



**CONESTOGA-ROVERS  
& ASSOCIATES**

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Alameda County  
Environmental Health

5900 Hollis Street, Suite A, Emeryville, California 94608  
Telephone: 510-420-0700 Facsimile: 510-420-9170  
www.CRAworld.com

June 5, 2008

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

Re: **Groundwater Monitoring Report  
First Quarter 2008**  
Former Exxon Service Station  
3055 35th Avenue, Oakland, California  
Fuel Leak Case No. RO0000271  
CRA Project No. 130105

Dear Mr. Plunkett:

On behalf of Golden Empire Properties, Inc., Conestoga-Rovers & Associates, Inc. (CRA) has prepared this *Groundwater Monitoring Report – First Quarter 2008*. Presented in the report are the first quarter 2008 activities and the anticipated second quarter 2008 activities. This report was delayed due to updates to the groundwater table with current or historic observations of sheen.

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

Sincerely,  
**Conestoga-Rovers & Associates, Inc.**

Mark Jonas, P.G.  
Senior Project Geologist

Attachments: *Groundwater Monitoring Report - First Quarter 2008*

cc: Golden Empire Properties, Inc., 5942 MacArthur Boulevard, Suite B, Oakland, California 94605  
Mr. Jeffrey Lawson, SVLG, 25 Metro Drive, Suite 600, San Jose, California 95110  
Ms. Dawn Zemo, Zemo & Associates, 986 Wander Way, Incline Village, NV 89451

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**CONESTOGA-ROVERS  
& ASSOCIATES**

## GROUNDWATER MONITORING REPORT - FIRST QUARTER 2008

**Former Exxon Service Station  
3055 35th Avenue, Oakland, California  
Fuel Leak Case No. RO0000271  
CRA Project No. 130105**

**June 5, 2008**

*Prepared for:*

Golden Empire Properties, Inc.  
5942 MacArthur Boulevard, Suite B  
Oakland, California 94605

*Prepared by:*

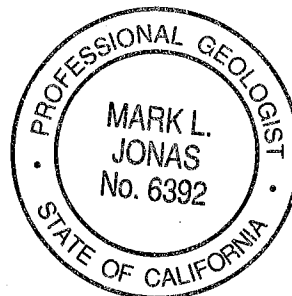
Conestoga-Rovers & Associates, Inc.  
5900 Hollis Street, Suite A  
Emeryville, California 94608

*Written by:*

Erin Reinhart-Koylu  
Staff Geologist

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Mark Jonas, P.G.  
Senior Project Geologist





**CONESTOGA-ROVERS  
& ASSOCIATES**

## **GROUNDWATER MONITORING REPORT – FIRST QUARTER 2008**

**Former Exxon Service Station  
3055 35th Avenue, Oakland, California  
Fuel Leak Case No. RO0000271  
CRA Project No. 130105**

**June 5, 2008**

### **INTRODUCTION**

On behalf of Golden Empire Properties, Inc., Conestoga-Rovers & Associates, Inc. (CRA) has prepared this *Groundwater Monitoring Report – First Quarter 2008* for the referenced site (see Figure 1). Presented in the report are the first quarter 2008 activities and anticipated second quarter 2008 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. Appendix A contains field data sheets for this monitoring event. Appendix B is the recent laboratory analytical report. Appendix C is time-series plots with benzene and total petroleum hydrocarbons as gasoline (TPHg) concentrations, and groundwater elevations.

### **FIRST QUARTER 2008 ACTIVITIES**

#### **Monitoring Activities**

**Field Activities:** On March 9, 2008, CRA subcontracted 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 A. 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 A.



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.

**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; and for benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method SW8021B. The laboratory used a modified Zemo & Associates' *Protocol for Gravity Separation of Groundwater Samples to Isolate the Water Phase* (Zemo Separation Protocol). 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 A. The laboratory analytical report is presented as Appendix B. The analytical data has been submitted to the GeoTracker database.

## **Monitoring Results**

**Groundwater Flow Direction:** Based on depth to water measurements collected during MES's March 9, 2008 site visit, groundwater beneath the site flows towards the southwest with a gradient of 0.04 ft/ft (Figure 2). The groundwater gradient is generally consistent with historical static groundwater conditions. Groundwater monitoring data is presented in Table 2.

**Hydrocarbon Distribution in Groundwater:** Hydrocarbon concentrations were detected in all six sampled wells. TPHg concentrations ranged from 1,100 micrograms per liter ( $\mu\text{g/L}$ ) to 23,000  $\mu\text{g/L}$ , with the highest concentration detected in well MW-3. Benzene concentrations ranged from 220  $\mu\text{g/L}$  to 4,200  $\mu\text{g/L}$ , with the highest concentration detected in wells MW-3 And RW-9. TPHd concentrations ranged from 90  $\mu\text{g/L}$  to 3,400  $\mu\text{g/L}$ , with the highest concentration detected in well MW-3. MTBE was not detected at or above the laboratory reporting during this sampling event. Hydrocarbon concentrations are generally stable or lower than the fourth quarter 2007 monitoring event (see Appendix C for individual well concentration trend graphs). TPHd may have decreased due to the use of the Zemo Separation Protocol and it should represent just the dissolved phase. Analytical results are summarized in Table 2 and shown on Figure 2.

## **Corrective Action Activities**

No corrective action activities took place during the first quarter 2008.



**CONESTOGA-ROVERS  
& ASSOCIATES**

Groundwater Monitoring Report – First Quarter 2008

Fuel Leak Case No. RO0000271

June 5, 2008

## **ANTICIPATED SECOND QUARTER 2008 ACTIVITIES**

### **Monitoring Activities**

During the second quarter 2008, CRA will coordinate 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; and for BTEX and MTBE by EPA Method SW8021B. The laboratory shall also use the Zemo & Associates *Protocol for Gravity Separation of Groundwater Samples to Isolate the Water Phase*, but only for TPHd extractables. CRA will summarize groundwater monitoring activities and results in the *Groundwater Monitoring Report – Second Quarter 2008*.

### **Offsite and Onsite Characterization**

We are implementing the approved Work Plan for additional onsite and offsite characterization. An investigation report will follow.

## **ATTACHMENTS**

Figure 1 – Vicinity Map

Figure 2 – Groundwater Elevation and Hydrocarbon Concentration Map – March 9, 2008

Table 1 – Well Construction Details

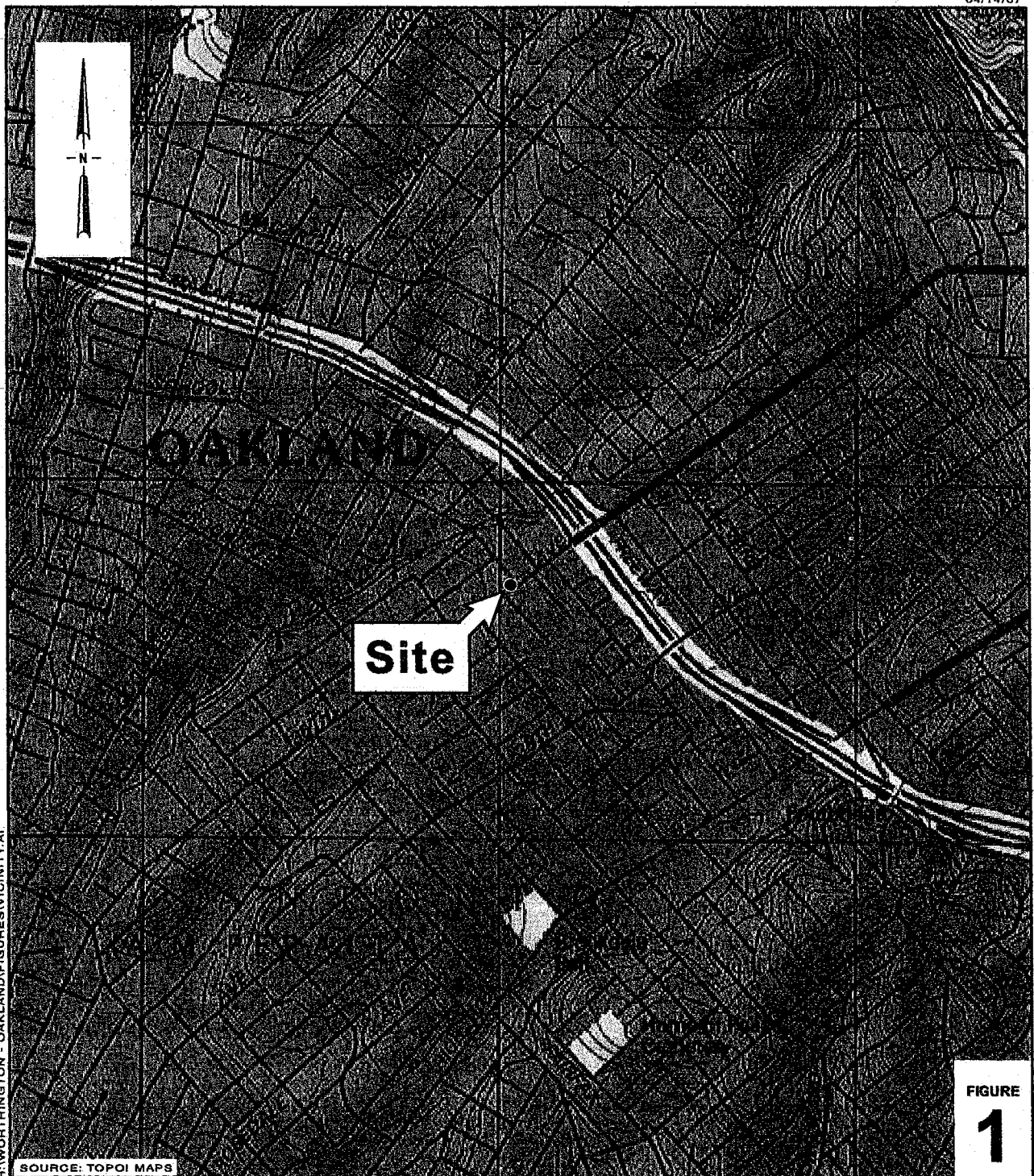
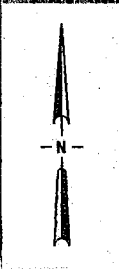
Table 2 – Groundwater Elevations and Analytical Data

Appendix A – Field Data Sheets

Appendix B – Laboratory Analytical Report

Appendix C – TPHg and Benzene Concentration Trend Graphs

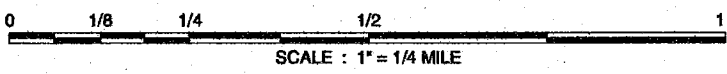
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SOURCE: TOPOI MAPS

FIGURE  
**1**

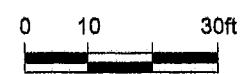
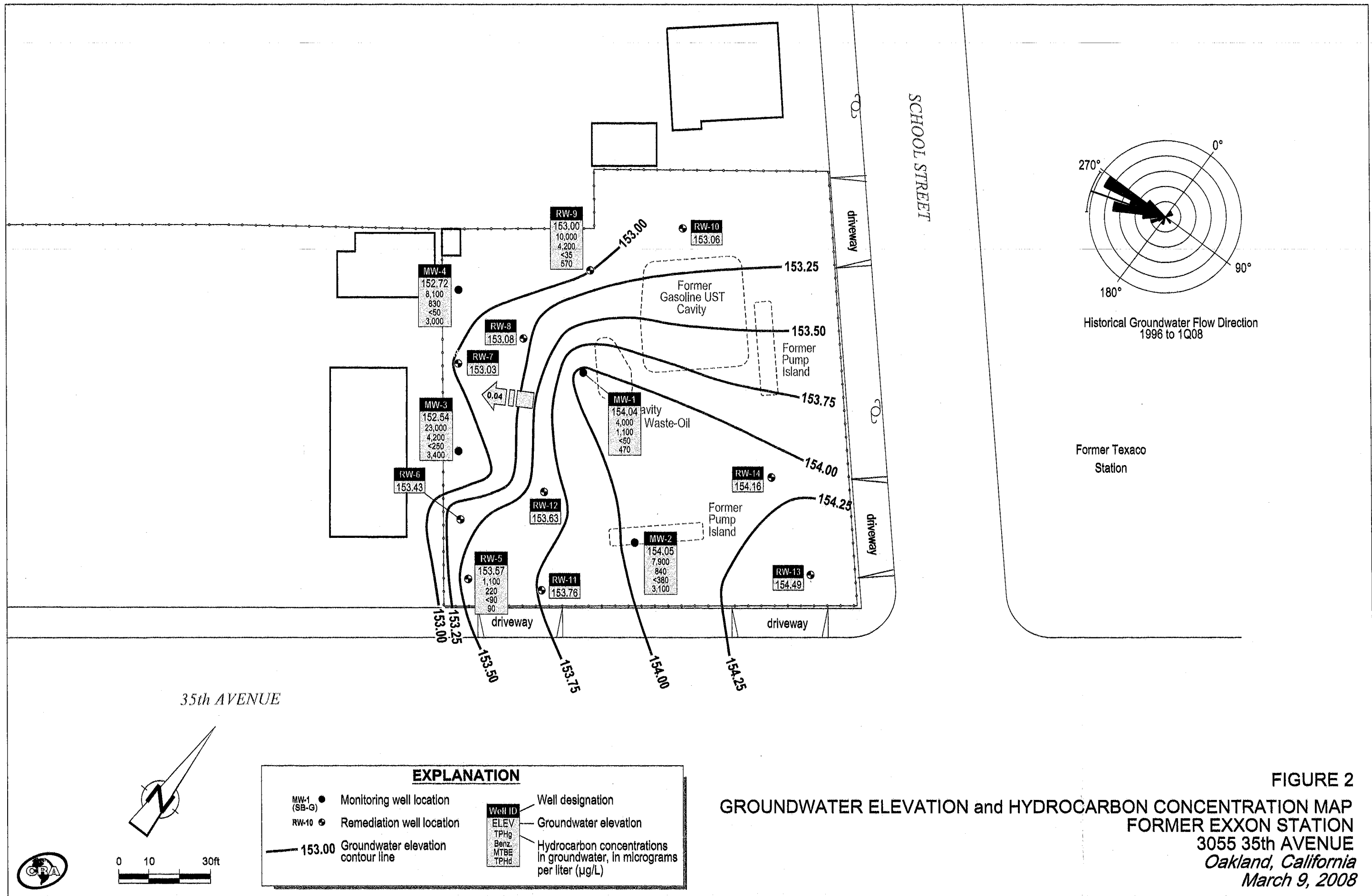


**Former Exxon Station**  
3035 35th Avenue  
Oakland, California



**CONESTOGA-ROVERS  
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**Vicinity Map**



# Conestoga-Rovers & Associates

**Table 1. Well Construction Details - Former Exxon Service Station, 3055 35th 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)
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



# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID	Date	TOC GW	SPH	GW	Note	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System	
TOC		Depth (ft)	(ft)	Elev. (ft)		Concentrations in micrograms per liter (µg/L)										Status
MW-1	5/25/1994	16.79	Sheen	84.06		120,000	25,000	<50,000	22,000	17,000	2,800	16,000	---	---		
100.85	7/19/1994	20.77	---	80.08		---	---	---	---	---	---	---	---	---		
	8/18/1994	21.04	Sheen	79.81		925,000	---	---	16,500	6,200	1,000	9,400	---	---		
	11/11/1994	15.80	---	85.05		57,000	---	---	14,000	4,400	1,400	6,400	---	---		
	2/27/1995	15.53	---	85.32		45,000	---	---	2,900	2,500	760	4,100	---	---		
	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		33,000	4,300	---	10,000	480	1,000	1,800	3,300	---		
	5/21/1996	14.62	---	86.23		36,000	8,500	---	8,500	1,400	1,300	2,800	1,900	---		
	8/22/1996	22.30	---	78.55		41,000	6,200	---	8,600	1,300	1,500	2,900	<200	8.0		
	11/27/1996	17.24	Sheen	83.61		38,000	6,100	---	9,600	950	1,600	3,100	<400	5.6		
	3/20/1997	16.65	---	84.20		33,000	10,000	---	6,100	560	970	2,200	<400	8.5		
	6/25/1997	19.77	---	81.08		31,000	7,400 <sup>a</sup>	---	7,400	440	890	1,800	<400	3.7		
	9/17/1997	20.12	---	80.73		32,000 <sup>d</sup>	3,500 <sup>e</sup>	---	9,100	550	1,000	2,000	<1,000	2.1		
	12/22/1997	12.95	---	87.90		26,000 <sup>d</sup>	5,800 <sup>e</sup>	---	7,900	370	920	1,500	<790	0.7		
	3/18/1998	12.34	Sheen	88.51		30,000 <sup>d</sup>	4,200 <sup>e,f</sup>	---	7,800	820	840	2,000	<1,100	1.3		
	7/14/1998	17.34	---	83.51		41,000 <sup>d</sup>	8,900 <sup>e,f</sup>	---	8,200	1,100	1,200	3,000	<200	1.8		
	9/30/1998	19.90	---	80.95		37,000	3,300	---	11,000	950	1,200	2,800	<20	2.0		
	12/8/1998	15.62	---	85.23		22,000	3,700	---	3,000	1,200	730	3,100	<900	---		
	3/29/1999	11.98	---	88.87		36,000 <sup>d</sup>	6,800 <sup>e</sup>	---	12,000	750	1,300	2,400	950	0.50		
	6/29/1999	20.77	---	80.08		28,000 <sup>d</sup>	3,500 <sup>e</sup>	---	7,300	420	810	1,700	<1,300	0.10		
	9/28/1999	19.68	---	81.17		13,000 <sup>d</sup>	3,600 <sup>e,f</sup>	---	3,200	130	320	1,100	<210	0.55		
	12/10/1999	17.02	---	83.83		25,000 <sup>d</sup>	2,900 <sup>e,f</sup>	---	5,400	130	620	1,400	<1,000	1.03		
	3/23/2000	12.76	---	88.09		21,000 <sup>d</sup>	3,300 <sup>f</sup>	---	4,700	140	470	1,100	<350	---		
	9/7/2000	19.45	---	81.40		40,000 <sup>d,g</sup>	12,000 <sup>e,g</sup>	---	3,700	1,400	910	4,900	<50	0.17		
	12/5/2000	18.60	---	82.25		26,000 <sup>d</sup>	3,400 <sup>e</sup>	---	7,900	150	580	810	<300	0.35	Not operating	
	3/7/2001	16.19	---	84.66		13,000	2,400	---	2,700	43	69	300	<100	0.49	Not operating	
	6/6/2001	18.47	---	82.38		19,000	4,000	---	4,500	130	270	430	<400	0.39	Not operating	
	8/30/2001	21.70	---	79.15		8,800 <sup>a</sup>	1,400 <sup>d</sup>	---	2,100	45	91	240	<130	0.27	Operating	
	12/7/2001	26.55	---	74.30		8,700 <sup>d</sup>	1,900 <sup>e,f</sup>	---	1,300	160	38	730	<20	0.59	Operating	
	3/11/2002	17.13	---	83.72		9,400 <sup>d</sup>	1,400 <sup>e</sup>	---	2,100	200	74	470	<20	0.39	Operating	
	6/10/2002	24.10	---	76.75		4,200 <sup>d</sup>	900 <sup>e,k</sup>	---	830	170	110	460	<100	---	Operating	
	9/26/2002	20.30	---	80.55		7,000 <sup>d</sup>	1,300 <sup>e,f,k</sup>	---	1,300	190	200	760	<100	0.70	Operating	
	11/21/2002	21.55	---	79.30		83,000 <sup>d,g</sup>	200,000 <sup>e,g</sup>	---	7,100	1,700	3,000	13,000	<1,000	0.49	Operating	
	1/13/2003	14.80	---	86.05		20,000 <sup>d</sup>	5,300 <sup>e,f</sup>	---	2,300	480	300	2,100	<500	0.33	Not operating	
	4/25/2003	20.90	---	79.95		4,200 <sup>d</sup>	320 <sup>e</sup>	---	580	81	59	470	<50	---	Operating	
	5/30/2003	16.65	---	84.20		---	---	---	---	---	---	---	---	---	Not operating	
	9/3/2003	24.16	---	76.69		14,000 <sup>d</sup>	36,000 <sup>e,f</sup>	---	300	50	33	480	<50	---	Operating	
	12/2/2003	24.12	Sheen <sup>Lab</sup>	76.73		7,100 <sup>d,g</sup>	9,300 <sup>e,f,g</sup>	---	1,400	230	160	820	<100	---	Operating	

# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID TOC	Date	TOC GW Depth (ft)	SPH (ft)	GW Elev. (ft)	Note	Concentrations in micrograms per liter (µg/L)								DO (mg/L)	DPE System Status
						TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE		
167.02	3/18/2004	17.70	---	83.15		3,600 <sup>d</sup>	1,100 <sup>a,f</sup>	---	650	59	38	370	<90	---	Operating
MW-1	6/16/2004	19.20	---	147.82		8,100 <sup>d</sup>	2,300 <sup>a,f</sup>	---	1,500	69	22	1,000	<100	---	Not operating
Continued	9/27/2004	23.07	---	143.95		7,800 <sup>d</sup>	1,700 <sup>e</sup>	---	1,800	110	120	670	<180	0.28	Not operating
	12/27/2004	17.04	---	149.98		10,000 <sup>d</sup>	1,400 <sup>e</sup>	---	2,400	170	170	1,500	<120	0.41	Not operating
	3/7/2005	10.73	---	156.29		8,700 <sup>d</sup>	1,300 <sup>a,f,k</sup>	---	1,200	99	140	770	<500	0.91	Not operating
	6/21/2005	14.60	---	152.42		6,500 <sup>d</sup>	930 <sup>a,k</sup>	---	820	26	57	110	<250	---	Not operating
	9/21/2005	19.64	---	147.38		2,900 <sup>d</sup>	860 <sup>a,k,f</sup>	---	430	19	46	150	<50	1.14	Not operating
	12/14/2005	17.63	Sheen Field	149.39		6,200 <sup>d</sup>	4,000 <sup>a,f,k</sup>	---	570	32	72	420	<110	1.08	Not operating
	3/22/2006	10.52	Sheen Field	156.50		8,300 <sup>d</sup>	1,100 <sup>a,f,k</sup>	---	1,700	100	190	660	<150	0.84	Not operating
	6/30/2006	16.33	Sheen Field	150.69		2,100 <sup>d,l</sup>	1,500 <sup>a,k,l</sup>	---	320	6.1	<1.0	77	<90	0.66	Not operating
	9/5/2006	19.96	Sheen Lab	147.06		9,500 <sup>d,g</sup>	1,500 <sup>a,f,k,g</sup>	---	1,000	45	81	310	<120	0.38	Not operating
	12/6/2006	19.92	Sheen Lab	147.10		4,500 <sup>d,g</sup>	760 <sup>a,g</sup>	---	440	13	42	190	<60	0.55	Not operating
	3/16/2007	13.62	---	153.40		7,500 <sup>d</sup>	1,800 <sup>a,f</sup>	---	1,400	30	100	270	<150	0.58	Not Operating
	6/15/2007	18.07	Sheen Field	148.95		5,600 <sup>d</sup>	1,500 <sup>a,k,f</sup>	---	1,200	29	84	190	56	0.74	Not Operating
	9/6/2007	20.84	---	146.18		2,800 <sup>d</sup>	690 <sup>a,f</sup>	---	590	17	35	100	<80	0.90	Not Operating
	12/8/2007	18.66	Sheen Field	148.36		4,500 <sup>d</sup>	520 <sup>a,f</sup>	---	570	13	57	200	<120	1.24	Not Operating
	3/9/2008	12.98	Sheen Field	154.04	Z	4,600 <sup>d</sup>	470 <sup>e</sup>	<250	1,100	23	82	140	<50	1.17	Not operating
MW-2	5/25/1994	15.65	---	84.35		61,000	6,900	<5,000	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	---	
	5/21/1996	13.47	---	86.53		51,000	3,400	---	8,200	5,200	1,300	6,600	2,400	---	
	8/22/1996	19.12	---	80.88		37,000	5,700	---	5,100	3,500	960	4,500	<200	3.0	
	11/27/1996	16.61	Sheen	83.39		54,000	10,000	---	9,800	7,000	1,800	7,900	<2,000	3.1	
	3/20/1997	15.39	---	84.61		27,000	6,100	---	3,700	2,300	580	2,800	<400	8.1	
	6/25/1997	18.62	---	81.38		42,000	7,800 <sup>b</sup>	---	7,400	3,800	1,200	5,700	<200	0.9	
	9/17/1997	19.05	Sheen	80.95		41,000 <sup>d</sup>	8,900 <sup>e</sup>	---	5,200	3,400	1,300	5,900	<700	1.2	
	12/22/1997	14.09	---	85.91		47,000 <sup>d</sup>	6,100 <sup>e</sup>	---	8,500	4,600	1,800	8,400	<1,200	1.2	
	3/18/1998	10.83	Sheen	89.17		58,000 <sup>d</sup>	7,000 <sup>a,f</sup>	---	9,300	6,100	1,800	8,200	<1,100	1.1	
	7/14/1998	16.07	---	83.93		42,000 <sup>d</sup>	5,300 <sup>a,f</sup>	---	6,000	3,000	1,000	4,800	<200	1.5	
	9/30/1998	18.71	---	81.29		22,000	2,400	---	3,600	1,300	720	3,200	<30	1.8	
	12/8/1998	14.80	---	85.20		32,000	3,100	---	9,200	680	1,100	2,300	<2,000	---	
	3/29/1999	11.81	---	88.19		28,000 <sup>d</sup>	7,500 <sup>a,f</sup>	---	4,400	1,600	950	4,100	410	1.86	
	6/29/1999	19.54	---	80.46		28,000 <sup>d</sup>	3,300 <sup>e</sup>	---	3,500	1,100	690	3,100	<1,000	0.41	

# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID	Date	TOC GW	SPH	GW	Note	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System		
TOC		Depth (ft)	(ft)	Elev. (ft)		Concentrations in micrograms per liter (µg/L)										(mg/L)	Status
MW-2	9/28/1999	18.61	---	81.39		15,000 <sup>d</sup>	3,400 <sup>e,f</sup>	---	1,200	540	230	2,300	<36	1.18			
Continued	12/10/1999	16.53	---	83.47		17,000 <sup>d</sup>	2,500 <sup>e,f</sup>	---	1,300	780	420	2,700	<40	0.17			
	3/23/2000	13.56	---	86.44		25,000 <sup>d</sup>	3,100 <sup>i</sup>	---	1,900	1,100	660	3,700	<500	---			
	9/7/2000	18.25	---	81.75		62,000 <sup>d,g</sup>	32,000 <sup>e,g</sup>	---	5,300	2,300	1,500	8,400	<100	0.39			
	12/5/2000	17.45	---	82.55		60,000 <sup>d,g</sup>	87,000 <sup>e,f,g</sup>	---	5,100	2,200	1,600	9,000	<200	0.31	Not operating		
	3/7/2001	15.68	---	84.32		34,000	3,900	---	1,200	770	620	4,300	<200	0.44	Not operating		
	6/6/2001	17.51	---	82.49		110,000	48,000	---	14,000	9,000	1,900	12,000	<950	0.24	Not operating		
	8/30/2001	21.00	---	79.00		43,000 <sup>a,h</sup>	15,000 <sup>d,h</sup>	---	3,100	720	980	5,500	<200	---	Operating		
	12/7/2001	24.45	---	75.55		4,100 <sup>d</sup>	750 <sup>e,f</sup>	---	510	88	8.2	580	<20	0.47	Operating		
	3/11/2002	16.95	---	83.05		4,700 <sup>d</sup>	590 <sup>e</sup>	---	1,200	150	30	310	<50	0.24	Operating		
	6/10/2002	18.59	---	81.41		14,000 <sup>d</sup>	2,000 <sup>c</sup>	---	2,600	710	150	2,000	<800	---	Operating		
	9/26/2002	20.39	---	79.61		4,800 <sup>d</sup>	660 <sup>c</sup>	---	770	200	140	740	<50	0.29	Operating		
	11/21/2002	18.75	---	81.25		210,000 <sup>d,g</sup>	350,000 <sup>e,g</sup>	---	14,000	23,000	4,400	28,000	<1,700	0.43	Operating		
	1/13/2003	13.60	Sheen Lab	86.40		32,000 <sup>d,g</sup>	14,000 <sup>e,f,g,k</sup>	---	4,500	1,600	920	3,600	<1000	0.39	Not operating		
	4/25/2003	19.05	---	80.95		3,800 <sup>d</sup>	310 <sup>c</sup>	---	460	78	72	410	310	---	Operating		
	5/30/2003	15.23	---	84.77		---	---	---	---	---	---	---	---	---	Not operating		
	9/3/2003	23.57	---	76.43		2,900 <sup>d</sup>	2,300 <sup>c</sup>	---	240	57	68	380	770	---	Operating		
	12/2/2003	23.17	Sheen Lab	76.83		2,400 <sup>d,g</sup>	3,300 <sup>e,f,g</sup>	---	91	20	14	250	890	---	Operating		
	3/18/2004	15.78	---	84.22		4,200 <sup>d</sup>	870 <sup>e,f</sup>	---	730	89	<5.0	480	2,300	---	Operating		
166.14	6/16/2004	18.15	---	147.99		15,000 <sup>d</sup>	9,800 <sup>e,f</sup>	---	800	210	290	1,800	2,000	---	Not operating		
(Monument	9/27/2004	27.55**	---	138.59		770 <sup>d</sup>	1,000 <sup>e,f,k</sup>	---	20	7.9	10	140	1,600	0.79	Operating		
Well box)	12/27/2004	16.81	---	149.33		17,000 <sup>d</sup>	3,800 <sup>e,f</sup>	---	1,300	370	540	3,800	620	0.94	Not operating		
	3/7/2005	9.31	Sheen Field & Lab	156.83		20,000 <sup>d,g</sup>	8,300 <sup>e,f,k,g</sup>	---	1,400	330	430	2,600	1,100	0.88	Not operating		
	6/21/2005	13.42	Sheen Lab	152.72		36,000 <sup>d,g</sup>	15,000 <sup>e,f,g</sup>	---	1,700	310	460	3,100	1,200	---	Not operating		
	9/21/2005	18.50	Sheen Field	147.64		4,600 <sup>d</sup>	1,100 <sup>e,f</sup>	---	370	62	110	740	1,100	0.86	Not operating		
	12/14/2005	16.40	Sheen Field & Lab	149.74		29,000 <sup>d,g</sup>	49,000 <sup>e,f,k,g</sup>	---	1,700	260	600	3,700	1,000	0.99	Not operating		
	3/22/2006	9.15	Sheen Lab	156.99		21,000 <sup>d,g</sup>	23,000 <sup>e,f,k,g</sup>	---	2,300	200	550	2,800	1,200	0.91	Not operating		
	6/30/2006	16.78	Sheen Field & Lab	149.36		18,000 <sup>d,g</sup>	55,000 <sup>e,f,k,g</sup>	---	1,100	71	270	1,400	1,200	0.84	Not operating		
	9/5/2006	18.96	Sheen Lab	147.18		15,000 <sup>d,g</sup>	19,000 <sup>e,f,k,g</sup>	---	680	70	260	1,400	<1,000	0.79	Not operating		
	12/6/2006	18.01	Sheen Field & Lab	148.13		27,000 <sup>d,g</sup>	31,000 <sup>e,f,k,g</sup>	---	1,100	51	420	1,600	<900	0.48	Not operating		
	3/16/2007	12.31	Sheen Field & Lab	153.83		44,000 <sup>d,g</sup>	49,000 <sup>e,f,k,g</sup>	---	1,800	71	670	2,200	<900	0.52	Not operating		
	6/15/2007	17.31	Sheen Field & Lab	148.83		18,000 <sup>d,g</sup>	21,000 <sup>e,k,f,g</sup>	---	700	22	290	740	<650	0.68	Not operating		
	9/6/2007	19.28	Sheen Field & Lab	146.86		17,000 <sup>d,h</sup>	8,400 <sup>e,f,g</sup>	---	1,000	53	450	1,100	<700	0.72	Not operating		
	12/8/2007	17.72	Sheen Field & Lab	148.42		14,000 <sup>d,g</sup>	3,600 <sup>e,f,g</sup>	---	640	13	220	520	<300	0.80	Not operating		
	3/9/2008	12.09	Sheen Field	154.05	Z	7,900 <sup>d</sup>	3,100 <sup>e</sup>	<250	840	24	280	380	<380	0.68	Not operating		
MW-3	5/25/1994	13.93	Sheen	82.94		56,000	14,000	<50,000	14,000	14,000	1,300	11,000	---	---			
96.87	7/19/1994	17.04	---	79.83		---	---	---	---	---	---	---	---	---			
	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	---	---			

# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID	Date	TOC.GW	SPH	GW	Note	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		Depth (ft)	(ft)	Elev. (ft)		Concentrations in micrograms per liter (µg/L)								(mg/L)	Status
MW-3	2/27/1995	11.86	Sheen	85.01		250,000	---	---	22,000	26,000	7,800	21,000	---	---	
Continued	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		69,000	13,000	---	17,000	9,400	1,700	9,400	2,600	---	
	8/22/1996	16.50	---	80.37		94,000	16,000	---	17,000	15,000	2,100	12,000	330	2.0	
	11/27/1996	13.47	Sheen	83.40		82,000	24,000	---	14,000	13,000	2,400	13,000	<1,000	2.4	
	3/20/1997	12.86	---	84.01		56,000	11,000	---	9,900	6,900	1,300	8,000	3,500	9.0	
	6/25/1997	15.98	---	80.89		49,000	7,700 <sup>b</sup>	---	9,700	7,100	1,300	7,000	220	5.8	
	9/17/1997	16.34	Sheen	80.53		78,000 <sup>d</sup>	15,000 <sup>e</sup>	---	11,000	9,900	1,800	10,000	<1,200	0.7	
	12/22/1997	10.71	Sheen	86.16		49,000 <sup>d</sup>	14,000 <sup>e</sup>	---	7,300	5,300	1,400	7,500	<1,100	3.1	
	3/18/1998	8.41	Sheen	88.46		120,000 <sup>d</sup>	20,000 <sup>e,f</sup>	---	21,000	19,000	2,600	15,000	<1,600	1.6	
	7/14/1998	13.51	---	83.36		94,000 <sup>d,g</sup>	65,000 <sup>e,f,g</sup>	---	18,000	14,000	1,900	11,000	<1,400	1.8	
	9/30/1998	16.14	---	80.73		91,000	9,800	---	17,000	13,000	2,100	12,000	<1,300	2.0	
	12/8/1998	11.20	---	85.67		51,000	4,200	---	8,000	6,800	1,400	7,500	<1,100	---	
	3/29/1999	7.95	---	88.92		39,000 <sup>d</sup>	4,600 <sup>e</sup>	---	8,900	4,400	940	4,500	810	0.56	
	6/29/1999	16.98	---	79.89		71,000 <sup>d</sup>	6,900 <sup>e</sup>	---	12,000	7,300	1,400	8,400	<1,700	0.19	
	9/28/1999	15.99	---	80.88		60,000 <sup>d</sup>	7,800 <sup>e</sup>	---	9,400	9,200	1,000	9,900	200	0.53	
	12/10/1999	13.31	---	83.56		53,000 <sup>d</sup>	5,300 <sup>e,f</sup>	---	8,000	6,400	1,100	8,100	<200	0.48	
	3/23/2000	8.98	---	87.89		77,000 <sup>d,g</sup>	11,000 <sup>e,j</sup>	---	10,000	9,400	1,600	11,000	<430	---	
	9/7/2000	15.61	---	81.26		100,000 <sup>d,g</sup>	19,000 <sup>e,f,g</sup>	---	17,000	12,000	1,600	11,000	<500	---	
	12/5/2000	14.80	---	82.07		110,000 <sup>d,g</sup>	17,000 <sup>e,g</sup>	---	17,000	11,000	1,900	12,000	<750	0.37	Not operating
	3/7/2001	14.27	---	82.60		60,000	13,000	---	7,000	4,600	900	7,100	<350	0.49	Not operating
	6/6/2001	14.88	---	81.99		43,000	12,000	---	3,000	1,000	770	5,200	<400	1.71	Not operating
	8/30/2001	12.43	---	84.44		95,000 <sup>a,h</sup>	190,000 <sup>d,h</sup>	---	6,900	10,000	2,700	15,000	<250	0.24	Operating
	12/7/2001	24.65	---	72.22		25,000 <sup>d</sup>	3,900 <sup>e,f</sup>	---	2,500	1,700	64	2,200	<200	0.19	Operating
	3/11/2002	14.69	---	82.18		30,000 <sup>d</sup>	2,800 <sup>e,c,k</sup>	---	5,000	2,400	190	1,800	<1,300	0.30	Operating
	6/10/2002	22.94	---	73.93		9,000 <sup>d</sup>	990 <sup>e,k</sup>	---	1,800	1,300	96	1,000	<300	---	Operating
	9/26/2002	18.85	---	78.02		50,000 <sup>d,g</sup>	130,000 <sup>e,g</sup>	---	3,900	5,400	820	6,600	<500	0.19	Operating
	11/21/2002	17.85	0.05	79.06		37,000 <sup>d,g</sup>	120,000 <sup>e,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		21,000 <sup>d,g</sup>	6,300 <sup>e,f,g,k</sup>	---	2,400	2,300	390	3,000	<500	0.31	Not operating
	4/25/2003	18.30	---	78.57		12,000 <sup>d</sup>	1,200 <sup>e</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		8,100 <sup>d</sup>	3,300 <sup>e</sup>	---	220	170	66	560	<50	---	Operating
	12/2/2003	17.70	Sheen <sup>Lab</sup>	79.17		30,000 <sup>d,g</sup>	8,400 <sup>e,f,g</sup>	---	2,900	2,100	530	3,600	<500	---	Operating
	3/18/2004	16.49	---	80.38		15,000 <sup>d</sup>	2,300 <sup>e,f</sup>	---	2,600	990	260	1,700	<300	---	Operating
162.94	6/16/2004	15.40	---	147.54		23,000 <sup>d</sup>	8,800 <sup>e,f</sup>	---	2,100	1,300	360	2,800	<1,000	---	Operating
	9/27/2004	23.65	---	139.29		5,200 <sup>d</sup>	1,700 <sup>e,f</sup>	---	430	220	100	680	250	0.55	Operating
	12/27/2004	14.58	Sheen <sup>Lab</sup>	148.36		32,000 <sup>d,g</sup>	24,000 <sup>e,f,g,k</sup>	---	4,400	2,800	650	4,800	<250	0.71	Not operating

# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID	Date	TOC GW	SPH	GW	Note	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		Depth (ft)	(ft)	Elev. (ft)		Concentrations in micrograms per liter (µg/L)								(mg/L)	Status
MW-3	3/7/2005	6.91	Sheen Field & Lab	156.03		50,000 <sup>d,g</sup>	14,000 <sup>e,f,g</sup>	---	6,100	2,100	1,300	7,400	<500	0.62	Not operating
Continued	6/21/2005	10.79	Sheen Field & Lab	152.15		44,000 <sup>d,g</sup>	12,000 <sup>e,g</sup>	---	4,900	870	1,100	6,500	<1,200	---	Not operating
	9/21/2005	15.73	Sheen Field & Lab	147.21		41,000 <sup>d,g</sup>	16,000 <sup>e,f,k,g</sup>	---	3,700	480	930	5,700	<500	0.90	Not operating
	12/14/2005	13.65	Sheen Field & Lab	149.29		53,000 <sup>d,g</sup>	19,000 <sup>e,f,k,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		45,000 <sup>d,g</sup>	15,000 <sup>e,f,k,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		44,000 <sup>d,g</sup>	15,000 <sup>e,f,k,g</sup>	---	4,000	160	550	4,000	<450	0.81	Not operating
	9/5/2006	16.25	Sheen Field & Lab	146.69		56,000 <sup>d,g</sup>	16,000 <sup>e,f,k,g</sup>	---	5,400	300	1,200	6,200	<500	0.55	Not operating
	12/6/2006	15.25	Sheen Field & Lab	147.69		44,000 <sup>d,g</sup>	19,000 <sup>e,f,k,g</sup>	---	4,500	110	930	3,600	<500	0.70	Not operating
	3/16/2007	10.25	Sheen Field & Lab	152.69		72,000 <sup>d,g</sup>	5,300 <sup>e,f,k,g</sup>	---	6,500	420	1,200	3,900	<1,000	0.61	Not operating
	6/15/2007	14.57	Sheen Field & Lab	148.37		56,000 <sup>d,g</sup>	25,000 <sup>e,k,f,g</sup>	---	5,100	200	1,100	3,200	<1000	0.48	Not operating
	9/6/2007	16.55	Sheen Field & Lab	146.39		41,000 <sup>d,g</sup>	14,000 <sup>e,f,g</sup>	---	4,400	180	1,000	3,800	<700	0.70	Not operating
	12/8/2007	14.49	Sheen Field & Lab	148.45		33,000 <sup>d,g</sup>	4,000 <sup>e,f,g</sup>	---	4,300	120	370	2,200	<250	0.77	Not operating
	3/9/2008	10.40	Sheen Field	152.54	Z	23,000 <sup>d</sup>	3,400 <sup>e</sup>	310	4,200	120	650	1,600	<250	0.71	Not operating
MW-4	3/20/1997	13.75	---	83.59		47,000	3,100	---	11,000	4,500	1,100	5,200	3,400	8.4	
97.34	6/25/1997	16.15	---	81.19		61,000	5,800 <sup>b</sup>	---	16,000	6,100	1,500	5,900	780 <sup>c</sup>	1.4	
	9/17/1997	17.10	---	80.24		60,000 <sup>d</sup>	4,400 <sup>e</sup>	---	17,000	4,900	1,500	5,700	<1,500	1.5	
	12/22/1997	9.21	---	88.13		43,000 <sup>d</sup>	3,100 <sup>e</sup>	---	13,000	3,900	1,100	4,200	<960	3.7	
	3/18/1998	9.54	---	87.80		58,000 <sup>d</sup>	5,500 <sup>e,f</sup>	---	14,000	4,700	1,400	5,700	<1,200	0.8	
	7/14/1998	14.15	---	83.19		73,000 <sup>d</sup>	2,900 <sup>e,f</sup>	---	22,000	7,000	1,800	7,300	<200	1.0	
	9/30/1998	16.84	---	80.50		39,000	2,100	---	12,000	2,700	1,000	3,400	510	1.1	
	12/8/1998	13.45	---	83.89		27,000	1,600	---	8,900	1,600	730	2,300	<1,500	---	
	3/29/1999	9.10	---	88.24		48,000 <sup>d</sup>	2,400 <sup>e,f,h</sup>	---	15,000	3,000	1,300	5,000	1,300	1.32	
	06/29/99*	---	---	---		---	---	---	---	---	---	---	---	---	
	9/28/1999	16.58	---	80.76		24,000 <sup>d</sup>	3,200 <sup>e,f</sup>	---	7,500	1,200	190	2,200	210	14.29 <sup>#</sup>	
	12/10/1999	13.99	---	83.35		47,000 <sup>d</sup>	3,100 <sup>e,f</sup>	---	12,000	1,800	1,000	4,400	<100	0.62	
	3/23/2000	10.22	---	87.12		40,000 <sup>d</sup>	3,100 <sup>e,f</sup>	---	11,000	1,600	910	3,100	690	---	
	9/7/2000	16.40	---	80.94		43,000 <sup>d</sup>	5,900 <sup>e</sup>	---	10,000	1,100	1,100	3,400	<450	1.04	
	12/5/2000	15.55	---	81.79		69,000 <sup>d,g</sup>	2,600 <sup>e,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		75,000	5,400	---	22,000	1,800	1,900	6,400	<1,200	2.22	Not operating
	8/30/2001	18.00	---	79.34		43,000 <sup>a</sup>	3,200 <sup>d</sup>	---	6,400	630	510	2,600	<200	0.32	Operating
	12/7/2001	23.45	---	73.89		32,000 <sup>d,g</sup>	11,000 <sup>e,f,g</sup>	---	4,500	740	310	2,300	<200	0.21	Operating
	3/11/2002	14.95	---	82.39		15,000 <sup>d</sup>	1,600 <sup>e,f,k</sup>	---	3,700	500	92	790	<500	0.30	Operating
	6/10/2002	22.30	---	75.04		9,400 <sup>d</sup>	3,400 <sup>e</sup>	---	1,400	50	<5.0	690	<200	---	Operating
	9/26/2002	17.93	---	79.41		21,000 <sup>d</sup>	800 <sup>e</sup>	---	3,300	1,300	450	2,900	<500	0.24	Operating
	11/21/2002	17.55	---	79.79		5,700 <sup>d</sup>	2,400 <sup>e,k</sup>	---	1,400	290	63	640	550	---	Operating
	1/13/2003	11.75	Sheen Lab	85.59		35,000 <sup>d,g</sup>	15,000 <sup>e,f,g,k</sup>	---	5,100	1,500	510	4,500	<800	0.28	Not operating
	4/25/2003	19.37	---	77.97		6,600 <sup>d</sup>	2,200 <sup>e,f</sup>	---	960	130	100	560	<170	---	Operating
	5/30/2003	13.56	---	83.78		---	---	---	---	---	---	---	---	---	Not operating

# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID	Date	TOC GW	SPH	GW	Note	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System	
TOC		Depth (ft)	(ft)	Elev. (ft)		Concentrations in micrograms per liter (µg/L)									(mg/L)	Status
MW-4	9/3/2003	21.65	---	75.69		29,000 <sup>d</sup>	27,000 <sup>e,f</sup>	---	2,200	380	280	2,300	65	---	Operating	
Continued	12/2/2003	19.17	---	78.17		13,000 <sup>d</sup>	5,800 <sup>e,f</sup>	---	1,300	180	120	1,900	<250	---	Operating	
	3/18/2004	14.92	---	82.42		5,300 <sup>d</sup>	1,500 <sup>e</sup>	---	1,300	55	37	440	<180	---	Operating	
163.49	6/16/2004	16.02	---	147.47		9,100 <sup>d</sup>	3,400 <sup>e,f</sup>	---	940	96	120	800	<50	---	Not operating	
	9/27/2004	19.93	---	143.56		1,300 <sup>d</sup>	980 <sup>e,f,k</sup>	---	140	10	11	81	<50	0.68	Not operating	
	12/27/2004	14.79	Sheen <sup>Lab</sup>	148.70		10,000 <sup>d,g</sup>	5,300 <sup>e,f,g,k</sup>	---	1,000	99	34	1,600	<50	0.74	Not operating	
	3/7/2005	7.81	Sheen <sup>Field &amp; Lab</sup>	155.68		15,000 <sup>d,g</sup>	9,300 <sup>e,f,g</sup>	---	1,100	140	88	1,900	<100	0.65	Not operating	
	6/21/2005	11.82	Sheen <sup>Field &amp; Lab</sup>	151.67		30,000 <sup>d,g</sup>	12,000 <sup>e,g</sup>	---	3,300	270	250	2,800	<500	---	Not operating	
	9/21/2005	16.55	Sheen <sup>Field &amp; Lab</sup>	146.94		12,000 <sup>d,g</sup>	15,000 <sup>e,f,k,g</sup>	---	540	100	54	1,800	<50	0.89	Not operating	
	12/14/2005	14.43	Sheen <sup>Field &amp; Lab</sup>	149.06		5,200 <sup>d,g</sup>	9,800 <sup>e,f,k,g</sup>	---	710	41	91	540	<50	0.91	Not operating	
	3/22/2006	7.52	Sheen <sup>Field &amp; Lab</sup>	155.97		17,000 <sup>d,g</sup>	9,300 <sup>e,f,k,g</sup>	---	2,000	230	150	1,900	<50	0.80	Not operating	
	6/30/2006	15.00	Sheen <sup>Field &amp; Lab</sup>	148.49		18,000 <sup>d,g</sup>	19,000 <sup>e,f,g</sup>	---	1,400	50	60	1,300	<100	0.85	Not operating	
	9/5/2006	16.96	Sheen <sup>Field &amp; Lab</sup>	146.53		30,000 <sup>d,g</sup>	9,400 <sup>e,f,k,g</sup>	---	1,400	180	110	4,300	<500	0.75	Not operating	
	12/6/2006	15.95	Sheen <sup>Field &amp; Lab</sup>	147.54		21,000 <sup>d,g</sup>	22,000 <sup>e,f,g</sup>	---	920	56	73	1,500	<100	0.71	Not operating	
	3/16/2007	10.71	Sheen <sup>Field &amp; Lab</sup>	152.78		13,000 <sup>d,g</sup>	2,700 <sup>e,f,k,g</sup>	---	1,400	32	93	740	<100	0.65	Not operating	
	6/15/2007	15.43	Sheen <sup>Field &amp; Lab</sup>	148.06		14,000 <sup>d,g</sup>	7,200 <sup>e,g</sup>	---	1,200	46	63	850	<110	0.61	Not operating	
	9/6/2007	17.25	Sheen <sup>Field &amp; Lab</sup>	146.24		27,000 <sup>d,g</sup>	8,400 <sup>e,f,k,g</sup>	---	1,500	150	120	4,500	<250	0.55	Not operating	
	12/8/2007	15.15	Sheen <sup>Field &amp; Lab</sup>	148.34		7,600 <sup>d,g</sup>	790 <sup>e,f,g</sup>	---	690	27	39	570	<80	0.72	Not operating	
	3/9/2008	10.77	Sheen <sup>Field</sup>	152.72	Z	8,100 <sup>d</sup>	3,000 <sup>e</sup>	<250	830	7.7	55	310	<50	0.79	Not operating	
RW-5 162.34	1/13/2003	10.20	---	---		14,000	3,000	---	2,100	750	300	1,800	950	0.17		
	3/18/2003	14.48	---	---		12,000	---	---	2,000	380	190	1,500	830	---	Not operating	
	6/16/2004	14.73	---	147.61		---	---	---	---	---	---	---	---	---	Operating	
	9/27/2004	25.55	---	136.79		---	---	---	---	---	---	---	---	---	Not operating	
	12/27/2004	10.45	---	151.89		---	---	---	---	---	---	---	---	---	Not operating	
	3/7/2005	4.42	Sheen <sup>Field</sup>	157.92		7,000 <sup>d</sup>	6,100 <sup>e,f,k</sup>	---	720	63	97	670	<400	0.93	Not operating	
	6/21/2005	10.02	Sheen <sup>Field</sup>	152.32		11,000 <sup>d</sup>	490 <sup>e</sup>	---	1,200	67	68	690	<500	---	Not operating	
	9/21/2005	15.07	Sheen <sup>Field &amp; Lab</sup>	147.27		2,000 <sup>d,g</sup>	2,500 <sup>e,f,k,g</sup>	---	390	16	24	170	1,300	0.99	Not operating	
	12/14/2005	12.95	Sheen <sup>Field &amp; Lab</sup>	149.39		8,900 <sup>d,g</sup>	6,200 <sup>e,f,k,g</sup>	---	1,500	92	180	750	2,300	1.03	Not operating	
	3/22/2006	2.55	Sheen <sup>Field</sup>	159.79		7,400 <sup>d</sup>	2,700 <sup>e,f,k</sup>	---	59	76	20	120	<50	1.10	Not operating	
	6/30/2006	13.32	Sheen <sup>Field</sup>	149.02		3,100 <sup>d</sup>	3,100 <sup>e,f,k</sup>	---	590	15	27	88	410	0.89	Not operating	
	9/5/2006	15.55	Sheen <sup>Field &amp; Lab</sup>	146.79		5,300 <sup>d,g</sup>	3,200 <sup>e,f,k,g</sup>	---	1,000	31	61	230	370	0.81	Not operating	
	12/6/2006	14.53	Sheen <sup>Field &amp; Lab</sup>	147.81		8,500 <sup>d,g</sup>	5,500 <sup>e,f,g</sup>	---	1,200	24	91	250	<900	0.79	Not operating	
	3/16/2007	8.81	Sheen <sup>Field &amp; Lab</sup>	153.53		2,400 <sup>d,g</sup>	2,500 <sup>e,f,k,g</sup>	---	180	3.3	7.3	10	<17	0.62	Not operating	
	6/15/2007	13.84	Sheen <sup>Field &amp; Lab</sup>	148.50		3,700 <sup>d,g</sup>	2,000 <sup>e,k,g</sup>	---	730	14	36	80	<150	0.65	Not operating	
	9/6/2007	15.85	Sheen <sup>Field</sup>	146.49		2,500 <sup>d</sup>	1,000 <sup>e,f</sup>	---	600	12	24	92	180	0.68	Not operating	
12/8/2007	13.99	Sheen <sup>Field</sup>	148.35		1,900 <sup>d</sup>	370 <sup>e,f</sup>	---	220	4.0	10	38	500	0.74	Not operating		
3/9/2008	8.77	Sheen <sup>Field</sup>	153.57	Z	1,100 <sup>d</sup>	90 <sup>e</sup>	<250	220	5.3	4.9	10	<90	0.92	Not operating		
RW-6	3/11/2002	--	---	---		14,000	3,100	---	970	520	170	2,200	<130	---		

# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID	Date	TOC GW	SPH	GW	Note	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System		
TOC		Depth (ft)	(ft)	Elev. (ft)		Concentrations in micrograms per liter (µg/L)										(mg/L)	Status
162.36	1/13/2003	10.35	--	--		15,000	2,900	--	2,200	1,200	130	2,200	440	0.24			
RW-6	3/18/2004	11.47	--	--		8,500	--	--	1,300	260	71	990	1,300	--			
Continued	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		
RW-7	3/11/2002	--	--	--		<50	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--			
162.72	1/13/2003	10.95	--	--		<50	67	--	<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		
RW-8	3/11/2002	--	--	--		1,300	80	--	620	11	15	14	<60	--			

# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID	Date	TOC GW Depth (ft)	SPH (ft)	GW Elev. (ft)	Note	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO (mg/L)	DPE System Status
		Concentrations in micrograms per liter (µg/L)													
164.13	1/13/2003	12.80	---	---		390	56	---	150	11	4.1	4.1	13	0.31	
RW-8	3/18/2004	15.34	---	---		760	---	---	310	9.9	11	16	<25	---	
Continued	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
	6/30/2006	15.31	---	148.82		---	---	---	---	---	---	---	---	---	Not operating
	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
RW-9	3/11/2002	---	---	---		12,000	880	---	3,400	230	78	1,300	<240	---	
163.86	1/13/2003	11.85	---	---		23,000	2,000	---	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		9,000 <sup>d</sup>	510 <sup>e</sup>	---	2,600	69	200	550	<500	0.91	Not operating
	6/21/2005	11.90	---	151.96		9,400 <sup>d</sup>	630 <sup>e</sup>	---	2,400	69	210	470	<350	---	Not operating
	9/21/2005	16.62	Sheen Lab	147.24		8,300 <sup>d,g</sup>	820 <sup>e,f,g</sup>	---	2,500	36	190	310	<170	1.04	Not operating
	12/14/2005	14.52	---	149.34		6,300 <sup>d</sup>	1,100 <sup>e,f</sup>	---	1,900	29	150	260	<50	0.98	Not operating
	3/22/2006	7.63	---	156.23		7,600 <sup>d</sup>	680 <sup>e</sup>	---	2,900	59	190	310	<200	0.95	Not operating
	6/30/2006	15.04	---	148.82		14,000 <sup>d</sup>	1,400 <sup>e</sup>	---	3,100	53	130	260	<300	0.73	Not operating
	9/5/2006	17.02	---	146.84		14,000 <sup>d</sup>	1,100 <sup>e</sup>	---	3,900	39	200	230	<330	0.69	Not operating
	12/6/2006	16.04	Sheen Lab	147.82		13,000 <sup>d,g</sup>	660 <sup>e,g</sup>	---	3,000	29	180	260	<250	0.74	Not operating
	3/16/2007	10.83	Sheen Lab	153.03		16,000 <sup>d,g</sup>	1,200 <sup>e</sup>	---	3,700	76	230	340	<350	0.71	Not operating
	6/15/2007	15.48	---	148.38		12,000 <sup>d</sup>	670 <sup>e</sup>	---	3,000	44	170	220	<250	0.68	Not operating
	9/6/2007	17.29	Sheen Field & Lab	146.57		13,000 <sup>d,g</sup>	2,200 <sup>e,f,g</sup>	---	2,700	61	240	350	<400	0.66	Not operating
	12/8/2007	15.22	Sheen Field	148.64		9,300 <sup>d</sup>	1,000 <sup>e,f</sup>	---	2,900	24	150	170	<250	0.89	Not operating
	3/9/2008	10.86	---	153.00	Z	10,000 <sup>d</sup>	570 <sup>e</sup>	<250	4,200	71	180	380	<35	0.86	Not operating
RW-10	3/11/2002	---	---	---		12,000	740	---	3,900	150	110	1,100	<270	---	



# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID	Date	TOC GW	SPH	GW	Note	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		Depth (ft)	(ft)	Elev. (ft)		Concentrations in micrograms per liter (µg/L)								(mg/L)	Status
163.02	1/13/2003	10.75	---	---		4,300	330	---	1,500	43	98	98	<100	0.41	
RW-10	3/18/2004	13.13	---	---		5,800	---	---	2,400	11	<10	110	<300	---	
Continued	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
RW-11	3/11/2002	---	---	---		260	<50	---	34	5.3	8.1	48	<5.0	---	
162.57	1/13/2003	9.80	---	---		5,300	2,700	---	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
	9/21/2005	15.09	---	147.48		---	---	---	---	---	---	---	---	---	Not operating
	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
RW-12	3/11/2002	---	---	---		13,000	900	---	4,500	130	130	270	<5.0	---	

# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID	Date	TOC GW	SPH	GW	Note	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System
TOC		Depth (ft)	(ft)	Elev. (ft)		Concentrations in micrograms per liter (µg/L)								(mg/L)	Status
163.06	1/13/2003	10.90	--	--		4,100	1,800	--	1,000	130	99	99	<100	0.21	
RW-12	3/18/2004	13.63	--	--		17,000	--	--	2,700	960	230	1,500	1,400	--	
Continued	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
RW-13	3/11/2002	--	--	--		830	79	--	190	13	13	34	<5.0	--	
164.34	1/13/2003	11.20	--	--		210	92	--	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
RW-14	3/11/2002	--	--	--		270	82	--	44	0.99	<0.5	4.2	<5.0	--	

# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data - Former Exxon Service Station, 3055 35th Avenue, Oakland, California**

Well ID	Date	TOC GW	SPH	GW	Note	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO	DPE System	
TOC		Depth (ft)	(ft)	Elev. (ft)		Concentrations in micrograms per liter (µg/L)									(mg/L)	Status
163.76	1/13/2003	11.00	---	---		3700	6800	---	230	77	91	91	<50	0.38		
RW-14	3/18/2004	12.81	---	---		220	---	---	42	1.4	0.99	5.2	<5.0	---		
Continued	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	
	3/7/2005	6.61	---	157.15		---	---	---	---	---	---	---	---	---	Not operating	
	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	

**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 Gravity Separation of Groundwater Samples to Isolate the Water Phase Protocol (Zemo)

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

TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method SW8015C

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

DO = Dissolved oxygen

µg/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

**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

\* = 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



**CONESTOGA-ROVERS  
& ASSOCIATES**

**APPENDIX A  
Field Data Sheet**



## WELL GAUGING SHEET

<b>Client:</b> Conestoga-Rovers and Associates						
<b>Site Address:</b> 3055 35th Avenue, Oakland, CA						
<b>Date:</b> 3/9/2008			<b>Signature:</b>			
Well ID	Time	Depth to SPH	Depth to Water	SPH Thickness	Depth to Bottom	Comments
MW-1	6:35		12.98		27.35	
MW-2	7:00		12.09		27.60	
MW-3	7:05		10.40		25.10	
MW-4	6:45		10.77		30.30	
RW-5	6:15		8.77		25.65	
RW-6	6:20		8.93		25.34	
RW-7	6:30		9.69		29.20	
RW-8	6:40		11.05		29.00	
RW-9	6:50		10.86		25.20	
RW-10	6:10		9.96		24.95	
RW-11	6:55		8.81		24.95	



## WELL SAMPLING FORM

<b>Date:</b> 3/9/2008																															
<b>Client:</b> Conestoga-Rovers and Associates																															
<b>Site Address:</b> 3055 35th Avenue, Oakland, CA																															
<b>Well ID:</b> MW-1																															
<b>Well Diameter:</b> 4"																															
<b>Purging Device:</b> 3" PVC Bailer																															
<b>Sampling Method:</b> Disposable Bailer																															
<b>Total Well Depth:</b> 27.35	<b>Fe=</b> mg/L																														
<b>Depth to Water:</b> 12.98	<b>ORP=</b> mV																														
<b>Water Column Height:</b> 14.37	<b>DO=</b> 1.17 mg/L																														
<b>Gallons/ft:</b> 0.65																															
<b>1 Casing Volume (gal):</b> 9.34	<b>COMMENTS:</b> very turbid, silty, sheen																														
<b>3 Casing Volumes (gal):</b> 28.02																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">TIME:</th> <th style="width: 10%;">CASING VOLUME (gal)</th> <th style="width: 10%;">TEMP (Celsius)</th> <th style="width: 10%;">pH</th> <th style="width: 10%;">COND. (µS)</th> </tr> </thead> <tbody> <tr> <td>9:50</td> <td>9.3</td> <td>17.3</td> <td>6.70</td> <td>1290</td> </tr> <tr> <td>10:00</td> <td>18.7</td> <td>17.2</td> <td>6.68</td> <td>1329</td> </tr> <tr> <td>10:15</td> <td>28.0</td> <td>16.7</td> <td>6.65</td> <td>1316</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (µS)	9:50	9.3	17.3	6.70	1290	10:00	18.7	17.2	6.68	1329	10:15	28.0	16.7	6.65	1316										
TIME:		CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (µS)																										
9:50		9.3	17.3	6.70	1290																										
10:00	18.7	17.2	6.68	1329																											
10:15	28.0	16.7	6.65	1316																											
<b>Sample ID:</b>	<b>Sample Date:</b>	<b>Sample Time:</b>	<b>Container Type</b>	<b>Preservative</b>	<b>Analytes</b>	<b>Method</b>																									
MW-1	3/9/2008	10:25	40 ml VOA, 1 L Amber	HCl, ICE	TPHg BTEX MTBE TPHd	8015 with silica gel clean up, 8021 (Zemo)																									
<b>Signature:</b>																															















**CONESTOGA-ROVERS  
& ASSOCIATES**

**APPENDIX B**  
**Laboratory Analytical Report**

**McC Campbell Analytical, Inc.**

"When Quality Counts"

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

Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #130105; Golden Empire Properties	Date Sampled: 03/09/08
	Client Contact: Mark Jonas	Date Received: 03/10/08
	Client P.O.:	Date Reported: 03/19/08
		Date Completed: 03/19/08

**WorkOrder: 0803209**

March 19, 2008

Dear Mark:

Enclosed within are:

- 1) The results of the **6** analyzed samples from your project: **#130105; Golden Empire Properties,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

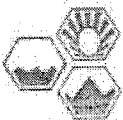
If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
Laboratory Manager  
McC Campbell Analytical, Inc.

0803289



**McCAMPBELL ANALYTICAL, INC.**  
 1534 WILLOW PASS ROAD  
 PITTSBURG, CA 94565-1701  
 Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
 Telephone: (877) 252-9262 Fax: (925) 252-9269

**CHAIN OF CUSTODY RECORD**  
 TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

GeoTracker EDF  PDF  Excel  Write On (DW)

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

Report To: Mark Jonas Bill To: Ceresia-Royce Associates  
 Company: Ceresia-Royce Associates  
5900 Hollis Street, Ste. A  
Emeryville, CA E-Mail: mjonas@ceresiaroyce.com  
 Tele: (510) 420-3307 Fax: (510) 420-9170  
 Project #: 130105 Project Name: Golden Emporium  
 Project Location: 3055 35th Ave, Oakland, CA  
 Sampler Signature: Muskan Environmental Sampling

Analysis Request		Other	Comments
<input type="checkbox"/>	MTBE & TPH as Gas (602 / 802 / 8015) / MTBE		Filter Samples for Metals analysis: Yes / No
<input type="checkbox"/>	TPH as Diesel (6015) / TPH as Gas		
<input type="checkbox"/>	Total Petroleum Oil & Grease (1664 / 5520 EPA&F)		
<input type="checkbox"/>	Total Petroleum Hydrocarbons (418.1)		
<input type="checkbox"/>	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)		
<input type="checkbox"/>	MTBE / BTEX ONLY (EPA 502 / 8021)		
<input type="checkbox"/>	EPA 502.6/608 / 6081 (C) Pesticides		
<input type="checkbox"/>	EPA 608 / 8082 (CFE & ONLY) Aroclors / Congeners		
<input type="checkbox"/>	EPA 507 / 8141 (NP Pesticides)		
<input type="checkbox"/>	EPA 815 / 8151 (Acidic Cl Herbicides)		
<input type="checkbox"/>	EPA 814.2 / 624 / 8360 (VOCs)		
<input type="checkbox"/>	EPA 815.2 / 625 / 8370 (SYOC)		
<input type="checkbox"/>	EPA 8270 SIM / 8310 (PAHs / PNAH)		
<input type="checkbox"/>	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)		
<input type="checkbox"/>	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)		
<input type="checkbox"/>	Lead (200.7 / 200.8 / 6010 / 6020)		

Pre-analysis gravity separation test

SAMPLE ID	LOCATION / Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED						
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO <sub>3</sub>	Other			
MW-1		3/9/08	10:25	1	200ml	X						X	X				
MW-2			12:25	1								X	X				
MW-3			2:30	1								X	X				
MW-4			10:55	1								X	X				
RW-5			9:30	1								X	X				
RW-9			11:40	1								X	X				

Relinquished By: <u>[Signature]</u>	Date: <u>3/10/08</u>	Time: <u>5:05 PM</u>	Received By: <u>[Signature]</u>	<u>Vall</u>
Relinquished By:	Date:	Time:	Received By:	
Relinquished By:	Date:	Time:	Received By:	

COMMENTS:  
 ICE? 2.72  
 GOOD CONDITION   
 HEAD SPACE ABSENT   
 DECHLORINATED IN LAB   
 APPROPRIATE CONTAINERS   
 PRESERVED IN LAB   
 VOAS  O&G  METALS  OTHER   
 PRESERVATION  pH < 2



## Zemo & Associates LLC

988 Wander Way  
Incline Village, NV 89451  
Tel/Fax: 775-831-6179  
dzemo@zemoassociates.com

### Protocol for Gravity Separation of Groundwater Samples to Isolate the Water Phase

Groundwater samples may contain non-dissolved petroleum resulting from entrained sheen and/or entrained petroleum-affected soil particles. The objective of this procedure is to separate the oil phase and the particulate matter solid phase from the water phase prior to extraction and analysis of the sample. In this way, the analysis will better represent the true dissolved-phase of the sample. The success of this procedure depends on many factors, including adequate time for separation, and complete exclusion of the oil and particulate matter phases from the collected water phase.

*For groundwater samples to be analyzed for semi-volatiles (e.g., extractable TPH, PAHs):*

1. Pour the raw groundwater sample into a glass separatory funnel of adequate volume.
2. Allow the sample to separate and equilibrate for a minimum of 48 hours. Keep the sample refrigerated during the separation period.
3. After the separation period, the analyst will observe the sample to confirm that the water phase is visually clear. If the water is not visually clear, additional separation time may be required.
4. Open the bottom stopcock of the funnel and allow all of the particulate matter that collected at the bottom to run completely through; discard.
5. Collect an adequate sample volume of the water phase from the bottom of the funnel without including any of the oil phase and place into appropriate containers.
6. Add surrogates to water phase sample and extract as per requested method.

*For groundwater samples to be analyzed for volatiles (e.g., purgeable TPH, BTEX, etc.):*

1. Store the 40-ml VOA vials upside-down in the refrigerator for a minimum of 48 hours.
2. After the separation period, the vials must remain in the upside-down position while the septum is punctured by the hypodermic needle and the water phase is subsampled. The analyst should keep the needle tip within the water phase and must avoid both the solid and oil phases with the needle tip during subsampling.

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*M. V. S.*  
*He Vall 3/10/08 5:05 PM*

**McC Campbell Analytical, Inc.**



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

**CHAIN-OF-CUSTODY RECORD**

WorkOrder: 0803209

ClientCode: CETE

WriteOn

EDF

Excel

Fax

Email

HardCopy

ThirdParty

J-flag

Report to:

Mark Jonas  
Conestoga-Rovers & Associates  
5900 Hollis St, Suite A  
Emeryville, CA 94608

Email: mjonas@CRAworld.com  
TEL: (510) 420-0700 FAX: (510) 420-9170  
PO:  
ProjectNo: #130105; Golden Empire Properties

Bill to:

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

Requested TAT: 5 days

Date Received: 03/10/2008

Date Printed: 03/13/2008

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0803209-001	MW-1	Water	3/9/2008 10:25	<input type="checkbox"/>	D	A	A	B	C								
0803209-002	MW-2	Water	3/9/2008 12:25	<input type="checkbox"/>	D	A		B	C								
0803209-003	MW-3	Water	3/9/2008 14:30	<input type="checkbox"/>	D	A		B	C								
0803209-004	MW-4	Water	3/9/2008 10:55	<input type="checkbox"/>	D	A		B	C								
0803209-005	RW-5	Water	3/9/2008 9:30	<input type="checkbox"/>	D	A		B	C								
0803209-006	RW-9	Water	3/9/2008 11:40	<input type="checkbox"/>	D	A		B	C								

Test Legend:

1	G-MBTX-DZ_W
6	
11	

2	G-MBTX_W
7	
12	

3	PREF REPORT
8	

4	TPH(D)WSG_W
9	

5	TPH(DMO)-DZWSG_W
10	

Prepared by: Melissa Valles

Comments:

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



### Sample Receipt Checklist

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

Date and Time Received: **3/10/08 5:09:01 PM**

Project Name: **#130105; Golden Empire Properties**

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

WorkOrder N°: **0803209** Matrix Water

Carrier: Client Drop-In

#### Chain of Custody (COC) Information

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

#### Sample Receipt Information

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

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

- All samples received within holding time? Yes  No
- Container/Temp Blank temperature Cooler Temp: 2.7°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted
- Sample labels checked for correct preservation? Yes  No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

Client contacted:

Date contacted:

Contacted by:

Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

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

Conestoga-Rovers & Associates  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #130105; Golden Empire Properties	Date Sampled: 03/09/08
	Client Contact: Mark Jonas	Date Received: 03/10/08
	Client P.O.:	Date Analyzed: 03/13/08-03/14/08
		Date Extracted: 03/13/08-03/14/08

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

Extraction method SW5030B/Dawn Zemo

Analytical methods SW8021B/8015Cm

Work Order: 0803209

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001D	MW-1	W	4600,a	ND<50	1100	23	82	140	10	104
002D	MW-2	W	7900,a	ND<380	840	24	280	380	20	107
003D	MW-3	W	23,000,a	ND<250	4200	120	650	1600	50	106
004D	MW-4	W	8100,a	ND<50	830	7.7	55	310	10	120
005D	RW-5	W	1100,a	ND<90	220	5.3	4.9	10	3.3	107
006D	RW-9	W	10,000,a	ND<35	4200	71	180	380	3.3	122

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

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

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates  5900 Hollis St, Suite A  Emeryville, CA 94608	Client Project ID: #130105; Golden Empire Properties	Date Sampled: 03/09/08
	Client Contact: Mark Jonas	Date Received: 03/10/08
	Client P.O.:	Date Analyzed 03/14/08
		Date Extracted: 03/13/08

### Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons with Silica Gel Clean-Up\*

Extraction method: SW3510C/3630C/Dawn Zemo

Analytical methods: SW8015C

Work Order: 0803209


Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0803209-001C	MW-1	W	470,d	ND	1	109
0803209-002C	MW-2	W	3100,d	ND	1	109
0803209-003C	MW-3	W	3400,d	310	1	113
0803209-004C	MW-4	W	3000,d	ND	1	112
0803209-005C	RW-5	W	90,d	ND	1	108
0803209-006C	RW-9	W	570,d	ND	1	110

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

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

#) cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to matrix interference; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; p) see attached narrative.

 Angela Rydelius, Lab Manager



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0803209

EPA Method SW8021B/8015Cm	Extraction SW5030B/Dawn Ze			BatchID: 34283			Spiked Sample ID: 0803205-007A					
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>f</sup>	200	60	NR	NR	NR	99.4	102	2.43	70 - 130	20	70 - 130	20
MTBE	ND	10	108	110	0.999	108	106	1.51	70 - 130	20	70 - 130	20
Benzene	ND	10	104	99.4	4.58	103	104	0.720	70 - 130	20	70 - 130	20
Toluene	19	10	NR	NR	NR	95.4	95.4	0	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	95.8	93.4	2.50	105	104	0.917	70 - 130	20	70 - 130	20
Xylenes	1.3	30	87.9	85.9	2.20	100	100	0	70 - 130	20	70 - 130	20
%SS:	90	10	--#	--#	---#	99	98	0.270	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 34283 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0803209-001D	03/09/08 10:25 AM	03/13/08	03/13/08 2:40 PM	0803209-002D	03/09/08 12:25 PM	03/13/08	03/13/08 3:10 PM
0803209-003D	03/09/08 2:30 PM	03/13/08	03/13/08 5:12 PM				

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

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

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

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

# cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0803209

EPA Method SW8021B/8015Cm		Extraction SW5030B/Dawn Ze				BatchID: 34286			Spiked Sample ID: 0803210-006A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex <sub>f</sub> )	ND	60	101	102	0.833	109	109	0	70 - 130	20	70 - 130	20
MTBE	31	10	93.7	103	2.24	91.5	105	13.3	70 - 130	20	70 - 130	20
Benzene	ND	10	98.3	100	1.73	97.4	97.8	0.461	70 - 130	20	70 - 130	20
Toluene	ND	10	97.7	98.2	0.517	108	109	0.285	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	98.4	99.1	0.763	106	102	4.52	70 - 130	20	70 - 130	20
Xylenes	ND	30	89.8	90.6	0.844	115	114	1.04	70 - 130	20	70 - 130	20
%SS:	91	10	107	109	1.61	97	96	1.11	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 34286 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0803209-004D	03/09/08 10:55 AM	03/13/08	03/13/08 6:13 PM	0803209-005D	03/09/08 9:30 AM	03/14/08	03/14/08 7:49 PM
0803209-006D	03/09/08 11:40 AM	03/13/08	03/13/08 7:13 PM	0803209-006D	03/09/08 11:40 AM	03/14/08	03/14/08 10:19 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 applicable or not enough sample to perform matrix spike and matrix spike duplicate.

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



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0803209

EPA Method SW8015C	Extraction SW3510C/3630C/Da				BatchID: 34287			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	112	113	1.00	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	104	103	0.454	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 34287 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0803209-001C	03/09/08 10:25 AM	03/13/08	03/14/08 12:47 AM	0803209-002C	03/09/08 12:25 PM	03/13/08	03/14/08 1:56 AM
0803209-003C	03/09/08 2:30 PM	03/13/08	03/14/08 3:04 AM	0803209-004C	03/09/08 10:55 AM	03/13/08	03/14/08 5:21 AM
0803209-005C	03/09/08 9:30 AM	03/13/08	03/14/08 6:29 AM	0803209-006C	03/09/08 11:40 AM	03/13/08	03/14/08 9:54 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.

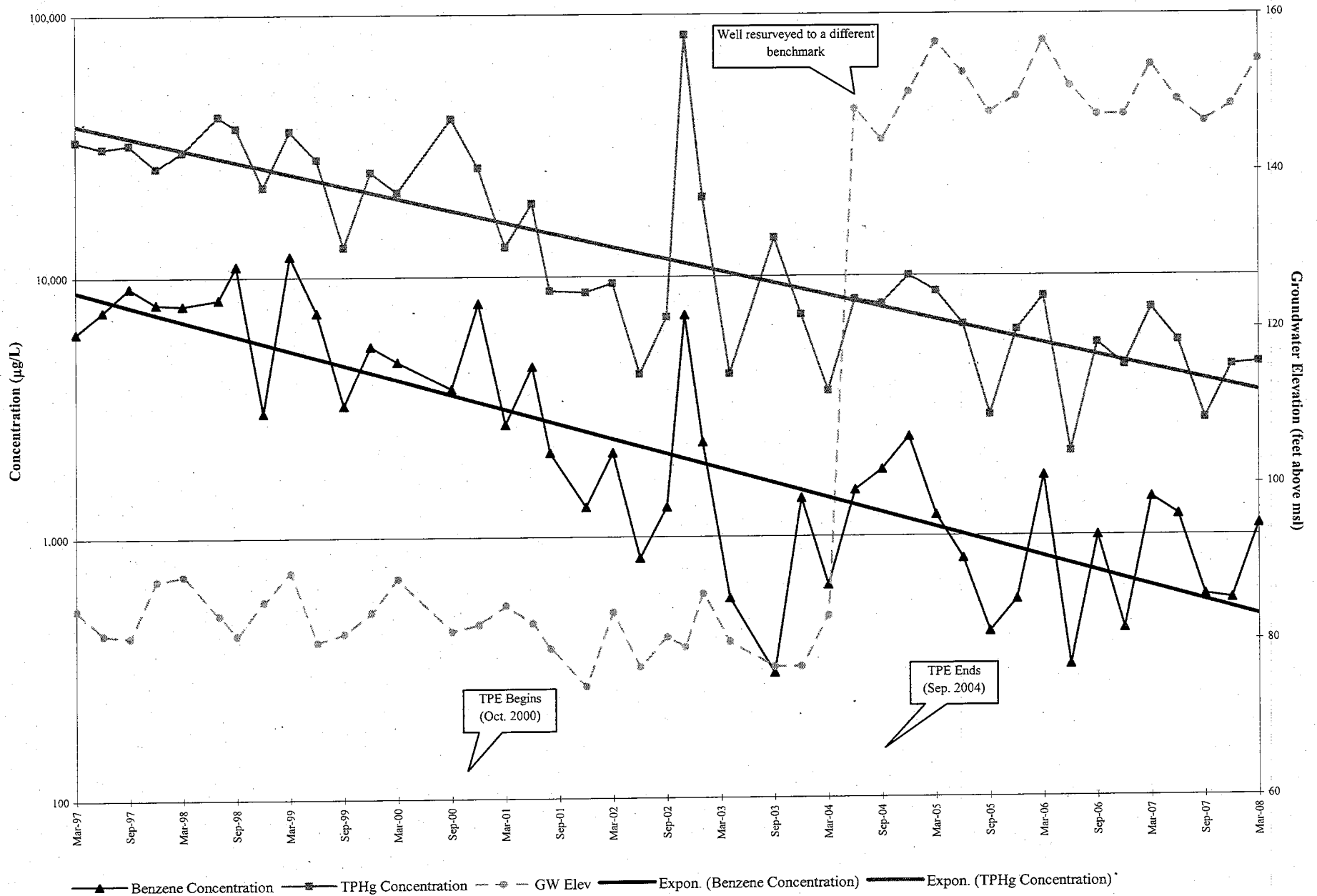




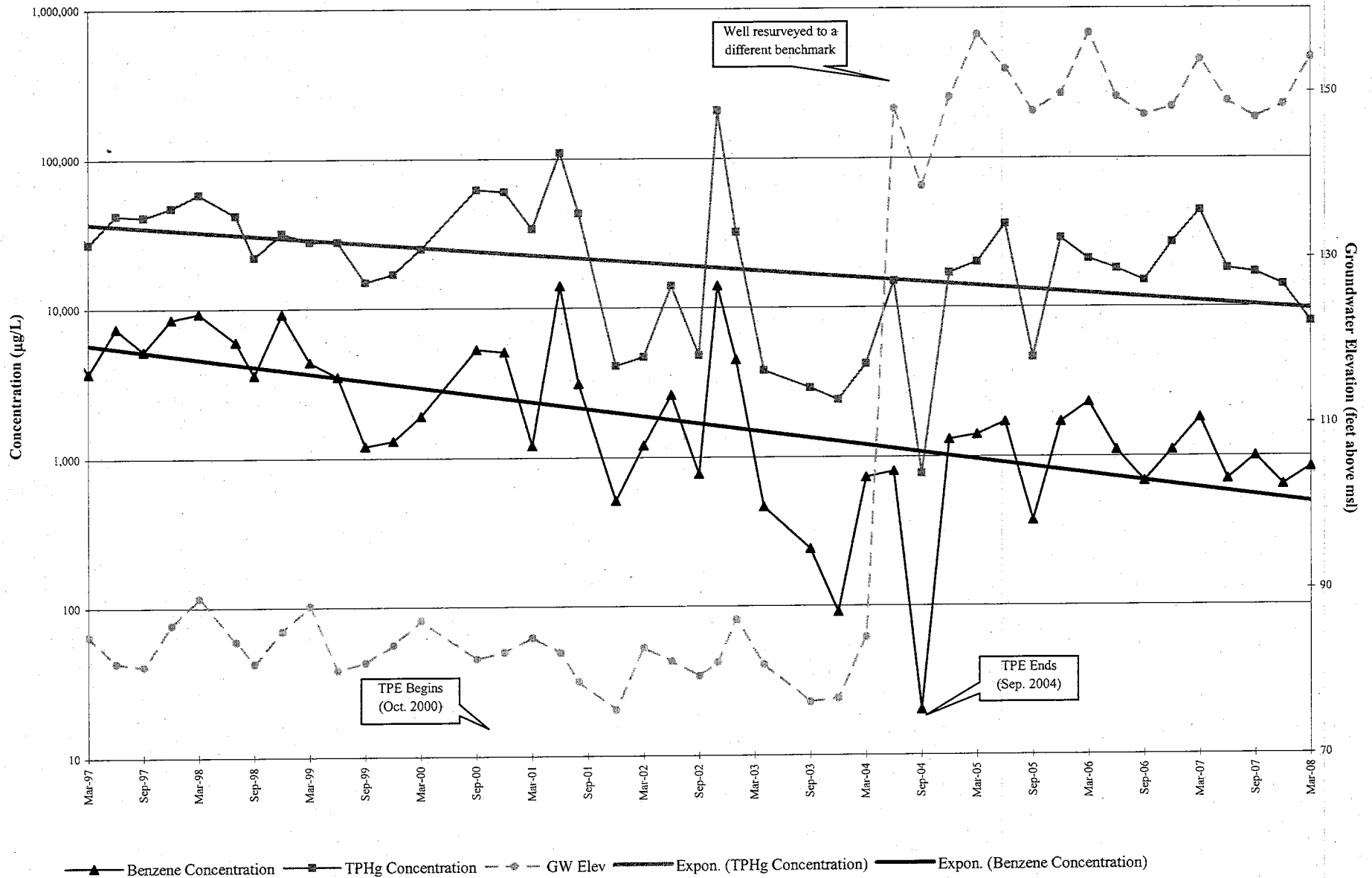
**CONESTOGA-ROVERS  
& ASSOCIATES**

**APPENDIX C**  
**TPHg and Benzene**  
**Concentration Trend Graphs**

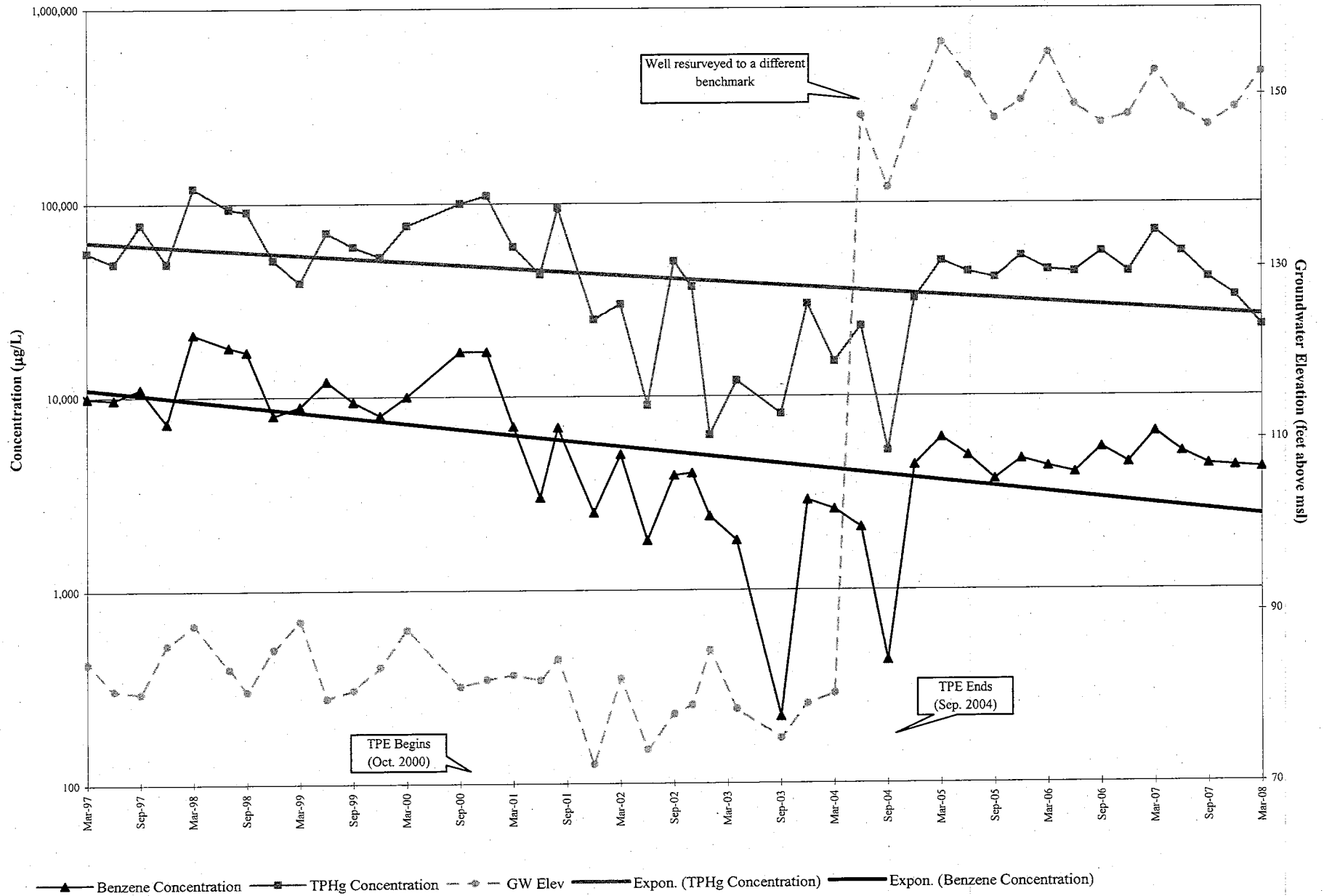
### TPHg and Benzene Concentration Trends Well MW-1 (March 1997 to Present)



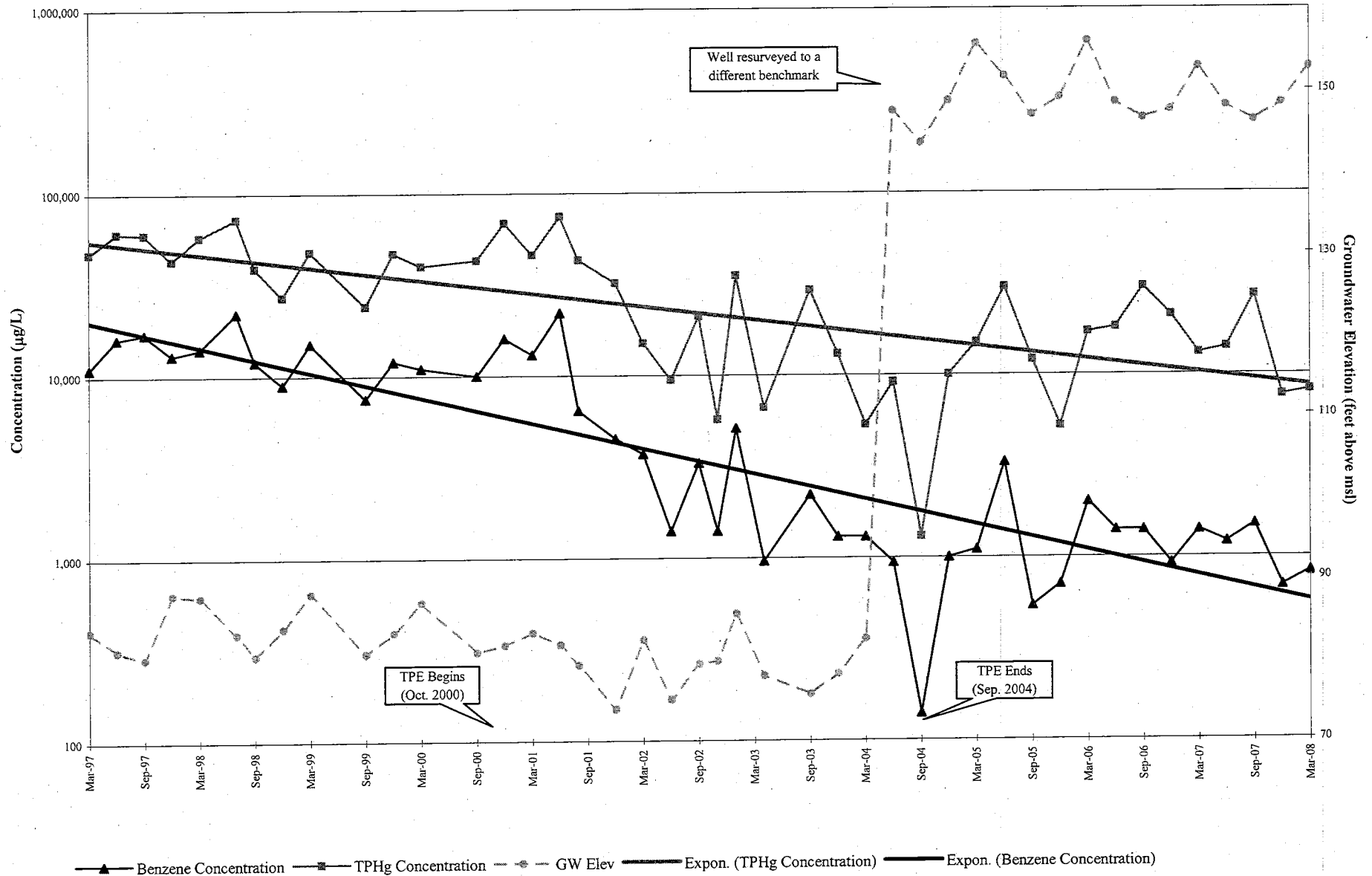
### TPHg and Benzene Concentration Trends Well MW-2 (March 1997 to Present)



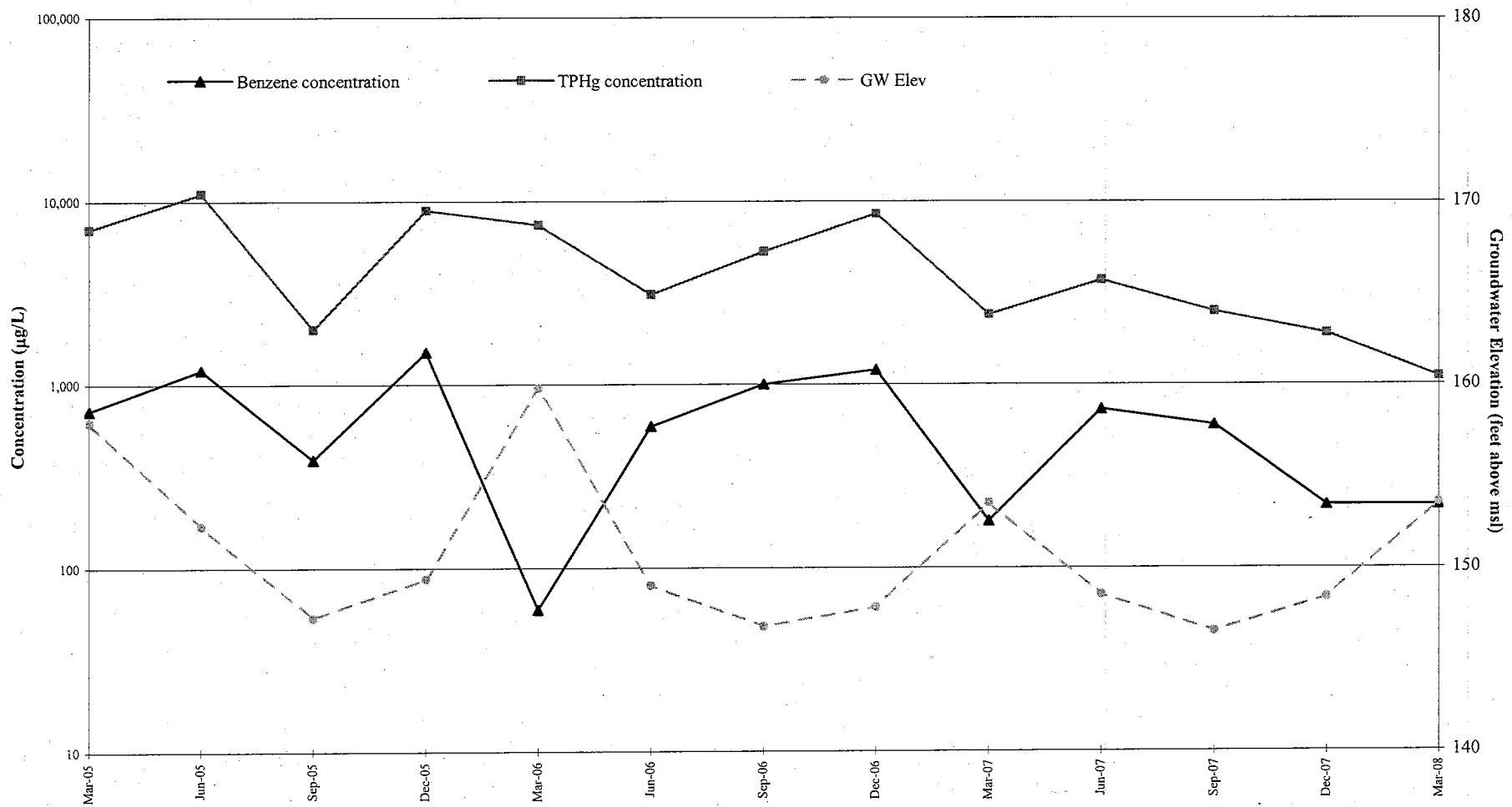
### TPHg and Benzene Concentration Trends Well MW-3 (March 1997 to Present)



### TPHg and Benzene Concentration Trends Well MW-4 (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)**

