300	2.0	
Continued	12/8/1998	11.20		85.67		4,200		51,000	8,000	6,800	1,400	7,500	<1,100		
	3/29/1999	7.95		88.92		4,600 <sup>e</sup>		39,000 <sup>d</sup>	8,900	4,400	940	4,500	810	0.56	
	6/29/1999	16.98		79.89		6,900 <sup>e</sup>		71,000 <sup>d</sup>	12,000	7,300	1,400	8,400	<1,700	0.19	
	9/28/1999	15.99		80.88		7,800 <sup>e</sup>		60,000 <sup>d</sup>	9,400	9,200	1,000	9,900	200	0.53	
	12/10/1999	13.31		83.56		5,300 <sup>e,f</sup>		53,000 <sup>d</sup>	8,000	6,400	1,100	8,100	<200	0.48	
	3/23/2000	8.98		87.89		11,000 <sup>g,,j</sup>		77,000 <sup>d,g</sup>	10,000	9,400	1,600	11,000	<430		
	9/7/2000	15.61		81.26		19,000 <sup>e,f,g</sup>		100,000 <sup>d,g</sup>	17,000	12,000	1,600	11,000	< 500		
	12/5/2000	14.80		82.07		17,000 <sup>e,g</sup>		110,000 <sup>d,g</sup>	17,000	11,000	1,900	12,000	<750	0.37	Not operating
	3/7/2001	14.27		82.60		13,000		60,000	7,000	4,600	900	7,100	<350	0.49	Not operating
	6/6/2001	14.88		81.99		12,000		43,000	3,000	1,000	770	5,200	<400	1.71	Not operating
	8/30/2001	12.43		84.44		190,000 <sup>d,h</sup>		95,000 <sup>a,h</sup>	6,900	10,000	2,700	15,000	<250	0.24	Operating
	12/7/2001	24.65		72.22		3,900 <sup>e,f</sup>		25,000 <sup>d</sup>	2,500	1,700	64	2,200	<200	0.19	Operating
	3/11/2002	14.69		82.18		2,800 <sup>f,e,k</sup>		30,000 <sup>d</sup>	5,000	2,400	190	1,800	<1,300	0.30	Operating
	6/10/2002	22.94		73.93		990 <sup>e,k</sup>		9,000 <sup>d</sup>	1,800	1,300	96	1,000	<300		Operating
	9/26/2002	18.85		78.02		130,000 <sup>e,g</sup>		50,000 <sup>d,g</sup>	3,900	5,400	820	6,600	< 500	0.19	Operating
	11/21/2002	17.85	0.05	79.06		120,000 <sup>e,g</sup>		37,000 <sup>d,g</sup>	4,000	660	1,200	5,100	<1,700	0.28	Operating
	1/13/2003	11.43	Sheen <sup>Lab</sup>	85.44		6,300 <sup>e,f,g,k</sup>		21,000 <sup>d,g</sup>	2,400	2,300	390	3,000	< 500	0.31	Not operating
	4/25/2003	18.30		78.57		1,200 <sup>e</sup>		12,000 <sup>d</sup>	1,800	850	150	1,200	< 500		Operating
	5/30/2003	13.30		83.57											Not operating
	9/3/2003	21.65		75.22		3,300 <sup>e</sup>		8,100 <sup>d</sup>	220	170	66	560	<50		Operating
	12/2/2003	17.70	Sheen <sup>Lab</sup>	79.17		8,400 <sup>e,f,g</sup>		30,000 <sup>d,g</sup>	2,900	2,100	530	3,600	< 500		Operating
	3/18/2004	16.49		80.38		2,300 <sup>e,f</sup>		15,000 <sup>d</sup>	2,600	990	260	1,700	<300		Operating
	6/16/2004	15.40		147.54		8,800 <sup>e,f</sup>		23,000 <sup>d</sup>	2,100	1,300	360	2,800	<1,000		Operating
162.94	9/27/2004	23.65		139.29		1,700 <sup>e,f</sup>		5,200 <sup>d</sup>	430	220	100	680	250	0.55	Operating
	12/27/2004	14.58	Sheen <sup>Lab</sup>	148.36		24,000 <sup>e,f,g,k</sup>		32,000 <sup>d,g</sup>	4,400	2,800	650	4,800	<250	0.71	Not operating
	3/7/2005	6.91	Sheen Field & Lab	156.03		14,000 <sup>e,f,g</sup>		50,000 <sup>d,g</sup>	6,100	2,100	1,300	7,400	< 500	0.62	Not operating
	6/21/2005	10.79	Sheen Field & Lab	152.15		12,000 <sup>e,g</sup>		44,000 <sup>d,g</sup>	4,900	870	1,100	6,500	<1,200		Not operating
	9/21/2005	15.73	Sheen Field & Lab	147.21		16,000 <sup>e,f,k,g</sup>		41,000 <sup>d,g</sup>	3,700	480	930	5,700	< 500	0.90	Not operating
	12/14/2005	13.65	Sheen Field & Lab	149.29		19,000 <sup>e,f,k,g</sup>		53,000 <sup>d,g</sup>	4,700	350	1,100	7,400	<1,000	0.95	Not operating
	3/22/2006	8.10	Sheen Field & Lab	154.84		15,000 <sup>e,f,k,g</sup>		45,000 <sup>d,g</sup>	4,300	390	1,100	5,300	<1,000	0.88	Not operating
	6/30/2006	14.10	Sheen Field & Lab	148.84		15,000 <sup>e,f,k,g</sup>		44,000 <sup>d,g</sup>	4,000	160	550	4,000	<450	0.81	Not operating
	9/5/2006	16.25	Sheen Field & Lab	146.69		16,000 <sup>e,f,k,g</sup>		56,000 <sup>d,g</sup>	5,400	300	1,200	6,200	<500	0.55	Not operating
	12/6/2006	15.25	Sheen Field & Lab	147.69		19,000 e,f,k,g		44,000 <sup>d,g</sup>	4,500	110	930	3,600	<500	0.70	Not operating
	3/16/2007	10.25	Sheen Field & Lab	152.69		5,300 <sup>e,f,k,g</sup>		72,000 <sup>d,g</sup>	6,500	420	1,200	3,900	<1,000	0.61	Not operating

TABLE 2

Well ID TOC	Date	GW Depth (ft TOC)	SPH (ft)	GW Elev. (ft msl)	Note	<b>ΤΡΗ</b> d (μg/L)	<b>TPHmo</b> (μg/L)	<b>ΤΡΗg</b> (μg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (μg/L)	Xylenes (μg/L)	<b>MTBE</b> (μg/L)	DO (mg/L)	DPE System Status
		y/	-	y ,		-	Vi-Sy /	_	(F-Q) /	(1-8/-)	W-O/	Vi-Qi /	(F-Q) /	(8)	
MW-3	6/15/2007	14.57	Sheen Field & Lab	148.37		25,000 <sup>e,k,f,g</sup>		56,000 <sup>d,g</sup>	5,100	200	1,100	3,200	<1000	0.48	Not operating
Continued	9/6/2007	16.55	Sheen Field & Lab	146.39		14,000 <sup>e,f,g</sup>		41,000 <sup>d,g</sup>	4,400	180	1,000	3,800	<700	0.70	Not operating
	12/8/2007	14.49	Sheen Field & Lab	148.45		4,000 e,f,g		33,000 <sup>d,g</sup>	4,300	120	370	2,200	<250	0.77	Not operating
	3/9/2008	10.40	Sheen Field	152.54	(Z)	(3,400 <sup>e</sup> )	(310)	(23,000 <sup>d</sup> )	(4,200)	(120)	(650)	(1,600)	(<250)	0.71	Not operating
	6/14/2008	15.92	Sheen <sup>Field</sup>	147.02	(Z)	(4,900 °)	(600)	(36,000 <sup>d</sup> )	(4,700)	(140)	(830)	(1,600)	(<500)	1.05	Not operating
	9/6/2008	16.65	Sheen Field & Lab	146.29	$(Z^{TPHd})$	(7,900 e,f,g)		42,000 <sup>d,g</sup>	5,800	190	1,100	2,400	<800	1.03	Not operating
	12/28/2008	12.72	Sheen Field & Lab	150.22	$(Z^{TPHd})$	(4,100 e,g)	<250	24,000 <sup>d,g</sup>	4,100	91	380	960	91 °	0.91	Not operating
	3/14/2009	9.02	Sheen Field & lab	153.92	$(Z^{TPHd})$	8,700 <sup>e,f,k,g</sup> (8,100 <sup>e,g</sup> )		41,000 <sup>d,g</sup>	4,900	140	940	1,600	97 °	1.14	Not operating
MW-4	3/20/1997	13.75		83.59		3,100		47,000	11,000	4,500	1,100	5,200	3,400	8.4	
97.34	6/25/1997	16.15		81.19		5,800 <sup>b</sup>		61,000	16,000	6,100	1,500	5,900	780°	1.4	
	9/17/1997	17.10		80.24		4,400 <sup>e</sup>		60,000 <sup>d</sup>	17,000	4,900	1,500	5,700	<1,500	1.5	
	12/22/1997	9.21		88.13		3,100 <sup>e</sup>		43,000 <sup>d</sup>	13,000	3,900	1,100	4,200	<960	3.7	
	3/18/1998	9.54		87.80		5,500 <sup>e,f</sup>		58,000 <sup>d</sup>	14,000	4,700	1,400	5,700	<1,200	0.8	
	7/14/1998	14.15		83.19		2,900 <sup>e,f</sup>		73,000 <sup>d</sup>	22,000	7,000	1,800	7,300	<200	1.0	
	9/30/1998	16.84		80.50		2,100		39,000	12,000	2,700	1,000	3,400	510	1.1	
	12/8/1998	13.45		83.89		1,600		27,000	8,900	1,600	730	2,300	<1,500		
	3/29/1999	9.10		88.24		2,400 <sup>e,f,h</sup>		48,000 <sup>d</sup>	15,000	3,000	1,300	5,000	1,300	1.32	
	06/29/99*					·									
	9/28/1999	16.58		80.76		3,200 <sup>e,f</sup>		24,000 <sup>d</sup>	7,500	1,200	190	2,200	210	14.29#	
	12/10/1999	13.99		83.35		3,100 <sup>e,f</sup>		47,000 <sup>d</sup>	12,000	1,800	1,000	4,400	<100	0.62	
	3/23/2000	10.22		87.12		3,100 <sup>e,f</sup>		40,000 <sup>d</sup>	11,000	1,600	910	3,100	690		
	9/7/2000	16.40		80.94		5,900 <sup>e</sup>		43,000 <sup>d</sup>	10,000	1,100	1,100	3,400	<450	1.04	
	12/5/2000	15.55		81.79		2,600 <sup>e,g</sup>		69,000 <sup>d,g</sup>	16,000	1,300	1,300	3,400	<200	0.35	Not operating
	3/20/2001	14.03		83.31				46,000	13,000	1,000	900	2,800	<350	0.39	Not operating
	6/6/2001	15.49		81.85		5,400		75,000	22,000	1,800	1,900	6,400	<1,200	2.22	Not operating
	8/30/2001	18.00		79.34		3,200 <sup>d</sup>		43,000 <sup>a</sup>	6,400	630	510	2,600	<200	0.32	Operating
	12/7/2001	23.45		73.89		11,000 <sup>e,f,g</sup>		32,000 <sup>d,g</sup>	4,500	740	310	2,300	<200	0.21	Operating
	3/11/2002	14.95		82.39		1,600 <sup>e,f,k</sup>		15,000 <sup>d</sup>	3,700	500	92	790	< 500	0.30	Operating
	6/10/2002	22.30		75.04		3,400 <sup>e</sup>		9,400 <sup>d</sup>	1,400	50	<5.0	690	<200		Operating
	9/26/2002	17.93		79.41		800 <sup>e</sup>		21,000 <sup>d</sup>	3,300	1,300	450	2,900	< 500	0.24	Operating
	11/21/2002	17.55		79.79		2,400 <sup>e,k</sup>		5,700 <sup>d</sup>	1,400	290	63	640	550		Operating
	1/13/2003	11.75	Sheen <sup>Lab</sup>	85.59		15,000 <sup>e,f,g,k</sup>		35,000 <sup>d,g</sup>	5,100	1,500	510	4,500	<800	0.28	Not operating
	4/25/2003	19.37		77.97		2,200 <sup>e,f</sup>		6,600 <sup>d</sup>	960	130	100	560	<170		Operating
	5/30/2003	13.56		83.78											Not operating
	9/3/2003	21.65		75.69		27,000 <sup>e,f</sup>		29,000 <sup>d</sup>	2,200	380	280	2,300	65		Operating

TABLE 2

Well ID	Date	GW Depth	SPH	GW Elev.	Note	TPHd	ТРНто	ТРНд	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		(ft TOC)	(ft)	(ft msl)		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	Status
3.57.4	10 /0 /0000	40.45		E0.4E		= cosef		and	1 200	100	120	1 000	<b>-25</b> 0		0 "
MW-4	12/2/2003	19.17		78.17		5,800 <sup>e,f</sup>		13,000 <sup>d</sup>	1,300	180	120	1,900	<250		Operating
Continued	3/18/2004	14.92		82.42		1,500 <sup>e</sup>		5,300 <sup>d</sup>	1,300	55	37	440	<180		Operating
163.49	6/16/2004	16.02		147.47		3,400 <sup>e,f</sup>		9,100 <sup>d</sup>	940	96	120	800	<50		Not operating
	9/27/2004	19.93	I ab	143.56		980 <sup>e,f,k</sup>		1,300 <sup>d</sup>	140	10	11	81	<50	0.68	Not operating
	12/27/2004	14.79	Sheen Lab	148.70		5,300 <sup>e,f,g,k</sup>		10,000 <sup>d,g</sup>	1,000	99	34	1,600	<50	0.74	Not operating
	3/7/2005	7.81	Sheen Field & Lab	155.68		9,300 <sup>e,f,g</sup>		15,000 <sup>d,g</sup>	1,100	140	88	1,900	<100	0.65	Not operating
	6/21/2005	11.82	Sheen Field & Lab	151.67		12,000 <sup>e,g</sup>		30,000 <sup>d,g</sup>	3,300	270	250	2,800	<500		Not operating
	9/21/2005	16.55	Sheen Field & Lab	146.94		15,000 <sup>e,f,k,g</sup>		12,000 <sup>d,g</sup>	540	100	54	1,800	<50	0.89	Not operating
	12/14/2005	14.43	Sheen Field & Lab	149.06		9,800 <sup>e,f,k,g</sup>		5,200 <sup>d,g</sup>	710	41	91	540	<50	0.91	Not operating
	3/22/2006	7.52	Sheen Field & Lab	155.97		9,300 <sup>e,f,k,g</sup>		17,000 <sup>d,g</sup>	2,000	230	150	1,900	<50	0.80	Not operating
	6/30/2006	15.00	Sheen Field & Lab	148.49		19,000 <sup>e,f,g</sup>		18,000 <sup>d,g</sup>	1,400	50	60	1,300	<100	0.85	Not operating
	9/5/2006	16.96	Sheen Field & Lab	146.53		9,400 <sup>e,f,k,g</sup>		30,000 <sup>d,g</sup>	1,400	180	110	4,300	< 500	0.75	Not operating
	12/6/2006	15.95	Sheen Field & Lab	147.54		22,000 e,f,g		21,000 <sup>d,g</sup>	920	56	73	1,500	<100	0.71	Not operating
	3/16/2007	10.71	Sheen Field & Lab	152.78		2,700 e,f,k,g		13,000 <sup>d,g</sup>	1,400	32	93	740	<100	0.65	Not operating
	6/15/2007	15.43	Sheen Field & Lab	148.06		7,200 <sup>e,g</sup>		14,000 <sup>d,g</sup>	1,200	46	63	850	<110	0.61	Not operating
	9/6/2007	17.25	Sheen Field & Lab	146.24		8,400 e,f,k,g		27,000 <sup>d,g</sup>	1,500	150	120	4,500	<250	0.55	Not operating
	12/8/2007	15.15	Sheen Field & Lab	148.34		790 <sup>e,f,g</sup>		7,600 <sup>d,g</sup>	690	27	39	570	<80	0.72	Not operating
	3/9/2008	10.77	Sheen Field	152.72	(Z)	(3,000 °)	(<250)	(8,100 <sup>d</sup> )	(830)	(7.7)	(55)	(310)	(<50)	0.79	Not operating
	6/14/2008	16.68	Sheen Field	146.81	(Z)	(4,200 °)	(<250)	(15,000 <sup>d</sup> )	(1,100)	(50)	(86)	(1,300)	(<150)	1.2	Not operating
	9/6/2008	17.27	Sheen Field & Lab	146.22	$(Z^{TPHd})$	(2,800 e,g)		24,000 <sup>d,g</sup>	1,400	65	130	2,300	<250	1.28	Not operating
	12/28/2008	13.35	Sheen Field & Lab	150.14	$(Z^{TPHd})$	(1,800 <sup>e,g</sup> )	<250	7,500 <sup>d,g</sup>	630	21	40	210	22 °	1.20	Not operating
	3/14/2009	9.30	Sheen Field	154.19	(Z <sup>TPHd</sup> )	2,800 <sup>e,f,k</sup> (3,200 <sup>e</sup> )		8,800 <sup>d</sup>	980	23	61	220	22 °	1.27	Not operating
					(- )	, , , , ,		.,							1 0
RW-5	1/13/2003	10.20				3,000		14,000	2,100	750	300	1,800	950	0.17	
162.34	3/18/2003	14.48						12,000	2,000	380	190	1,500	830		
	6/16/2004	14.73		147.61											Not operating
	9/27/2004	25.55		136.79											Operating
	12/27/2004	10.45		151.89											Not operating
	3/7/2005	4.42	Sheen <sup>Field</sup>	157.92		$6,100^{e,f,k}$		7,000 <sup>d</sup>	720	63	97	670	<400	0.93	Not operating
	6/21/2005	10.02	Sheen Field	152.32		490 <sup>e</sup>		11,000 <sup>d</sup>	1,200	67	68	690	< 500		Not operating
	9/21/2005	15.07	Sheen Field & Lab	147.27		2,500 <sup>e,f,k,g</sup>		2,000 <sup>d,g</sup>	390	16	24	170	1,300	0.99	Not operating
	12/14/2005	12.95	Sheen Field & Lab	149.39		6,200 <sup>e,f,k,g</sup>		8,900 <sup>d,g</sup>	1,500	92	180	750	2,300	1.03	Not operating
	3/22/2006	2.55	Sheen Field	159.79		2,700 <sup>e,f,k</sup>		7,400 <sup>d</sup>	59	76	20	120	<50	1.10	Not operating
	6/30/2006	13.32	Sheen Field	149.02		3,100 <sup>e,f,k</sup>		3,100 <sup>d</sup>	590	15	27	88	410	0.89	Not operating
	9/5/2006	15.55	Sheen Field & Lab	146.79		3,200 <sup>e,f,k,g</sup>		5,300 <sup>d,g</sup>	1,000	31	61	230	370	0.81	Not operating
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TABLE 2

Well ID	Date	GW Depth	SPH	GW Elev.	Note	TPHd	ТРНто	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		(ft TOC)	(ft)	(ft msl)		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	Status
DIALE	10///2004	14.50	Choon Field & Lab	1.45.01		= =oo efg		a = aa d g	1.200	24	01	250	1000	0.70	NT
RW-5	12/6/2006	14.53	SHEEH	147.81		5,500 <sup>e,f,g</sup>		8,500 <sup>d,g</sup>	1,200	24	91	250	<900	0.79	Not operating
Continued	3/16/2007	8.81	Sheen Field & Lab	153.53		2,500 e,f,k,g		2,400 <sup>d,g</sup>	180	3.3	7.3	10	<17	0.62	Not operating
	6/15/2007	13.84	Sheen Field & Lab	148.50		2,000 <sup>e,k,f,g</sup>		3,700 <sup>d,g</sup>	730	14	36	80	<150	0.65	Not operating
	9/6/2007	15.85	Sheen Field	146.49		1,000 <sup>e,f</sup>		2,500 <sup>d</sup>	600	12	24	92	180	0.68	Not operating
	12/8/2007	13.99	Sheen Field	148.35	(7)	370 <sup>e,f</sup>	( .250)	1,900 <sup>d</sup>	220	4.0	10	38	500	0.74	Not operating
	3/9/2008	8.77	Sheen Field	153.57	(Z)	(90 °)	(<250)	(1,100 <sup>d</sup> )	(220)	(5.3)	(4.9)	(10)	(<90)	0.92	Not operating
	6/14/2008	15.21	Sheen Field	147.13	(Z)	(190 <sup>e</sup> )	(<250)	(1,200 <sup>d</sup> )	(310)	(5.8)	(3.5)	(25)	(<250)	1.73	Not operating
	9/6/2008	16.01	Sheen Field	146.33	$(Z^{TPHd})$	(220 °)		1,100 <sup>d</sup>	120	2.6	2.2	13	120	1.42	Not operating
	12/28/2008	10.55	Sheen Field	151.79	$(Z^{TPHd})$	(250 <sup>m</sup> )	<250	1,200 <sup>d,n</sup>	110	5.6	2.5	9.8	81 °	1.13	Not operating
	3/14/2009	6.82	Sheen Field	155.52	$(\mathbf{Z}^{\mathrm{TPHd}})$	2,000 f,k,m (750 e)		2,000 <sup>d</sup>	260	9.8	9.5	18.0	38 °	1.15	Not operating
RW-6	3/11/2002					3,100		14,000	970	520	170	2,200	<130		
162.36	1/13/2003	10.35				2,900		15,000	2,200	1,200	130	2,200	440	0.24	
	3/18/2004	11.47						8,500	1,300	260	71	990	1,300		
	6/16/2004	14.80		147.56											Not operating
	9/27/2004	18.46		143.90											Not operating
	12/27/2004	9.82		152.54											Not operating
	3/7/2005	6.05		156.31											Not operating
	6/21/2005	10.13		152.23											Not operating
	9/21/2005	15.13		147.23											Not operating
	12/14/2005	13.02		149.34											Not operating
	3/22/2006	5.85		156.51											Not operating
	6/30/2006	13.44		148.92											Not operating
	9/5/2006	15.63		146.73											Not operating
	12/6/2006	14.63		147.73											Not operating
	3/16/2007	8.89		153.47											Not operating
	6/15/2007	13.90		148.46											Not operating
	9/6/2007	15.92		146.44											Not operating
	12/8/2007	14.21		148.15											Not operating
	3/9/2008	8.93		153.43											Not operating
	6/14/2008	15.28		147.08											Not operating
	9/6/2008	16.08		146.28											Not operating
	12/28/2008	12.02		150.34											Not operating
	3/14/2009	7.16		155.20											Not operating

TABLE 2

<b>Well ID</b> TOC	Date	GW Depth (ft TOC)	SPH (ft)	GW Elev. (ft msl)	Note	<b>TPHd</b> (μg/L)	<b>ΤΡΗπο</b> (μg/L)	<b>ΤΡΗg</b> (μg/L)	Benzene (μg/L)	<b>Toluene</b> (μg/L)	Ethylbenzene (μg/L)	<b>Xylenes</b> (μg/L)	MTBE (μg/L)	DO (mg/L)	DPE System Status
RW-7	3/11/2002					<50		<50	<0.5	<0.5	<0.5	<0.5	<5.0		
162.72	1/13/2003	10.95				67		<50	< 0.5	<0.5	<0.5	< 0.5	<5.0	0.22	
	3/18/2004	15.33						250	66	4.8	3.2	10	<15		
	6/16/2004	15.22		147.50											Not operating
	9/27/2004	18.98		143.74											Not operating
	12/27/2004	9.85		152.87											Not operating
	3/7/2005	5.82		156.90											Not operating
	6/21/2005	10.85		151.87											Not operating
	9/21/2005	15.70		147.02											Not operating
	12/14/2005	13.58		149.14											Not operating
	3/22/2006	5.75		156.97											Not operating
	6/30/2006	14.05		148.67											Not operating
	9/5/2006	16.12		146.60											Not operating
	12/6/2006	15.13		147.59											Not operating
	3/16/2007	9.69		153.03											Not operating
	6/15/2007	14.54		148.18											Not operating
	9/6/2007	16.42		146.30											Not operating
	12/8/2007	14.46		148.26											Not operating
	3/9/2008	9.69		153.03											Not operating
	6/14/2008	15.80		146.92											Not operating
	9/6/2008	16.51		146.21											Not operating
	12/28/2008	12.62		150.10											Not operating
	3/14/2009	7.94		154.78											Not operating
RW-8	3/11/2002					80		1,300	620	11	15	14	<60		
164.13	1/13/2003	12.80				56		390	150	11	4.1	4.1	13	0.31	
	3/18/2004	15.34						760	310	9.9	11	16	<25		
	6/16/2004	16.41		147.72											Not operating
	9/27/2004	19.74		144.39											Not operating
	12/27/2004	12.32		151.81											Not operating
	3/7/2005	8.10		156.03											Not operating
	6/21/2005	12.15		151.98											Not operating
	9/21/2005	16.90		147.23											Not operating
	12/14/2005	14.80		149.33											Not operating
	3/22/2006	7.88		156.25											Not operating

TABLE 2

Well ID	Date	GW Depth	SPH	GW Elev.	Note	TPHd	ТРНто	ТРНд	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		(ft TOC)	(ft)	(ft msl)		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	Status
RW-8	6/30/2006	15.31		148.82											Not operating
Continued	9/5/2006	17.38		146.75											Not operating
	12/6/2006	16.37		147.76											Not operating
	3/16/2007	11.04		153.09											Not operating
	6/15/2007	15.81		148.32											Not operating
	9/6/2007	17.63		146.50											Not operating
	12/8/2007	15.60		148.53											Not operating
	3/9/2008	11.05		153.08											Not operating
	6/14/2008	17.07		147.06											Not operating
	9/6/2008	17.70		146.43											Not operating
	12/28/2008	13.80		150.33											Not operating
	3/14/2009	9.25		154.88											Not operating
RW-9	3/11/2002					880		12,000	3,400	230	78	1,300	<240		
163.86	1/13/2003	11.85				2,000		23,000	7,700	610	310	310	<500	0.39	
	3/18/2004	13.69						2,300	770	32	15	200	<50		
	6/16/2004	16.03		147.83											Not operating
	9/27/2004	19.83		144.03											Not operating
	12/27/2004	24.88		138.98											Not operating
	3/7/2005	7.87		155.99		510 <sup>e</sup>		9,000 <sup>d</sup>	2,600	69	200	550	<500	0.91	Not operating
	6/21/2005	11.90		151.96		630 <sup>e</sup>		9,400 <sup>d</sup>	2,400	69	210	470	<350		Not operating
	9/21/2005	16.62	Sheen <sup>Lab</sup>	147.24		820 <sup>e,f,g</sup>		8,300 <sup>d,g</sup>	2,500	36	190	310	<170	1.04	Not operating
	12/14/2005	14.52		149.34		1,100 <sup>e,f</sup>		6,300 <sup>d</sup>	1,900	29	150	260	<50	0.98	Not operating
	3/22/2006	7.63		156.23		680 <sup>e</sup>		7,600 <sup>d</sup>	2,900	59	190	310	<200	0.95	Not operating
	6/30/2006	15.04		148.82		1,400 <sup>e</sup>		14,000 <sup>d</sup>	3,100	53	130	260	<300	0.73	Not operating
	9/5/2006	17.02		146.84		1,100 <sup>e</sup>		14,000 <sup>d</sup>	3,900	39	200	230	<330	0.69	Not operating
	12/6/2006	16.04	Sheen Lab	147.82		660 <sup>e,g</sup>		13,000 <sup>d,g</sup>	3,000	29	180	260	<250	0.74	Not operating
	3/16/2007	10.83	Sheen <sup>Lab</sup>	153.03		1,200 <sup>e</sup>		16,000 <sup>d,g</sup>	3,700	76	230	340	<350	0.71	Not operating
	6/15/2007	15.48	Field & Lab	148.38		670 <sup>e</sup>		12,000 <sup>d</sup>	3,000	44	170	220	<250	0.68	Not operating
	9/6/2007	17.29	Sheen Field & Lab	146.57		2,200 <sup>e,f,g</sup>		13,000 <sup>d,g</sup>	2,700	61	240	350	<400	0.66	Not operating
	12/8/2007	15.22	Sheen <sup>Field</sup>	148.64		1,000 <sup>e,f</sup>		9,300 <sup>d</sup>	2,900	24	150	170	<250	0.89	Not operating
	3/9/2008	10.86		153.00	(Z)	(570 °)	(<250)	(10,000 <sup>d</sup> )	(4,200)	(71)	(180)	(380)	(<35)	0.86	Not operating
	6/14/2008	16.71		147.15	(Z)	(610)	(<250)	(8,100 <sup>d</sup> )	(2,800)	(33)	(100)	(220)	(<210)	1.29	Not operating
	9/6/2008	17.31	Sheen <sup>Lab</sup>	146.55	$(Z^{TPHd})$	(1,600 e,g)		13,000 <sup>d,g</sup>	3,600	52	170	220	<350	1.22	Not operating

TABLE 2

<b>Well ID</b> TOC	Date	GW Depth (ft TOC)	SPH (ft)	GW Elev. (ft msl)	Note	<b>ΤΡΗ</b> <i>d</i> (μg/L)	<b>ΤΡΗπο</b> (μg/L)	<b>TPHg</b> (μg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (μg/L)	<b>MTBE</b> (μg/L)	DO (mg/L)	DPE System Status
RW-9	12/28/2008	13.41	Sheen Field	150.45	$(Z^{TPHd})$	(950 °)	<250	7,300 <sup>d</sup>	3,500	24	150	200	30°	1.28	Not operating
Continued	3/14/2009	8.97	Sheen Field	154.89	$(Z^{TPHd})$	450 ° (440 °)		14,000 <sup>d</sup>	3,600	71	190	380	31 °	1.21	Not operating
RW-10	3/11/2002					740		12,000	3,900	150	110	1,100	<270		
163.02	1/13/2003	10.75				330		4,300	1,500	43	98	98	<100	0.41	
	3/18/2004	13.13						5,800	2,400	11	<10	110	<300		
	6/16/2004	15.03		147.99											Not operating
	9/27/2004	18.35		144.67											Not operating
	12/27/2004	19.39		143.63											Not operating
	3/7/2005	6.40		156.62											Not operating
	6/21/2005	10.95		152.07											Not operating
	9/21/2005	15.51		147.51											Not operating
	12/14/2005	13.37		149.65											Not operating
	3/22/2006	6.53		156.49											Not operating
	6/30/2006	14.13		148.89											Not operating
	9/5/2006	15.98		147.04											Not operating
	12/6/2006	15.02		148.00											Not operating
	3/16/2007	9.91		153.11											Not operating
	6/15/2007	14.52		148.50											Not operating
	9/6/2007	16.23		146.79											Not operating
	12/8/2007	14.23		148.79											Not operating
	3/9/2008	9.96		153.06											Not operating
	6/14/2008	15.64		147.38											Not operating
	9/6/2008	16.23		146.79											Not operating
	12/28/2008	12.42		150.60											Not operating
	3/14/2009	8.02	-	155.00											Not operating
RW-11	3/11/2002					<50		260	34	5.3	8.1	48	<5.0		
162.57	1/13/2003	9.80				2,700		5,300	490	110	120	120	180	0.24	
	3/18/2004	12.45						9,300	980	120	180	770	2,000		
	6/16/2004	14.75		147.82											Not operating
	9/27/2004	18.44		144.13											Not operating
	12/27/2004	10.07		152.50											Not operating
	3/7/2005	5.95		156.62											Not operating
	6/21/2005	9.96		152.61											Not operating

TABLE 2

<b>Well ID</b> TOC	Date	GW Depth (ft TOC)	SPH (ft)	GW Elev. (ft msl)	Note	<b>TPHd</b> (μg/L)	<b>ΤΡΗπο</b> (μg/L)	TPHg (μg/L)	Benzene (µg/L)	<b>Toluene</b> (μg/L)	Ethylbenzene (μg/L)	<b>Xylenes</b> (μg/L)	MTBE (μg/L)	DO (mg/L)	DPE System Status
RW-11	9/21/2005	15.09		147.48											Not operating
Continued	12/14/2005	12.96		149.61											Not operating
	3/22/2006	5.70		156.87											Not operating
	6/30/2006	13.36		149.21											Not operating
	9/5/2006	15.56		147.01											Not operating
	12/6/2006	14.55		148.02											Not operating
	3/16/2007	8.85		153.72											Not operating
	6/15/2007	13.90		148.67											Not operating
	9/6/2007	15.84		146.73											Not operating
	12/8/2007	13.83		148.74											Not operating
	3/9/2008	8.81		153.76											Not operating
	6/14/2008	15.26		147.31											Not operating
	9/6/2008	15.99		146.58											Not operating
	12/28/2008	12.01		150.56											Not operating
	3/14/2009	7.14		155.43											Not operating
RW-12	3/11/2002					900		13,000	4,500	130	130	270	< 5.0		
163.06	1/13/2003	10.90				1,800		4,100	1,000	130	99	99	<100	0.21	
	3/18/2004	13.63						17,000	2,700	960	230	1,500	1,400		
	6/16/2004	15.30		147.76											Not operating
	9/27/2004	19.09		143.97											Not operating
	12/27/2004	10.85		152.21											Not operating
	3/7/2005	6.59		156.47											Not operating
	6/21/2005	10.58		152.48											Not operating
	9/21/2005	15.63		147.43											Not operating
	12/14/2005	13.43		149.63											Not operating
	3/22/2006	6.35		156.71											Not operating
	6/30/2006	13.95		149.11											Not operating
	9/5/2006	16.11		146.95											Not operating
	12/6/2006	15.11		147.95											Not operating
	3/16/2007	9.52		153.54											Not operating
	6/15/2007	14.44		148.62											Not operating
	9/6/2007	16.42		146.64											Not operating
	12/8/2007	14.87		148.19											Not operating
	3/9/2008	9.43		153.63											Not operating

TABLE 2

Well ID	Date	GW Depth	SPH	GW Elev.	Note	TPHd	ТРНто	ТРНд	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		(ft TOC)	(ft)	(ft msl)		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	Status
RW-12	6/14/2008	15.74		147.32											Not operating
Continued	9/6/2008	16.58		146.48											Not operating
	12/28/2008	12.80		150.26											Not operating
	3/14/2009	7.77		155.29											Not operating
RW-13	3/11/2002					79		830	190	13	13	34	<5.0		
164.34	1/13/2003	11.20				92		210	54	2.0	2.7	2.7	< 5.0	0.35	
	3/18/2004	13.45						150	47	1.0	2.1	1.5	< 5.0		
	6/16/2004	15.83		148.51											Not operating
	9/27/2004	19.55		144.79											Not operating
	12/27/2004	18.12		146.22											Not operating
	3/7/2005	6.90		157.44											Not operating
	6/21/2005	11.05		153.29											Not operating
	9/21/2005	16.20		148.14											Not operating
	12/14/2005	14.11		150.23											Not operating
	3/22/2006	6.65		157.69											Not operating
	6/30/2006	14.44		149.90											Not operating
	9/5/2006	16.62		147.72											Not operating
	12/6/2006	15.70		148.64											Not operating
	3/16/2007	9.93		154.41											Not operating
	6/15/2007	14.98		149.36											Not operating
	9/6/2007	16.95		147.39											Not operating
	12/8/2007	14.97		149.37											Not operating
	3/9/2008	9.85		154.49											Not operating
	6/14/2008	16.32		148.02											Not operating
	9/6/2008	17.10		147.24											Not operating
	12/28/2008	13.26		151.08											Not operating
	3/14/2009	8.16		156.18											Not operating
RW-14	3/11/2002					82		270	44	0.99	<0.5	4.2	<5.0		
163.76	1/13/2003	11.00				6800		3700	230	77	91	91	<50	0.38	
	3/18/2004	12.81						220	42	1.4	0.99	5.2	< 5.0		
	6/16/2004	15.41		148.35											Not operating
	9/27/2004	19.20		144.56											Not operating
	12/27/2004	12.62		151.14											Not operating

TABLE 2

Well ID	Date	GW Depth	SPH	GW $Elev$ .	Note	TPHd	ТРНто	ТРНд	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		(ft TOC)	(ft)	(ft msl)		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	Status
RW-14	3/7/2005	6.61		157.15											Not operating
Continued	6/21/2005	10.80		152.96											Not operating
	9/21/2005	15.82		147.94											Not operating
	12/14/2005	13.73		150.03											Not operating
	3/22/2006	6.43		157.33											Not operating
	6/30/2006	14.10		149.66											Not operating
	9/5/2006	16.21		147.55											Not operating
	12/6/2006	15.31		148.45											Not operating
	3/16/2007	9.66		154.10											Not operating
	6/15/2007	14.61		149.15											Not operating
	9/6/2007	16.54		147.22											Not operating
	12/8/2007	14.57		149.19											Not operating
	3/9/2008	9.60		154.16											Not operating
	06/14/08	15.90		147.86											Not operating
	09/06/08	16.68		147.08											Not operating
	12/28/08	12.82		150.94											Not operating
	03/14/09	7.88		155.88											Not operating

#### Methods and Abbreviations:

TOC = Top of casing elevation measured in feet relative to surveyor's datum

All site wells were re-surveyed by Virgil Chavez Land Surveying on June 2, 2004 to the CA State Coordinate System, Zone III (NAD83). Benchmark elevation = 177.397 feet (NGVD 29)

TOC GW Depth = Groundwater depth measured in feet below TOC.

GW Elev. = Groundwater elevation measured in feet above mean sea level.

ft = Measured in feet

SPH = Separate-phase hydrocarbons depth measured from TOC.

(Z) = Laboratory used Zemo Gravity Separation Protocol for Extractables & Purgeables

(Z<sup>TPHd</sup>) = Laboratory used Zemo Gravity Separation Protocol for Extractables (TPHd)

() = Zemo Gravity Separation Protocol Use Prior to Analysis

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

TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method

SW8015C; with Dawn Zemo Separation in (parentheses)

TPHmo = Total petroleum hydrocarbons as motor oil by modified EPA Method SW8015C

Benzene, Toluene, Ethylbenzene, and Xylenes by EPA Method SW8021B

MTBE = Methyl tertiary butyl ether by EPA Method SW8021B

#### Notes

- a = Result has an atypical pattern for diesel analysis
- b = Result appears to be a lighter hydrocarbon than diesel
- c = There is a >40% difference between primary and confirmation analysis
- d = Unmodified or weakly modified gasoline is significant
- e = Gasoline range compounds are significant
- f = Diesel range compounds are significant; no recognizable pattern
- g = Lighter than water immiscible sheen/product is present
- h = One to a few isolated peaks present
- i = Medium boiling point pattern does not match diesel (stoddard solvent)
- j = Aged diesel is significant
- k = Oil range compounds are significant
- l = Liquid sample that contains greater than ~1 vol. % sediment
- m = Stoddard solvent/mineral spirit
- n = Strongly aged gasoline or diesel range compounds are significant in the TPHg chromatogram.
- o = MTBE by EPA Method SW8260B

#### TABLE 2

#### GROUNDWATER ELEVATIONS AND ANALYTICAL DATA FORMER EXXON SERVICE STATION 3055 35<sup>th</sup> AVENUE, OAKLAND, CALIFORNIA

Well ID	Date	GW Depth	SPH	GW $Elev$ .	Note	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		(ft TOC)	(ft)	(ft msl)		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	Status

DO = Dissolved oxygen

 $\mu$ g/L = Micrograms per liter, equivalent to parts per billion in water

mg/L = Milligrams per liter, equivalent to parts per million in water

DPE = Dual-phase extraction remediation

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

Field = Observed in field

Lab = Observed in analytical laboratory

- \* = Well inaccessible during site visit
- \*\* = No water in well due to system operating in well, value reflects total well depth.
- # = abnormally high reading due to added hydrogen peroxide
- --- = Not sampled; not analyzed; not applicable; or no SPH measured or observed

TABLE 3

## GROUNDWATER ANALYTICAL DATA - OXYGENATED VOLATILE ORGANIC COMPOUNDS FORMER EXXON SERVICE STATION 3055 35TH AVENUE, OAKLAND, CALIFORNIA

Well ID TOC	Date	<b>GW Depth</b> (ft TOC)	GW Elev. (ft msl)	<b>ΤΑΜΕ</b> (μg/L)	<b>ΤΒΑ</b> (μg/L)	<b>EDB</b> (μg/L)	<b>1,2-DCA</b> (μg/L)	<b>DIPE</b> (μg/L)	<b>ΕΤΒΕ</b> (μg/L)	Notes
MW-1	9/6/2008	20.66	146.36	<1.2	59	<1.2	<1.2	<1.2	<1.2	
167.02	12/28/2008	16.57	150.45	<1.7	59	<1.7	<1.7	<1.7	<1.7	
	3/14/2009	12.57	154.45	<2.5	58	<2.5	<2.5	<2.5	<2.5	
MW-2	9/6/2008	19.41	146.73	<2.5	92	<2.5	<2.5	<2.5	<2.5	a
166.14	12/28/2008	15.73	150.41	<2.5	110	<2.5	<2.5	<2.5	<2.5	
	3/14/2009	10.52	155.62	<5.0	170	<5.0	<5.0	<5.0	<5.0	
MW-3	9/6/2008	16.65	146.29	<17	360	<17	<17	<17	<17	a
162.94	12/28/2008	12.72	150.22	<10	190	<10	<10	<10	<10	a
	3/14/2009	9.02	153.92	<12	210	<12	<12	<12	<12	
MW-4	9/6/2008	17.27	146.22	<2.5	63	<2.5	<2.5	<2.5	<2.5	a
163.49	12/28/2008	13.35	150.14	<2.5	55	<2.5	<2.5	<2.5	<2.5	a
	3/14/2009	9.30	154.19	<2.5	67	<2.5	<2.5	<2.5	<2.5	
RW-5	9/6/2008	16.01	146.33	<2.5	410	<2.5	<2.5	<2.5	<2.5	
162.34	12/28/2008	10.55	151.79	<2.5	77	<2.5	<2.5	<2.5	<2.5	
	3/14/2009	6.82	155.52	<1.0	76	<1.0	<1.0	<1.0	<1.0	
RW-9	9/6/2008	17.31	146.55	<10	230	<10	<10	<10	<10	a
163.86	12/28/2008	13.41	150.45	< 5.0	190	<5.0	<5.0	< 5.0	<5.0	
	3/14/2009	8.97	154.89	<10	210	<10	<10	<10	<10	

#### Abbreviations:

TOC = Top of casing

 $TOC\ Elevations\ surveyed\ by\ Virgil\ Chavez\ Land\ Surveying\ on\ June\ 2,2004$  to CA State Cooordinate System, Zone III (NAD83);

Benchmark elevation = 177.397 feet (NGVD 29)

GW Depth = Groundwater depth measured in feet below top of casing

GW Elev. = Groundwater elevation measured in feet above mean sea level

ft TOC = Feet below top of casing

ft msl = Feet above mean sea level

 $\mu g/L$  = Micrograms per liter

TAME = Tert-amyl methyl ether by EPA Method SW8260B

TBA = t-Butyl alcohol by EPA Method SW8260B

EDB = 1,2-Dibromoethane by EPA Method SW8260B

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

DIPE = Diisopropyl ether by EPA Method SW8260B

ETBE = Ethyl tert-butyl ether by EPA Method SW8260B

#### **Laboratory Analytical Notes**

a = Lighter than water immiscible sheen/product is present

#### 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. Cambria's specific 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<sup>TM</sup> or Alconox<sup>TM</sup> 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 either by hand using a disposal or PVC bailer or by using an aboveground pump (e.g. peristaltic or Wattera<sup>TM</sup>) or down-hole pump (e.g. Grundfos<sup>TM</sup> or DC Purger pump).

Groundwater wells shall be purged approximately three to ten well-casing volumes (depending on the regulatory agency requirements) or until groundwater parameters of temperature, pH, and conductivity have stabilized to within 10% for three consecutive readings. Temperature, pH, and conductivity shall be measured and recorded at least once per well casing volume removed. 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, dissolved oxygen (DO), and oxidation-reduction potential (ORP) shall also be measured prior to collection of each groundwater sample.

Groundwater samples shall be collected after the well has been purged. If the well is slow to recharge, a sample shall be collected after the water column is allowed to recharge to 80% of the pre-purging static water level. If the well does not recover to 80% in 2 hours, a sample shall be collected once there is enough groundwater in the well. Groundwater samples shall be collected using clean disposable bailers or pumps (if an operating remediation system exists on site and the project manager approves of its use for sampling) and shall be decanted into clean containers supplied by the analytical laboratory. New latex gloves and disposable tubing or bailers shall be

### Conestoga-Rovers & Associates

used for sampling each well. If a PVC bailer or down-hole pump is used for groundwater purging, it shall be decontaminated before purging each well by using soapy water consisting of Liqui-nox<sup>TM</sup> or Alconox<sup>TM</sup> followed by one rinse of clean tap water and then two rinses of distilled water. If a submersible pump with non-dedicated discharge tubing is used for groundwater purging, both the inside and outside of pump and discharge tubing shall be decontaminated as described above.

#### 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.

H:\- MGT IR Group Info\SOPs\Groundwater Monitoring and Sampling SOP 07-2005.doc

#### APPENDIX B

CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

### McCampbell Analytical, Inc.

"When Ouality Counts"

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

Conestoga-Rovers & Associates	Client Project ID: #130105; Golden Empire	Date Sampled: 03/14/09
5900 Hollis St, Suite A	Property	Date Received: 03/16/09
Emeryville, CA 94608	Client Contact: Mark Jonas	Date Reported: 03/23/09
Zanery vine, err 7 1000	Client P.O.:	Date Completed: 03/20/09

WorkOrder: 0903385

March 23, 2009

<b>T</b>			•
Dear	N /	Or.	7.

#### Enclosed within are:

- 6 analyzed samples from your project: #130105; Golden Empire Property, 1) The results of the
- 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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager

McCampbell Analytical, Inc.

### MaCAMPRELL ANALYTICAL

CHAIN OF	CUSTODY	RECORD
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1534 WILLOW PASS ROAD										TURN AROUND TIME																						
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SAMPLE ID	LOCATION/			iers	ig.			Т			T		٦.	as F	1 (80	mm C	um F	01/	X O	/ 80	82 PC	41 (7	51 (/	24/	125/	M/	als (2	als (2	200.	EJ		
SAMPLE ID	Field Point	_		tair	lon 1			63						T	Diese	trole	trole	2/6	BTE	809/	/ 80	/ 81	/ 81	3/6	276	18 0Z	Met	Meta	0.77	FA		
	Name	Date	Time	Containers	Type Containers	Water	= .	dg	Other	田	HCL	HNO3	Ottner	BTEX & TPH	TPH as Diesel (8015)	al Pe	al Pe	1 502	BE/	1 505	1 608	1 507	1 515	1 524	1 525	82	M 17	FT.5	d (20	200		
				#	L,	3	Soil	Slu	ŏ	IC	Ħ	H	5	BH	TPI	Tot	Tota	EP/	MT	EP/	EP/	EP/	EP/	EP/	EP	EP/	CA	12	Lea	ES		
- MU-1 -		3-14-09	9:45	4	Pmb	*		T		X	X		1,	X	×														$\vdash$	X	$\top$	
MU-2			1:15	T	11										X															X		
MU-3			11:10			T		-		П			_		Х															X		
MN-4			10:15			Ħ		T					_	X	X															X		
RU-5			12:10	$\vdash$	+	11		+		П		+			X													$\top$	1	X		
RW-9			8:55	1	1	1		+	$\vdash$		×	+	_		X								-	1		$\vdash$	1	1	1	X	1	
KW-4	-	1	0.55	1	19	1	-	+		1	-	+	+		^				-				-			-		-	+	1	-	-
	-	-	-	-	$\vdash$	$\vdash$	-	+	-	$\vdash$	+	+	+	+	-	-	-		-	-	-	-	-	-	-	-	-	+	+	-	+	
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Relinquished By:		Date:	Time:	Rec	eived I	By:												**	0.0	-	0.0	2.5	ETF A	1.0	O	CHARLES W	0					
								VOAS O&G METALS OTHER PRESERVATION pH<2																								

## McCampbell Analytical, Inc.

Report to:

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

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder:	0903385	ClientCode:	CETE

		Bil	I to:		Requested TAT:	5 days
WriteOn	<b>✓</b> EDF	Excel	Fax	Email	☐ HardCopy ☐ ThirdParty	J-flag

mjonas@CRAworld.com Accounts Payable Mark Jonas Email:

Conestoga-Rovers & Associates Conestoga-Rovers & Associates cc:

Date Received: 03/16/2009 PO: 5900 Hollis St, Suite A 5900 Hollis St, Ste. A ProjectNo: #130105; Golden Empire Property Emeryville, CA 94608 Date Printed: 03/16/2009 Emeryville, CA 94608

(510) 420-0700 FAX (510) 420-9170

					Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	<b>Collection Date</b>	Hold	1	2	3	4	5	6	7	8	9	10	11	12
0903385-001	MW-1	Water	3/14/2009 9:45		D	Α	А	С	В							
0903385-002	MW-2	Water	3/14/2009 13:15		D	Α		С	В							
0903385-003	MW-3	Water	3/14/2009 11:10		D	Α		С	В							
0903385-004	MW-4	Water	3/14/2009 10:15		D	Α		С	В							
0903385-005	RW-5	Water	3/14/2009 12:10		D	Α		С	В							
0903385-006	RW-9	Water	3/14/2009 8:55		D	Α		С	В							

### Test Legend:

1 5-OXYS+PBSCV_W	2 G-MBTEX_W	3 PREDF REPORT	4 TPH(D)WSG_W	5 TPH-DZ-MAIWSG_W
6	7	8	9	10
11	12			
				Prepared by: Maria Venegas

**Comments:** 

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Telephone: 877-252-9262 Fax: 925-252-9269

## **Sample Receipt Checklist**

Client Name:	Conestoga-Rovers & A	Associates			Date a	and Time Received:	03/16/09	9:31:29 AM
Project Name:	#130105; Golden Empi	re Property			Check	list completed and r	eviewed by:	Maria Venegas
WorkOrder N°:	<b>0903385</b> Matrix	<u>Water</u>			Carrie	r: Rob Pringle (M	(1Al Courier)	
		Chain	of Cu	stody (C	COC) Informa	tion		
Chain of custody	y present?		Yes	V	No 🗆			
Chain of custody	y signed when relinquished a	nd received?	Yes	V	No 🗆			
Chain of custody	y agrees with sample labels?		Yes	<b>✓</b>	No 🗌			
Sample IDs noted	d by Client on COC?		Yes	<b>V</b>	No 🗆			
Date and Time o	f collection noted by Client on	COC?	Yes	<b>✓</b>	No 🗆			
Sampler's name	noted on COC?		Yes	<b>V</b>	No 🗆			
		<u>Sa</u>	mple	Receipt	t Information			
Custody seals in	ntact on shipping container/co	oler?	Yes		No 🗆		NA 🔽	
Shipping contain	ner/cooler in good condition?		Yes	V	No 🗆			
Samples in prop	er containers/bottles?		Yes	<b>V</b>	No 🗆			
Sample containe	ers intact?		Yes	<b>✓</b>	No 🗆			
Sufficient sample	e volume for indicated test?		Yes	<b>✓</b>	No 🗌			
	<u>s</u>	ample Preser	vatio	n and Ho	old Time (HT)	<u>Information</u>		
All samples rece	eived within holding time?		Yes	<b>✓</b>	No 🗌			
Container/Temp	Blank temperature		Coole	er Temp:	2.2°C		NA 🗆	
Water - VOA via	ıls have zero headspace / no	bubbles?	Yes	<b>✓</b>	No 🗆	No VOA vials subm	nitted $\square$	
Sample labels cl	hecked for correct preservation	on?	Yes	<b>✓</b>	No 🗌			
TTLC Metal - pH	acceptable upon receipt (pH<	:2)?	Yes		No 🗆		NA 🔽	
Samples Receive	ed on Ice?		Yes	<b>✓</b>	No 🗆			
		(Ice Type	: WE	TICE	)			
* NOTE: If the "I	No" box is checked, see com	ments below.						
=====	=======	=====				=	====	======
Client contacted:	:	Date contacte	ed:			Contacted	l by:	
Comments:								

Conestoga-Rovers & Associates Client Project ID: #130105; Golden Date Sampled: 03/14/09 **Empire Property** Date Received: 03/16/09 5900 Hollis St, Suite A Date Extracted: 03/20/09 Client Contact: Mark Jonas Emeryville, CA 94608 Client P.O.: Date Analyzed 03/20/09

### Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS\*

Extraction Method: SW5030B	Analytical Method: SW8260B					0903385
Lab ID	0903385-001D	0903385-002D	0903385-003D	0903385-004D		
Client ID	MW-1	MW-2	MW-3	MW-4	Reporting DF	
Matrix	W	W	W	W		
DF	5	10	25	5	S	W
Compound		Conce	entration		ug/kg	μg/L
tert-Amyl methyl ether (TAME)	ND<2.5	ND<5.0	ND<12	ND<2.5	NA	0.5
t-Butyl alcohol (TBA)	58	170	210	67	NA	2.0
1,2-Dibromoethane (EDB)	ND<2.5	ND<5.0	ND<12	ND<2.5	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<2.5	ND<5.0	ND<12	ND<2.5	NA	0.5
Diisopropyl ether (DIPE)	ND<2.5	ND<5.0	ND<12	ND<2.5	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND<2.5	ND<5.0	ND<12	ND<2.5	NA	0.5
Methyl-t-butyl ether (MTBE)	35	120	97	22	NA	0.5
Surrogate Recoveries (%)						
%SS1:	90	89	91	91		
Comments			b6			

<sup>\*</sup> 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; 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.

b6) lighter than water immiscible sheen/product is present



Conestoga-Rovers & Associates			oject ID: #13010	5; Golden	Date Sampled:	03/14/09		
5900 Hollis St, Suite A		Empire Property			Date Received: 03/16/09			
6700 1101110 51, 2 will 11		Client Co	ontact: Mark Jon	ias	Date Extracted:	03/20/09		
Emeryville, CA 94608		Client P.	Client P.O.: Date Analyzed					
Oxygenat	ed Volat	ile Orgar	nics + EDB and 1	,2-DCA by P&T	and GC/MS*			
Extraction Method: SW5030B		Anal	ytical Method: SW826	60B		Work Order:	0903385	
Lab ID	090338	85-005D	0903385-006D					
Client ID	RV	W-5	RW-9			Reporting DF	Limit for	
Matrix	7	W	W					
DF		2	20			S	W	
Compound			Conce	entration		ug/kg	μg/L	
tert-Amyl methyl ether (TAME)	ND	0<1.0	ND<10			NA	0.5	
t-Butyl alcohol (TBA)	7	76	210			NA	2.0	
1,2-Dibromoethane (EDB)	ND	<1.0	ND<10			NA	0.5	
1,2-Dichloroethane (1,2-DCA)	ND	<1.0	ND<10			NA	0.5	
Diisopropyl ether (DIPE)	ND	<1.0	ND<10			NA	0.5	
Ethyl tert-butyl ether (ETBE)	ND	<1.0	ND<10			NA	0.5	
Methyl-t-butyl ether (MTBE)	3	38	31			NA	0.5	
		Surr	ogate Recoveries	s (%)				
%SS1:	ò	91	90					
Comments								
* water and vapor samples are reported in	μg/L, soi	il/sludge/sc	olid samples in mg/k	g, product/oil/non-a	aqueous liquid sampl	es and all TC	LP & SPLP	

ND means not detected above the reporting 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.

b6) lighter than water immiscible sheen/product is present



extracts are reported in mg/L, wipe samples in µg/wipe.

Conestoga-Rovers & Associates	Client Project ID: #130105; Golden Empire Property	Date Sampled: 03/14/09
5900 Hollis St, Suite A	Emplie Property	Date Received: 03/16/09
	Client Contact: Mark Jonas	Date Extracted: 03/18/09-03/19/09
Emeryville, CA 94608	Client P.O.:	Date Analyzed 03/18/09-03/19/09

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

Analytical methods SW8021B/8015Bm Extraction method SW5030B Work Order: 0903385 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes DF % SS 001A MW-1 W 6700,d1 1100 100 180 100 002A W 107 MW-211,000,d1 1100 23 23 250 20 003A W 4900 140 940 1600 MW-341,000,d1,b6 50 113 004A MW-4 W 8800,d1 ---980 23 61 220 20 105 005A RW-5 W 2000,d1 260 9.8 9.5 18 1 102 006A RW-9 W 14,000,d1 3600 71 190 380 20 100

I	* 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,
ı	product/oil/non-aqueous liquid samples in mg/L.

<sup>#</sup> cluttered chromatogram; sample peak coelutes with surrogate peak.

W

50

1.0

5

0.05

0.5

0.005

0.5

0.005

0.5

0.005

0.5

0.005

μg/L

mg/Kg

- b6) lighter than water immiscible sheen/product is present
- d1) weakly modified or unmodified gasoline is significant



Reporting Limit for DF = 1;

ND means not detected at or

above the reporting limit

<sup>+</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

Conestoga-Rovers & Associates	Client Project ID: #130105; Golden	Date Sampled: 03/14/09
5900 Hollis St, Suite A	Empire Property	Date Received: 03/16/09
	Client Contact: Mark Jonas	Date Extracted: 03/16/09
Emeryville, CA 94608	Client P.O.:	Date Analyzed 03/16/09-03/17/09

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

Extraction method: SW3510C/3630C Analytical methods: SW8015B Work Order: 0903385

Extraction method. 3 w 3	310C/3030C	Allarytical file	Analytical methods. Sw 6013B		03363
Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS
0903385-001C	MW-1	W	2000,e4,e2,e7	1	91
0903385-002C	MW-2	W	3300,e4,e2,e7	1	82
0903385-003C	MW-3	W	8700,e4,e2,e7,b6	1	88
0903385-004C	MW-4	W	2800,e4,e2,e7	1	81
0903385-005C	RW-5	W	2000,e11,e2,e7	1	81
0903385-006C	RW-9	w	450,e4	1	82
1					1

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

<sup>\*</sup> water samples are reported in  $\mu$ g/L, wipe samples in  $\mu$ g/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  $\mu$ g/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.

- +The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
- b6) lighter than water immiscible sheen/product is present
- e2) diesel range compounds are significant; no recognizable pattern
- e4) gasoline range compounds are significant.
- e7) oil range compounds are significant
- e11) stoddard solvent/mineral spirit (?)

Conestoga-Rovers & Associates	Client Project ID: #130105; Golden	Date Sampled: 03/14/09
5900 Hollis St, Suite A	Empire Property	Date Received: 03/16/09
	Client Contact: Mark Jonas	Date Extracted: 03/16/09
Emeryville, CA 94608	Client P.O.:	Date Analyzed 03/19/09

### Total Extractable Petroleum Hydrocarbons with Dawn Zemo Separation & MAI Silica Gel Clean-Up\*

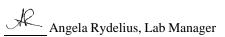
Extraction method SW3510C/3630C/Dawn Zemo Separa Analytical methods: SW8015B Work Order: 0903385

Estituetion metriou	5 W 33 TOC/3030C/Dawii Zeilio Bepara	111	anytical methods. BW 0013B	1401. 07	03303
Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS
0903385-001B	MW-1	W	860,e4	1	109
0903385-002B	MW-2	W	2700,e4	1	108
0903385-003B	MW-3	W	8100,e4,b6	1	109
0903385-004B	MW-4	W	3200,e4	1	98
0903385-005B	RW-5	W	750,e4	1	108
0903385-006B	RW-9	W	440,e4	1	82

Reporting Limit for DF =1;	W	50	μg/L
ND means not detected at or	C	N/A	NT A
above the reporting limit	3	NA	NA

<sup>\*</sup> water samples are reported in  $\mu g/L$ , wipe samples in  $\mu g/wipe$ , soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / SPLP / TCLP extracts are reported in  $\mu g/L$ .

- b6) lighter than water immiscible sheen/product is present
- e4) gasoline range compounds are significant.



<sup>#)</sup> 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; &) low or no surrogate due to matrix interference.

<sup>+</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 42065 WorkOrder 0903385

EPA Method SW8260B	Extra	ction SW	5030B					5	Spiked Sar	nple ID	: 0903382-0	31C
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	Criteria (%)	1
, way to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	112	116	3.56	86	90.6	5.23	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	2.4	50	119	119	0	80.7	82.2	1.88	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	126	123	2.34	93.8	98.9	5.25	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	128	124	3.24	97.3	101	3.42	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	125	123	1.79	88.2	90.3	2.40	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	127	125	1.36	93.3	95.2	2.04	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	120	118	1.58	89.4	92.6	3.42	70 - 130	30	70 - 130	30
%SS1:	82	25	84	85	0.938	87	87	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 42065 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903385-001D	03/14/09 9:45 AM	03/20/09	03/20/09 12:45 AM	0903385-002D	03/14/09 1:15 PM	03/20/09	03/20/09 1:28 AM
0903385-003D	03/14/09 11:10 AM	03/20/09	03/20/09 2:11 AM	0903385-004D	03/14/09 10:15 AM	03/20/09	03/20/09 2:55 AM
0903385-005D	03/14/09 12:10 PM	03/20/09	03/20/09 3:38 AM	0903385-006D	03/14/09 8:55 AM	03/20/09	03/20/09 4:22 AM

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

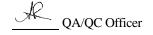
% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

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.

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.

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: 42067 WorkOrder 0903385

EPA Method SW8021B/8015Bm	Extra	ction SW	5030B					S	Spiked San	nple ID	: 0903392-0	02A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
7 thatyto	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btexf)	ND	60	93.1	85.4	8.65	113	105	6.99	70 - 130	20	70 - 130	20
MTBE	ND	10	93.2	94	0.909	109	115	5.35	70 - 130	20	70 - 130	20
Benzene	ND	10	96.3	88.3	8.58	98.7	102	3.21	70 - 130	20	70 - 130	20
Toluene	ND	10	89	81.6	8.64	109	113	3.18	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	95.6	86	10.5	108	111	3.30	70 - 130	20	70 - 130	20
Xylenes	ND	30	94.7	87.4	8.02	121	124	2.90	70 - 130	20	70 - 130	20
%SS:	93	10	99	99	0	93	95	2.09	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 42067 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903385-001A	03/14/09 9:45 AM	03/18/09	03/18/09 4:36 PM	0903385-002A	03/14/09 1:15 PM	03/19/09	03/19/09 6:51 PM
0903385-003A	03/14/09 11:10 AM	03/18/09	03/18/09 3:03 PM	0903385-004A	03/14/09 10:15 AM	03/18/09	03/18/09 4:04 PM
0903385-005A	03/14/09 12:10 PM	03/18/09	03/18/09 11:56 PM	0903385-006A	03/14/09 8:55 AM	03/18/09	03/18/09 4:35 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).

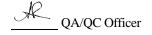
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the 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 SW8015B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 42066 WorkOrder: 0903385

EPA Method SW8015B	Extrac	tion SW	3510C/36	30C		Spiked Sample ID: N/A						
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
, and y to	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	90.3	90.3	0	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	86	85	1.00	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 42066 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903385-001C	03/14/09 9:45 AM	03/16/09	03/16/09 9:10 PM	0903385-002C	03/14/09 1:15 PM	03/16/09	03/16/09 10:16 PM
0903385-003C	03/14/09 11:10 AM	03/16/09	03/16/09 11:23 PM	0903385-004C	03/14/09 10:15 AM	03/16/09	03/17/09 12:29 AM
0903385-005C	03/14/09 12:10 PM	03/16/09	03/17/09 1:35 AM	0903385-006C	03/14/09 8:55 AM	03/16/09	03/17/09 2:42 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.

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.



### QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 42066 WorkOrder: 0903385

EPA Method SW8015B	Extraction SW3510C/3630C/Dawn Zemo Separation								Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)		
, many to	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	90.3	90.3	0	N/A	N/A	70 - 130	30	
%SS:	N/A	2500	N/A	N/A	N/A	86	85	1.00	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 42066 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0903385-001B	03/14/09 9:45 AM	03/16/09	03/19/09 10:18 AM	0903385-002B	03/14/09 1:15 PM	03/16/09	03/19/09 3:05 PM
0903385-003B	03/14/09 11:10 AM	03/16/09	03/19/09 4:16 PM	0903385-004B	03/14/09 10:15 AM	03/16/09	03/19/09 5:27 PM
0903385-005B	03/14/09 12:10 PM	03/16/09	03/19/09 6:38 PM	0903385-006B	03/14/09 8:55 AM	03/16/09	03/19/09 7:51 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



## WELL GAUGING SHEET

Client: Conestoga-Rovers and Associates

Site

Address: 3055 35th Avenue, Oakland, CA

Date:

3/14/2009

Signature:

-					r	
Well ID	Time	Depth to SPH	Depth to Water	SPH Thickness	Depth to Bottom	Comments
MW-1	7:20		12.57		27.35	
MW-2	8:05		10.52		27.60	
112.17	0.00		10.52		27.00	
MW-3	7:40	·	9.02		25.10	
141 44 -2	7.40		7.02		23.10	
2.6337.4	<b>77.0</b> 0		A 20		20.20	
MW-4	7:30		9.30		30.30	
						·
RW-5	7:50		6.82		25.65	
RW-6	7:45		7.16		25,35	
RW-7	7:35		7.94		29.20	
RW-8	7:25		9.25		29.00	
RW-9	7:15		8.97		25.20	
RW-10	7:10		8.02		24.95	
IX W-10	7.10		0.02		24.33	
DVV 46	<b>.</b>				• • • •	
RW-11	7:55		7.14		24.95	



## WELL GAUGING SHEET

						CONELI
Client:	Conestoga-I	Rovers and A	ssociates			
Site Address:	3055 35th A	Avenue, Oakl	and, CA			
Date:	3/14/2009	_	,	Signature:		
					/V ·	
Well ID	Time	Depth to SPH	Depth to Water	SPH Thickness	Depth to Bottom	Comments
RW-12	8:00		7.77		25.85	
RW-13	7:00		8.16		24.85	
RW-14	7:05		7.88		24.85	
						·
				:		



r				_ ~ ~ ~ ~ ~		ING PORM	_					
Date:		3/14/2009		*** ** *******************************								
Client:		Conestoga-l	Rovers and	l Associate	S							
Site Addı	dress: 3055 35th Avenue, Oakland, CA											
Well ID:		MW-1										
Well Diar	neter:	4"										
Purging D	evice:	3" Disposal	ole Bailer									
Sampling	Method:	3" Disposal	ble Bailer									
Total Wel	l Depth:			27.35	Fe=	mg/L						
Depth to V	Water:			12.57	ORP=	mV						
Water Co	lumn Heigh	t:		14.78	DO=	1.19 <b>mg/L</b>						
Gallons/ft	:			0.65								
1 Casing	Volume (ga	l):		9.61	COMMI	ENTS:						
	Volumes (ga			28.82	turbid, sh	neen						
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pН	COND. (μS)								
9:15	9.6	16.9	6.68	1070	1							
9:25	19.2	16.6	6.60	1095	1							
9:35	28.8	16.5	6.62	1040								
Sample ID:	Sample Da	ate:	Sample Time:	Containe	er Type	Preservative	Analytes					
MW-1	3/14/2009		9:45	40 ml VOA, 1 L Amber		HCl, ICE	TPHg BTEX MTBE TAME DIPE ETBE TBA	8015 with silica gel clean up, 8021 (Zemo) 8260B				
							EDB EDC					
						~		92				
			<u> </u>			Signatu	re: //					



territoria de la compansión de la compan	2/1/2000						
	3/14/2009			· · · · · · · · · · · · · · · · · · ·			
	Conestoga-l	Rovers and	Associate	S	······································		
ess:	3055 35th A	Avenue, Oa	akland, CA				
neter:	4"	-					
evice:	3" Disposal	ole Bailer				······································	
Method:	3" Disposal	ble Bailer			·		
l Depth:			27.60	Fe=	mg/L		
Water:			10.52	ORP=	mV		
umn Height	••		17.08	DO=	0.67 <b>mg/L</b>	· · · · · · · · · · · · · · · · · · ·	
			0.65				
Volume (gal	):		11.10	COMMI	ENTS:		
Volumes (ga	ıl):		33.31	turbid, he	eavy sheen		
CASING VOLUME	TEMP	рH	COND.				
		1		1			
22.2	16.6	6.70	810	1			:
33.3	16.8	6.64	812				
Sample Da	nte:	Sample Time:	Containe	er Type	Preservative	Analytes	Method
3/14/2009		1:15			HCl, ICE	TPHg BTEX MTBE TAME DIPE	8015 with silica gel clean up,
						EDB EDC	
					Signatur		  }
	ress:  meter: evice: Method: l Depth: Water: umn Height  Wolume (gal Wolumes (gal CASING VOLUME (gal) 11.1 22.2 33.3  Sample Da	MW-2  MW-2  Meter: 4"  evice: 3" Disposal  Method: 3" Disposal  Depth:  Water:  umn Height:  CASING VOLUME (gal):  CASING VOLUME TEMP (gal) (Celsius)  11.1 16.6  22.2 16.6  33.3 16.8  Sample Date:	Conestoga-Rovers and  MW-2  MW-2  neter: 4"  evice: 3" Disposable Bailer  Method: 3" Disposable Bailer  I Depth:  Water:  umn Height:  CASING VOLUME (gal):  CASING VOLUME (gal) (Celsius) pH  11.1 16.6 6.71  22.2 16.6 6.70  33.3 16.8 6.64  Sample Date: Sample  Time:	Conestoga-Rovers and Associate  Pess: 3055 35th Avenue, Oakland, CA  MW-2  Ineter: 4"  evice: 3" Disposable Bailer  Method: 3" Disposable Bailer  I Depth: 27.60  Water: 10.52  umn Height: 17.08  Evolume (gal): 11.10  Volumes (gal): 33.31  CASING VOLUME TEMP (gal) (Celsius) pH (µS)  11.1 16.6 6.71 795  22.2 16.6 6.70 810  33.3 16.8 6.64 812  Sample Date: Containe  40 ml VC	Conestoga-Rovers and Associates  Pess: 3055 35th Avenue, Oakland, CA  MW-2  Ineter: 4"  evice: 3" Disposable Bailer  Method: 3" Disposable Bailer  I Depth: 27.60 Fe=  Water: 10.52 ORP=  Water: 17.08 DO=  Evolume (gal): 11.10 COMMI  Volumes (gal): 33.31  CASING VOLUME TEMP (Celsius) pH (µs)  11.1 16.6 6.71 795  22.2 16.6 6.70 810  33.3 16.8 6.64 812  Sample Date: Container Type  40 ml VOA, 1 L	Conestoga-Rovers and Associates  3055 35th Avenue, Oakland, CA  MW-2  neter: 4"  evice: 3" Disposable Bailer  Method: 3" Disposable Bailer  1 Depth: 27.60 Fe= mg/L  Water: 10.52 ORP= mV  umn Height: 17.08 DO= 0.67 mg/L  : 0.65  Volume (gal): 33.31  CASING VOLUME (gal): 33.31  CASING VOLUME (Gal): COND. (µS)  11.11 16.6 6.71 795  22.2 16.6 6.70 810  33.3 16.8 6.64 812  Sample Date: Time: Container Type Preservative  40 ml VOA, 1 L  Amber HCl, ICE	Conestoga-Rovers and Associates  1



	e constanting from a		, ,		· · · · · · · · · · · · · · · · · · ·							
Date:		3/14/2009										
Client:		Conestoga-Rovers and Associates										
Site Addı	ess:	3055 35th A	Avenue, Oa	akland, CA								
Well ID:		MW-3										
Well Diar	neter:	2"										
Purging D	evice:	Disposable	Bailer									
Sampling	Method:	Disposable	Bailer									
Total Wel	l Depth:			25.10	Fe=	mg/L						
Depth to V	Water:			9.02	ORP=	mV	·					
Water Co	lumn Heigh	t:		16.08	DO=	1.14 <b>mg/</b> L						
Gallons/ft				0.16								
	Volume (ga	1).		2.57	СОММ	ENTS.						
	Volumes (g			7.72	┥	eavy sheen						
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pН	COND.								
10:35	2.6	17.0	6.61	1326	1							
10:35	5.1	16.8	6.63	1359	1							
10:45	7.7	16.9	6.59	1372	1							
10.55	,.,	10.5	0.55	1372	1							
Sample			Sample									
ID:	Sample D	ate:	Time:	Containe	r Type	Preservative	Analytes					
MW-3	3/14/2009		11:10	40 ml VC Amber	OA, 1 L	HCl, ICE	TPHg BTEX MTBE TAME DIPE ETBE TBA	8015 with silica gel clean up, 8021 (Zemo) 8260B				
							EDB EDC					
								9				
		Signature:										



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Date:		3/14/2009					v • · · · · · · · · · · · · · · · · · ·				
Client:		Conestoga-I	Rovers and	Associate	S						
Site Addr	ess:	3055 35th A	Avenue, Oa	akland, CA							
Well ID:		MW-4						,			
Well Dian	neter:	2"									
Purging D	evice:	Disposable	Bailer								
Sampling		Disposable	Bailer								
Total Wel	l Depth:			30.30	Fe=	mg/L		·			
Depth to V	Water:			9.30	ORP=	mV	· · · · · · · · · · · · · · · · · · ·				
Water Col	umn Heigh	t:		21.00	DO=	1.27 mg/L					
Gallons/ft	:			0.16							
1 Casing V	Volume (ga	l):		3.36	COMM	ENTS:	<del></del>				
	Volumes (g			10.08	turbid, sl	turbid, sheen					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pН	COND.							
10:00	3.4	17.3	6.52	871	1						
10:05	6.7	17.1	6.60	871	1						
10:10	10.1	16.9	6.58	875	-						
Sample ID:	Sample D	ate:	Sample Time:	Containe	er Type	Preservative	Analytes				
MW-4	3/14/2009		10:15	40 ml VOA, 1 L Amber		HCl, ICE	MTBE TAME DIPE ETBE TBA	8015 with silica gel clean up, 8021 (Zemo) 8260B			
							EDB EDC				
		·				Signatu	re:				



		<del></del>						
Date:		3/14/2009						
Client:		Conestoga-I	Rovers and	Associates	S			
Site Addr	ess:	3055 35th A	Avenue, Oa	ıkland, CA			<u></u>	
Well ID:		RW-5						
Well Dian	neter:	4"	<del></del>					
Purging D	evice:	3" Disposat	ole Bailer					
Sampling :	Method:	3" Disposal	ole Bailer			· · · · · · · · · · · · · · · · · · ·		
Total Well	Depth:			25.65	Fe=	mg/L		
Depth to V	Vater:			6.82	ORP=	mV		
Water Col	umn Heigh	t:		18.83	DO=	1.15 <b>mg/L</b>		
Gallons/ft				0.65				
1 Casing V	Volume (ga	):		12.24	СОММЕ	ENTS:		
	Volumes (ga			36.72	turbid, he	avy sheen		
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pН	COND.				
11:35	12.2	17.3	6.81	740				
11:45	24.5	17.6	6.79	716				
11:55	36.7	17.7	6.77	722				
~ ,			G 1				1	
Sample ID:	Sample Da	ate:	Sample Time:	Containe	r Type	Preservative	Analytes	Method
RW-5	3/14/2009		12:10	40 ml VO Amber	OA, 1 L	HCl, ICE	TPHg BTEX MTBE TAME DIPE ETBE TBA	8015 with silica gel clean up, 8021 (Zemo) 8260B
							EDB EDC TPHd	
						G:		
				<u> </u>		Signatu	re: //	

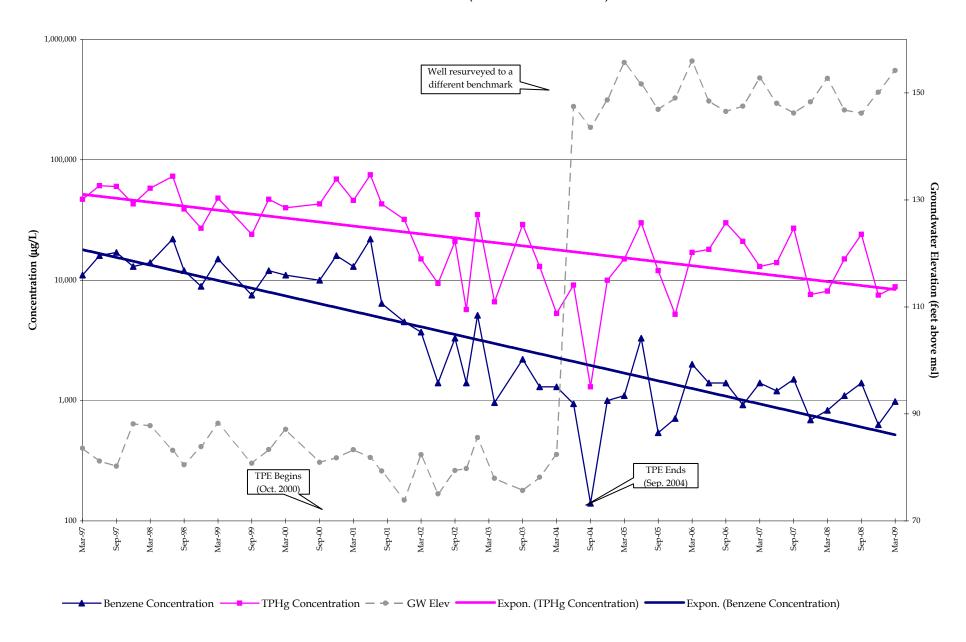


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Date:		3/14/2009	· · · · · · · · · · · · · · · · · · ·								
Client:		Conestoga-	Rovers and	l Associate	s						
Site Addı	ress:	3055 35th	Avenue, Oa	akland, CA							
Well ID:		RW-9									
Well Diar	neter:	4"									
Purging D	evice:	3" Disposal	ole Bailer	- <del> </del>							
Sampling	Method:	3" Disposa	ble Bailer			· · · · · · · · · · · · · · · · · · ·					
Total Wel	1 Depth:	· · · · · · · · · · · · · · · · · · ·		25.20	Fe=	mg/L					
Depth to V	Water:			8.97	ORP=	mV					
Water Co	lumn Heigh	t:		16.23	DO=	1.21 <b>mg/L</b>					
Gallons/ft	•			0.65							
1 Casino	Volume (ga	1).		10.55	COMM	COMMENTS:					
					turbid, sl						
3 Casing	Volumes (g CASING VOLUME	ТЕМР		31.65 COND.							
TIME:	(gal)	(Celsius)	pН	(μS)	4						
8:30	10.5	16.9	6.85	1370	1						
8:40	21.1	16.9	6.81	1354	-						
8:50	31.6	16.9	6.79	1329	_						
Sample ID:	Sample Da	ate:	Sample Time:	Containe	r Type	Preservative	Analytes				
RW-9	3/14/2009		8:55	40 ml VO Amber	A, 1 L	HCl, ICE	MTBE TAME DIPE	8015 with silica gel clean up,			
						ETBE TBA EDB EDC TPHd					
					,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
							K	B			
						Signatu	re: //	2			

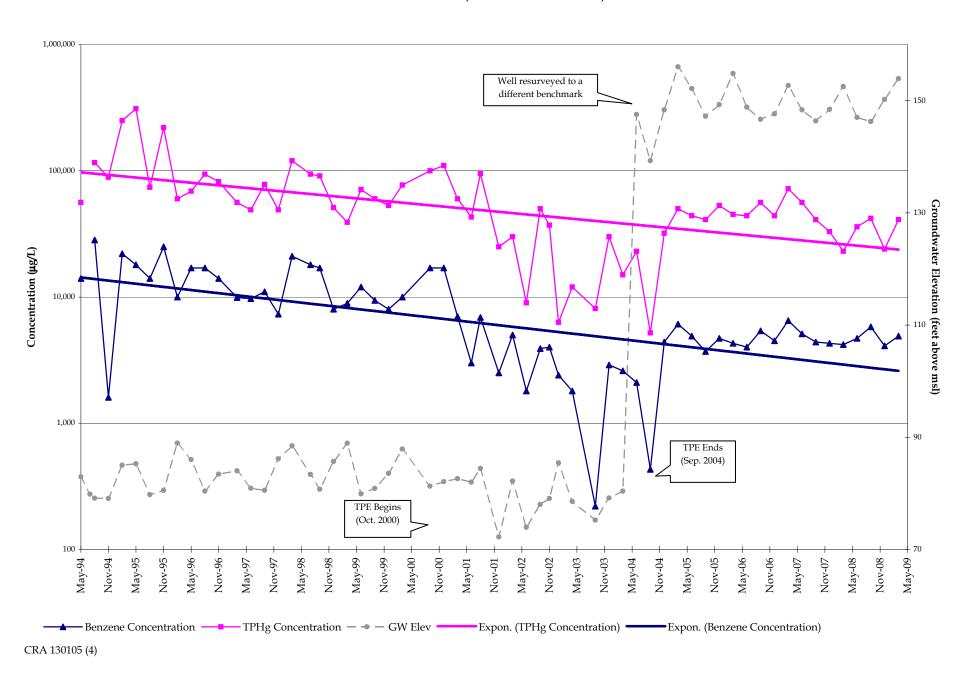
### APPENDIX D

TPHG AND BENZENE CONCENTRATION TREND GRAPHS

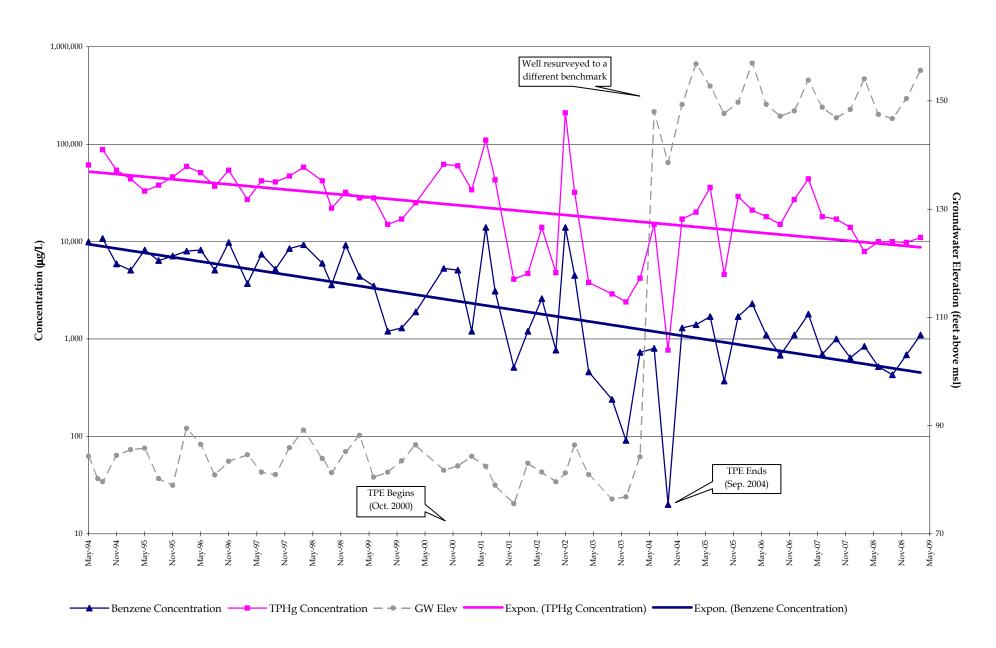
### TPHg and Benzene Concentration Trends Well MW-4 (March 1997 to Present)



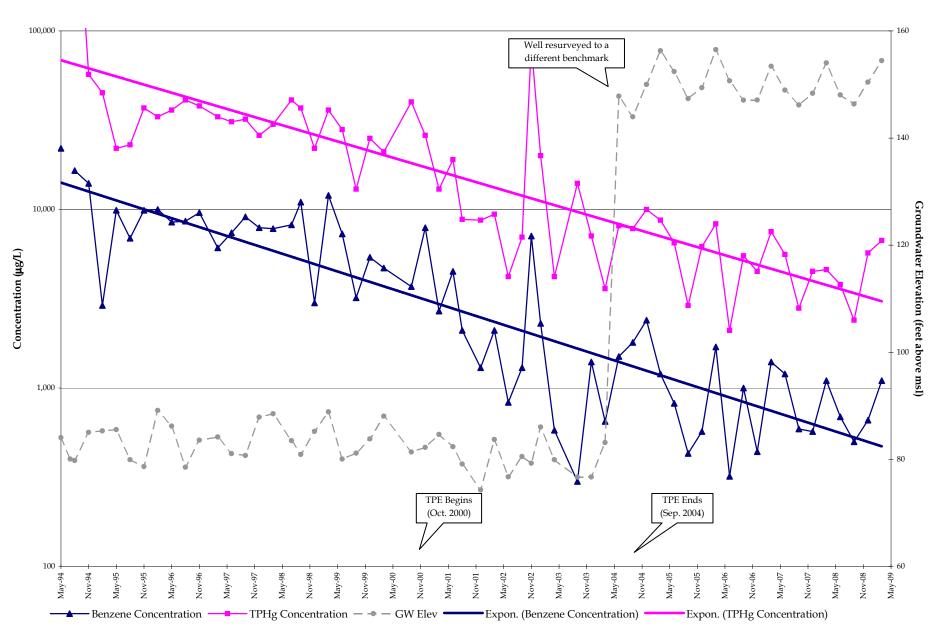
### TPHg and Benzene Concentration Trends Well MW-3 (March 1997 to Present)



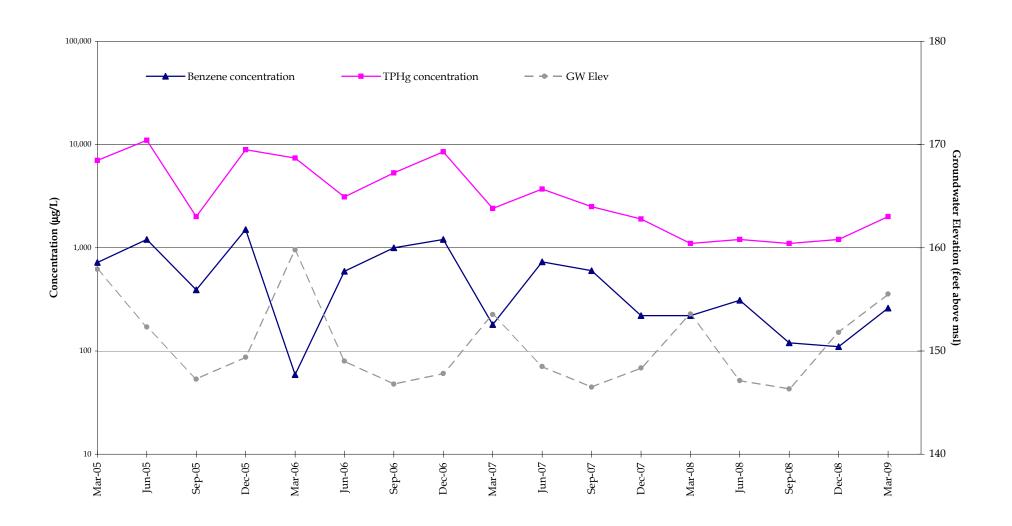
### TPHg and Benzene Concentration Trends Well MW-2 (March 1997 to Present)



### TPHg and Benzene Concentration Trends Well MW-1 (March 1997 to Present)



## TPHg and Benzene Concentration Trends Well RW-5 (March 2005 to Present)



## TPHg and Benzene Concentration Trends Well RW-9 (March 2005 to Present)

