



**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

March 7, 2007

Ms. Donna Drogos
Alameda County Department of Environmental Health
UST Local Oversight Program
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Re: Groundwater Monitoring Report – Fourth Quarter 2007

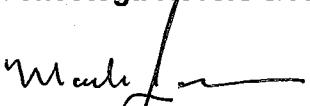
Gatzke / Hooshi's Auto Service
1499 MacArthur Boulevard, Oakland, California 94602
Fuel Leak Case #RO0000516
CRA Project #120741

Dear Ms. Drogos:

On behalf of Ms. Naomi Gatzke, Conestoga-Rovers & Associates, Inc. (CRA) is submitting this *Fourth Quarter 2007 Monitoring Report* for the subject site. This report describes Fourth Quarter 2007 activities and results as well as anticipated First Quarter 2008 activities.

If you have any questions or comments regarding this report or the project, please contact Mark Jonas at (510) 420-3307.

Sincerely,
Conestoga-Rovers & Associates, Inc.


Mark Jonas, P.G.
Senior Project Manager

Attachments: *Fourth Quarter 2007 Monitoring Report*

cc: Ms. Naomi Gatzke, 1545 Scenicview Drive, San Leandro, CA 94577

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**CONESTOGA-ROVERS
& ASSOCIATES**

FOURTH QUARTER 2007 MONITORING REPORT

**Hooshi's Auto Service
1499 MacArthur Boulevard
Oakland, California 94602
Fuel Leak Case No. RO0000516
CRA Project No. 120741**

March 7, 2007

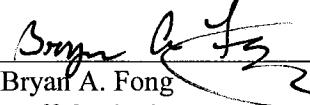
Prepared for:

Ms. Naomi Gatzke
1545 Scenicview Drive
San Leandro, California 94577

Prepared by:

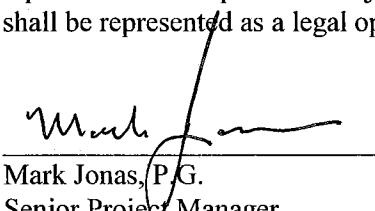
Conestoga-Rovers & Associates, Inc.
5900 Hollis Street, Suite A
Emeryville, California 94608

Written by:

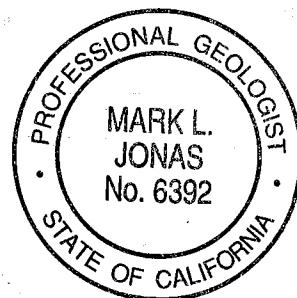


Bryan A. Fong
Staff Geologist

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Mark Jonas, P.G.
Senior Project Manager





**CONESTOGA-ROVERS
& ASSOCIATES**

FOURTH QUARTER 2007 MONITORING REPORT

**Hooshi's Auto Service
1499 MacArthur Boulevard
Oakland, California 94602
Fuel Leak Case No. RO0000516
CRA Project No. 120741**

March 7, 2007

INTRODUCTION

On behalf of Ms. Naomi Gatzke, Conestoga-Rovers & Associates, Inc. (CRA) is submitting this *Fourth Quarter 2007 Monitoring Report* for the subject site. Presented are the Fourth Quarter 2007 groundwater monitoring activities and results and the anticipated First Quarter 2008 activities.

Figure 1 is a vicinity map. Figure 2 is recent monitoring groundwater contours and hydrocarbon concentrations. Table 1 is well construction details. Table 2 provides recent and historic groundwater level measurements, elevations, hydrochemical, and separate phase hydrocarbon (SPH) data. Appendix A contains field data sheets for this monitoring event. Appendix B presents the recent laboratory analytical report. Appendix C includes time-series plots with benzene and total petroleum hydrocarbons as gasoline (TPHg) concentrations and groundwater elevations.

FOURTH QUARTER 2007 ACTIVITIES

Monitoring Activities

Field Activities: On October 24, 2007, Muskan Environmental Sampling (MES) conducted quarterly monitoring and sampling activities. MES measured well water levels and collected groundwater samples for monitoring wells MW-1 through MW-6 (Figure 2). Groundwater depth measurements have been 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, provided in Appendix A.



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Fourth Quarter 2007 Monitoring Report
1499 MacArthur Blvd., Oakland, CA
FLC #RO0000516
March 7, 2007

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 by McCampbell Analytical, Inc. of Pittsburgh, California, a California-certified laboratory (DHS License No. 1644). All groundwater samples were analyzed for TPHg by modified United States Environmental Protection Agency (EPA) Method SW8015C; and benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) by EPA Method SW8021B. MTBE detected by method SW8021B was confirmed by EPA Method SW8260B. The analytical laboratory report is included in Appendix B. Groundwater analytical results are provided on Table 2 and summarized on Figure 2. Groundwater analytical results have been submitted to the GeoTracker database.

Monitoring Results

Groundwater Flow Direction and Gradient: Based on depth-to-water measurements collected during the monitoring event on October 24, 2007, groundwater appears to generally flow towards the southwest with an apparent gradient of 0.111 feet per foot (Figure 2). The gradient and flow direction are consistent with historical data. Depth-to-water and groundwater elevation data for the site are in Table 2.

Hydrocarbon Distribution in Groundwater: Hydrocarbons were detected in three of the sampled wells, MW-1, MW-2, and MW-5. TPHg concentrations ranged from 150 micrograms per liter ($\mu\text{g/L}$) to 31,000 $\mu\text{g/L}$. The highest concentration of TPHg was detected in monitoring well MW-5. BTEX was detected in well MW-2 at concentrations of 370 $\mu\text{g/L}$, 40 $\mu\text{g/L}$, 240 $\mu\text{g/L}$, and 490 $\mu\text{g/L}$ respectively. BTEX was also detected in MW-5 at concentrations of 210 $\mu\text{g/L}$, 440 $\mu\text{g/L}$, 300 $\mu\text{g/L}$, and 2,500 $\mu\text{g/L}$ respectively. MTBE was only detected in well MW-2 at a concentration of 8.3 $\mu\text{g/L}$.

ANTICIPATED FIRST QUARTER 2008 ACTIVITIES

Monitoring Activities

During the first quarter 2008, CRA will measure water levels in all wells and collect groundwater samples from monitoring wells MW-1, MW-2, and MW-5 in accordance with the sampling schedule. CRA will then prepare a groundwater monitoring report summarizing the monitoring activities and results.

Based on the sampling schedule, monitoring wells MW-1, MW-2, and MW-5 are sampled on a quarterly basis and monitoring wells MW-3, MW-4, and MW-6 are sampled on an annual basis during the fourth quarter. Groundwater samples are analyzed for TPHg by modified EPA Method SW8015C, with BTEX and MTBE analyzed by EPA Method SW8021B.



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Fourth Quarter 2007 Monitoring Report
1499 MacArthur Blvd., Oakland, CA
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SUPPLEMENTAL SITE CHARACTERIZATION AND RECOMMENDATION

On March 1, 2007 a *Supplemental Site Characterization Report* was submitted to ACEH for review and consideration of a recommendation to produce *Remedial Action Plan*. On October 25, 2008 a *Request Approval to Proceed with Remedial Action Plan* was submitted to ACEH. Currently we are still waiting for a review of our March 1, 2007 report and consideration of our recommendation to produce *Remedial Action Plan* for this site.

ATTACHMENTS:

Figure 1 – Vicinity Map

Figure 2 – Groundwater Elevation Contour and Hydrocarbon Concentration Map

Table 1 – Well Construction Details

Table 2 – Groundwater Elevation and Analytical Data

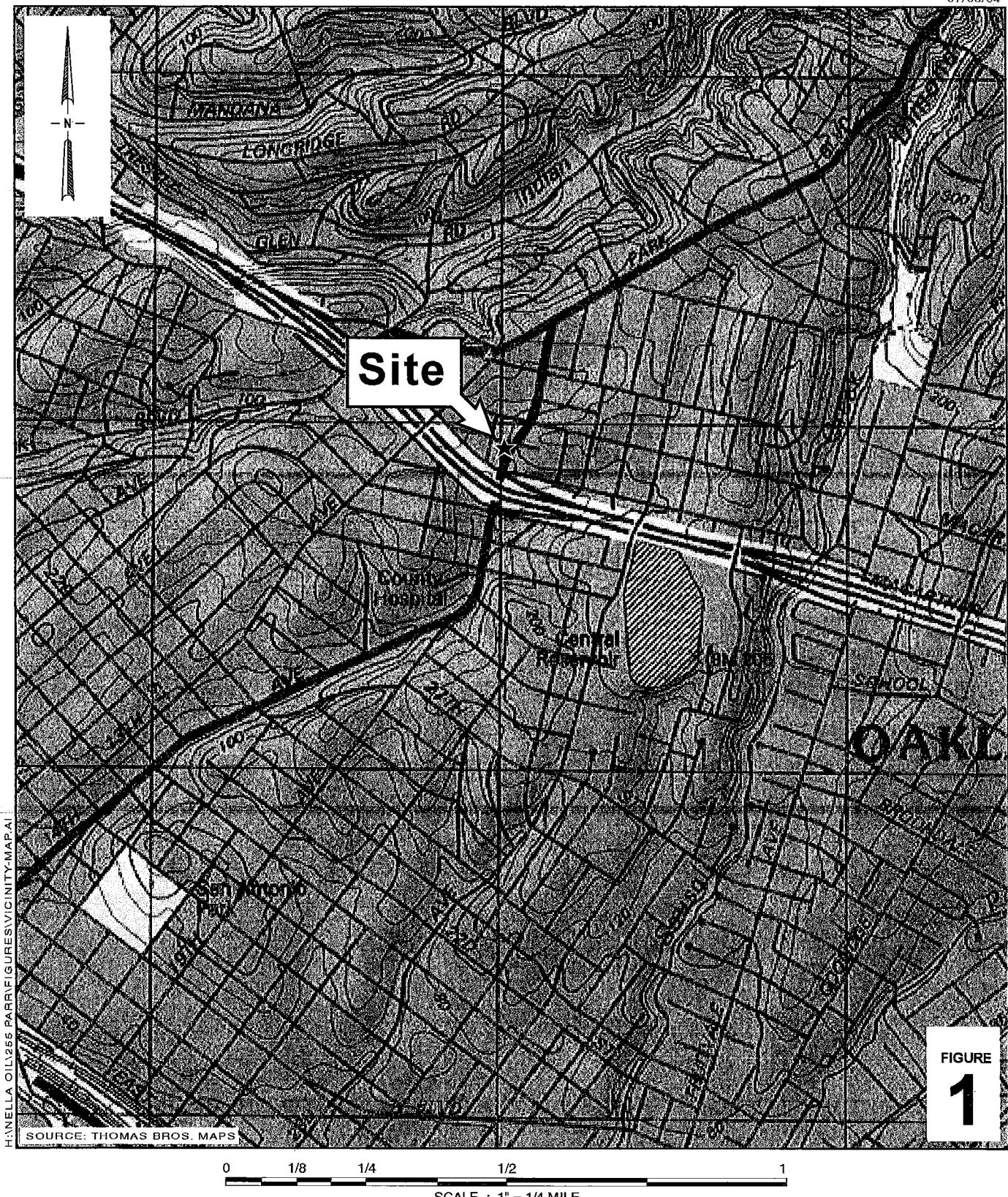
Appendix A – Groundwater Monitoring Field Data Sheets

Appendix B – Laboratory Analytical Report

Appendix C – Benzene and TPHg Concentration Graphs

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07/08/04



0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Hooshii's Auto Service

1499 MacArthur Boulevard
Oakland, California



**CONESTOGA-ROVERS
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Vicinity Map

MAC ARTHUR BLVD.

HAGATZKE (HOOSHI) OAKLAND FIGURES 20074GM07-MP-DWGS

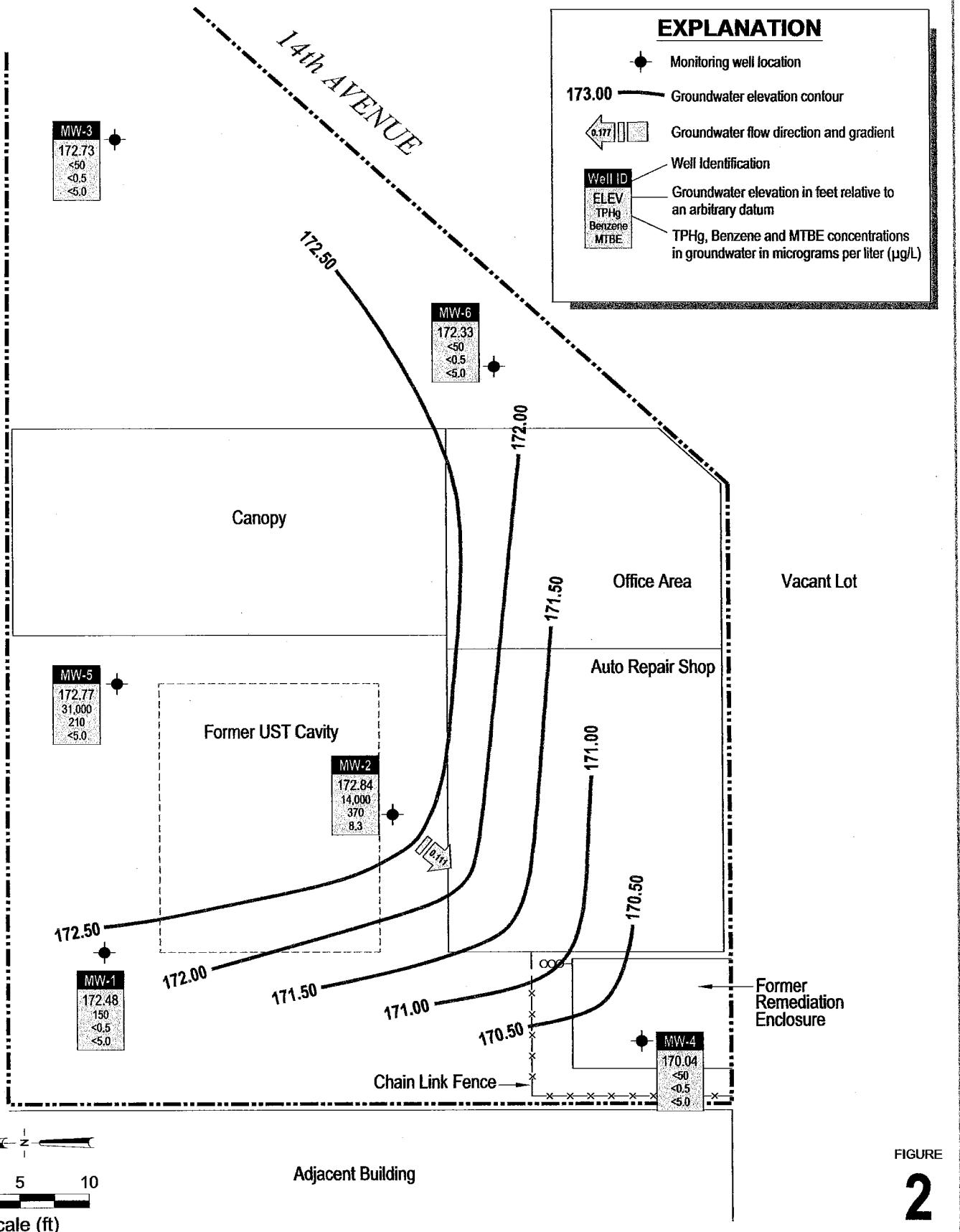


FIGURE
2

Hooshi's Auto Service

1499 MacArthur Boulevard

Oakland, California


**CONESTOGA-ROVERS
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**Groundwater Elevation Contour
and Hydrocarbon Concentration Map**

October 24, 2007

Conestoga-Rovers & Associates

Table 1. Monitoring Well Construction Details - Gatzke (Hooshi's) 1499 MacArthur Boulevard, Oakland, California

Well ID	Former ID	Date Installed	Date Destroyed	Borehole diameter (in)	Depth of borehole (ft)	Casing diameter (in)	Screened interval (ft bgs)	Filter Pack (ft bgs)	Bentonite seal (ft bgs)	Cement (ft bgs)	TOC elevation (ft above msl)
MW-1	B1	1/7/1993	--		20*	2					180.83
MW-2	B2	1/7/1993	--		20*	2					180.24
MW-3	B3	1/7/1993	--		20*	2					179.55
MW-4	--	6/27/1996	--		20	2	4.5 - 19	3.5 - 19	2.5 - 3.5	1 - 2.5	180.12
MW-5	--	6/27/1996	--		20	2	4.5 - 19	3.5 - 19	2.5 - 3.5	1 - 2.5	180.09
MW-6	--	6/27/1996	--		20	2	4.5 - 19	3.5 - 19	2.5 - 3.5	1 - 2.5	179.63

Abbreviations / Notes

ft = feet

in = inches

ft bgs = feet below grade surface

ft above msl = feet above mean sea level

TOC = top of casing

Elevations surveyed by Virgil Chavez Land Surveying.

* = Depth assume by downhole measurement.

Conestoga-Rovers & Associates

Table 2. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID TOC (ft*)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft msl**)	SPH Thickness (ft)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE	Notes
<u>2006 Grab Groundwater Analytical Data</u>											
B-1*	12/21/2006	--	--	--	13,000	37 / 28	32 / ND<17	380 / 520	1,100 / 1,300	ND<17	a,i
B-2*	12/21/2006	--	--	--	40,000	1,100 / 1,100	1,300 / 1,300	990 / 840	6,400 / 5,900	ND<50	a,i
B-3*	12/21/2006	--	--	--	300	1.9 / 3.2	1.0 / 0.98	0.76 / 1.4	0.62 / 1.2	ND<0.5	a,i
B-4*	12/21/2006	--	--	--	7,600	110 / 87	32 / 22	470 / 520	520 / 450	ND<10	a,i
B-5*	12/22/2006	--	--	--	72,000	-- / 850	-- / 3,100	-- / 2,800	-- / 16,000	ND<100	a,h
<u>Monitoring Well Groundwater Analytical Data</u>											
MW-1	1/4/1993	--	--	--	539	130	12	22	13	--	
181.00	4/22/1993	--	--	--	1,130	75	8.0	38	11	--	
	12/27/1994	--	--	--	770	22	6.6	14	21	--	
	6/27/1996	14.11	166.89	--	3,300	260	34	59	170	80	
	12/10/1996	13.71	167.29	--	1,500	84	11	22	32	34	
	5/8/1998	13.85	167.15	--	3,200	300	12	62	36	ND<120	a
	8/17/1998	14.11	166.89	--	1,700	160	18	32	27	39	a
	11/4/1998	14.28	166.72	--	1,100	11	4.3	3.6	6.5	ND<50	a
	2/17/1999	13.41	167.59	--	320	200	47	72	75	57	a
	5/27/1999	14.16	166.84	--	2,500	81	12	29	41	ND<80	a
	8/19/1999	14.18	166.82	--	780	19	ND<0.5	5.7	4.5	28	a
180.83	11/23/1999	14.43	166.40	--	1,300	24	0.64	1.8	3.3	ND<100	a
	2/17/2000	13.85	166.98	--	1,300	60	9.1	22	19	22/16	a,b
	5/9/2000	14.01	166.82	--	2,700	55	13	19	25	34/29	a
	8/15/2000	14.24	166.59	--	--	--	--	--	--	--	
	12/1/2000	8.75	172.08	--	480	6.4	5.9	1.1	3.9	18 (21)	a
180.63	2/8/2001	8.49	172.14	--	64	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.1/5.6	a,c
	4/9/2001	8.71	171.92	--	--	--	--	--	--	--	
	4/24/2001	7.90	172.73	--	77	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.6/3.7	c
	8/6/2001	8.83	171.80	--	140	1.7	0.55	ND<0.5	0.63	5.8/4.0	a
	10/22/2001	8.91	171.72	--	120	0.92	ND<0.5	ND<0.5	0.59	11(10)	a
	2/1/2002	8.15	172.48	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/19/2002	8.63	172.00	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/16/2002	8.79	171.84	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/3/2002	8.90	171.73	--	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	f
	1/10/2003	7.93	172.70	--	ND<50	ND<0.5	0.74	ND<0.5	ND<0.5	ND<5.0	
	4/21/2003	8.17	172.46	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/9/2003	8.92	171.71	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/7/2003	9.13	171.50	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/22/2004	8.20	172.43	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/2/2004	7.09	173.54	--	110	0.52	ND<0.5	ND<0.5	ND<0.5	ND<5.0	a
	12/29/2004	6.15	174.48	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/27/2005	7.15	173.48	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/6/2005	6.84	173.79	--	140	ND<0.5	0.55	ND<0.5	0.70	ND<5.0	c
	7/28/2005	7.36	173.27	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/14/2005	7.51	173.12	--	220	1.2	ND<0.5	0.56	0.75	ND<5.0	a
	1/30/2006	6.80	173.83	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/11/2006	6.60	174.03	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/14/2006	7.53	173.10	--	170	0.65	0.60	ND<0.5	ND<0.5	ND<5.0	a
	10/13/2006	7.47	173.16	--	200	0.93	ND<0.5	ND<0.5	ND<0.5	ND<5.0	a
	1/12/2007	7.40	173.23	--	92	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	c,i
	4/20/2007	7.14	173.49	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/30/2007	7.81	172.82	--	130	0.52	ND<0.5	ND<0.5	0.61	ND<10	a,c
	10/24/2007	8.15	172.48	--	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	c
MW-2	1/4/1993	--	--	--	149,000	21,700	25,000	ND	7,760	--	
180.45	4/22/1993	--	--	--	136,300	9,900	15,870	15,300	2,190	--	
	12/27/1994	--	--	--	94,000	11,000	18,000	2,700	16,000	--	
	6/27/1996	12.61	168.64	1.00	--	--	--	--	--	--	

Conestoga-Rovers & Associates

Table 2. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID TOC (ft*)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft msl**)	SPH Thickness (ft)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE	Notes
<i>MW-2 cont'd</i>	12/10/1996	11.10	169.55	0.25	--	--	--	--	--	--	--
	5/8/1998	10.81	169.66	0.03	--	--	--	--	--	--	--
	8/17/1998	12.16	168.31	0.02	--	--	--	--	--	--	--
	11/4/1998	12.61	167.86	0.02	--	--	--	--	--	--	--
	2/17/1999	9.82	170.66	0.04	--	--	--	--	--	--	--
	5/27/1999	11.07	169.48	0.13	--	--	--	--	--	--	--
	8/19/1999	12.79	167.68	0.02	--	--	--	--	--	--	--
<i>I80.24</i>	11/23/1999	12.14	168.20	0.12	--	--	--	--	--	--	--
	2/17/2000	10.01	170.37	0.18	--	--	--	--	--	--	--
	5/9/2000	10.88	169.38	0.03	--	--	--	--	--	--	--
	8/15/2000	12.28	167.97	0.01	--	--	--	--	--	--	--
	12/1/2000	8.03	172.21	--	260,000	1,100	5,000	1,900	17,000	ND<100	a
	2/8/2001	7.86	172.38	--	2,900	1.7	14	5.0	140	ND<5.0	c,d
	4/9/2001	7.95	172.29	--	--	--	--	--	--	--	--
	4/24/2001	6.90	173.34	--	56,000	360	980	1,000	4,700	ND<5.0	a,b
	8/6/2001	8.15	172.09	--	54,000	680	1,900	1,500	7,800	ND<200/ND<10	a,b,j
	10/22/2001	8.22	172.02	--	32,000	420	770	1,100	4,100	ND<250	a,b
	2/1/2002	8.07	172.17	--	26,000	310	490	920	1,600	ND<1,000	a
	4/19/2002	8.60	171.64	--	16,000	300	240	1,000	990	ND<100	a
	7/16/2002	8.21	172.03	--	5,700	120	18	340	15	ND<50	a
	10/3/2002	8.14	172.10	--	4,400	44	16	68	20	ND<25	a
	1/10/2003	6.98	173.26	--	16,000	300	320	580	830	ND<100	a,b
	4/21/2003	7.25	172.99	--	12,000	350	260	610	380	ND<50	a
	7/9/2003	7.99	172.25	--	3,300	51	7.4	47	2.8	ND<17	a
	10/7/2003	8.21	172.03	--	2,400	93	11	34	22	ND<50	a
	1/22/2004	7.24	173.00	--	5,900	240	130	350	200	ND<50	a
	4/2/2004	6.29	173.95	--	37,000	840	1,500	1,300	5,900	ND<500	a
	12/29/2004	5.37	174.87	--	9,300	240	230	330	880	ND<50	a
	1/27/2005	6.38	173.86	--	37,000	1,200	1,400	1,300	5,200	<250	a
	4/6/2005	5.88	174.36	--	21,000	400	340	780	1,700	ND<100	a
	7/28/2005	6.61	173.63	--	35,000	690	1,200	1,200	5,200	ND<500	a
	10/14/2005	6.80	173.44	--	14,000	380	120	780	1,200	ND<100	a, b
	1/30/2006	5.91	174.33	--	22,000	310	140	1,300	2,800	ND<50	a,b,i
	4/11/2006	5.65	174.59	--	18,000	280	170	780	1,400	ND<250	a,b,i
	7/14/2006	6.76	173.48	--	49,000	340	140	1,600	4,800	ND<500	a,b
	10/13/2006	6.74	173.50	--	21,000	490	73	600	1,100	ND<110	a,b,i
	1/12/2007	6.55	173.69	--	16,000	320	170	600	2,100	ND<250	a,i
	4/20/2007	6.39	173.85	--	15,000	340	160	420	1,700	ND<120	a,h
	7/30/2007	7.09	173.15	--	17,000	430	170	740	2,100	ND<100	a
	10/24/2007	7.40	172.84	--	14,000	370	40	240	490	ND<100 (8.3)	a,h
<i>MW-3</i>	1/4/1993	--	--	--	1,610	772	14	11	ND	--	--
<i>I79.94</i>	4/22/1993	--	--	--	3,040	980	34	19	16	--	--
	12/27/1994	--	--	--	2,600	180	9.0	7.2	13	--	--
	6/27/1996	13.20	166.74	--	2,000	22	2.9	11	7.4	56	--
	12/10/1996	13.13	166.81	--	970	ND<0.5	ND<0.5	ND<0.5	ND<0.5	24	--
	5/8/1998	13.03	166.91	--	780	3.7	2.1	1.1	2.4	ND<32	a
	8/17/1998	13.22	166.72	--	870	2.8	ND<0.5	ND<0.5	3.7	ND<5.0	b,c
	11/4/1998	13.31	166.63	--	770	1.6	4.4	2.0	6.9	ND<30	c
	2/17/1999	12.89	167.05	--	650	6.2	3.4	1.5	2.6	ND<5.0	b,c
	5/27/1999	12.32	167.62	--	570	1.5	1.2	0.72	1.1	ND<20	a
	8/19/1999	13.19	166.75	--	830	ND<0.5	1.9	ND<0.5	1.3	ND<20	c,d
<i>I79.55</i>	11/23/1999	13.26	166.29	--	900	ND<0.5	1.8	0.56	1.4	ND<20	c,d
	2/17/2000	12.78	166.77	--	250	ND<0.5	1.5	ND<0.5	0.62	ND<5.0	d
	5/9/2000	12.92	166.63	--	690	ND<0.5	2.1	0.85	1.6	ND<5.0	a
	8/15/2000	13.19	166.36	--	610	ND<0.5	2.3	0.75	1.2	ND<5.0	c,d
	12/1/2000	7.50	172.05	--	120	ND<0.5	0.90	0.65	0.62	ND<5.0	c,d
	2/8/2001	7.20	172.35	--	87	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	c,d

Conestoga-Rovers & Associates

Table 2. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID TOC (ft*)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft msl**)	SPH Thickness (ft)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE	Notes
<i>MW-3 cont'd</i>	4/9/2001	7.33	172.22	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/6/2001	7.61	171.94	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/22/2001	7.58	171.97	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	2/1/2002	7.53	172.02	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.5/8.5	
	4/19/2002	7.95	171.60	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.0/11	
	7/16/2002	7.68	171.87	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	20/30	
	10/3/2002	7.78	171.77	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/10/2003	6.91	172.64	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	19/16	
<i>sampled annually</i>	4/21/2003	7.21	172.34	--	--	--	--	--	--	--	
	7/9/2003	8.05	171.50	--	--	--	--	--	--	--	
	10/7/2003	8.19	171.36	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/22/2004	7.13	172.42	--	--	--	--	--	--	--	
	4/2/2004	5.73	173.82	--	--	--	--	--	--	--	
	12/29/2004	4.88	174.67	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/27/2005	5.80	173.75	--	--	--	--	--	--	--	
	4/6/2005	5.49	174.06	--	--	--	--	--	--	--	
	7/28/2005	6.02	173.53	--	--	--	--	--	--	--	
	10/14/2005	6.11	173.44	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/30/2006	5.45	174.10	--	--	--	--	--	--	--	
	4/11/2006	5.22	174.33	--	--	--	--	--	--	--	
	7/14/2006	6.15	173.40	--	--	--	--	--	--	--	
	10/13/2006	6.03	173.52	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/12/2007	5.98	173.57	--	--	--	--	--	--	--	
	4/20/2007	5.76	173.79	--	--	--	--	--	--	--	
	7/30/2007	6.44	173.11	--	--	--	--	--	--	--	
	10/24/2007	6.82	172.73	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
<i>MW-4</i>	6/27/1996	17.03	163.51	--	720	2	0.5	2.5	23	3.2	
<i>180.54</i>	12/10/1996	8.50	172.04	--	80	2.4	ND<0.5	ND<0.5	6.6	ND<2.0	
	5/8/1998	11.46	169.08	--	ND<50	0.60	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/17/1998	13.98	166.56	--	ND<50	ND<0.5	ND<0.5	ND<0.5	0.5	ND<5.0	
	11/4/1998	14.36	166.18	--	96	9.7	8.1	4.8	18	ND<5.0	a
	2/17/1999	8.39	172.15	--	ND<50	ND<0.5	ND<0.5	ND<0.5	0.5	ND<5.0	
	5/27/1999	12.80	167.74	--	ND<50	ND<0.5	1.0	ND<0.5	2.9	ND<5.0	
	8/19/1999	14.42	166.12	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
<i>180.12</i>	11/23/1999	14.63	165.49	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	2/17/2000	8.15	171.97	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	5/9/2000	12.81	167.31	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/15/2000	14.29	165.83	--	ND<50	2.1	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/1/2000	12.80	167.32	--	81	6.0	8.4	1.0	5.6	ND<5.0	a
	2/8/2001	12.57	167.55	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/9/2001	12.50	167.62	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/6/2001	14.00	166.12	--	59	1.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	a
	10/22/2001	14.05	166.07	--	130	6.3	ND<0.5	0.88	ND<0.5	ND<5.0	a
	2/1/2002	13.47	166.65	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/19/2002	13.55	166.57	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/16/2002	14.05	166.07	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/3/2002	13.09	167.03	--	77	2.1	0.51	ND<0.5	ND<0.5	ND<5.0	a
	1/10/2003	12.04	168.08	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	20/15	a
<i>sampled annually</i>	4/21/2003	12.15	167.97	--	--	--	--	--	--	--	
	7/9/2003	12.90	167.22	--	--	--	--	--	--	--	
	10/7/2003	13.15	166.97	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/22/2004	12.09	168.03	--	--	--	--	--	--	--	
	4/2/2004	8.97	171.15	--	--	--	--	--	--	--	
	12/29/2004	7.85	172.27	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/27/2005	8.28	171.84	--	--	--	--	--	--	--	
	4/6/2005	8.07	172.05	--	--	--	--	--	--	--	

Conestoga-Rovers & Associates

Table 2. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID TOC (ft*)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft msl**)	SPH Thickness (ft)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE	Notes
MW-4 cont'd	7/28/2005	10.83	169.29	--	--	--	--	--	--	--	--
	10/14/2005	11.49	168.63	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/30/2006	8.04	172.08	--	--	--	--	--	--	--	
	4/11/2006	8.03	172.09	--	--	--	--	--	--	--	
	7/14/2006	10.72	169.40	--	--	--	--	--	--	--	
	10/13/2006	11.25	168.87	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/12/2007	8.89	171.23	--	--	--	--	--	--	--	
	4/20/2007	9.22	170.90	--	--	--	--	--	--	--	
	7/30/2007	11.29	168.83	--	--	--	--	--	--	--	
	10/24/2007	10.08	170.04	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
MW-5	6/27/1996	13.62	166.74	0.16	--	--	--	--	--	--	
180.23	12/10/1996	13.26	167.77	1.00	--	--	--	--	--	--	
	5/8/1998	13.15	167.11	0.04	--	--	--	--	--	--	
	8/17/1998	13.36	166.89	0.02	--	--	--	--	--	--	
	11/4/1998	13.52	166.73	0.02	--	--	--	--	--	--	
	2/17/1999	13.02	167.23	0.02	--	--	--	--	--	--	
	5/27/1999	13.80	166.71	0.35	--	--	--	--	--	--	
	8/19/1999	13.45	166.86	0.10	--	--	--	--	--	--	
	11/23/1999	14.03	166.35	0.36	--	--	--	--	--	--	
180.09	2/17/2000	13.28	167.02	0.26	--	--	--	--	--	--	
	5/9/2000	13.55	166.77	0.29	--	--	--	--	--	--	
	8/15/2000	13.58	166.54	0.04	--	--	--	--	--	--	
	12/1/2000	8.00	172.09	0.00	54,000	240	1,700	870	1,000	ND<300	c,d
180.04	2/8/2001	7.88	172.16	0.00	33,000	63	420	120	4,500	ND<50	a,b
	4/9/2001	7.97	172.07	0.00	--	--	--	--	--	--	
	4/24/2001	7.00	173.04	0.00	3,200	ND<1.0	11	7	260	ND<5.0	c,d
	8/6/2001	8.17	171.87	--	2,700	11	40	21	240	ND<5.0	a
	10/22/2001	8.15	171.89	--	20,000	200	1,200	330	2,900	ND<100	a,b
	2/1/2002	8.07	171.97	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	4/19/2002	8.51	171.53	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	7/16/2002	8.40	171.64	--	ND<50	ND<0.5	ND<0.5	ND<0.5	1.7	ND<5.0	
	10/3/2002	8.18	171.86	--	15,000	94	830	460	2,200	ND<500	a
	1/10/2003	6.95	173.09	--	290	ND<0.5	1.8	ND<0.5	17	ND<5.0	a
	4/21/2003	7.18	172.86	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/9/2003	7.95	172.09	--	ND<50	ND<0.5	ND<0.5	ND<0.5	2.7	ND<5.0	
	10/7/2003	8.22	171.82	--	9,800	120	340	180	2,000	ND<50	a
	1/22/2004	7.18	172.86	--	250	ND<0.5	0.82	ND<0.5	29	ND<5.0	d
	4/2/2004	6.23	173.81	--	4,300	6.3	18	59	750	ND<25	a
	12/29/2004	5.27	174.77	--	72	ND<0.5	0.78	ND<0.5	6.5	ND<5.0	d
	1/27/2005	6.25	173.79	--	3,300	<5.0	22	18	320	<50	a
	4/6/2005	5.90	174.14	--	3,100	1.3	6.9	7.2	100	ND<10	c,d
	7/28/2005	6.50	173.54	--	18,000	53	230	130	2,100	ND<500	a
	10/14/2005	6.65	173.39	--	23,000	140	370	240	2,100	ND<500	a, b
	1/30/2006	5.96	174.08	--	2,500	1.0	8.7	ND<1.0	130	ND<10	b,c,d
	4/11/2006	5.63	174.41	--	1,200	1.3	3.1	1.7	54	ND<5.0	a
	7/14/2006	6.65	173.39	--	13,000	27	66	30	480	ND<50	a,b
	10/13/2006	6.60	173.44	--	23,000	170	390	260	2,500	ND<250	a,b
	1/12/2007	6.50	173.54	--	17,000	72	130	70	1,600	ND<250	a,h,i
	4/20/2007	6.22	173.82	--	10,000	55	120	37	620	ND<50	a,h
	7/30/2007	6.95	173.09	--	41,000	120	580	270	3,100	ND<250	a
	10/24/2007	7.27	172.77	--	31,000	210	440	300	2,500	ND<200 (ND<5.0)	a,h,j
MW-6	6/27/1996	18.55	161.48	--	ND	ND	ND	ND	ND	--	
180.03	12/10/1996	11.79	168.24	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	
	5/8/1998	11.62	168.41	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/17/1998	12.66	167.37	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	11/4/1998	13.56	166.47	--	68	3.8	3.7	2.8	11	ND<5.0	a

Conestoga-Rovers & Associates

Table 2. Groundwater Elevation and Analytical Data - Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California

Well ID TOC (ft*)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft msl**)	SPH Thickness (ft)	TPHg	Benzene	Toluene	Ethylbenzene ($\mu\text{g/L}$)	Xylenes	MTBE	Notes
MW-6 cont'd	2/17/1999	12.91	167.12	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	5/27/1999	13.03	167.00	--	ND<50	1.0	1.7	0.82	4.9	ND<5.0	
	8/19/1999	13.10	166.93	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
I79.63	11/23/1999	13.58	166.05	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	2/17/2000	10.72	168.91	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	5/9/2000	11.71	167.92	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/15/2000	12.49	167.14	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/1/2000	8.64	170.99	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	2/8/2001	8.20	171.43	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/9/2001	8.53	171.10	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/6/2001	8.69	170.94	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/22/2001	8.75	170.88	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	2/1/2002	8.31	171.32	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/19/2002	8.62	171.01	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/16/2002	8.84	170.79	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/3/2002	8.71	170.92	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/10/2003	6.99	172.64	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	19 (16)	
sampled annually	4/21/2003	7.15	172.48	--	--	--	--	--	--	--	
	7/9/2003	7.98	171.65	--	--	--	--	--	--	--	
	10/7/2003	8.28	171.35	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/22/2004	7.15	172.48	--	--	--	--	--	--	--	
	4/2/2004	6.56	173.07	--	--	--	--	--	--	--	
	12/29/2004	5.63	174.00	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/27/2005	6.66	172.97	--	--	--	--	--	--	--	
	4/6/2005	6.25	173.38	--	--	--	--	--	--	--	
	7/28/2005	6.71	172.92	--	--	--	--	--	--	--	
	10/14/2005	6.86	172.77	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/30/2006	6.35	173.28	--	--	--	--	--	--	--	
	4/11/2006	5.89	173.74	--	--	--	--	--	--	--	
	7/14/2006	6.80	172.83	--	--	--	--	--	--	--	
	10/13/2006	6.75	172.88	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/12/2007	6.61	173.02	--	--	--	--	--	--	--	
	4/20/2007	6.45	173.18	--	--	--	--	--	--	--	
	7/30/2007	6.98	172.65	--	--	--	--	--	--	--	
	10/24/2007	7.30	172.33	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
Trip Blank	5/8/1998	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	11/4/1998	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	5/27/1999	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	11/23/1999	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/1/2000	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	

Abbreviations and Methods:

TOC = Top of casing elevation

ft = Measured in feet

ft msl = elevation in feet mean sea level.

SPH = Separate phase hydrocarbons

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

Benzene, toluene, ethylbenzene, and xylenes by EPA Method SW8021B

MTBE = Methyl tertiary butyl ether by EPA Method SW8021B or SW8260B in parenthesis.

$\mu\text{g/L}$ = Micrograms per liter

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

ND<0.5 = Not Detected (ND) above Detection Limit.

x.x/y.y = Result of EPA Method SW8021B / Result of EPA Method SW8260B

* = 2006 grab groundwater samples collected from 20 ft bgs.

** = Calculated groundwater elevation corrected for SPH by the relation: Groundwater Elevation = Well Elevation - Depth to Water + (0.8xSPH thickness (ft))

*** = Due to the air sparge system running during sampling, samples collected on 4/9/01 were anomalous. Well was resampled on 4/24/01 with the air sparge system off.

Analytical Laboratory Notes:

a - Unmodified or weakly modified gasoline is significant.

b - Lighter than water immiscible sheen is present.

c - No recognizable pattern on laboratory chromatogram.

d - Heavier gasoline range compounds are significant (aged gasoline?).

f - One to a few isolated non-target peaks present on laboratory chromatogram.

h = lighter than water immiscible sheen/product present.

i - Liquid sample contains greater than ~1 vol. % sediment

j - Sample diluted due to high organic content.



CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX A

Groundwater Monitoring Field Data Sheets

A



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL GAUGING SHEET



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	10/24/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1499 MacArthur Boulevard, Oakland, CA					
Well ID:	MW-1					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	20.05		Fe=	mg/L		
Depth to Water:	8.15		ORP=	mV		
Water Column Height:	11.90		DO=	mg/L		
Gallons/ft:	0.16					
1 Casing Volume (gal):	1.90		COMMENTS: slightly turbid			
3 Casing Volumes (gal):	5.71					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (μ S)		
10:40	1.9	20.9	6.98	919		
10:43	3.8	21.2	6.88	917		
10:46	5.7	21.1	6.89	914		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-1	10/24/2007	10:50	40 ml VOA	HCl, ICE	TPHg BTEX MTBE	8015, 8021, 8260



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	10/24/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1499 MacArthur Boulevard, Oakland, CA					
Well ID:	MW-2					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	19.89		Fe=	mg/L		
Depth to Water:	7.40		ORP=	mV		
Water Column Height:	12.49		DO=	mg/L		
Gallons/ft:	0.16					
1 Casing Volume (gal):	2.00		COMMENTS: very turbid, heavy sheen			
3 Casing Volumes (gal):	6.00					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (μ S)		
11:20	2.0	19.6	6.67	653		
11:23	4.0	19.3	6.59	698		
11:26	6.0	19.3	6.66	690		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-2	10/24/2007	11:30	40 ml VOA	HCl, ICE	TPHg BTEX MTBE	8015, 8021, 8260



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	10/24/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1499 MacArthur Boulevard, Oakland, CA					
Well ID:	MW-3					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	19.94		Fe=	mg/L		
Depth to Water:	6.82		ORP=	mV		
Water Column Height:	13.12		DO=	mg/L		
Gallons/ft:	0.16					
1 Casing Volume (gal):	2.10		COMMENTS: very turbid, silty			
3 Casing Volumes (gal):	6.30					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (μ S)		
10:20	2.1	21.3	7.58	249		
10:23	4.2	21.4	7.58	245		
10:26	6.3	21.5	7.58	245		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-3	10/24/2007	10:30	40 ml VOA	HCl, ICE	TPHg BTEX MTBE	8015, 8021, 8260



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	10/24/2007								
Client:	Conestoga-Rovers and Associates								
Site Address:	1499 MacArthur Boulevard, Oakland, CA								
Well ID:	MW-4								
Well Diameter:	2"								
Purging Device:	Disposable Bailer								
Sampling Method:	Disposable Bailer								
Total Well Depth:	19.95		Fe=	mg/L					
Depth to Water:	10.08		ORP=	mV					
Water Column Height:	9.87		DO=	mg/L					
Gallons/ft:	0.16								
1 Casing Volume (gal):	1.58		COMMENTS:						
3 Casing Volumes (gal):	4.74								
TIME:	CASING VOLUME (gal)	TEMP (Celsius)						pH	COND. (μ S)
9:40	1.6	20.0						7.19	688
9:42	3.2	19.7						7.19	730
9:44	4.7	19.3						7.13	728
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method			
MW-4	10/24/2007	9:47	40 ml VOA	HCl, ICE	TPHg BTEX MTBE	8015, 8021, 8260			



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	10/24/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1499 MacArthur Boulevard, Oakland, CA					
Well ID:	MW-5					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	14.70		Fe=	mg/L		
Depth to Water:	7.27		ORP=	mV		
Water Column Height:	7.43		DO=	mg/L		
Gallons/ft:	0.16		COMMENTS: very turbid, light sheen			
1 Casing Volume (gal):	1.19					
3 Casing Volumes (gal):	3.57					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)				
11:00	1.2	21.1	6.91	531		
11:02	2.4	20.9	6.91	541		
11:04	3.6	21.0	6.95	533		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-5	10/24/2007	11:07	40 ml VOA	HCl, ICE	TPHg BTEX MTBE	8015, 8021, 8260



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	10/24/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1499 MacArthur Boulevard, Oakland, CA					
Well ID:	MW-6					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	20.07		Fe=	mg/L		
Depth to Water:	7.30		ORP=	mV		
Water Column Height:	12.77		DO=	mg/L		
Gallons/ft:	0.16					
1 Casing Volume (gal):	2.04		COMMENTS:			
3 Casing Volumes (gal):	6.13					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (µS)		
10:00	2.0	21.2	7.00	829		
10:03	4.1	21.0	6.95	896		
10:06	6.1	21.0	7.01	895		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-6	10/24/2007	10:10	40 ml VOA	HCl, ICE	TPHg BTEX MTBE	8015, 8021, 8260



**CONESTOGA-ROVERS
& ASSOCIATES**

APPENDIX B

Laboratory Analytical Report

B



McCampbell Analytical, Inc.

"When Quality 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 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #120741;Hooshi's	Date Sampled: 10/24/07
		Date Received: 10/24/07
	Client Contact: Mark Jonas	Date Reported: 10/31/07
	Client P.O.:	Date Completed: 10/31/07

WorkOrder: 0710787

October 31, 2007

Dear Mark:

Enclosed are:

- 1). the results of **6** analyzed samples from your **#120741;Hooshi's project**,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

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

If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

McCAMPBELL ANALYTICAL, INC.


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

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 0710787

ClientID: CETE

 EDF Excel Fax Email HardCopy ThirdParty

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
ProjectNo: #120741; Hooshi's
PO:

Bill to:

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

Requested TAT: 5 days

Date Received: 10/24/2007

Date Printed: 10/24/2007

Sample ID	ClientSamplID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0710787-001	MW-1	Water	10/24/07 10:50:00	<input type="checkbox"/>	A	A											
0710787-002	MW-2	Water	10/24/07 11:30:00	<input type="checkbox"/>	A												
0710787-003	MW-3	Water	10/24/07 10:30:00	<input type="checkbox"/>	A												
0710787-004	MW-4	Water	10/24/07 9:47:00	<input type="checkbox"/>	A												
0710787-005	MW-5	Water	10/24/07 11:07:00	<input type="checkbox"/>	A												
0710787-006	MW-6	Water	10/24/07 10:10:00	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTEX W
2	PREDF REPORT
6	
11	

2	PREDF REPORT
7	
12	

3	
8	

4	
9	

5	
10	

Prepared by: Ana Venegas

Comments:

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



McCampbell Analytical, Inc.

"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

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

Date and Time Received: **10/24/07 3:41:21 PM**

Project Name: **#120741;Hooshi's**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **0710787** Matrix Water

Carrier: Client Drop-In

Chain of Custody (COC) Information

- | | | |
|---|---|-----------------------------|
| Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Sample IDs noted by Client on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Date and Time of collection noted by Client on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Sampler's name noted on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |

Sample Receipt Information

- | | | | |
|--|---|-----------------------------|--|
| Custody seals intact on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Samples in proper containers/bottles? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |

Sample Preservation and Hold Time (HT) Information

- | | | | |
|---|---|-----------------------------|---|
| All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Container/Temp Blank temperature | Cooler Temp: 5.5°C | | NA <input type="checkbox"/> |
| Water - VOA vials have zero headspace / no bubbles? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Sample labels checked for correct preservation? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| TTLC Metal - pH acceptable upon receipt (pH<2)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |

Client contacted:

Date contacted:

Contacted by:

Comments:



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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: #120741;Hooshi's	Date Sampled: 10/24/07
		Date Received: 10/24/07
	Client Contact: Mark Jonas	Date Extracted: 10/25/07-10/26/07
	Client P.O.:	Date Analyzed 10/25/07-10/26/07

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

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0710787

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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



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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0710787

EPA Method SW8021B/8015Cm		Extraction SW5030B				BatchID: 31525				Spiked Sample ID: 0710787-006A			
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) ^f	ND	60	77.6	81.1	4.29	107	99.4	7.20	70 - 130	30	70 - 130	30	
MTBE	ND	10	98.3	105	6.84	102	101	0.841	70 - 130	30	70 - 130	30	
Benzene	ND	10	96.5	103	6.80	96.9	98.9	2.03	70 - 130	30	70 - 130	30	
Toluene	ND	10	95.5	101	5.63	108	110	1.42	70 - 130	30	70 - 130	30	
Ethylbenzene	ND	10	96.1	102	5.63	105	106	0.874	70 - 130	30	70 - 130	30	
Xylenes	ND	30	86.7	95.3	9.52	120	120	0	70 - 130	30	70 - 130	30	
%SS:	97	10	106	106	0	89	96	7.92	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 31525 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710787-001A	10/24/07 10:50 AM	10/25/07	10/25/07 10:23 PM	0710787-002A	10/24/07 11:30 AM	10/25/07	10/25/07 11:24 PM
0710787-003A	10/24/07 10:30 AM	10/26/07	10/26/07 12:24 AM	0710787-004A	10/24/07 9:47 AM	10/26/07	10/26/07 12:55 AM
0710787-005A	10/24/07 11:07 AM	10/26/07	10/26/07 4:26 AM	0710787-006A	10/24/07 10:10 AM	10/26/07	10/26/07 4:57 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.

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

cluttered chromatogram; sample peak coelutes with surrogate peak.



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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: #120741;Hooshi's	Date Sampled: 10/24/07
		Date Received: 10/24/07
	Client Contact: Mark Jonas	Date Reported: 11/02/07
	Client P.O.:	Date Completed: 11/02/07

WorkOrder: 0710787

November 02, 2007

Dear Mark:

Enclosed are:

- 1). the results of **2** analyzed samples from your **#120741;Hooshi's project**,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

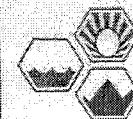
All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

0710787



McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

Website: www.mccampbell.com **Email:** main@mccampbell.com
Telenphone: (877) 252-9262 **Fax:** (925) 252-9269

Report To: Mack Jones Bill To: Conestoga-Rovers & Associates
Company: Conestoga-Rovers & Associates
5900 Holts Street, Ste A
Emeryville, CA E-Mail: mjjones@earthlink.net
Tele: (510) 420-3307 Fax: (510) 420-9170
Project #: 120741 Project Name: Hoashi's
Project Location: 1409 MacArthur Blvd., Oakland, CA 94607
Sampler Signature: 

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

GeoTracker ERF PDF Excel Write On (DW)

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

week 11 sample is effluent and a flag is required

Analysis Request Other Comment

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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 071078 A

ClientID: CETE

 EDF Excel Fax Email HardCopy ThirdParty

Report to:

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

Email: mjonas@CRAworld.com
TEL: (510) 420-3346 FAX: (510) 420-9170
ProjectNo: #120741; Hooshi's
PO:

Bill to:

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

Requested TAT: 5 days

Date Received: 10/24/2007

Date Add-On: 10/31/2007

Date Printed: 10/31/2007

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0710787-002	MW-2	Water	10/24/2007	<input type="checkbox"/>	B											
0710787-005	MW-5	Water	10/24/2007	<input type="checkbox"/>	B											

Test Legend:

1	MTBE_W
6	
11	

2	
7	
12	

3	
8	

4	
9	

5	
10	

Prepared by: Ana Venegas

Comments: Added MTBE by 8260 on 10/31/07.

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



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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: #120741;Hooshi's	Date Sampled: 10/24/07
		Date Received: 10/24/07
	Client Contact: Mark Jonas	Date Extracted: 11/01/07
	Client P.O.:	Date Analyzed 11/01/07

Methyl tert-Butyl Ether*

Extraction method SW5030B

Analytical methods SW8260B

Work Order: 0710787

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

* 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 surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0710787

EPA Method SW8260B		Extraction SW5030B				BatchID: 31608				Spiked Sample ID: 0710899-021B			
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	
Methyl-t-butyl ether (MTBE)	ND	10	97.7	98.1	0.316	103	93.4	9.64	70 - 130	30	70 - 130	30	
%SS1:	112	10	103	104	1.27	101	96	5.22	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 31608 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710787-002B	10/24/07 11:30 AM	11/01/07	11/01/07 2:33 PM	0710787-005B	10/24/07 11:07 AM	11/01/07	11/01/07 3:19 PM

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

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

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.

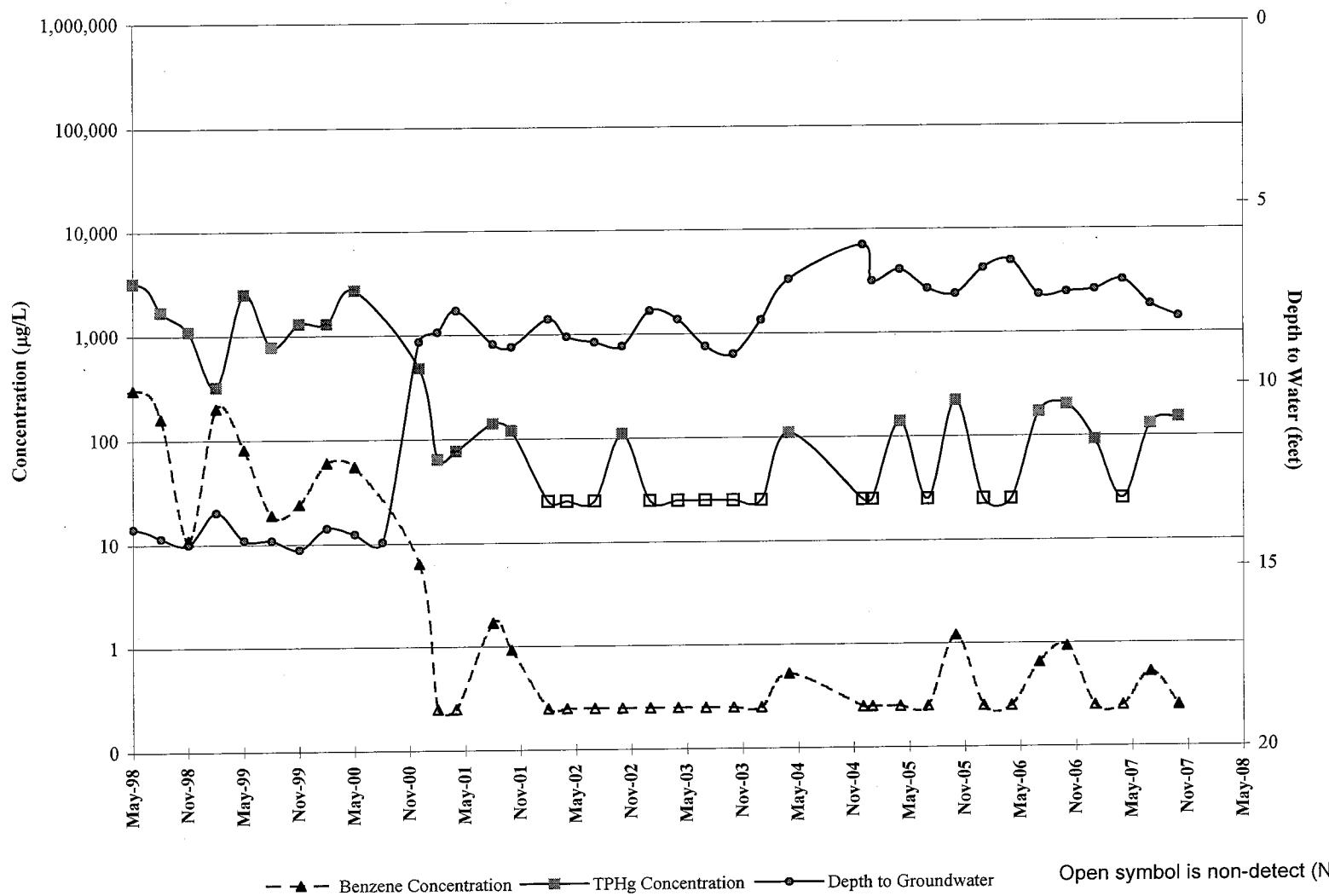


**CONESTOGA-ROVERS
& ASSOCIATES**

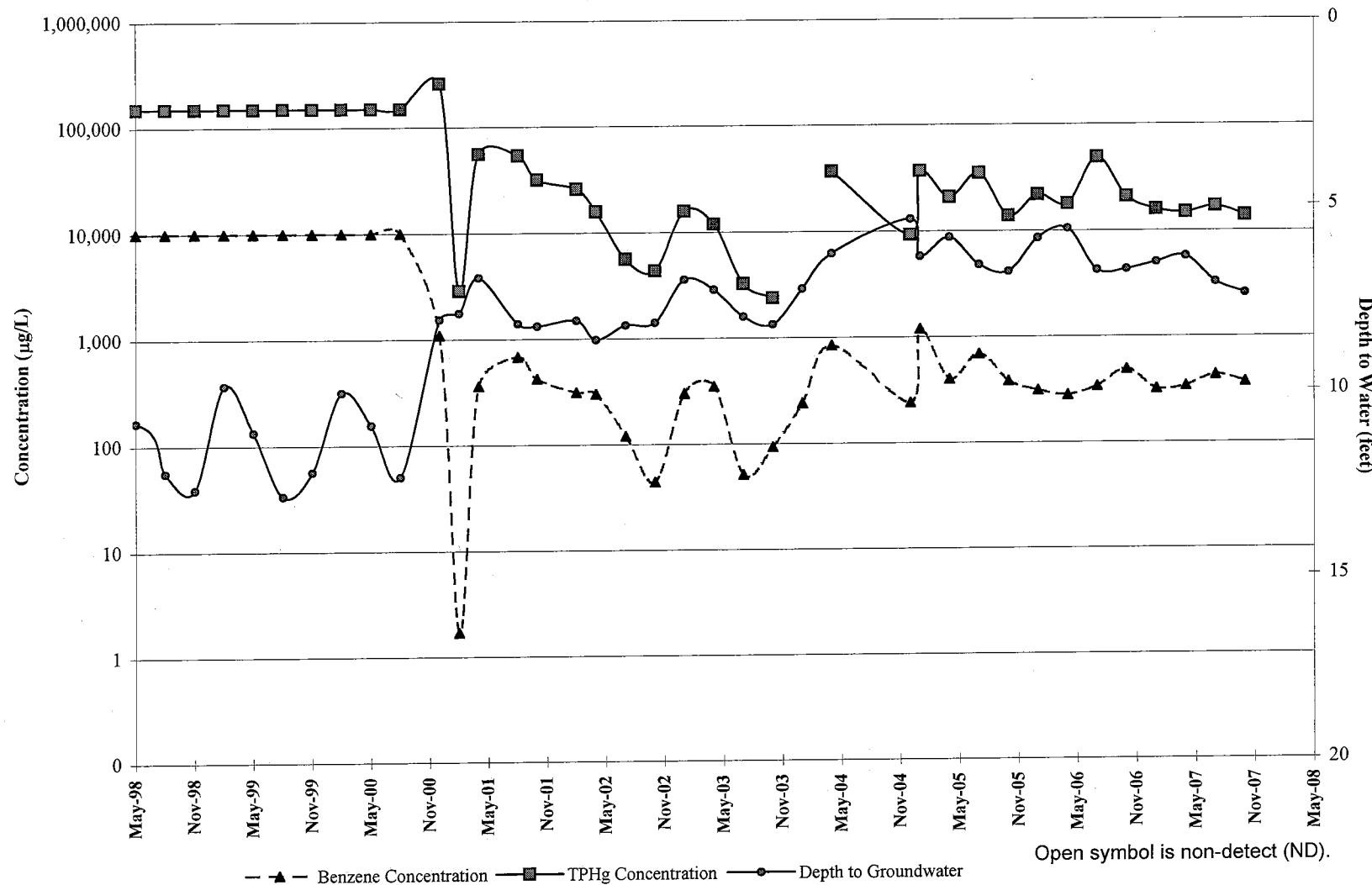
APPENDIX C

Benzene and TPHg Concentration Graphs

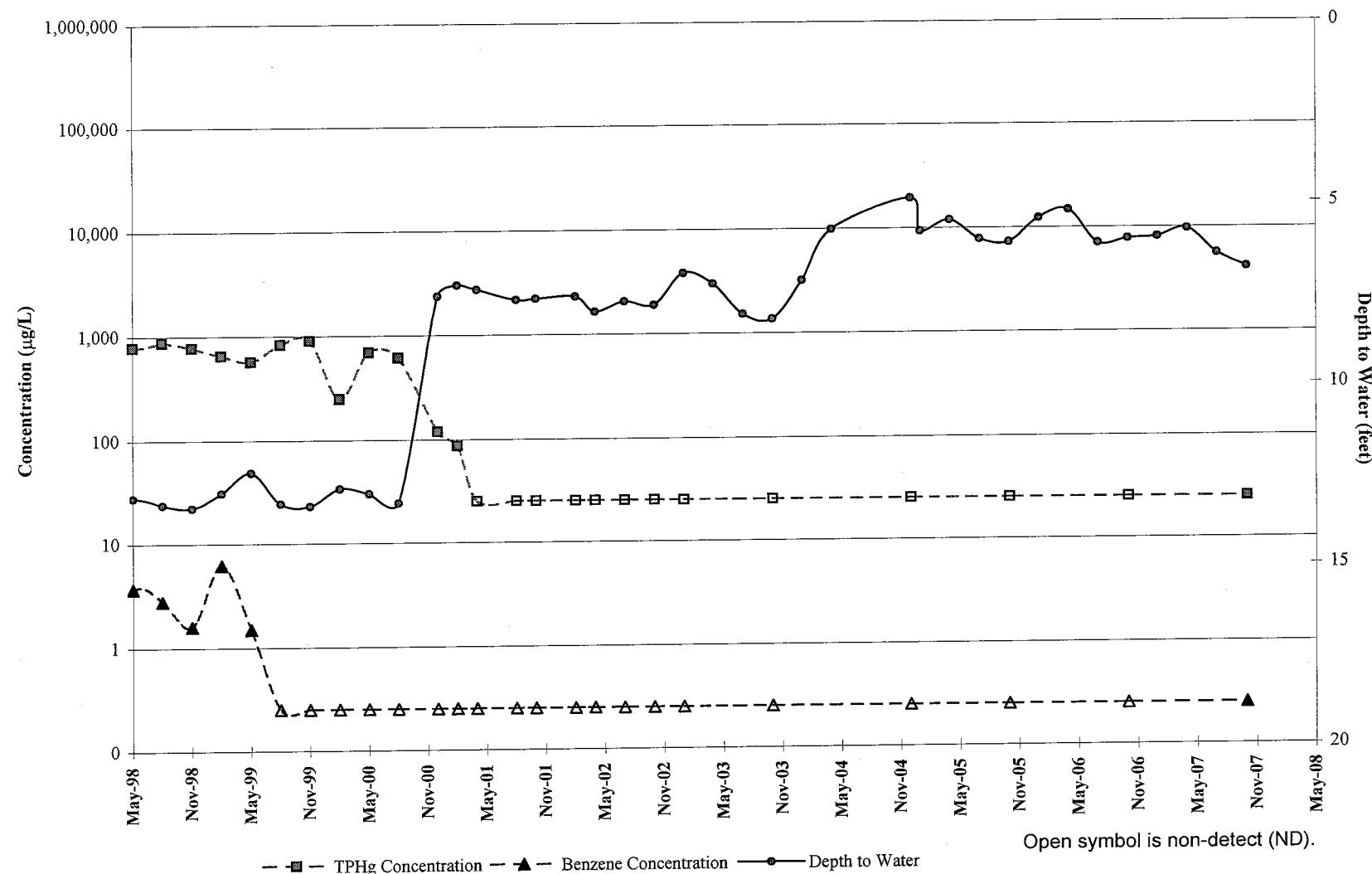
Monitoring Well MW-1
TPHg and Benzene Concentration Trend
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA



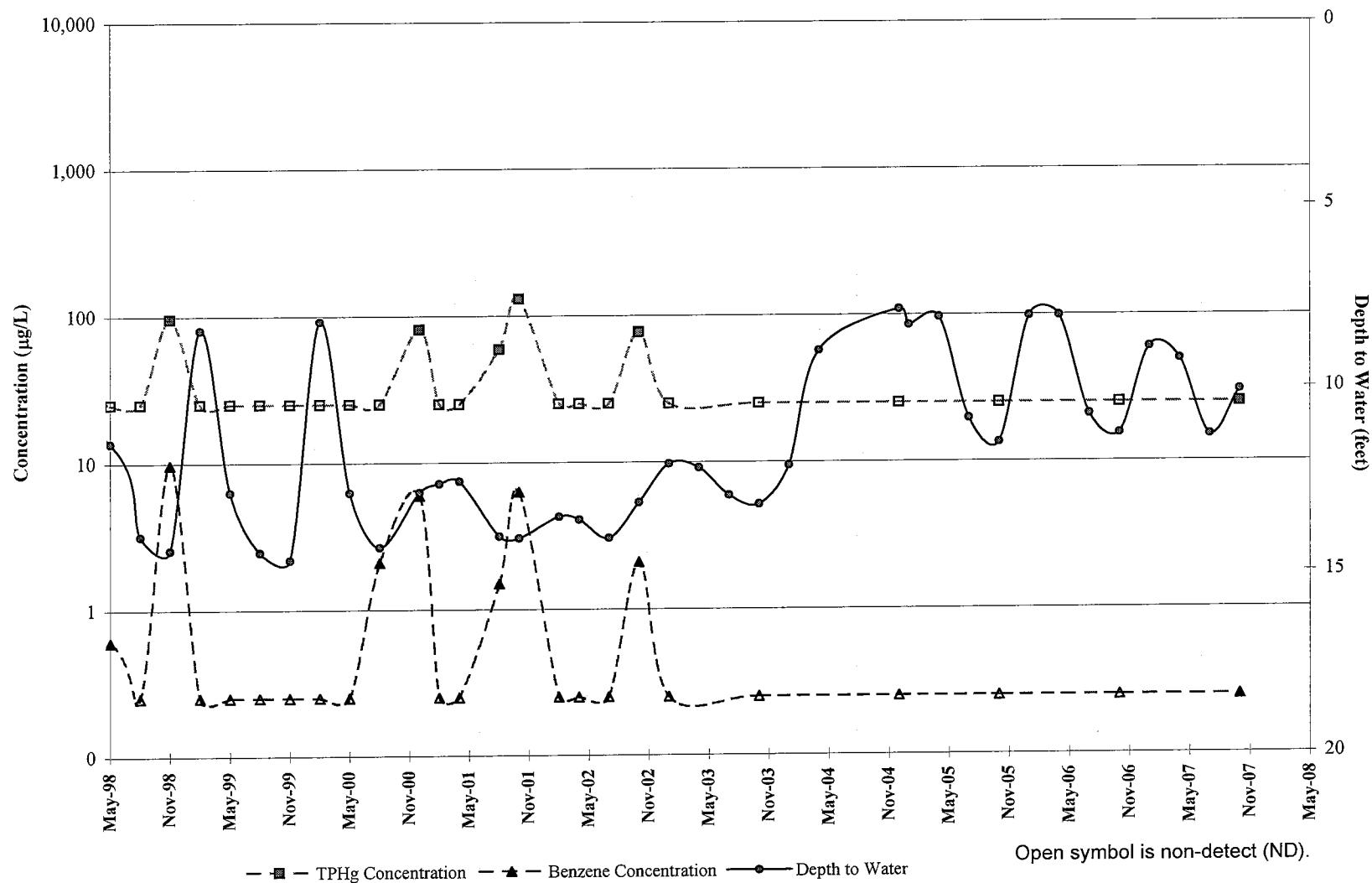
Monitoring Well MW-2
TPHg and Benzene Concentration Trend
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA



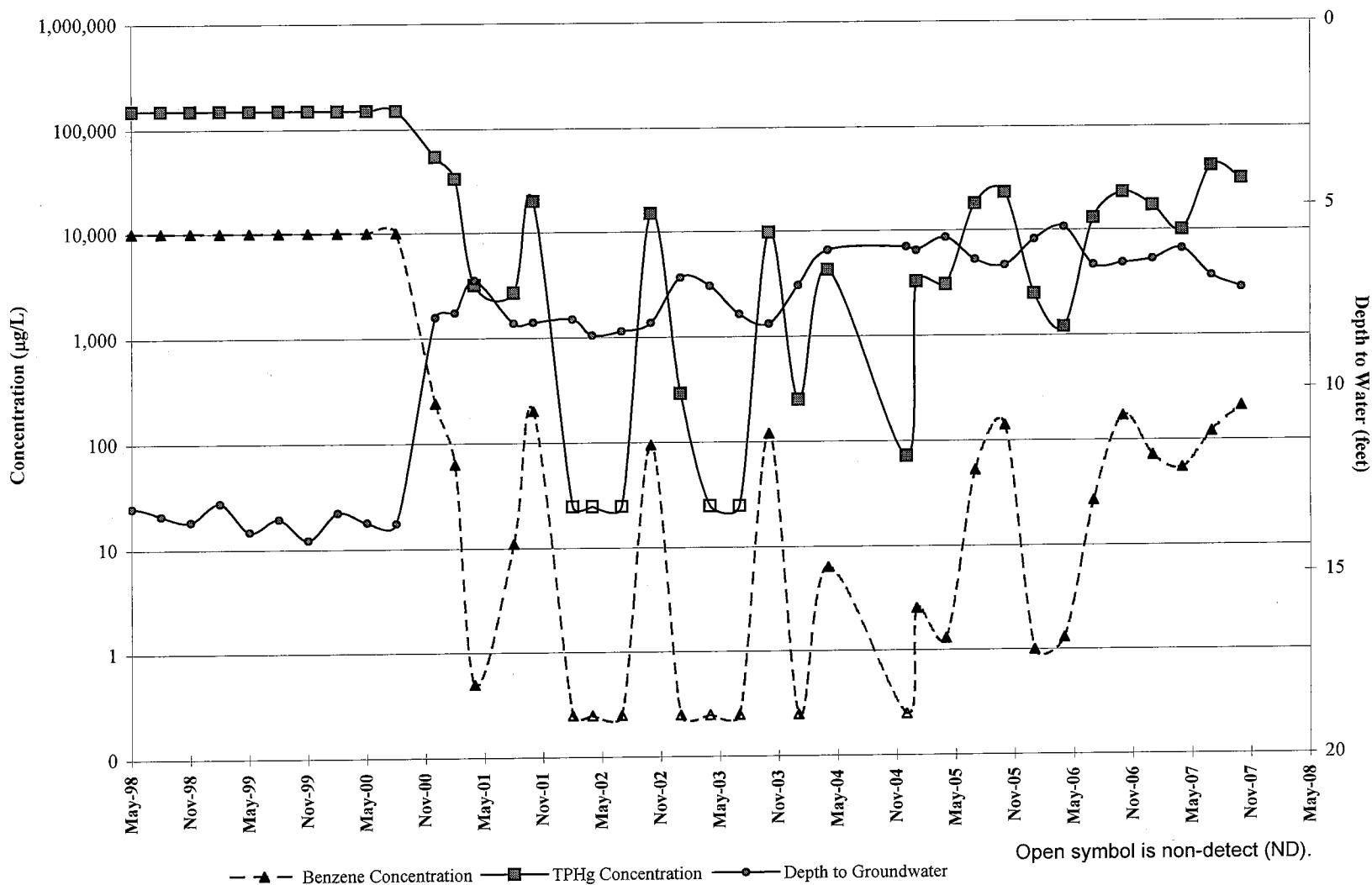
Monitoring Well MW-3
TPHg and Benzene Concentration Trend
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA



Monitoring Well MW-4
TPHg and Benzene Concentration Trend
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA



Monitoring Well MW-5
TPHg and Benzene Concentration Trend
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Monitoring Well MW-6
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