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Telephone: 510-420-0700 Facsimile: 510-420-9170
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July 3, 2007

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: **Groundwater Monitoring Report – Second Quarter 2007**
1137-1167 65th Street, Oakland, California 94608
Fuel Leak Case #RO0000082; CRA Project #521000

Dear Mr. Chan:

On behalf of Mr. John Nady, Conestoga-Rovers & Associates, Inc. (CRA) is submitting the *Groundwater Monitoring Report – Second Quarter 2007*. Presented in this report are a summary of the field activities and a presentation of the results from the second quarter 2007 groundwater monitoring event. In addition, this report contains recommendations for third quarter 2007 activities.

If you have any questions, please call me at (510) 420-3307.

Sincerely,
Conestoga-Rovers & Associates, Inc.

Mark Jonas, P.G.
Senior Project Manager

Attachment: Groundwater Monitoring Report – Second Quarter 2007

cc: Mr. Frederic Schrag, 6701 Shellmound Street, Emeryville, California 94608 (1 copy + PDF via e-mail)

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GROUNDWATER MONITORING REPORT – SECOND QUARTER 2007

**1137-1167 65th Street
Oakland, California 94608
Fuel Leak Case #RO0000082
CRA Project #521000**

July 3, 2007

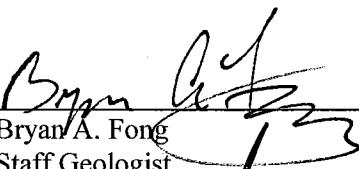
Prepared for Submittal to:

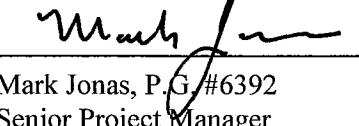
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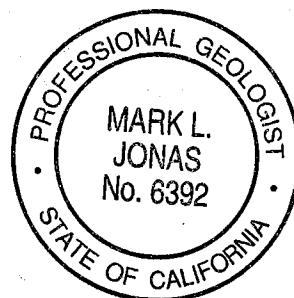
Prepared by:

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

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Bryan A. Fong
Staff Geologist


Mark Jonas, P.G. #6392
Senior Project Manager





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GROUNDWATER MONITORING REPORT – SECOND QUARTER 2007

1137-1167 65th Street
Oakland, California 94608
Case No.: RO0000082

July 3, 2007

INTRODUCTION

This report describes the second quarter 2007 groundwater monitoring activities performed at 1137-1167 65th Street, in Oakland, California (Figure 1). This groundwater monitoring event was conducted at the direction of the Alameda County Health Care Services Agency, Environmental Health Division (ACEH). This report presents a summary of the monitoring activities and results from second quarter 2007. In addition, this report contains recommendations for third quarter 2007 activities.

MONITORING ACTIVITIES

CRA coordinated with Muskan Environmental Sampling (MES) to perform quarterly groundwater monitoring activities at the site. On June 11, 2007, MES measured groundwater levels in all thirteen monitoring wells and collected groundwater samples from nine of the thirteen wells. As recommended in the *Groundwater Monitoring Report – Fourth Quarter 2005* and approved by Mr. Barney Chan of ACEH, the sampling schedule was revised as follows:

- Total petroleum hydrocarbons as diesel (TPHd), gasoline (TPHg), motor oil (TPHmo), and stoddard solvent (TPHss), and benzene, toluene, ethylbenzene, and total xylenes (BTEX) are analyzed in groundwater samples collected from monitoring wells MW-1A, MW-2A, MW-3A, MW-4A, MW-6A, MW-7A, and MW-6B.
- Halogenated volatile organic compounds (HVOCs) are analyzed in groundwater samples collected from monitoring wells MW-1A, MW-3A, MW-6A, MW-7A, MW-1B, MW-6B, and MW-6C.
- It is not necessary to analyze groundwater samples for methyl tertiary butyl ether (MTBE).
- Monitoring wells MW-4B, MW-5B, MW-1C, and MW-4C are no longer sampled.

Copies of the field data sheets are included as Appendix A.



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Groundwater Monitoring Report – Second Quarter 2007
1137-1167 65th Street, Oakland
July 3, 2007

Water Level Measurements: Depth to groundwater measurements were recorded to the nearest 0.01-foot, relative to a previously established reference elevation. Measurements were collected using an electric, conductance-actuated well sounder. The groundwater level measurement data are summarized in Table 1.

Groundwater Sampling: MES collected groundwater samples from wells MW-1A, MW-2A, MW-3A, MW-4A, MW-6A, MW-7A, MW-1B, MW-6B, and MW-6C.

Prior to sampling, the wells were purged to remove standing water in the well casing and annulus, and to promote inflow of representative groundwater from the surrounding formation. Each well was purged using a new disposable bailer, pre-cleaned poly vinyl chloride (PVC) bailer, or disposable tubing with a check valve. Field measurements of pH, specific conductance, and temperature of purged groundwater were measured after extraction of each successive casing volume. Casing volumes were calculated based on well diameter and height of the water column. Typically, purging continued until at least three casing volumes are extracted and consecutive pH, specific conductance, and temperature measurements appeared to stabilize. Field water quality measurements, purge volumes and sample collection data were recorded on field sampling data forms (Appendix A).

To minimize the potential for cross-contamination, groundwater monitoring equipment was decontaminated prior to being used in the first monitoring well and between successive wells. Groundwater samples were collected from each of the wells using clean disposable bailers or disposable tubing with a check valve. The samples were decanted from the bailers into 1-liter (L) amber glass containers and/or 40-milliliter (mL) glass volatile organic analysis (VOA) vials, both supplied by McCampbell Analytical, Inc. (McCampbell) of Pittsburg, California. Sample containers were labeled and placed in a cooler chilled with water-based ice, for temporary storage and transport. A chain-of-custody record was maintained (Appendix B).

Groundwater samples were analyzed for TPHd, TPHmo, TPHss, and TPHg by modified United States Environmental Protection Agency (EPA) Method SW8015C. BTEX and MTBE were analyzed by EPA Method SW8021B. Samples were also analyzed for HVOCs by EPA Method SW8260B, but only reported for the EPA Method 8010 basic target list. Samples marked for TPHd and TPHmo analysis were subjected to silica gel cleanup prior to analysis. The laboratory analytical report is included in Appendix B. Analytical results are summarized on Figures 2, 3, and 4 and presented in Tables 2 and 3.



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1137-1167 65th Street, Oakland
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Waste Disposal: Approximately 65 gallons of purge water was generated during this quarter's monitoring event. This waste water is stored in sealed Department of Transportation (DOT) approved 55 gallon drums and temporarily left on site for eventual transport and disposal.

RESULTS

Groundwater Flow Direction and Gradient: Depth-to-water measurements collected from thirteen wells on June 11, 2007 ranged from 2.57 to 13.11 feet (ft) below top of casing (TOC). Groundwater elevations were calculated by subtracting the depth-to-water measurements from the surveyed TOC elevations. The groundwater elevations for A, B, and C-zone water-bearing zones were each plotted and contoured on Figures 2, 3, and 4, respectively. The groundwater flow direction in the A-zone was southwest with a gradient of approximately 0.03 feet per foot (ft/ft) (Figure 2). The groundwater flow direction in the B-zone was predominantly southwest with a gradient of approximately 0.059 ft/ft (Figure 3). The groundwater flow direction in the C-zone was southwest with a gradient of approximately 0.007 ft/ft (Figure 4). The groundwater flow direction and gradient in the A-zone, B-zone, and C-zone are generally consistent with historical results. The A-zone is defined as the first encountered groundwater bearing zone from approximately 5 feet below ground surface (ft bgs) to 15 ft bgs. A-zone monitoring wells are MW-1A, MW-2A, MW-3A, MW-4A, MW-6A, and MW-7A. The B-zone is defined as the second encountered groundwater bearing zone from approximately 16 ft bgs to 22 ft bgs. B-zone monitoring wells are MW-1B, MW-4B, MW-5B, and MW-6B. The C-zone is defined as the third encountered groundwater bearing zone from approximately 28 ft bgs to 40 ft bgs. C-zone monitoring wells are MW-1C, MW-4C, and MW-6C. Rose diagrams depicting historical groundwater flow directions for the A, B, and C-zones are presented on the figures. Depth-to-water and groundwater elevation data are presented in Tables 2 and 3.

Chemicals Detected in A-Zone Groundwater: During this monitoring event, groundwater samples from A-zone monitoring wells MW-1A, MW-2A, MW-3A, MW-4A, MW-6A, and MW-7A were analyzed for petroleum hydrocarbons. Groundwater from A-zone monitoring wells MW-1A, MW-3A, MW-6A, and MW-7A were analyzed for HVOCS.

Petroleum hydrocarbons were detected in all six A-zone monitoring wells sampled. The highest TPHd concentration was detected in well MW-7A with 32,000 micrograms per liter ($\mu\text{g}/\text{L}$). The highest TPHg concentration was detected in well MW-3A with 5,200 $\mu\text{g}/\text{L}$ and the highest TPHss concentration was detected in well MW-6A with 3,700 $\mu\text{g}/\text{L}$. TPHmo concentration was only detected in well MW-3A at 730 $\mu\text{g}/\text{L}$.



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No benzene was detected in any of the A-zone wells sampled. Ethylbenzene was only detected in well MW-6A at a concentration of 2.1 µg/L. Xylenes were detected in wells MW-4A and MW-6A at concentrations of 1.6 µg/L and 9.5 µg/L, respectively. Toluene was detected in well MW-2A and well MW-4A at concentrations of 1.7 µg/L and 0.92 µg/L, respectively.

HVOCS were detected in two of the four A-zone monitoring wells sampled. The HVOCS detections were as follows:

- The only Tetrachloroethene (PCE) Trichloroethene (TCE) cis-1,2-Dichloroethene (cis-1,2-DCE) trans-1,2-Dichloroethene (trans-1,2-DCE) 1,1-Dichloroethane (1,1-DCA), and Vinyl Chloride concentrations detected were in well MW-1A at a concentration of 26 µg/L, 17 µg/L, 13 µg/L, 1.6 µg/L, 1.9 µg/L, and 2.3 µg/L, respectively.
- Additionally, chlorobenzene was detected in well MW-3A at a concentration of 68 µg/L.

No other HVOCS were detected in A-zone wells. A-zone groundwater analytical data and water level data are presented in Tables 2 and 3, and summarized on Figure 2.

Chemicals Detected in B-Zone Groundwater: During the second quarter 2007, groundwater samples from B-zone monitoring well MW-6B were analyzed for petroleum hydrocarbons by EPA Methods SW8015C and SW8021B, and wells MW-1B and MW-6B were analyzed for HVOCS.

- TPHd, TPHss, and TPHg were detected in this groundwater sample at concentrations of 29,000 µg/L, 2,100 µg/L, and 2,600 µg/L, respectively.
- No TPHmo or BTEX were detected above laboratory reporting limits.
- The following HVOCS were detected in well MW-1B: 8.5 µg/L cis-1,2-DCE, 8.0 µg/L 1,1-DCA, and 6.5 µg/L 1,2-DCA.
- No other HVOCS were detected in B-zone wells. B-zone groundwater analytical data and water level data are presented in Tables 2 and 3, and summarized on Figure 3.



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Groundwater Monitoring Report – Second Quarter 2007
1137-1167 65th Street, Oakland
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Chemicals Detected in C-Zone Groundwater: No C-zone wells were sampled for petroleum hydrocarbons. Only C-zone well MW-6C was sampled and analyzed for HVOCS.

- The following HVOCS were detected in well MW-6C: 6.1 µg/L PCE, 6.4 µg/L TCE, 26 µg/L cis-1,2-DCE, 0.99 µg/L trans-1,2-DCE, 0.85 µg/L 1,1-DCA, and 4.0 µg/L vinyl chloride.
- No other HVOCS were detected in well MW-6C. C-zone groundwater analytical data and water level data are presented in Tables 2 and 3, and summarized on Figure 4.

GEOTRACKER SUBMITTALS

CRA uploaded second quarter 2007 groundwater depth data, analytical results, and this report to the State's GeoTracker database on behalf of Mr. John Nady.

RECOMMENDED THIRD QUARTER 2007 ACTIVITIES

CRA makes the following recommendations:

- Conduct a quarterly groundwater monitoring event during the third quarter 2007. Monitoring activities should include gauging groundwater depths in the thirteen site monitoring wells to determine groundwater flow patterns. Groundwater sampling and analysis should include monitoring wells MW-1A, MW-2A, MW-3A, MW-4A, MW-6A, MW-7A, and MW-6B for petroleum hydrocarbons (TPHg, TPHd, TPHmo, TPHss, and BTEX) and wells MW-1A, MW-3A, MW-6A, MW-7A, MW-1B, MW-6B, and MW-6C for (8010 basic target list) HVOCS. A report will be prepared detailing the activities and findings of the third quarter 2007 event to be submitted to ACEH.
- Groundwater analytical, well gauging data, and groundwater monitoring report will be uploaded to GeoTracker.
- The third quarter 2007 groundwater monitoring report will be submitted via ACEH's file transfer protocol (ftp) site and notification will be sent to Mr. Chan by e-mail.



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Groundwater Monitoring Report – Second Quarter 2007
1137-1167 65th Street, Oakland
July 3, 2007

ATTACHMENTS

Figure 1 – Vicinity Map

Figure 2 – Groundwater Flow and Chemical Concentrations – A Zone

Figure 3 – Groundwater Flow and Chemical Concentrations – B Zone

Figure 4 – Groundwater Flow and Chemical Concentrations – C Zone

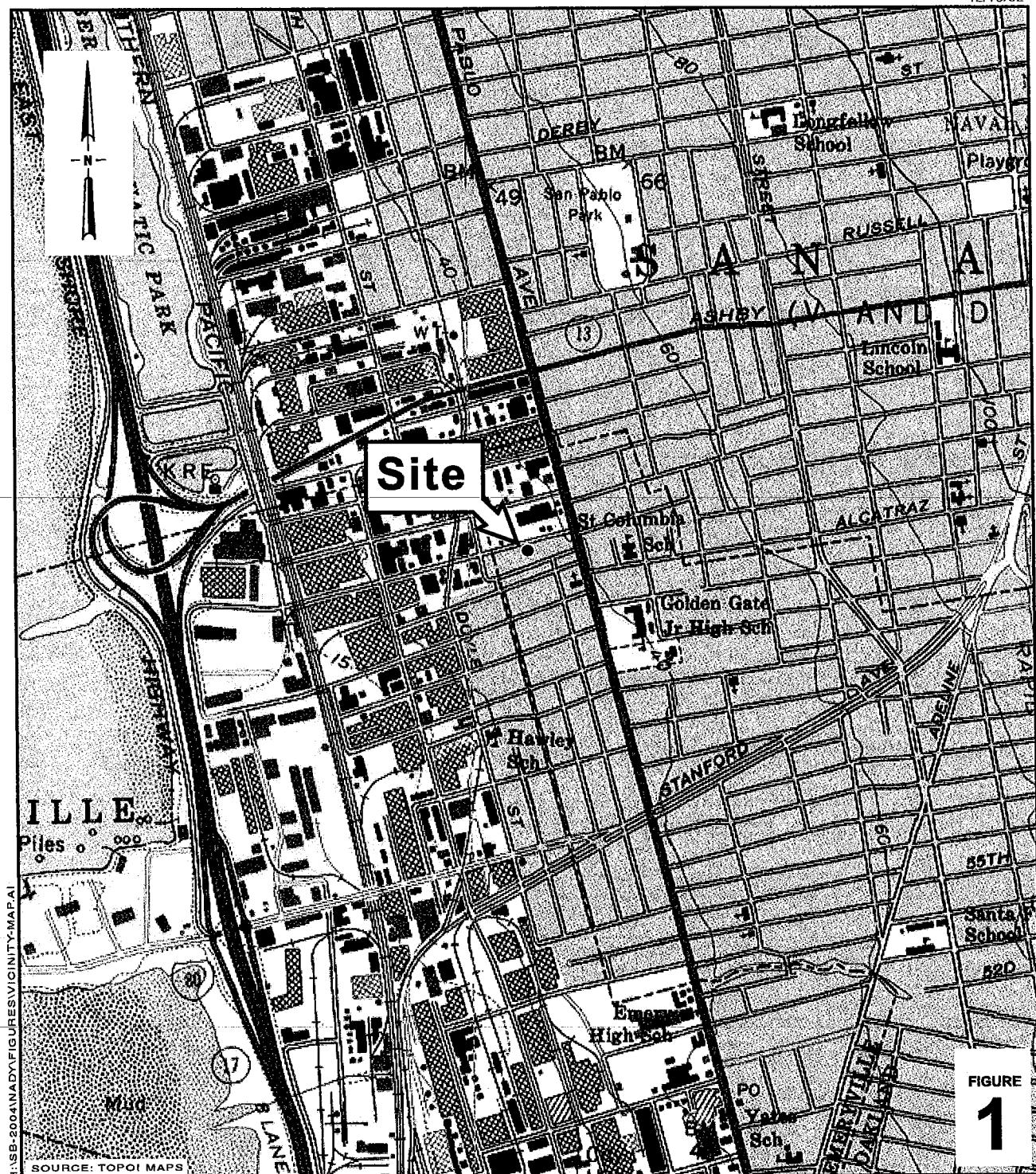
Table 1 – Well Construction Details

Table 2 – Monitoring Well Groundwater Results: Petroleum Hydrocarbons

Table 3 – Monitoring Well Groundwater Results: Halogenated Volatile Organic Compounds

Appendix A – Field Data Sheets

Appendix B – Laboratory Analytical Report



Vicinity Map

1137 - 1167 65th Street
Oakland, California

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**Groundwater Flow and
Chemical Concentrations - A Zone**

June 11, 2007

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1137 - 1167 65th Street
Oakland, California

EXPLANATION

- MW-1A • CRA monitoring well location
- SB-12 • CRA soil boring location
- SB-1 • CRA soil boring/temporary well location
- SCI soil sample location
- 1 ○ Former tank location and tank nomenclature
- - - Product piping
- Product piping stub-ups
- Electrical line
- Storm drain
- Sanitary sewer line
- Water line
- Gas line
- Communications line
- 33.00 — Groundwater elevation contour line
in feet above mean sea level (MSL),
dashed where inferred
- 0.031 ← → Groundwater flow direction and gradient
- Well ID
- ELEV.
- TPHd
- TPHss
- TPHg
- PCE
- TCE
- cls-1,2-DCE
- Vinyl Chloride
- Not analyzed

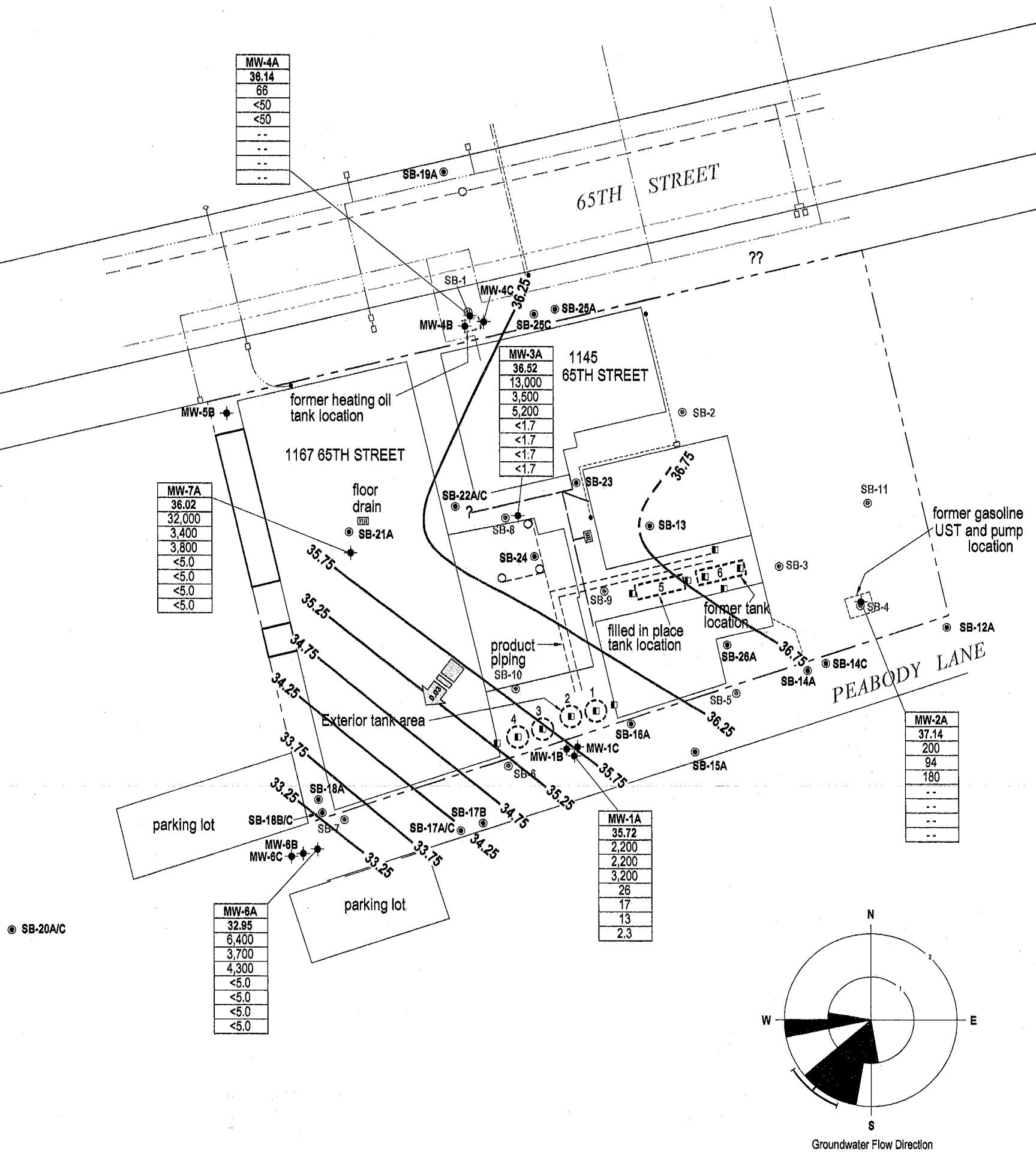
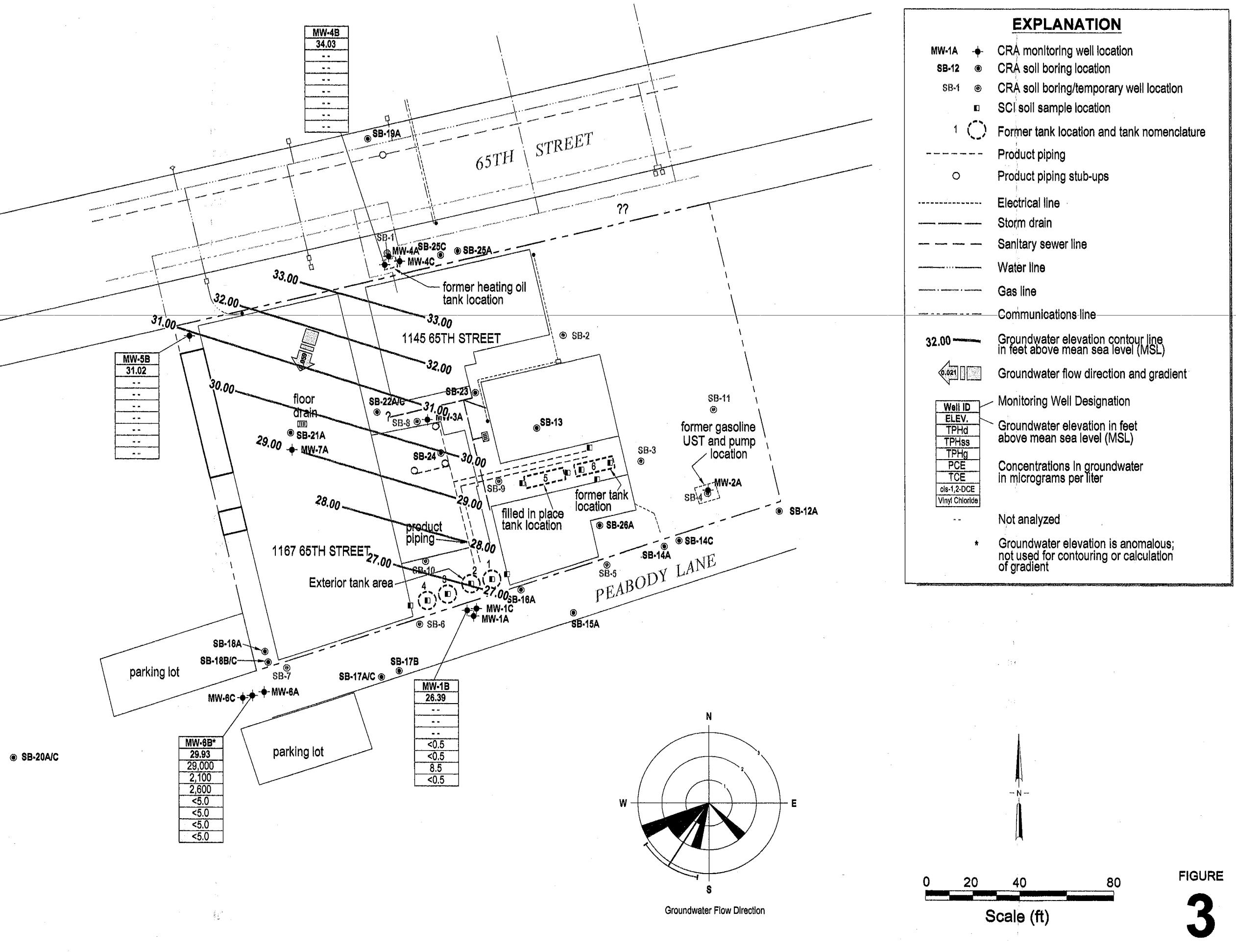


FIGURE
2

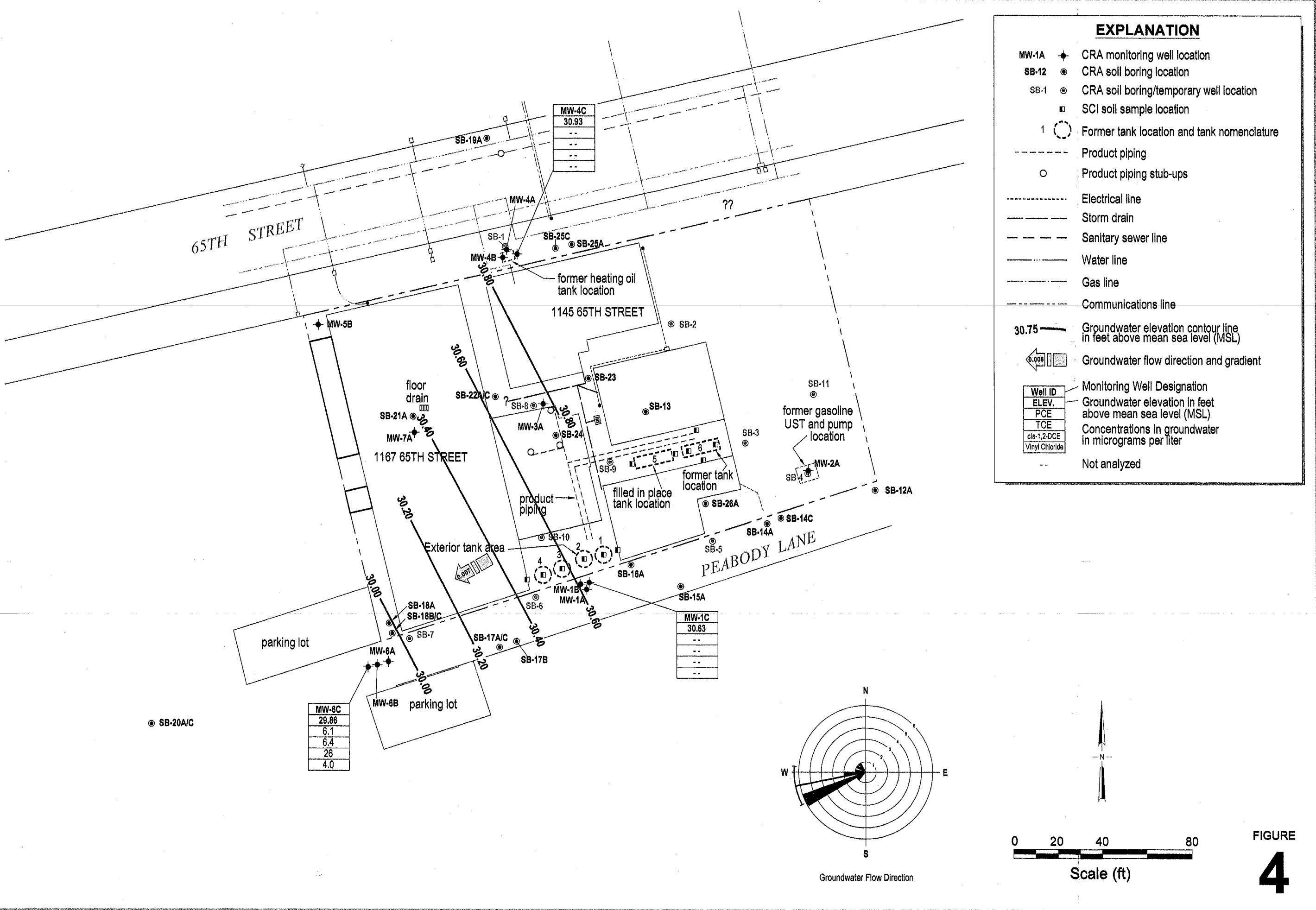
**Groundwater Flow and
Chemical Concentrations - B Zone**

June 11, 2007


**CRA
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**Groundwater Flow and
Chemical Concentrations - C Zone**

June 11, 2007



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Table 1. Well Construction Details - John Nady, 1137-1167 65th Street, Oakland, California

Well ID	Date Installed	Borehole Depth (ft)	Borehole Diameter (inches)	Casing Diameter (in)	Screen Interval (ft bgs)	Screen Size (in)	Filter Pack (ft bgs)	Bentonite Seal (ft bgs)	Cement Seal (ft bgs)	TOC Elevation (ft msl)
<u>A-Zone Monitoring Wells</u>										
MW-1A	5/10/2004	14.5	8	2	4.5 - 14.5	0.010	3.5 - 14.5	2.5 - 3.5	0 - 2.5	39.64
MW-2A	5/11/2004	12.0	10	4	3.0 - 12.0	0.020	2.5 - 3.0	1.0 - 2.5	0 - 1.0	40.72
MW-3A	5/7/2004	16.0	8	2	3.5 - 14.0	0.010	3.0 - 3.5	2.0 - 3.0	0 - 2.0	40.88
MW-4A	5/18/2004	16.0	8	2	3.0 - 13.0	0.010	2.5 - 13.0	1.5 - 2.5	0 - 1.5	38.71
MW-6A	5/11/2004	14.5	8	2	4.5 - 14.5	0.010	3.5 - 14.5	1.5 - 3.5	0 - 1.5	37.98
MW-7A	5/7/2004	10.0	6.5	1	5.0 - 10.0	0.010	4.0 - 10.0	3.0 - 4.0	0 - 3.0	40.58
<u>B-Zone Monitoring Wells</u>										
MW-1B	5/12/2004	20.0	8	2	16.5 - 20.0	0.010	15.5 - 20.0	13.0 - 15.5	0 - 13.0	39.50
MW-4B	5/18/2004	24.0	8	2	17.0 - 21.0	0.010	16.0 - 21.0	12.0 - 14.0 21.0 - 24.0	0 - 12.0	38.54
MW-5B	5/18/2004	24.0	8	2	15.0 - 24.0	0.010	14.0 - 24.0	12.0 - 14.0	0 - 12.0	38.98
MW-6B	5/12/2004	24.5	8	2	17.0 - 22.0	0.010	16.0 - 22.0	14.0 - 16.0 22.0 - 24.5	0 - 14.0	37.66
<u>C-Zone Monitoring Wells</u>										
MW-1C	5/10/2004	40.0	8	2	25.0 - 34.0	0.010	24.0 - 34.0	22.0 - 24.0 34.0 - 40.0	0 - 22.0	39.49
MW-4C	5/17/2004	40.0	8	2	27.0 - 32.0	0.010	26.0 - 27.0	24.0 - 26.0 32.0 - 40.0	0 - 24.0	38.50
MW-6C	5/11/2004	39.5	8	2	26.5 - 34.0	0.010	25.5 - 34.0	23.0 - 25.0 34.0 - 39.5	0 - 23.0	37.59

Abbreviations / Notes

ft = feet

in = inches

ft bgs = feet below grade surface

ft msl = feet above mean sea level

TOC = top of casing

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Table 2. Monitoring Well Groundwater Results: Petroleum Hydrocarbons - John Nady, 1137-1167 65th Street, Oakland, California

Well ID TOC (ft)	Date Sampled	Groundwater Elevation (ft msl)	Depth to Water (ft)	TPHd ↖	TPHg	TPHmo	TPHss	Benzene µg/L	Toluene	Ethylbenzene	Xylenes	MTBE ↗	Notes
MW-1A 39.64	6/3/2004	35.14	4.50	1,300	1,400	260	2,500	ND<0.5	ND<0.5	2.0	11	ND<5.0	
	11/23/2004	36.54	3.10	1,400	2,300	ND<250	2,800	0.64	ND<0.5	2.5	9.7	6.8	a,b,c
	3/14/2005	37.02	2.62	3,200	4,800	ND<250	6,000	0.68	ND<0.5	2.0	6.8	ND<5.0	d,e
	6/15/2005	35.14	4.50	2,500	2,800	ND<250	3,400	ND<2.5	ND<2.5	ND<2.5	5.9	ND<25	a,b,h,i,c
	9/19/2005	33.14	6.50	2,800	4,100	ND<250	6,000	ND<1.0	ND<1.0	3.3	6.2	ND<10	a,b,i,c
	12/12/2005	35.14	4.50	2,500	2,600	ND<250	3,100	ND<1.7	ND<1.7	2.7	6.5	ND<17	a,b,c,h,i
	3/13/2006	37.74	1.90	2,300	2,000	ND<250	2,400	0.51	ND<0.5	1.9	3.5	--	a,b,c,j
	6/19/2006	35.94	3.70	2,600	2,200	ND<250	3,500	0.52	ND<0.5	2.9	6.7	--	m,b,c
	9/20/2006	34.19	5.45	2,400	2,200	ND<250	2,400	ND<2.5	ND<2.5	3.0	9.7	--	a,b,c,j
	12/20/2006	37.02	2.62	1,900	1,300	ND<250	1,400	0.52	ND<0.5	2.9	7.6	--	a,e,h
MW-1A 39.64	3/29/2007	37.04	2.60	1,200	1,800	ND<250	2,100	ND<0.5	ND<0.5	2.2	6.4	ND<5.0	a,b,c
	6/11/2007	35.72	3.92	2,200	3,200	ND<250	2,200	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	a,b,c
MW-2A 40.72	6/3/2004	36.48	4.24	2,900	1,700	ND<250	3,500	ND<0.5	3.5	4.9	5.1	ND<5.0	
	11/23/2004	37.83	2.89	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	3/14/2005	39.02	1.70	--	--	--	--	--	--	--	--	--	
	3/15/2005	--	--	560	360	450	260	ND<0.5	2.5	ND<0.5	ND<0.5	ND<5.0	e,d,g,i
	6/15/2005	37.91	2.81	--	--	--	--	--	--	--	--	--	
	6/16/2005	--	--	470	480	330	430	ND<0.5	2.9	ND<0.5	ND<0.5	ND<5.0	a,b,i,g,e
	9/19/2005	35.46	5.26	--	--	--	--	--	--	--	--	--	
	9/20/2005	--	--	2,100	960	870	960	ND<0.5	4.7	2.9	ND<0.5	ND<5.0	e,g,b,i,l
	12/12/2005	37.66	3.06	--	--	--	--	--	--	--	--	--	
	12/13/2005	--	--	700	670	470	510	ND<0.5	5.9	ND<0.5	ND<0.5	ND<5.0	a,b,e,g,i
	3/13/2006	40.33	0.39	--	--	--	--	--	--	--	--	--	
	3/14/2006	--	--	81	100	ND<250	81	ND<0.5	1.5	ND<0.5	ND<0.5	--	a,b,c,i
	6/19/2006	37.31	3.41	--	--	--	--	--	--	--	--	--	
	6/20/2006	--	--	530	270	420	180	ND<0.5	1.7	ND<0.5	ND<0.5	--	e,g,i,l
MW-3A 40.88	9/20/2006	34.65	6.07	800	1,700	730	1,700	ND<2.5	5.5	ND<2.5	ND<2.5	--	a,b,d,e,g,i
	12/20/2006	38.57	2.15	190	94	300	61	ND<0.5	1.5	ND<0.5	ND<0.5	--	e,g,m,n
	3/29/2007	38.22	2.50	200	260	ND<250	240	ND<0.5	2.7	ND<0.5	ND<0.5	ND<5.0	a,b,c
	6/11/2007	37.14	3.58	200	180	ND<250	94	ND<0.5	1.7	ND<0.5	ND<0.5	--	a,b,c,i
	6/3/2004	36.56	4.32	90,000	4,800	6,000	12,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	
	11/23/2004	37.89	2.99	22,000	3,800	ND<2,500	5,700	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	a,c,d
MW-3A 40.88	3/14/2005	37.28	3.60	--	--	--	--	--	--	--	--	--	
	3/15/2005	--	--	37,000	2,400	ND<2,500	3,500	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<17	e,d,i
MW-3A 40.88	6/15/2005	36.78	4.10	--	--	--	--	--	--	--	--	--	

Conestoga-Rovers & Associates

Table 2. Monitoring Well Groundwater Results: Petroleum Hydrocarbons - John Nady, 1137-1167 65th Street, Oakland, California

Well ID TOC (ft)	Date Sampled	Groundwater Elevation (ft msl)	Depth to Water (ft)	TPHd ←	TPHg	TPHmo	TPHss	Benzene μg/L	Toluene —	Ethylbenzene	Xylenes	MTBE →	Notes
MW-3A <i>(cont.)</i>	6/16/2005	--	--	15,000	2,100	ND<1,200	3,300	ND<1.7	ND<1.7	ND<1.7	2.4	ND<17	a,c,d,h,i
	9/19/2005	35.93	4.95	--	--	ND<5,000	8,000	ND<1.0	ND<1.0	2.6	6.8	ND<10	a,b,c,d,i
	9/20/2005	--	--	55,000	4,700	--	--	--	--	--	--	--	--
	12/12/2005	36.72	4.16	--	--	--	--	--	--	--	--	ND<17	a,b,c,d,h,i
	12/13/2005	--	--	34,000	1,100	ND<12,000	1,600	ND<1.7	ND<1.7	ND<1.7	2.3	--	--
	3/13/2006	37.42	3.46	--	--	--	--	--	--	--	--	--	a,c,d,g,h
	3/14/2006	--	--	21,000	2,200	1,600	3,300	ND<0.5	ND<0.5	1.1	ND<0.5	--	--
	6/19/2006	36.48	4.40	--	--	--	--	--	--	--	--	--	c,d,g,h,m
	6/20/2006	--	--	19,000	8,000	1,000	16,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	a,c,d,g,h,i
	9/20/2006	35.78	5.10	13,000	2,500	1,300	3,300	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	e,g,h,n
	12/20/2006	36.78	4.10	15,000	2,600	670	3,500	ND<2.5	ND<2.5	ND<2.5	7.6	--	a,c,d,h
	3/29/2007	36.82	4.06	21,000	2,600	940	3,400	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	--
	6/11/2007	36.52	4.36	13,000	5,200	730	3,500	ND<10	ND<10	ND<10	ND<10	--	a,d,h
MW-4A 38.71	6/3/2004	36.26	2.45	270	ND<50	440	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	d
	11/23/2004	37.13	1.58	73	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	3/14/2005	36.66	2.05	--	--	--	--	--	--	--	--	--	g,d,f,i
	3/15/2005	--	--	210	ND<50	300	ND<50	0.91	1.7	ND<0.5	1.9	ND<5.0	--
	6/15/2005	36.38	2.33	--	--	--	--	--	--	--	--	--	j,d,f
	6/16/2005	--	--	99	59	ND<250	75	1.0	1.9	ND<0.5	2.1	ND<5.0	--
	9/19/2005	35.01	3.70	--	--	--	--	--	--	--	--	--	--
	9/20/2005	--	--	87	ND<50	ND<250	ND<50	1.2	2.1	0.51	2.4	ND<5.0	d,f
	12/12/2005	36.39	2.32	--	--	--	--	--	--	--	--	--	--
	12/13/2005	--	--	71	ND<50	ND<250	ND<50	0.67	1.4	ND<0.5	1.9	ND<5.0	d,f,i
	3/13/2006	36.75	1.96	--	--	--	--	--	--	--	--	--	--
	3/14/2006	--	--	68	ND<50	ND<250	ND<50	0.60	1.3	ND<0.5	1.8	--	d,f
	6/19/2006	36.15	2.56	--	--	--	--	--	--	--	--	--	f
	6/20/2006	--	--	72	ND<50	ND<250	ND<50	0.53	1.1	ND<0.5	1.6	--	a,d,f,i
	9/20/2006	35.10	3.61	160	110	ND<250	88	1.2	2.5	0.61	3.9	--	f
	12/20/2006	36.39	2.32	97	ND<50	ND<250	ND<50	0.99	2.1	0.52	2.9	--	--
	3/29/2007	36.46	2.25	ND<50	ND<50	ND<250	ND<50	ND<0.5	0.93	ND<0.5	1.3	ND<5.0	--
	6/11/2007	36.14	2.57	66	ND<50	ND<250	ND<50	ND<0.5	0.92	ND<0.5	1.6	--	d,f
MW-6A 37.98	6/3/2004	31.98	6.00	3,500	970	340	2,400	ND<0.5	ND<0.5	ND<0.5	2.1	ND<5.0	a,c
	11/23/2004	33.13	4.85	1,400	1,900	ND<250	3,000	ND<0.5	ND<0.5	ND<0.5	3.0	ND<5.0	e,d,i
	3/14/2005	35.03	2.95	5,900	2,900	ND<250	2,600	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	a,j,c,d
	6/15/2005	33.28	4.70	6,100	2,200	ND<250	3,400	ND<0.5	ND<0.5	0.60	4.4	ND<10	--

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Table 2. Monitoring Well Groundwater Results: Petroleum Hydrocarbons - John Nady, 1137-1167 65th Street, Oakland, California

Well ID TOC (ft)	Date Sampled	Groundwater Elevation (ft msl)	Depth to Water (ft)	TPHd ←	TPHg	TPHmo	TPHss	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
								µg/L					
MW-6A <i>(cont.)</i>	9/19/2005	32.07	5.91	2,600	2,200	ND<250	3,900	ND<1.0	ND<1.0	1.4	7.6	ND<10	a,b,c
	12/12/2005	33.12	4.86	4,600	2,900	ND<250	4,500	ND<0.5	ND<0.5	1.6	8.9	ND<5.0	a,c,h,i
	3/13/2006	36.05	1.93	4,300	1,900	ND<250	3,000	ND<0.5	ND<0.5	ND<0.5	4.3	--	a,c,d,h
	6/19/2006	32.59	5.39	7,800	2,300	260	4,600	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	c,g,h,m
	9/20/2006	31.96	6.02	2,600	960	ND<250	1,200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	--	a,c,i
	12/20/2006	33.57	4.41	4,100	2,400	ND<250	3,200	ND<5.0	ND<5.0	ND<5.0	8.1	--	e,h,n
	3/29/2007	33.67	4.31	2,900	2,200	ND<250	2,700	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	a,c
MW-7A 40.58	6/3/2004	36.08	4.50	--	3,900	--	9,900	ND<5.0	ND<5.0	ND<5.0	6.6	ND<50	--
	11/23/2004	--	--	--	--	--	--	--	--	--	--	--	c,d,h
	3/14/2005	37.03	3.55	14,000	3,900	620	3,700	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	a,c,d,h,i
	6/15/2005	36.41	4.17	24,000	2,500	ND<1,200	3,900	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	a,c,i
	9/19/2005	35.25	5.33	43,000	7,000	ND<5,000	13,000	ND<10	ND<10	ND<10	ND<10	ND<100	a,c,d,h,i
	12/12/2005	36.15	4.43	10,000	1,700	ND<1,200	2,500	ND<1.0	ND<1.0	1.4	2.4	ND<10	a,c,d,g,h,i
	3/13/2006	36.76	3.82	31,000	1,600	1,100	2,300	ND<0.5	ND<0.5	0.93	9.1	--	a,c,d,g,h,i,m
MW-1B 39.50	6/19/2006	35.78	4.80	36,000	26,000	1,300	44,000	ND<5.0	ND<5.0	10	ND<5.0	--	c,d,g,h,i,m
	9/20/2006	35.03	5.55	36,000	49,000	ND<5,000	69,000	ND<50	ND<50	ND<50	ND<50	--	a,c,h,i
	12/20/2006	36.35	4.23	14,000	38,000	ND<1,200	53,000	ND<50	ND<50	ND<50	150	--	e,h,n
	3/29/2007	36.06	4.52	34,000	4,100	890	5,600	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	a,h,c,d
	6/11/2007	36.02	4.56	32,000	3,800	ND<1,200	3,400	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	a,c,d,h,i
	6/3/2004	25.10	14.40	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--
	11/23/2004	26.24	13.26	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	d,i
MW-4B 38.54	3/14/2005	33.97	5.53	52	ND<50	ND<250	ND<50	0.60	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	6/15/2005	31.87	7.63	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	9/19/2005	30.35	9.15	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	12/12/2005	30.39	9.11	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	3/13/2006	32.15	7.35	--	--	--	--	--	--	--	--	--	--
	6/19/2006	22.99	16.51	--	--	--	--	--	--	--	--	--	--
	9/20/2006	30.32	9.18	--	--	--	--	--	--	--	--	--	--
MW-4B 38.54	12/20/2006	31.60	7.90	--	--	--	--	--	--	--	--	--	--
	3/29/2007	24.63	14.87	--	--	--	--	--	--	--	--	--	--
	6/11/2007	26.39	13.11	--	--	--	--	--	--	--	--	--	--

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Table 2. Monitoring Well Groundwater Results: Petroleum Hydrocarbons - John Nady, 1137-1167 65th Street, Oakland, California

Well ID TOC (ft)	Date Sampled	Groundwater Elevation (ft msl)	Depth to Water (ft)	TPHd	TPHg	TPHmo	TPHss	Benzene μg/L	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
MW-4B (cont.)	3/14/2005	34.78	3.76	--	--	--	--	--	--	--	--	--	i
	3/15/2005	--	--	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	6/15/2005	33.98	4.56	--	--	--	--	--	--	--	--	--	i
	6/16/2005	--	--	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	9/19/2005	32.57	5.97	--	--	--	--	--	--	--	--	--	i
	9/20/2005	--	--	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/12/2005	33.65	4.89	--	--	--	--	--	--	--	--	--	i
	12/13/2005	--	--	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	3/13/2006	34.61	3.93	--	--	--	--	--	--	--	--	--	
	6/19/2006	33.86	4.68	--	--	--	--	--	--	--	--	--	
	9/20/2006	32.58	5.96	--	--	--	--	--	--	--	--	--	
	12/20/2006	33.92	4.62	--	--	--	--	--	--	--	--	--	
	3/29/2007	33.96	4.58	--	--	--	--	--	--	--	--	--	
	6/11/2007	34.03	4.51	--	--	--	--	--	--	--	--	--	
MW-5B 38.98	6/3/2004	30.16	8.82	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	11/23/2004	31.32	7.66	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	3/14/2005	32.71	6.27	--	--	--	--	--	--	--	--	--	i
	3/15/2005	--	--	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	6/15/2005	31.20	7.78	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	9/19/2005	28.68	10.30	--	--	--	--	--	--	--	--	--	
	9/20/2005	--	--	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/12/2005	30.65	8.33	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	3/13/2006	32.87	6.11	--	--	--	--	--	--	--	--	--	
	6/19/2006	30.97	8.01	--	--	--	--	--	--	--	--	--	
	9/20/2006	29.68	9.30	--	--	--	--	--	--	--	--	--	
	12/20/2006	31.21	7.77	--	--	--	--	--	--	--	--	--	
	3/29/2007	31.40	7.58	--	--	--	--	--	--	--	--	--	
	6/11/2007	31.02	7.96	--	--	--	--	--	--	--	--	--	
MW-6B 37.66	6/3/2004	29.36	8.30	2,300	1,100	ND<250	2,900	ND<0.5	ND<0.5	ND<0.5	1.4	ND<5.0	
	11/23/2004	30.53	7.13	280	500	ND<250	700	ND<0.5	ND<0.5	ND<0.5	1.6	ND<5.0	a,c
	3/14/2005	31.86	5.80	5,200	1,300	340	1,200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	e,d,i
	6/15/2005	30.17	7.49	1,700	900	ND<250	1,300	ND<0.5	ND<0.5	ND<0.5	1.9	ND<5.0	a,c
	9/19/2005	28.83	8.83	2,700	1,200	ND<250	2,000	1.0	1.4	ND<1.0	5.0	ND<20	a,b,c
	12/12/2005	29.85	7.81	4,100	840	ND<250	1,200	ND<0.5	ND<0.5	ND<0.5	3.3	ND<5.0	a,c,h,i
	3/13/2006	32.31	5.35	6,900	1,400	270	2,000	ND<0.5	ND<0.5	ND<0.5	4.7	--	a,c,d,h,i

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Well ID TOC (ft)	Date Sampled	Groundwater Elevation (ft msl)	Depth to Water (ft)	TPHd ↔	TPHg	TPHmo	TPHss	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE →	Notes
								µg/L					
MW-6B <i>(cont.)</i>	6/19/2006	29.88	7.78	7,700	1,700	310	3,300	ND<1.0	ND<1.0	ND<1.0	ND<1.0	~	c,g,h,m
	9/20/2006	28.78	8.88	16,000	3,200	740	4,200	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	a,c,d,g,h,i
	12/20/2006	30.34	7.32	16,000	55,000	ND<1,200	77,000	ND<50	ND<50	ND<50	130	--	e,g,h,n
	3/29/2007	30.44	7.22	24,000	3,400	650	4,300	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	a,h,c,d
	6/11/2007	29.93	7.73	29,000	2,600	ND<1,200	2,100	ND<5.0	ND<5.0	ND<5.0	ND<5.0	-	a,c,d,h
MW-1C 39.49	6/3/2004	30.07	9.42	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	11/23/2004	31.30	8.19	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	3/14/2005	32.58	6.91	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	f
	6/15/2005	30.89	8.60	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	9/19/2005	29.19	10.30	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	12/12/2005	30.54	8.95	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	3/13/2006	32.99	6.50	--	--	--	--	--	--	--	--	--	
	6/19/2006	30.66	8.83	--	--	--	--	--	--	--	--	--	
	9/20/2006	29.53	9.96	--	--	--	--	--	--	--	--	--	
	12/20/2006	31.13	8.36	--	--	--	--	--	--	--	--	--	
	3/29/2007	31.19	8.30	--	--	--	--	--	--	--	--	--	
	6/11/2007	30.63	8.86	--	--	--	--	--	--	--	--	--	
MW-4C 38.50	6/3/2004	30.10	8.40	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	11/23/2004	31.31	7.19	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	3/14/2005	33.15	5.35	--	--	--	--	--	--	--	--	--	
	3/15/2005	--	--	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	6/15/2005	30.85	7.65	--	--	--	--	--	--	--	--	--	
	6/16/2005	--	--	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	9/19/2005	25.97	12.53	--	--	--	--	--	--	--	--	--	
	9/20/2005	--	--	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/12/2005	30.00	8.50	--	--	--	--	--	--	--	--	--	
	12/13/2005	--	--	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	3/13/2006	31.18	7.32	--	--	--	--	--	--	--	--	--	
	6/19/2006	30.90	7.60	--	--	--	--	--	--	--	--	--	
	9/20/2006	29.91	8.59	--	--	--	--	--	--	--	--	--	
	12/20/2006	31.21	7.29	--	--	--	--	--	--	--	--	--	
	3/29/2007	31.29	7.21	--	--	--	--	--	--	--	--	--	
	6/11/2007	30.93	7.57	--	--	--	--	--	--	--	--	--	

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Well ID TOC (ft)	Date Sampled	Groundwater Elevation (ft msl)	Depth to Water (ft)	TPHd	TPHg	TPHmo	TPHss	µg/L				MTBE	Notes
								←	→	Benzene	Toluene		
MW-6C 37.59	6/3/2004	27.89	9.70	240	160	ND<50	340	ND<0.5	ND<0.5	ND<0.5	1.1	ND<5.0	
	11/23/2004	29.21	8.38	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	3/14/2005	31.79	5.80	60	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	d
	6/15/2005	30.14	7.45	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	9/19/2005	28.79	8.80	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/12/2005	29.81	7.78	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	3/13/2006	32.09	5.50	--	--	--	--	--	--	--	--	--	
	6/19/2006	29.84	7.75	--	--	--	--	--	--	--	--	--	
	9/20/2006	28.74	8.85	--	--	--	--	--	--	--	--	--	
	12/20/2006	30.29	7.30	--	--	--	--	--	--	--	--	--	
	3/29/2007	30.39	7.20	--	--	--	--	--	--	--	--	--	
	6/11/2007	29.86	7.73	--	--	--	--	--	--	--	--	--	

Abbreviations:

TOC (ft) = Top of casing elevation in feet above mean sea level (msl)

µg/L = micrograms per liter - approximately equal to parts per billion = ppb

ft = measured in feet

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

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

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

TPHss = Total petroleum hydrocarbons as stoddard solvent by EPA Method SW8015C.

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

MTBE = Methyl tertiary-butyl ether by EPA Method SW8021B (EPA Method SW8260B).

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

Notes:

a = TPH pattern that does not appear to be derived from gasoline (stoddard solvent/mineral spirit?).

b = No recognizable pattern.

c = Stoddard solvent/mineral spirit.

d = Diesel range compounds are significant; no recognizable pattern.

e = Gasoline range compounds are significant.

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 contains greater than ~1 vol. % sediment.

j = Unmodified or weakly modified gasoline is significant

k = TPHg range non-target isolated peaks subtracted out of the TPHg concentration

l = Heavier gasoline compounds are significant (aged gasoline?)

m = Strongly aged gasoline or diesel range compounds are significant

Conestoga-Rovers & Associates

Table 3. Monitoring Well Groundwater Results: Halogenated Volatile Organic Compounds - John Nady, 1137-1167 65th Street, Oakland, California

Well ID TOC (#)	Date Sampled	Groundwater Elevation (ft amsl)	Depth to Water (ft)	(PCE) µg/L								(TCE) µg/L				Notes/Other VOCs
				Chloroethane	Chloroform	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride		
MW-1A 39.64	6/3/2004	35.14	4.50	ND<2.5	ND<2.5	ND<2.5	55	16	ND<2.5	36	ND<2.5	ND<2.5	ND<2.5	ND<2.5	6.3	
	11/23/2004	36.54	3.10	ND<1.0	ND<1.0	ND<1.0	38	11	ND<1.0	51	2.4	2.8	ND<1.0	9.5		
	3/14/2005	37.02	2.62	ND<1.0	ND<1.0	ND<1.0	42	12	2.0	32	2.2	2.4	ND<1.0	8.0		
	6/15/2005	35.14	4.50	ND<1.0	ND<1.0	ND<1.0	62	19	2.6	24	2.4	3.0	ND<1.0	10	i,j	
	9/19/2005	33.14	6.50	ND<1.2	ND<1.2	ND<1.2	55	18	2.3	28	2.0	2.6	ND<1.2	9.4	i	
	12/12/2005	35.14	4.50	ND<1.0	ND<1.0	16	60	17	2.0	22	2.3	2.5	ND<1.0	12	i,h,j	
	3/13/2006	37.74	1.90	ND<1.2	ND<1.2	14	30	17	ND<1.2	16	1.4	2.0	ND<1.2	4.0	i	
	6/19/2006	35.94	3.70	ND<0.5	ND<0.5	ND<0.5	33	9.0	ND<0.5	15	1.1	1.8	ND<0.5	3.2		
	9/20/2006	34.19	5.45	ND<0.5	ND<0.5	ND<0.5	34	15	ND<0.5	21	1.6	2.3	ND<0.5	5.4	j	
	12/20/2006	37.02	2.62	ND<0.5	ND<0.5	ND<0.5	27	15	ND<0.5	16	1.3	1.7	ND<0.5	5.2		
	3/29/2007	37.04	2.60	ND<0.5	ND<0.5	ND<0.5	29	16	ND<0.5	13	1.2	1.4	ND<0.5	ND<0.5		
	6/11/2007	35.72	3.92	ND<0.5	ND<0.5	ND<0.5	26	17	ND<0.5	13	1.6	1.9	ND<0.5	2.3		
MW-2A 40.72	6/3/2004	36.48	4.24	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	11/23/2004	37.83	2.89	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	3/14/2005	39.02	1.70	--	--	--	--	--	--	--	--	--	--	--	--	i
	3/15/2005	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	6/15/2005	37.91	2.81	--	--	--	--	--	--	--	--	--	--	--	--	i
	6/16/2005	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	9/19/2005	35.46	5.26	--	--	--	--	--	--	--	--	--	--	--	--	
	9/20/2005	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i
	12/12/2005	37.66	3.06	--	--	--	--	--	--	--	--	--	--	--	--	
	12/13/2005	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i
	3/13/2006	40.33	0.39	--	--	--	--	--	--	--	--	--	--	--	--	
	6/19/2006	37.31	3.41	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3A 40.88	9/20/2006	34.65	6.07	--	--	--	--	--	--	--	--	--	--	--	--	
	12/20/2006	38.57	2.15	--	--	--	--	--	--	--	--	--	--	--	--	
	3/29/2007	38.22	2.50	--	--	--	--	--	--	--	--	--	--	--	--	
	6/11/2007	37.14	3.58	--	--	--	--	--	--	--	--	--	--	--	--	
	6/3/2004	36.56	4.32	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	a
	11/23/2004	37.89	2.99	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	3/14/2005	37.28	3.60	--	--	--	--	--	--	--	--	--	--	--	--	j,i, 1,3-dichlorobenzene (1.2), 1,4-dichlorobenzene (5.7)
	3/15/2005	--	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
	6/15/2005	36.78	4.10	--	--	--	--	--	--	--	--	--	--	--	--	j,i, 1,3-dichlorobenzene (1.5), 1,4-dichlorobenzene (8.3)
	6/16/2005	--	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
	9/19/2005	35.93	4.95	--	--	--	--	--	--	--	--	--	--	--	--	i, 1,4-dichlorobenzene (7.6), 1,3-dichlorobenzene (1.4)
	9/20/2005	--	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
	12/12/2005	36.72	4.16	--	--	--	--	--	--	--	--	--	--	--	--	j,i, 1,4-dichlorobenzene (7.2)
	12/13/2005	--	--	ND<1.0	ND<1.0	26	ND<1.0	ND<1.0	43	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
	3/13/2006	37.42	3.46	--	--	--	--	--	--	--	--	--	--	--	--	i, chlorobenzene (3.7), 1,4-dichlorobenzene (7.2)
	3/14/2006	--	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
	6/19/2006	36.48	4.40	--	--	--	--	--	--	--	--	--	--	--	--	h, chlorobenzene (9.8), 1,4-dichlorobenzene (7.3)
	6/20/2006	--	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
	9/20/2006	35.78	5.10	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
	12/20/2006	36.78	4.10	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	1,4-dichlorobenzene (5.6), chlorobenzene (55)
	3/29/2007	36.82	4.06	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	1,4-dichlorobenzene (5.0)
	6/11/2007	36.52	4.36	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	h, chlorobenzene (68)

Conestoga-Rovers & Associates

Table 3. Monitoring Well Groundwater Results: Halogenated Volatile Organic Compounds - John Nady, 1137-1167 65th Street, Oakland, California

Well ID <i>(#)</i>	Date Sampled	Groundwater Elevation (ft amsl)	Depth to Water (ft)	(PCE) (TCE)												Notes/Other VOCs	
				Chloroethane	Chloroform	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride			
												µg/L					
MW-4A <i>38.71</i>	6/3/2004	36.26	2.45	ND<0.5	ND<0.5	ND<0.5	1.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	11/23/2004	37.13	1.58	ND<0.5	ND<0.5	ND<0.5	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	3/14/2005	36.66	2.05	--	--	--	--	--	--	--	--	--	--	--	--	--	
	3/15/2005	--	--	ND<0.5	ND<0.5	ND<0.5	1.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i	
	6/15/2005	36.38	2.33	--	--	--	--	--	--	--	--	--	--	--	--	--	
	6/16/2005	--	--	ND<0.5	ND<0.5	ND<0.5	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	9/19/2005	35.01	3.70	--	--	--	--	--	--	--	--	--	--	--	--	--	
	9/20/2005	--	--	ND<0.5	ND<0.5	ND<0.5	1.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	12/12/2005	36.39	2.32	--	--	--	--	--	--	--	--	--	--	--	--	--	
	12/13/2005	--	--	ND<0.5	ND<0.5	ND<0.5	2.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i	
	3/13/2006	36.75	1.96	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6A <i>37.98</i>	6/3/2004	31.98	6.00	4.7	0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8	2.1	ND<0.5	6.7		
	11/23/2004	33.13	4.85	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i	
	3/14/2005	35.03	2.95	0.61	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5		
	6/15/2005	33.28	4.70	6.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.3	ND<0.5	2.5	1.5	ND<0.5	3.2	i, 1,4-dichlorobenzene (0.60)	
	9/19/2005	32.07	5.91	21	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.6	ND<0.5	6.7	4.7	0.59	5.0		
	12/12/2005	33.12	4.86	13	ND<0.5	8.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.1	0.82	ND<0.5	ND<0.5	
	3/13/2006	36.05	1.93	1.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	h,j	
	6/19/2006	32.59	5.39	9.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0	1.1	ND<0.5	1.3	
	9/20/2006	31.96	6.02	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.6	1.9	0.57	ND<0.5	
	12/20/2006	33.57	4.41	12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.69	0.71	ND<0.5	ND<0.5	
	3/29/2007	33.67	4.31	8.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5		
	6/11/2007	32.95	5.03	9.8	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0		
MW-7A <i>40.58</i>	6/3/2004	36.08	4.50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	11/23/2004	--	--	--	--	--	--	--	--	--	--	--	--	--	--	h	
	3/14/2005	37.03	3.55	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	h,j	
	6/15/2005	36.41	4.17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5		
	9/19/2005	35.25	5.33	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i	
	12/12/2005	36.15	4.43	ND<0.5	ND<0.5	21	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	h,j	
	3/13/2006	36.76	3.82	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	h,j	
	6/19/2006	35.78	4.80	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	h,j	
	9/20/2006	35.03	5.55	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	h,j	
	12/20/2006	36.35	4.23	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	h,j	
	3/29/2007	36.06	4.52	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
	6/11/2007	36.02	4.56	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	j,h,j	
MW-1B <i>39.50</i>	6/3/2004	25.10	14.40	ND<0.5	8.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.9	ND<0.5	8.1	7.9	ND<0.5	
	11/23/2004	26.24	13.26	ND<0.5	6.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.5	ND<0.5	8.4	8.8	ND<0.5	
	3/14/2005	33.97	5.53	1.1	1.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.8	ND<0.5	5.2	12	ND<0.5	
	6/15/2005	31.87	7.63	ND<0.5	1.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.3	ND<0.5	8.8	9.9	ND<0.5	
	9/19/2005	30.35	9.15	0.98	0.87	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.0	ND<0.5	7.1	11	ND<0.5	
	12/12/2005	30.39	9.11	1.5	0.75	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.7	ND<0.5	7.0	12	ND<0.5	
	3/13/2006	32.15	7.35	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.1	ND<0.5	6.8	5.2	ND<0.5	
	6/19/2006	22.99	16.51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.0	ND<0.5	7.8	6.2	ND<0.5	
	9/20/2006	30.32	9.18	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.9	ND<0.5	11	10	ND<0.5	
	12/20/2006	31.60	7.90	2.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.9	ND<0.5	7.7	7.8	ND<0.5	
	3/29/2007	24.63	14.87	1.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.0	ND<0.5	9.7	8.7	ND<0.5	
	6/11/2007	26.39	13.11	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.5	ND<0.5	8.0	6.5	ND<0.5	

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Table 3. Monitoring Well Groundwater Results: Halogenated Volatile Organic Compounds - John Nady, 1137-1167 65th Street, Oakland, California

Well ID TOC (#)	Date Sampled	Groundwater Elevation (ft amsl)	Depth to Water (ft)	(PCE) (TCE) µg/L												Notes/Other VOCs
				Chloroethane	Chloroform	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride		
MW-4B 38.54	6/3/2004	33.52	5.02	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	11/23/2004	34.65	3.89	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	3/14/2005	34.78	3.76	--	--	--	--	--	--	--	--	--	--	--	--	
	3/15/2005	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i
	6/15/2005	33.98	4.56	--	--	--	--	--	--	--	--	--	--	--	--	
	6/16/2005	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	9/19/2005	32.57	5.97	--	--	--	--	--	--	--	--	--	--	--	--	
	9/20/2005	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i
	12/12/2005	33.65	4.89	--	--	--	--	--	--	--	--	--	--	--	--	
	12/13/2005	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	3/13/2006	34.61	3.93	--	--	--	--	--	--	--	--	--	--	--	--	
	6/19/2006	33.86	4.68	--	--	--	--	--	--	--	--	--	--	--	--	
	9/20/2006	32.58	5.96	--	--	--	--	--	--	--	--	--	--	--	--	
	12/20/2006	33.92	4.62	--	--	--	--	--	--	--	--	--	--	--	--	
	3/29/2007	33.96	4.58	--	--	--	--	--	--	--	--	--	--	--	--	
	6/11/2007	34.03	4.51	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5B 38.98	6/3/2004	30.16	8.82	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	11/23/2004	31.32	7.66	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	3/14/2005	32.71	6.27	--	--	--	--	--	--	--	--	--	--	--	--	
	3/15/2005	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i
	6/15/2005	31.20	7.78	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	9/19/2005	28.68	10.30	--	--	--	--	--	--	--	--	--	--	--	--	
	9/20/2005	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	12/12/2005	30.65	8.33	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	3/13/2006	32.87	6.11	--	--	--	--	--	--	--	--	--	--	--	--	
	6/19/2006	30.97	8.01	--	--	--	--	--	--	--	--	--	--	--	--	
	9/20/2006	29.68	9.30	--	--	--	--	--	--	--	--	--	--	--	--	
	12/20/2006	31.21	7.77	--	--	--	--	--	--	--	--	--	--	--	--	
	3/29/2007	31.40	7.58	--	--	--	--	--	--	--	--	--	--	--	--	
	6/11/2007	31.02	7.96	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6B 37.66	6/3/2004	29.36	8.30	0.65	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	11/23/2004	30.53	7.13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	3/14/2005	31.86	5.80	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	6/15/2005	30.17	7.49	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	9/19/2005	28.83	8.85	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	
	12/12/2005	29.85	7.81	2.3	ND<0.5	11	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.3	ND<0.5	ND<0.5	ND<0.5	
	3/13/2006	32.31	5.35	0.73	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	6/19/2006	29.88	7.78	0.91	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	9/20/2006	28.78	8.88	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	j,h,i
	12/20/2006	30.34	7.32	2.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.2	ND<0.5	ND<0.5	ND<0.5	h
	3/29/2007	30.44	7.22	1.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	j,h
	6/11/2007	29.93	7.73	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	j,h
MW-1C 39.49	6/3/2004	30.07	9.42	0.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	11/23/2004	31.30	8.19	ND<0.5	0.56	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i
	3/14/2005	32.58	6.91	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	6/15/2005	30.89	8.60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i
	9/19/2005	29.19	10.30	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	12/12/2005	30.54	8.95	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	i
	3/13/2006	32.99	6.50	--	--	--	--	--	--	--	--	--	--	--	--	
	6/19/2006	30.66	8.83	--	--	--	--	--	--	--	--	--	--	--	--	
	9/20/2006	29.53	9.96	--	--	--	--	--	--	--	--	--	--	--	--	

Conestoga-Rovers & Associates

Table 3. Monitoring Well Groundwater Results: Halogenated Volatile Organic Compounds - John Nady, 1137-1167 65th Street, Oakland, California

Well ID TOC (ft)	Date Sampled	Groundwater Elevation (ft amsl)	Depth to Water (ft)	(PCE) (TCE) µg/L												Notes/Other VOCs
				Chloroethane	Chloroform	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride		
MW-1C <i>(cont.)</i>	12/20/2006	31.13	8.36	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/2007	31.19	8.30	-	--	-	-	-	-	-	-	-	-	-	-	-
	6/11/2007	30.63	8.86	-	--	-	--	-	-	-	-	-	-	-	-	-
MW-4C <i>38.50</i>	6/3/2004	30.10	8.40	ND<0.5	0.84	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/23/2004	31.31	7.19	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/14/2005	33.15	5.35	-	--	--	--	--	--	--	--	--	--	--	--	i
	3/15/2005	--	-	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	6/15/2005	30.85	7.65	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/16/2005	--	-	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/19/2005	25.97	12.53	-	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2005	--	-	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	12/12/2005	30.00	8.50	--	--	--	--	--	--	--	--	--	--	--	--	i
	12/13/2005	--	-	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/13/2006	31.18	7.32	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/19/2006	30.90	7.60	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2006	29.91	8.59	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/20/2006	31.21	7.29	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/29/2007	31.29	7.21	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2007	30.93	7.57	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6C <i>37.59</i>	6/3/2004	27.89	9.70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.8	ND<0.5	0.61	ND<0.5	ND<0.5
	11/23/2004	29.21	8.38	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/14/2005	31.79	5.80	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8	1.9	ND<0.5	12	ND<0.5	1.1	ND<0.5	2.3	
	6/15/2005	30.14	7.45	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.1	3.1	ND<0.5	20	0.64	1.4	ND<0.5	5.7	
	9/19/2005	28.79	8.80	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.9	3.0	ND<0.5	18	0.57	1.3	ND<0.5	6.8	
	12/12/2005	29.81	7.78	0.66	ND<0.5	ND<0.5	ND<0.5	3.2	3.0	ND<0.5	19	0.61	1.4	ND<0.5	10	
	3/13/2006	32.09	5.50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.2	3.9	ND<0.5	26	0.61	0.95	ND<0.5	5.1	
	6/19/2006	29.84	7.75	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.0	3.4	ND<0.5	32	0.78	0.96	ND<0.5	11	
	9/20/2006	28.74	8.85	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.7	4.6	ND<0.5	23	0.76	1.0	ND<0.5	9.4	i
	12/20/2006	30.29	7.30	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.1	4.6	ND<0.5	36	0.88	0.92	ND<0.5	13	
	3/29/2007	30.39	7.20	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.0	6.4	ND<0.5	35	1.2	1.1	ND<0.5	5.3	
	6/11/2007	29.86	7.73	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.1	6.4	ND<0.5	26	0.99	0.85	ND<0.5	4.0	

Abbreviations:

TOC (ft) = Top of casing elevation in feet above mean sea level (msl)

µg/L = micrograms per liter; approximately equal to parts per billion = ppb

ft = measured in feet

Halogenated Volatile Organic Compounds analyzed by EPA Method SW8260B, reported EPA Method 8010 basic target list.

ND<0.5 = Not Detected above detection limit cited.

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

Notes:

a = Total Trihalomethanes

b = Sample diluted due to high organic content

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



CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX A

Field Data Sheets



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL GAUGING SHEET

Client: Conestoga-Rovers and Associates						
Site Address: 1137-1167 65th Street, Oakland, CA						
Date: 6/11/2007			Signature:			
Well ID	Time	Depth to SPH	Depth to Water	SPH Thickness	Depth to Bottom	Comments
MW-1A	9:05		3.92		14.40	
MW-1B	9:00		13.11		19.75	
MW-1C	8:55		8.86		34.55	
MW-2A	9:35		3.58		11.15	
MW-3A	9:42		4.36		13.95	
MW-4A	8:45		2.57		12.65	
MW-4B	8:40		4.51		20.77	
MW-4C	8:35		7.57		32.00	
MW-5B	8:30		7.96		23.06	
MW-6A	9:25		5.03		14.40	
MW-6B	9:20		7.73		22.00	



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL GAUGING SHEET



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	6/11/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1137-1167 65th Street, Oakland, CA					
Well ID:	MW-1A					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	14.40		Fe=	mg/L		
Depth to Water:	3.92		ORP=	mV		
Water Column Height:	10.48		DO=	mg/L		
Gallons/ft:	0.16					
1 Casing Volume (gal):	1.68		COMMENTS: very turbid, silty			
3 Casing Volumes (gal):	5.03					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (μ S)		
1:10	1.7	20.0	9.09	228		
1:15	3.4	19.5	9.03	225		
1:20	5.0	19.3	9.08	230		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-1A	6/11/2007	1:25	40 ml VOA, 1 L amber	HCl, ICE	TPHg/ss BTEX TPHd TPHmo HVOCs	8015 with silica gel clean up, 8021, 8010



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	6/11/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1137-1167 65th Street, Oakland, CA					
Well ID:	MW-2A					
Well Diameter:	4"					
Purging Device:	3" PVC Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	11.15		Fe=	mg/L		
Depth to Water:	3.58		ORP=	mV		
Water Column Height:	7.57		DO=	mg/L		
Gallons/ft:	0.65					
1 Casing Volume (gal):	4.92		COMMENTS: very turbid, silty			
3 Casing Volumes (gal):	14.76					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (µS)		
1:55	4.9	20.2	7.55	256		
1:57	9.8	20.7	7.49	249		
2:00	14.8	20.4	7.47	246		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-2A	6/11/2007	2:05	40 ml VOA, 1 L amber	HCl, ICE	TPHg/ss BTEX TPHd TPHmo	8015 with silica gel clean up, 8021



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	6/11/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1137-1167 65th Street, Oakland, CA					
Well ID:	MW-3A					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	13.95		Fe=	mg/L		
Depth to Water:	4.36		ORP=	mV		
Water Column Height:	9.59		DO=	mg/L		
Gallons/ft:	0.16					
1 Casing Volume (gal):	1.53		COMMENTS: very turbid, silty			
3 Casing Volumes (gal):	4.60					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (µS)		
2:15	1.5	17.8	6.70	458		
2:17	3.1	17.9	6.74	470		
2:20	4.6	17.9	6.78	472		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-3A	6/11/2007	2.25	40 ml VOA, 1 L amber	HCl, ICE	TPHg/ss BTEX TPHd TPHmo HVOCs	8015 with silica gel clean up, 8021, 8010



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ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	6/11/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1137-1167 65th Street, Oakland, CA					
Well ID:	MW-6A					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	14.40		Fe=	mg/L		
Depth to Water:	5.03		ORP=	mV		
Water Column Height:	9.37		DO=	mg/L		
Gallons/ft:	0.16					
1 Casing Volume (gal):	1.50		COMMENTS: very turbid, silty			
3 Casing Volumes (gal):	4.50					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (μ S)		
12:25	1.5	20.8	6.35	615		
12:30	3.0	20.1	6.40	617		
12:35	4.5	20.5	6.41	612		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-6A	6/11/2007	12:40	40 ml VOA, 1 L amber	HCl, ICE	TPH/ss BTEX TPHd TPHmo HVOCs	8015 with silica gel clean up, 8021, 8010



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	6/11/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1137-1167 65th Street, Oakland, CA					
Well ID:	MW-7A					
Well Diameter:	1"					
Purging Device:	Check Valve Tubing					
Sampling Method:	Disposable Bailer					
Total Well Depth:	10.00		Fe=	mg/L		
Depth to Water:	4.56		ORP=	mV		
Water Column Height:	5.44		DO=	mg/L		
Gallons/ft:	0.04					
1 Casing Volume (gal):	0.22		COMMENTS: very turbid, silty			
3 Casing Volumes (gal):	0.65					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (µS)		
11:00	0.2	18.2	6.08	951		
11:01	0.4	17.6	6.11	951		
11:02	0.7	17.5	6.13	963		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-7A	6/11/2007	11:05	40 ml VOA, 1 L amber	HCl, ICE	TPHg/ss BTEX TPHd TPHmo HVOCs	8015 with silica gel clean up, 8021, 8010



MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	6/11/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1137-1167 65th Street, Oakland, CA					
Well ID:	MW-1B					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	19.75		Fe=	mg/L		
Depth to Water:	13.11		ORP=	mV		
Water Column Height:	6.64		DO=	mg/L		
Gallons/ft:	0.16					
1 Casing Volume (gal):	1.06		COMMENTS: very turbid, silty			
3 Casing Volumes (gal):	3.19					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (µS)		
12:50	1.1	19.4	6.39	1745		
12:52	2.1	18.8	6.31	1715		
12:55	3.2	18.9	6.37	1722		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-1B	6/11/2007	1:00	40 ml VOA	HCl, ICE	HVOCs	8010
						



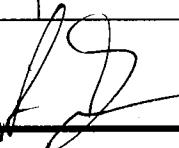
MUSKAN
ENVIRONMENTAL
SAMPLING

WELL SAMPLING FORM

Date:	6/11/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1137-1167 65th Street, Oakland, CA					
Well ID:	MW-6B					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	22.00		Fe=	mg/L		
Depth to Water:	7.73		ORP=	mV		
Water Column Height:	14.27		DO=	mg/L		
Gallons/ft:	0.16					
1 Casing Volume (gal):	2.28		COMMENTS: turbid			
3 Casing Volumes (gal):	6.85					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND. (µS)		
11:55	2.3	18.4	6.64	1010		
12:00	4.6	18.3	6.61	1067		
12:05	6.8	18.3	6.65	1074		
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-6B	6/11/2007	12:10	40 ml VOA, 1 L amber	HCl, ICE	TPHg/ss BTEX TPHd TPHmo HVOCs	8015 with silica gel clean up, 8021, 8010



WELL SAMPLING FORM

Date:	6/11/2007					
Client:	Conestoga-Rovers and Associates					
Site Address:	1137-1167 65th Street, Oakland, CA					
Well ID:	MW-6C					
Well Diameter:	2"					
Purging Device:	Disposable Bailer					
Sampling Method:	Disposable Bailer					
Total Well Depth:	33.81		Fe=	mg/L		
Depth to Water:	7.73		ORP=	mV		
Water Column Height:	26.08		DO=	mg/L		
Gallons/ft:	0.16					
1 Casing Volume (gal):	4.17		COMMENTS:			
3 Casing Volumes (gal):	12.52					
TIME:	CASING VOLUME (gal)	TEMP (Celsius)			pH	COND. (µS)
11:25	4.2	19.2			6.52	1052
11:30	8.3	19.0			6.52	1078
11:35	12.5	19..1			6.48	1078
Sample ID:	Sample Date:	Sample Time:	Container Type	Preservative	Analytes	Method
MW-6C	6/11/2007	11:40	40 ml VOA	HCl, ICE	HVOCS	8010
					Signature: 	



CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX B

Laboratory Analytical Report



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: #521000; Nady Systems	Date Sampled: 06/11/07
		Date Received: 06/11/07
	Client Contact: Mark Jonas	Date Reported: 06/18/07
	Client P.O.:	Date Completed: 06/18/07

WorkOrder: 0706287

June 18, 2007

Dear Mark:

Enclosed are:

- 1). the results of **9** analyzed samples from your **#521000; Nady Systems project**,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

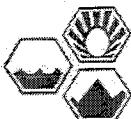
All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

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

cete 0706287



McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

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

Report To: Mrs. K. Jones

Bill To: Conestoga-Rovers & Associates

Company: Conestoga - Rovers & Associates

5900 Holly Street Site A

Emporia, CA

Tele: (510) 420-330

Fax: (510) 420-9170

Project #: 521006

Street, Oakland, CA 94601

Sampler Signature:

SAMPLING MATRIX

Sampling
in
the
United
States
and
elsewhere

Relinquished by

Date: July 4, 2017

Received By

COMMENTS:

Relinquished By:

Date:

Received By

Relinquished By:

Date: _____

Received By

ICE/P 34 ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB ✓
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB ✓

VOAS O&G METALS OTHER
PRESERVATION ✓ pH<2

McCampbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 0706287

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) 420-070 FAX: (510) 420-917
ProjectNo: #521000; Nady Systems
PO:

Bill to

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

Requested TAT: 5 days

Date Received 06/11/2007

Date Printed: 06/11/2007

Sample ID	Client SampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0706287-001	MW-1A	Water	06/11/07 1:25:00	<input type="checkbox"/>	C	A	A	B								
0706287-002	MW-1B	Water	06/11/07 1:00:00	<input type="checkbox"/>	A				B							
0706287-003	MW-2A	Water	06/11/07 2:05:00	<input type="checkbox"/>		A			B							
0706287-004	MW-3A	Water	06/11/07 2:25:00	<input type="checkbox"/>	C	A		B								
0706287-005	MW-4A	Water	06/11/07 1:45:00	<input type="checkbox"/>		A		B								
0706287-006	MW-6A	Water	06/11/07 12:40:00	<input type="checkbox"/>	C	A		B								
0706287-007	MW-6B	Water	06/11/07 12:20:00	<input type="checkbox"/>	C	A		B								
0706287-008	MW-6C	Water	06/11/07 11:40:00	<input type="checkbox"/>	A											
0706287-009	MW-7A	Water	06/11/07 11:05:00	<input type="checkbox"/>	C	A		B								

Test Legend:

1	8010BMS_W
6	
11	
12	

2	G-MBTEX_W
7	
12	

3	PREDF REPORT
8	

4	TPH(DMO)WSG_W
9	

5	
10	

Prepared by: Melissa Valles

Comments:

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



McCampbell Analytical, Inc.

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Sample Receipt Checklist

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

Date and Time Received: **06/11/07 8:16:32 PM**

Project Name: **#521000; Nady Systems**

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

WorkOrder N°: **0706287** 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: | 3.4°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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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: #521000; Nady Systems	Date Sampled: 06/11/07
		Date Received: 06/11/07
	Client Contact: Mark Jonas	Date Extracted: 06/12/07-06/13/07
	Client P.O.:	Date Analyzed 06/12/07-06/13/07

Halogenated Volatile Organics by P&T and GC-MS (8010 Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0706287

Lab ID	0706287-001C	0706287-002A	0706287-004C	0706287-006C	Reporting Limit for DF =1	
Client ID	MW-1A	MW-1B	MW-3A	MW-6A		
Matrix	W	W	W	W	S	W
DF	1	1	3.3	10		
Compound			Concentration		µg/kg	µg/L
Bromodichloromethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Bromoform	ND	ND	ND<1.7	ND<5.0	NA	0.5
Bromomethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Carbon Tetrachloride	ND	ND	ND<1.7	ND<5.0	NA	0.5
Chlorobenzene	ND	ND	68	ND<5.0	NA	0.5
Chloroethane	ND	ND	ND<1.7	9.8	NA	0.5
2-Chloroethyl Vinyl Ether	ND	ND	ND<3.3	ND<10	NA	1.0
Chloroform	ND	ND	ND<1.7	ND<5.0	NA	0.5
Chloromethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Dibromochloromethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,2-Dichlorobenzene	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,3-Dichlorobenzene	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,4-Dichlorobenzene	ND	ND	ND<1.7	ND<5.0	NA	0.5
Dichlorodifluoromethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,1-Dichloroethane	1.9	8.0	ND<1.7	ND<5.0	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	6.5	ND<1.7	ND<5.0	NA	0.5
1,1-Dichloroethene	ND	ND	ND<1.7	ND<5.0	NA	0.5
cis-1,2-Dichloroethene	13	8.5	ND<1.7	ND<5.0	NA	0.5
trans-1,2-Dichloroethene	1.6	ND	ND<1.7	ND<5.0	NA	0.5
1,2-Dichloropropane	ND	ND	ND<1.7	ND<5.0	NA	0.5
cis-1,3-Dichloropropene	ND	ND	ND<1.7	ND<5.0	NA	0.5
trans-1,3-Dichloropropene	ND	ND	ND<1.7	ND<5.0	NA	0.5
Methylene chloride	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Tetrachloroethene	26	ND	ND<1.7	ND<5.0	NA	0.5
1,1,1-Trichloroethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,1,2-Trichloroethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Trichloroethene	17	ND	ND<1.7	ND<5.0	NA	0.5
Trichlorofluoromethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Vinyl Chloride	2.3	ND	ND<1.7	ND<5.0	NA	0.5

Surrogate Recoveries (%)

%SS1:	101	99	98	96	
%SS2:	97	96	97	96	
%SS3:	99	91	96	92	

Comments

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

ND means not detected above the reporting limit; 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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Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #521000; Nady Systems	Date Sampled: 06/11/07
		Date Received: 06/11/07
	Client Contact: Mark Jonas	Date Extracted: 06/12/07-06/13/07
	Client P.O.:	Date Analyzed 06/12/07-06/13/07

Halogenated Volatile Organics by P&T and GC-MS (8010 Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0706287

Lab ID	0706287-007C	0706287-008A	0706287-009C		Reporting Limit for DF =1	
Client ID	MW-6B	MW-6C	MW-7A			
Matrix	W	W	W		S	W
DF	10	1	10			
Compound	Concentration			µg/kg	µg/L	
Bromodichloromethane	ND<5.0	ND	ND<5.0		NA	0.5
Bromoform	ND<5.0	ND	ND<5.0		NA	0.5
Bromomethane	ND<5.0	ND	ND<5.0		NA	0.5
Carbon Tetrachloride	ND<5.0	ND	ND<5.0		NA	0.5
Chlorobenzene	ND<5.0	ND	ND<5.0		NA	0.5
Chloroethane	ND<5.0	ND	ND<5.0		NA	0.5
2-Chloroethyl Vinyl Ether	ND<10	ND	ND<10		NA	1.0
Chloroform	ND<5.0	ND	ND<5.0		NA	0.5
Chloromethane	ND<5.0	ND	ND<5.0		NA	0.5
Dibromochloromethane	ND<5.0	ND	ND<5.0		NA	0.5
1,2-Dichlorobenzene	ND<5.0	ND	ND<5.0		NA	0.5
1,3-Dichlorobenzene	ND<5.0	ND	ND<5.0		NA	0.5
1,4-Dichlorobenzene	ND<5.0	ND	ND<5.0		NA	0.5
Dichlorodifluoromethane	ND<5.0	ND	ND<5.0		NA	0.5
1,1-Dichloroethane	ND<5.0	0.85	ND<5.0		NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<5.0	ND	ND<5.0		NA	0.5
1,1-Dichloroethene	ND<5.0	ND	ND<5.0		NA	0.5
cis-1,2-Dichloroethene	ND<5.0	26	ND<5.0		NA	0.5
trans-1,2-Dichloroethene	ND<5.0	0.99	ND<5.0		NA	0.5
1,2-Dichloropropane	ND<5.0	ND	ND<5.0		NA	0.5
cis-1,3-Dichloropropene	ND<5.0	ND	ND<5.0		NA	0.5
trans-1,3-Dichloropropene	ND<5.0	ND	ND<5.0		NA	0.5
Methylene chloride	ND<5.0	ND	ND<5.0		NA	0.5
1,1,2,2-Tetrachloroethane	ND<5.0	ND	ND<5.0		NA	0.5
Tetrachloroethene	ND<5.0	6.1	ND<5.0		NA	0.5
1,1,1-Trichloroethane	ND<5.0	ND	ND<5.0		NA	0.5
1,1,2-Trichloroethane	ND<5.0	ND	ND<5.0		NA	0.5
Trichloroethene	ND<5.0	6.4	ND<5.0		NA	0.5
Trichlorofluoromethane	ND<5.0	ND	ND<5.0		NA	0.5
Vinyl Chloride	ND<5.0	4.0	ND<5.0		NA	0.5

Surrogate Recoveries (%)

%SS1:	96	95	98	
%SS2:	96	96	95	
%SS3:	92	92	93	

Comments

j,h

j,h,i

* 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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Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #521000; Nady Systems	Date Sampled: 06/11/07
		Date Received: 06/11/07
	Client Contact: Mark Jonas	Date Extracted: 06/12/07-06/14/07
	Client P.O.:	Date Analyzed 06/12/07-06/14/07

Gasoline Range(C6-C12) Stoddard Solvent Range(C9-C12) Volatile Hydrocarbons with BTEX & MTBE*

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Cm

Work Order: 0706287

Lab ID	0706287-001A	0706287-003A	0706287-004A	0706287-005A	Reporting Limit for DF =1	
Client ID	MW-1A	MW-2A	MW-3A	MW-4A		
Matrix	W	W	W	W	S	W
DF	10	1	20	1		
Compound	Concentration				ug/kg	ug/L
TPH(g)	3200	180,i	5200	ND	NA	50
TPH(ss)	2200	94	3500	ND	NA	50
MTBE	---	---	---	---	NA	5.0
Benzene	ND<5.0	ND	ND<10	ND	NA	0.5
Toluene	ND<5.0	1.7	ND<10	0.92	NA	0.5
Ethylbenzene	ND<5.0	ND	ND<10	ND	NA	0.5
Xylenes	ND<5.0	ND	ND<10	1.6	NA	0.5

Surrogate Recoveries (%)

%SS:	105	105	98	98	
Comments	e,m	e,m,i	e,h		

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in ug/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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Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #521000; Nady Systems	Date Sampled: 06/11/07
		Date Received: 06/11/07
	Client Contact: Mark Jonas	Date Extracted: 06/12/07-06/14/07
	Client P.O.:	Date Analyzed 06/12/07-06/14/07

Gasoline Range(C6-C12) Stoddard Solvent Range(C9-C12) Volatile Hydrocarbons with BTEX & MTBE*

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Cm

Work Order: 0706287

Lab ID	0706287-006A	0706287-007A	0706287-009A		Reporting Limit for DF =1	
Client ID	MW-6A	MW-6B	MW-7A			
Matrix	W	W	W			
DF	1	10	10		S	W
Compound	Concentration				ug/kg	µg/L
TPH(g)	4300	2600	3800,i		NA	50
TPH(ss)	3700	2100	3400		NA	50
MTBE	---	---	---		NA	5.0
Benzene	ND	ND<5.0	ND<5.0		NA	0.5
Toluene	ND	ND<5.0	ND<5.0		NA	0.5
Ethylbenzene	2.1	ND<5.0	ND<5.0		NA	0.5
Xylenes	9.5	ND<5.0	ND<5.0		NA	0.5
Surrogate Recoveries (%)						
%SS:	85	91	89			
Comments	e	e,h	e,h,i			

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, 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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Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #521000; Nady Systems	Date Sampled: 06/11/07
		Date Received: 06/11/07
	Client Contact: Mark Jonas	Date Extracted: 06/11/07
	Client P.O.:	Date Analyzed: 06/14/07-06/16/07

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

Extraction method: SW3510C/3630C

Analytical methods: SW8015C

Work Order: 0706287

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 McCampbell 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.



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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0706287

EPA Method SW8260B		Extraction SW5030B				BatchID: 28658				Spiked Sample ID: 0706289-005B			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
Chlorobenzene	ND	10	103	103	0	102	111	8.39	70 - 130	30	70 - 130	30	
1,2-Dichloroethane (1,2-DCA)	ND	10	103	97.3	5.52	98.7	102	3.52	70 - 130	30	70 - 130	30	
1,1-Dichloroethene	ND	10	90.8	85.7	5.80	95.5	98.2	2.83	70 - 130	30	70 - 130	30	
Trichloroethene	ND	10	83.7	82.9	0.943	88.4	92.2	4.17	70 - 130	30	70 - 130	30	
%SS1:	100	10	114	105	7.94	109	103	6.27	70 - 130	30	70 - 130	30	
%SS2:	86	10	92	96	4.98	94	94	0	70 - 130	30	70 - 130	30	
%SS3:	102	10	88	93	5.64	89	90	1.47	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 28658 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706287-001C	06/11/07 1:25 PM	06/12/07	06/12/07 2:41 PM	0706287-002A	06/11/07 1:00 PM	06/12/07	06/12/07 3:27 PM
0706287-004C	06/11/07 2:25 PM	06/13/07	06/13/07 12:48 AM	0706287-006C	06/11/07 12:40 PM	06/12/07	06/12/07 8:54 PM
0706287-007C	06/11/07 12:20 PM	06/12/07	06/12/07 9:40 PM	0706287-008A	06/11/07 11:40 AM	06/12/07	06/12/07 6:31 PM
0706287-009C	06/11/07 11:05 AM	06/12/07	06/12/07 10:29 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.



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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0706287

EPA Method SW8015C		Extraction SW3510C/3630C				BatchID: 28577			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	96.7	86.2	11.6	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	104	96	7.82	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 28577 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706287-001B	06/11/07 1:25 PM	06/11/07	06/15/07 2:27 PM	0706287-003B	06/11/07 2:05 PM	06/11/07	06/16/07 3:12 AM

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.

DHS ELAP Certification Nº 1644

 QA/QC Officer



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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0706287

EPA Method SW8021B/8015Cm		Extraction SW5030B				BatchID: 28660				Spiked Sample ID: 0706289-005A			
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	74.2	73.1	1.45	92.5	94.2	1.76	70 - 130	30	70 - 130	30	
MTBE	ND	10	88.7	93.8	5.60	80.7	79.9	0.958	70 - 130	30	70 - 130	30	
Benzene	ND	10	82.9	85.7	3.28	85.6	84.7	1.02	70 - 130	30	70 - 130	30	
Toluene	ND	10	83.5	86.8	3.90	87	85	2.34	70 - 130	30	70 - 130	30	
Ethylbenzene	ND	10	87.1	88.5	1.53	90.8	89.4	1.59	70 - 130	30	70 - 130	30	
Xylenes	ND	30	96.3	100	3.74	103	100	3.28	70 - 130	30	70 - 130	30	
%SS:	91	10	90	91	0.988	90	90	0	70 - 130	30	70 - 130	30	

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

BATCH 28660 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706287-001A	06/11/07 1:25 PM	06/12/07	06/12/07 7:13 PM	0706287-003A	06/11/07 2:05 PM	06/12/07	06/12/07 7:44 PM
0706287-004A	06/11/07 2:25 PM	06/14/07	06/14/07 8:34 AM	0706287-005A	06/11/07 1:45 PM	06/12/07	06/12/07 6:41 PM
0706287-006A	06/11/07 12:40 PM	06/12/07	06/12/07 4:03 PM	0706287-007A	06/11/07 12:20 PM	06/14/07	06/14/07 7:33 AM
0706287-009A	06/11/07 11:05 AM	06/14/07	06/14/07 7:03 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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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0706287

EPA Method SW8015C		Extraction SW3510C/3630C				BatchID: 28661			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	105	106	1.04	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	121	123	1.77	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 28661 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706287-004B	06/11/07 2:25 PM	06/11/07	06/16/07 5:24 AM	0706287-005B	06/11/07 1:45 PM	06/11/07	06/14/07 7:28 PM
0706287-006B	06/11/07 12:40 PM	06/11/07	06/14/07 8:38 PM	0706287-007B	06/11/07 12:20 PM	06/11/07	06/15/07 6:00 PM
0706287-009B	06/11/07 11:05 AM	06/11/07	06/15/07 4:51 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.

DHS ELAP Certification N° 1644

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